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Handbook of Comparative Studies on Community Colleges and Global Counterparts

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Editors

Handbook of Comparative Studies on Community Colleges and Global Counterparts

With 57 Figures and 59 Tables

 Springer

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The creation of any work is directly related to the support and encouragement received to push on. In that context, we are indebted to those who agreed to serve as peer review advisors and to colleagues who spent time as advisory members giving critical feedback and direction. We give great thanks to the authors of these two volumes who subjected their thinking and writing to rigorous review, trusted us, and in turn worked diligently to be responsive. Their work is enduring. Finally, we wish to thank and dedicate this work to Ron Raby and Vera Valeau, our spouses. Their tolerance of our absence, and sometime lack of focus, provided the support, warmth, love, and care we needed to complete our work. We love you. The African saying, “it takes a village” is very much alive in the completion of this work. Thanks all.

Foreword

As students around the world continue to attain secondary education in increasing numbers, questions about effective pathways to, and content of, tertiary education has become a topic of great professional interest and academic curiosity. The talk about twenty-first-century skills, relevant knowledge, and applied career knowledge, which support evolving industries, is ubiquitous yet elusive. Clearly, changing political, economic, and social expectations of the role of postsecondary education are reinforcing new institutional forms that offer a combination of academic, vocational, career-oriented, technological, and specialist programs at certificate, diploma, or associate or bachelor degree levels.

The harmonization of higher education systems has become a reality for academically oriented colleges and universities, enabling international mobility for students enrolled in bachelor and masters programs. One may even speak of a universal model of academic higher education, strongly influenced by reforms in countries of the global North and West, such as the US credit system and the Bologna Process in the European higher education space. In contrast, national differences in lower tertiary institutions are vast to the extent that there is a lack of universal nomenclature to describe vocational-technical education or lower tertiary education that prepares students for skilled and specialized labor. Within this sector are institutions that are known by several names including College of Further Education, Community Colleges, Polytechnics, Technical College/University, and TAFE (Technical and Further Education). For purposes of this book, these institutions are being called community colleges. This is not to suggest that the US variant of community colleges, or any other type of lower tertiary education system, should be adopted in other parts of the world. The choice of the term is merely a matter of finding a common ground in order to reflect on common as well as different challenges in varied national contexts.

The forty-one chapters in the *Handbook of Comparative Studies on Community Colleges and Global Counterparts* illustrate the immense popularity of community college and global counterparts as they accommodate the educational needs of the communities they serve. Student enrollment underscores the crucial role that these institutions play worldwide, accounting for on average 25–58% of all higher educational students. At the same time, this higher educational sector struggles with funding and status.

Readers of this book are exposed to comparative, empirical, and case studies that show that although institutional variations exist, it remains the noted similarities that frame these institutions as an alternative to universities. These institutions fill an important gap. The unique characteristics include (a) location in geographical locations to service rural and urban poor; (b) nontraditional and under-served student populations (age, gender, ethnicity, socioeconomic background); (c) curriculum that is deemed “useful” to support local industry and economy; (d) granting of certificates and diplomas for technological and specialist programs and associate level or baccalaureate level degrees for vocational, career-oriented, and academic disciplines; (e) belief that resulting education will support vertical social mobility; and (f) reality that these institutions maintain less prestige than selective universities and whose graduates are also often labeled as less prestigious.

While *Handbook of Comparative Studies on Community Colleges and Global Counterparts* does not feature every country with a community college or global counterpart, it does examine institutions in 24 countries and 6 regions to show how this educational sector is serving populations. In addition, several chapters in the book focus on different educational issues within the same country to illustrate the complexity of the sector.

The chapters in the *Handbook of Comparative Studies on Community Colleges and Global Counterparts* also address the complexities of transnational educational borrowing. Some chapters focus on borrowing as an internal process often linked to national development strategies. Other chapters focus on borrowing as an external process linked to institutional and donors from one country seeking out international partners and supporting educational change through international development and collaborative projects. Often the context for borrowing includes both internal and external flows. In addition, for many countries, results of increasing student/faculty/staff mobility, disciplinary need to acknowledge internationalized components of curriculum, and designed international collaboration projects which link curriculum and training also facilitate educational borrowing. Finally, many of the chapters show how flexibility and adaptability of goals, purposes, and design has local interpretations.

The *Handbook of Comparative Studies on Community Colleges and Global Counterparts* provides the first set of comparative studies that explore the complexities of the institutions in this sector in terms of institutional profile, mission, economic impact, governance, curriculum, faculty, assessment, and the role that these institutions are playing in achieving societal equity and in postcompletion student pathways. Authors include scholars from around the world who are conducting research on institutional design, practices, and reform. The authors make clear that the exploration of this sector of institutions shows variability, but at the same time enough similarities to warrant future study. Moreover, the authors collectively make it clear that educational leaders have to change the way they look at this sector to more fully address its purpose and impact around the world.

The Sustainable Development Goals, launched in 2015 and in effect until 2030, focus on completion of free, equitable, and quality secondary education increasing, skills development, and life-long learning. It is likely that the number of students

who complete secondary education in the countries of the global South and East will increase dramatically over the next few years, making it necessary for policy analysts and researchers to scrutinize, and critically reflect on, the existing pathways and outcomes of tertiary education. The debates and case studies, presented in this book, are both timely and unique because they illuminate fascinating trends in different parts of the world in an area of vocational skills development that has been seriously understudied.

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Preface

The community college system may be thought to be as American as apple pie, but distant regions have created analogous educational systems hoping to reap some of the benefits that the 2-year public institutions have brought to the United States. Using education to enact equity, providing training and postsecondary access to underserved groups, and open the doors of opportunity are principles on which the American system was built. Since “imitation is the sincerest form of flattery” (Colton 1837, p. 118) the expansion of the American community college speaks loudly of its positive global reputation.

However, a showering of compliments on the American community colleges must be balanced with the realities that not all enrollees have experienced high levels of satisfaction or academic success. Since their inception, community colleges have been plagued with low success rates, high proportions of drop-outs, low transfer rates, students trapped in remediation, and for some colleges high loan default rates. As such, countries and regions considering a community college counterpart are well advised to take a realistic look at the American 2-year sector and to understand the system with full acknowledgment of the warts and faults that mar their walls. Moreover, a transplanting of the American system would not only be insufficient to meet the needs of countries around the globe, but also ill-informed. Rather, countries have incorporated aspects of the American model while adapting other characteristics to fit their needs and to retain their cultures.

In a spirit of transparency, I confess to beginning my postsecondary education at an American community college and credit this system with my ability to complete a college degree. Hence, I personally understand the value of these institutions and as a result have been a strong advocate throughout my career. Coupled with my appreciation is my deep convictions for globalization and internationalization. My two research areas – community college student success and international education – have often seemed to be a peculiar coupling. However, as this book has demonstrated, there is a convergence; especially when viewed through the lens of world economic prosperity and understanding. I have often said that my goal in life is to contribute to world peace. While such statements are almost always met with skepticism, I want to clearly state my sincerity. Perhaps, the best road to a more peaceful world peace winds through the roads of quality education – one student at a time. Thus, world peace requires that education be liberally and globally distributed

across the lifespan. An educated citizenry is the key to economic prosperity both at the individual and aggregate levels. Yet education has historically been reserved for the young. Youth are given one chance to be educated and if poverty, lack of access to quality schools, or other issue prevents the acquisition of a quality education, individuals are generally doomed to a suboptimal life. Community colleges and their counterparts do not draw a line eliminating adults or those who have been previously unsuccessful in the educational arena but rather expand opportunities for a second or even third chance at a better life.

This book is a testament to the importance of postsecondary education in a form to fit the society, wherever it might be. From **Albania** to **Zimbabwe** countries are facing life or death challenges: terrorism, extremism, global warming, and human frailty to mention but a few. These threats cannot be overcome with education alone, but are left to flourish without it.

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Introduction

Rosalind Latiner Raby and Edward J. Valeau

There is a sector of institutions in higher education that share similarities in mission, philosophy, and student composition. This sector exists alongside the university sector and offers a curriculum designed to attract a specific cohort of learners. Institutional variations exist between countries and often within institutions in the same country. Nonetheless, noted similarities frame the institutions in this sector as an alternative to universities, and sometimes, a precursor. Although, comparative research has been conducted since 1971, there remains a lack of a concise term by which these institutions are called. The lack of identification is echoed in the lack of integration of these institutions in the study of higher education.

The generic term “tertiary” fails to distinguish these institutions from universities. The specific term “short-cycle” does not take into consideration the 2–4-year certificate and degree programs that are commonly found within these institutions. The disciplinary focus of vocational, technical, occupational, all of which offer a practical emphasis, are commonly offered by these institutions. However, institutions in this sector increasingly offer a practical oriented curriculum combined with a liberal arts or theoretical emphasis. The term “community college” is considered to be a North American prototype, and some feel it is not applicable on a global scale. Yet, there are numerous institutions around the world that call themselves “community colleges” and some share components found within the North American model. Despite the lack of a term for these institutions, research documents that this sector exists, that institutions within the sector are growing in number, that student enrollment is substantial, and student success is highly linked to job attainment. For purposes of this book and to facilitate communication on this sector, we call these institutions community colleges and global counterparts (Raby and Valeau 2009).

Institutions within the community college and global counterpart sector are mostly divided according to institutional type (Applied Sectors of Higher Education, Higher Colleges of Technology, Junior Colleges, University Colleges); academic level (upper-secondary, postsecondary; pre-baccalaureate); length of study (short cycle; short-term; 2-year; associate degree; applied baccalaureate); type of study (post-compulsory; tertiary); curricular context (lifelong education, transfer

education, vocational education); and status (non-university, sub-degree, second-tier). The complexities of these institutions are intensifying as changing local and national needs, funding options, and public opinion redefine the purpose, institutional structure, and even names of these institutions.

Early publications explored how the institutional design and curriculum made these institutions unique from universities (Kintzer 1979; Raby and Tarrow 1996). This first generation of publications focused on similarities of form, with knowledge obtained as a result of personal visits. The second generation of publications applied theories of massification, social capital, globalization, neo-liberalism, inequality theories, and transnational educational borrowing to explain institutional development and varietal patterns. It is important to note that more than half of the publications in the field are written by those who reside in other countries, and yet almost all of the publications are written in English. The identification and addition of non-English sources should be embraced as they will continue to broaden a deeper and richer understanding of the institutions in this sector.

This book represents a third generation of scholarship that no longer questions the existence of these institutions but rather uses empirical research to study the sector and highlight contemporary issues that are germane to the field of higher education with a purpose of building a comparative understanding of the sector at large. The authors explore emerging and evolving phenomena that impact the institutions' ability to (a) serve students; (b) offer a sound curricula; (c) admit and retain students; (d) increase completion rates; (e) link completion to job attainment; (f) create viable and sustained partnerships locally and internationally; (g) address the needs of unique populations; (h) fund and sustain adopted missions, visions, and values; and (i) support staff development to enhance faculty and staff excellence.

The *Handbook of Comparative Studies on Community Colleges and Global Counterparts* provides the first set of comparative studies that explore the complexities of these institutions in terms of mission, economic impact, governance, curriculum, and the role they are playing in the completion and success of students. The first volume focuses on philosophical, economic, and cultural adaptations as well as elements of success in terms of achieving equity. The second volume focuses on faculty, curriculum, assessment, internationalization, innovations, and post-completion pathways. The *Handbook of Comparative Studies on Community Colleges and Global Counterparts* is important due to the sheer number of community colleges and global counterparts that exist worldwide and the increasing focus they are gaining as countries are turning to them for an educated citizenry capable of competing on the world stage, economically, socially, and politically. It is time to acknowledge and validate the influence and importance that these institutions play and will continue to do so in the changing landscape of higher education.

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Prologue 1

The *Handbook of Comparative Studies on Community Colleges and Global Counterparts* comes out at a time when many countries are expanding and strengthening postsecondary education systems. In our increasingly global society and economy, education and training beyond secondary education is essential to a nation's competitiveness and the standard of living of its people. Institutions, like community colleges, are filling a need for education that is inexpensive, accessible, flexible, and tied to business and industry.

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Prologue 2

The field of international education is a lived experience for me, as it is for many of us who are champions of mobility because we have experienced first-hand its transformative power. Although I studied at a large research institution as an international student in the United States, it was while living and working in California, with its vast network of community colleges, that I truly began to grasp the unique role that these institutions play in educating the American population. Today, 68% of Americans begin their education at a community college, and so do almost 10% of all international students as demonstrated in Open Doors. But our field is also a constantly evolving one, with knowledge and educational transfer knowing no boundaries. As one such example of learning from global best practices, India – where I came from as an international student to the United States – is now exploring its own version of a US-inspired community college model.

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Prologue 3

In recent decades, many higher education institutions in Latin America have evolved to become universities. This phenomenon has been the result of the higher prestige that professional degrees (4–5-year-long programs) have over shorter technical and vocational education. However, the costs of attending universities and drop-out rates tend to be high, job markets have been challenging for college graduates, and there is an increasing demand for more occupations in technical and technological majors. In this context, the development of affordable postsecondary institutions and shorter programs is necessary. Community college models could become the solution to prepare the manpower in a wide range of areas and with specific knowledge and skills for the labor market. This book showcases some successful examples in Latin America.

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Dr. Raby and Dr. Valeau were the editors for the book *Community College Models: Globalization and Higher Education Reform* (2009, Springer Netherlands). Since publication, this book has remained one of the more popular sellers for Springer and chapters continue to be downloaded years after publication. Other joint publications include *International Education at Community Colleges: Themes, Practices, Research, and Case Studies* (2016, Palgrave Macmillan), *Increasing Effectiveness of the Community College Financial Model: A Global Perspective for the Global Economy* (2011, Palgrave Macmillan), and *International Reform Efforts and Challenges in Community Colleges* (2007, Jossey-Bass Publishers).

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Carrie B. Kister is an education research and policy consultant in Los Angeles and a Director of the Center for the Study of Community Colleges. She received her B.A. (1999) in Psychology from Dartmouth College and her M.A. (2003) and Ph.D. (2006) in Higher Education from the University of California, Los Angeles. She engages in relevant and applicable research related to community college policy and practice and regularly consults with community college leaders on issues related to college outcomes and accountability, governance, civic engagement, and strategic planning. She is the author of numerous journal articles and book chapters on community colleges and has coedited two volumes of *New Directions for Community Colleges*. She co-wrote *The American Community College* (6th edition, 2014) with Arthur M. Cohen and Florence B. Brawer and *The Shaping of American Higher Education: Emergence and Growth of the Contemporary System* (2nd edition, 2010) with Arthur M. Cohen.

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Volume 1

Building a Higher Educational Sector



Building a Higher Educational Sector: Volume Introduction

1

Rosalind Latiner Raby and Edward J. Valeau

Contents

Introduction 4

Abstract

This introduction introduces the thematic organization of the chapters included in the Vol. 1. These chapters are organized thematically to provide a foundation and context for understanding the sector of community colleges and global counterparts. Within each theme are examples of institutions in this sector from throughout the world.

Keywords

Globalization · Market commodity · Mission · Equity · Class · Race · Gender · Inequalities

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3

Introduction

Volume 1 focuses on characteristics of institutions in the community college and global counterpart sector that makes them distinct from other higher educational institutions. It includes four subsections: (a) “Globalization: Mission, Market Commodity, and the Philosophical Role”; (b) “Institutional and Cultural Adaptations”; (c) “Theories on Achieving Equity: Philosophy and Practice”; and (d) “Class, Race, and Gender Inequalities: Implications for Educational Opportunities.”

In the first section, the chapters explore similarities in mission that are influenced by massification, local influences, and the global market economy. Raby and Valeau show how changing educational theories of humanitarianism, neoliberalism, accessibility, and stratification intersect with the vision of community colleges and global counterparts. Martin Jephcote examines how economic and political priorities influence further and higher education colleges in England by focusing on the changing profile of learners, patterns of geographical engagement, and government policies that increase competition within and between further and higher education providers. Mike Brown describes the changing form and mission of TAFE institutions in Australia by showing how marketization of VET by for-profit and other higher educational providers is forcing TAFE to reinterpret further education curriculum to shift to a job-skill development curriculum. Hei-hang Hayes Tang, Chak-pong Gordon Tsui, and Wilton Chau analyze how market policy used the concept of massification to create Hong Kong community colleges and how the resulting sub-degree programs are differentiating those who attend community colleges from those who attend elite universities. M. Allison Witt compares the Copenhagen process policy in the European Union to the US Department of Labor’s Trade Adjustment Assistance Community College and Career Training to see how vocational education and training (VET) is reconstructed as a neoliberal response to globalization that results in a shift of power from local influences to multinational influences. Cassie Kruger and Charl Wolhuter examine how national contextual forces are upgrading South Africa’s Technical and Vocational Education and Training Colleges (formerly known as the Further Education and Training Colleges) and how the high cost of vocational education, lack of affordability by poor students, high levels of internal inefficiency, and low completion rates are complicating the transition. Audree Chase-Mayoral and Fayaz Amiri analyze how global market demands dictated by international agency funds and private sector interests determine how institutional structure, financial assistance, curriculum development, and provision of instructors are offered in Afghanistan community colleges.

Chapters in the second section explore institutional and cultural adaptations of community colleges and global counterparts as a strategic tool to build a highly trained workforce to improve national economic growth and facilitate massification to serve local communities. Mary Beth Marklein and Mai Van Tinh examine the 50-year history of community colleges in Vietnam and show how community colleges are helping to meet the economic needs of a country in transition while also preserving its cultural identity by “Vietnamizing” the model. Yi (Leaf) Zhang discusses the advantages of developing community colleges in Mainland China

based on the existing Radio and Television Universities (RTVU, *guangbo dianshi daxue*, or *dianda*) system which plays a significant role in China's online and adult higher education. Krisha Bista and Uttam Gaulee examine the Kathmandu National Planning Commission and University Grants Commission policy framework to restructure Nepal higher education and discuss how adopting the community college model will encourage massification to meet those objectives. Jillian Gross details how parallel organizational forms of nongovernmental organizations at the periphery of formal education and small departments embedded in government-funded institutions are interpreting the purpose of the Indian community college as a tool to enhance national development.

In the third section, chapters examine the extent to which the mission of providing access for nontraditional students is being met and if massification results in social change. Nitza Davidovitch and Dan Soren apply theories that link higher education to reducing social gaps to a case study of Israel University Colleges. They show that while new educational opportunities are utilized by students from less privileged groups and from those who live in peripheral geographic locations, the lesser status of these institutions maintains inequities as dominant groups continue to enroll in universities, major in more attractive fields, and gain employment in select jobs. Martina Gaisch and Regina Aichinger use a case study of the Universities of Applied Sciences in Austria whose mission of lifelong learning, third mission of sustainable regional development, and response to heterogeneity of students allows them to pursue varied educational pathways allowing for vertical expansion. Kristin Bailey Wilson and Wouter Van Alebeek use a case study of the South Africa #FeesMustFall movement to show how comprehensive universities can address economic disparities in income, lack of educational opportunities, and can become a means to offer possibilities for social change. Kevin Orr examines further education colleges in the United Kingdom that serve the less privileged students and explains how further education has a capacity to adapt despite being poorly understood by policy makers and managed by central government agencies and facing challenges due to sweeping cuts in funding.

The final chapters explore how class, race, and gender inequalities within a society are reflected in community colleges and global counterparts and how internal and external constraints thwart the realization of student success. Nitza Davidovitch, Dan Soen, and Yaacov Iram analyze pathways within Israeli University Colleges for Israeli Arabs from 2006 to 2016 and its impact on social integration from students' personal-family and academic characteristics, motivation for academic studies, perceived self-efficacy to succeed, and perceived social academic climate; it examines how pathway choices impact student integration in the Israeli job market. David Roof examines a case study of the National Institute of Management and Administration, a 2-year institute in Kabul, Afghanistan, in terms of faculty development, technology access, and how the institution is addressing issues of gender equity. Efia Assignon compares technical and vocational education and training (TVET) of higher education institutions in Francophone Africa with Canadian community colleges to examine why Francophone African TVET higher education institutions are unable to provide their economies with effective labor, professional, well-trained

abilities to best serve the needs of local populations. Pedro Pineda and Jorge Celis use a neo-institutional framework to delve into how the expansion of technical education in postwar Colombia created opportunities for massification but at the same time how lack of status was maintained due to the absence of institutional legitimacy by policy makers that resulted in transforming Technical Education to be part of the university “higher education” system.

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Part I

Globalization: Mission, Market Commodity, and the Philosophical Role



Community Colleges and Global Counterparts: Defining a Higher Educational Sector

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Abstract

Within higher education exists a sector of institutions called Community Colleges and Global Counterparts. These institutions are Global Counterparts to one another because they share mission, structural, and philosophical characteristics as they “educate non-traditional post-secondary students and demonstrate in a practical way the means by which new generations can receive skills and training that will ensure employment, prosperity and facilitation of social mobility” (Raby and Valeau. *Community college models: Globalization and higher education reform*. Dordrecht: Springer, 2009). Although researchers world-wide have examined this sector since 1971, it remains largely understudied and under-recognized by world educators and policy makers. This chapter examines how the mission of these institutions’ intends to provide an opportunity to build social mobility and yet simultaneously serves as a limitation that maintains societal inequalities. The chapter also applies the theory of educational borrowing to explore what institutional characteristics emerged as a result of internal institutional change and what characteristics emerged as a result of globalization patterns. In an era of expanded educational reform for higher education, the role of the Community College or Global Counterpart is pivotal for serving a varied workforce that is ever demanding and changing.

Keywords

Community Colleges and Global Counterparts sector · Non-traditional post-secondary students · Social mobility · Societal inequalities · Educational borrowing · Globalization

Introduction

Postsecondary education is linked to economic competitiveness and raised standards of living and is continually expanding as many nations are racing for the top. Yet, as students achieve secondary education in increasing numbers (UNESCO 2017; OECD 2015a), the pathways to the traditional university remain highly competitive. In 1993, Cerych (p. 5) noted that “the existence of a recognized alternative to traditional universities [is] indispensable.” Community Colleges and Global Counterparts (Raby and Valeau 2009) are a response to the need for these alternatives. Since 1971, over 1400 publications have been written about a sector of global institutions that share these specific characteristics and that we suggest allows them to be compared as a cohort. Within this sector are institutions that are known by several names including College of Further Education (Parry 2009), Community College (Levin et al. 2016), Polytechnic, Technical College/University, and TAFE (Technical and Further Education) (Adams and Gamage 2008). For purposes of this book, we call these institutions Community Colleges and Global Counterparts. This book is relevant because of the current and growing number of Community Colleges and Global Counterparts around the world and the consequence of high student enrollment patterns that are changing opportunity and access to higher education.

In the 1970s, the first publications on Community Colleges and Global Counterparts described institutional types and cross-national development projects. The first book included descriptive and theoretical analysis of educational borrowing from five countries (Raby and Tarrow 1996). Since then, multiple books have profiled structural design and characteristics, special journal issues have explored case studies, and peer-review journal articles have documented empirical research on this sector of higher education institutions. This book expands upon previous research by exploring the complexities found within and between these institutions by focusing on critical analysis of governance, leadership, and mission. These complexities represent emerging and evolving phenomena that impact the institutions ability to (a) serve students; (b) admit and retain students; (c) increase completion rates; (d) create viable and sustained partnerships locally and internationally; (e) use curriculum to address the needs of unique populations; (f) support sustained funding; and (g) support staff development to enhance faculty and staff excellence.

The two volumes of the *International Handbook* explore these topics to highlight not only the challenges of the field within a specific country, but to show how these topics build a comparative understanding of the sector at large. In that these institutions are now identified, it is time to academically address their role in higher education. This chapter provides (a) an overview of literature in the field; (b) an analysis of historical foundations; (c) a construct for defining a sector cohort; and (d) an introduction to theoretical discussions stemming from open access, building of human capital and educational borrowing flows.

Nomenclature Variations

There are many institutions that fit into the Community College and Global Counterpart cohort and yet there remains a lack of a common term by which they are defined globally. As an example, authors may use regional distinctions, such as American or European models (Skolnik 2016), labels, such as second-tier institutions (De Wit et al. 2015), and descriptors, such as Global Counterparts (Raby and Valeau 2009). The International Standard Classification of Education (ISCED 1997) placed these institutions in both *Level 4: Post-Secondary Non-Tertiary Education* and *Level 5: First State of Tertiary Education*. ISCED 2011 placed these institutions in both *Level 5 as short-cycle tertiary (at least 2 years) (with practical emphasis)* and in *Level 6 as 3–4 year Bachelor's or equivalent first degree programs (with theoretical emphasis)*. Other classifications, such as European Fields of Education and Australian Standard Classification of Education use ISCED terms and although they sort on skill level, they too fail to identify these institutions as a cohort. ISCED-F (2013) separates vocational education from general education but ignores those institutions that offer both concurrently, which is a commonality of most of the institutions in the Community College and Global Counterpart cohort. While ISCED and the other classification use the terms “short-cycle” and “tertiary” to define these institutions, these terms are rarely used to define this sector in academic or policy literature.

Table 1 Seventy-nine keywords 1971–2017

Keyword	#	Keyword	#	Keyword	#
Community college	323	Nonuniversity	21	Technical education	8
TAFE	237	Postsecondary	22	Technical-vocational education (TVE)	7
Further education (FE)	218	Postcompulsory	15	Higher colleges of technology	7
Vocational education	181	Higher education	15	University colleges	7
Vocational education training (VET)	114	Technical university	11	Vocational training	6
Tertiary	55	Junior college	9	Post-16	6
TVET	22	Apprenticeship education	8	Vocational-technical education (VTE)	6
Polytechnic	22	Short-cycle	8	Universities of applied sciences	5
Terms with four mentions	14–19; Adult education; lifelong; occupational education				
Terms with three mentions	Agricultural college; colleges; college university; entrepreneurial education; higher vocational education; labor education; secondary technical college; technical college; technical education training (TET); third-tier				
Terms with two mentions	Colleges and institutes; college sectors; farmer field school; higher professional college; higher TVE; industrial college; postsecondary vocational education; professional college; technical-vocational colleges; tourism education; two-year college; university alternative; vocational higher education; vocational secondary; vocational school; work college				
Terms with one mention	Agricultural technical; aquaculture; Ammattikorkeakoulu; associate colleges; continuing education; Fachhochschulen; folk high schools; Learning Village; lower secondary vocational track; low stratified higher education; maritime college; regional colleges; second tier higher education; short-term; stratification; technical institute; two-year technological college; two-year university; UTS; upper secondary college; vocational bachelor; vocational colleges; vocational further education; vocational and general; vocational and technical schools of higher education; work-based				

Table 1 identifies 71 names that a search of academic literature and policy studies found that identifies this educational sector. These terms are mostly divided according to institutional type (higher colleges of technology; Jr. college; university colleges; and applied sectors of higher education), academic level (upper-secondary, postsecondary; prebaccalaureate); length of study (short-cycle; short-term; 2-year); type of study (postcompulsory; tertiary); curricular context (lifelong education, transfer education, and vocational education), and status (nonuniversity, second-tier). In part, changing terminology reflects how universities and colleges are not static organizations as they are constantly redefining themselves (Tierney 2012). Changing nomenclature also shows a complexity within these institutions as variations often exist within a specific institutional type, such as the range of Technical

Vocational and Education Training (TVET) institutions (Anderson 2008) and the range of US Community Colleges (Dougherty and Townsend 2006).

Methodology

For this chapter, we updated the Raby and Valeau (2012) literature review of Community Colleges and Global Counterparts in print and online literature written in English, including peer review journal articles, chapters in books, dissertations, and ERIC documents. While any review that only focus on only English language sources ignores a wealth of publications (Raby 2010), English still remains the dominant language of international publication. For example, more than half of the authors in our review wrote about institutions in their home countries using the medium of English. Many chapters in this book will add non-English references that will enhance future longitudinal reviews. The longevity and depth of these publications has resulted in a de facto field of scholarship that resembles what Yamada (2015, p. 273–238) refers to as a process of institutional bases. In this process, the accumulation of knowledge production over time creates a recognized field of study that is supported by international conference presentations, focused in government policy documents, and reinforced by publications in peer-review journals. In turn, this scholarship builds a new generation of scholars who redefine this new field with thesis, dissertations, and empirical research. This process increases validity and credibility that this cohort exists and is viable for cross-cultural and comparative analysis.

Publications for the literature review were identified based on the process defined by the *Comparative Education Review Bibliography* (Raby 2010) in which a title had to reference (a) a country and/or region outside of the United States and (b) contain one of the identified keywords. Keywords were selected through a three-step process. First, a list of keywords used to describe Community Colleges and Global Counterparts were created from 1970 to 1980 publications. Secondly, as new sources were read, additional keywords were accumulated. Finally, all identified publications underwent a final keyword search to assure proper identification to define cross-checking results. Three search designs helped to locate diverse sources that could reflect different scholarly approaches: (1) peer-review articles listed in the *Comparative Education Review Annual Bibliographies* from 1971 to 2016; (2) peer-review articles and ERIC documents in ERIC, EBSCOhost Research Databases, PsycINFO, PROQUEST academic databases, IDP Database of Research on International Education, NORRAG database, and Australian Council for Educational Research databases from 1971 to 2017; (3) Google search for published books, chapters in books, dissertations, open-access journals, and institutional reports. The multipart data analysis included a quantitative charting of the type of publication and geographical focus followed by a qualitative content analysis of related themes and identification of common characteristics. Data was divided into segments, labeled and examined for overlap and redundancy, and then collapsed into layers of themes. The coding tool was refined through an iterative process and refinements were then examined using the same coding for multiple publications.

The review of literature includes 1473 publications from 1970 to 2017. The year 1970 is used as a start date because that is the date of the earliest publications that highlight Community Colleges and Global Counterparts in a comparative mode. Within the sample are 860 journal articles; 227 book chapters, dissertations, or thesis; 36 conference presentations; and 348 monographs, policy documents, or government reports. In order of occurrence, the most mentioned keywords were Community College (323), TAFE (237), Further Education (220), Vocational Education (181), Vocational Education and Technology (VET) (114), tertiary (55), polytechnic (22), postsecondary (22), Technical and Vocational Education and Training [TVET] (22), and nonuniversity (21). Table 2 compares the frequency of keywords from 1970 to 2017. The literature review confirms that many publications that focus on institutional names are linked to a specific geographic region. For example, publications on Technical and Further Education Colleges (TAFE) mostly focused on these institutions in Australia, Further Education Colleges (FE) in Great Britain, Polytechnics in New Zealand, Applied Sectors of Higher Education in Western Europe; and Regional Technical Institutes (Terciarios) in Latin America.

Sector Distinctions

Community Colleges and Global Counterparts share four specific characteristics (Raby and Valeau 2009). These institutions all have a mission in which professional and academic programs are responsive to the educational needs of local communities and industries and whose curricular programs are likewise defined by local needs. Because these institutions are purposefully located in communities where students live, there is an ease of access to get to the institution that, in turn, increases enrollment for nontraditional are oftentimes lower-income students (Dennison and Gallagher 1986; Wang and Seggie 2013). Secondly, this cohort of institutions offer options for university overflow and a “second chance” for nontraditional students who have long been excluded from higher education (Ayalon and Yogev 2006). Thirdly, this cohort offers short-term and sometimes longer multipurpose curricula to meet regional medium term labor requirements in high demand occupations in changing economies (Hui 2012; Shumaker 2013). Finally, these institutions support a mission that views educational access as necessary for providing economic and social capital that is needed to ensure social prosperity (Treat and Hagedorn 2013).

Within this higher education sector are institutions that have variations in organization, accreditation, and curricular emphasis. Some institutions are part of post-compulsory systems and most are postsecondary and part of a tertiary system. Few are an upward extension of secondary school, although in Quebec, students begin their education earlier because their secondary education is shorter (Bègin-Caouette 2013). Most are publicly funded, yet for some, “public” means “belongs to the public” and not funding from public sources (Epperson 2010, p. 115). Some are part of a binary system in which multiple missions lead to terminal certificate/degree and/or to transfer credit to 4-year university in which a student can then finish a baccalaureate degree, such as in Chile (Von Chrismar et al. 2015) and in Singapore

Table 2 Comparing frequency of the publication of keywords: 1970–2017

	1970–1979	1980–1989	1990–1999	2000–2009	2010–2014	2015–2017
Community college	21	17	67	110	80	28
TAFE	17	79	73	54	12	2
Further education	2	1	9	124	63	20
Vocational education	0	0	11	94	64	11
Vocational education training (VET)	0	1	7	35	63	8
Tertiary	0	0	0	44	6	1
Polytechnic	0	0	0	15	7	0
Nonuniversity	0	0	12	9	0	0
Technical vocational education and training (TVET)	0	0	0	10	11	1
Postsecondary	1	0	0	16	2	3
Postcompulsory	0	0	3	11	1	0
Higher education	0	0	2	9	3	1
Technical university	0	0	2	7	2	0
Junior college	2	0	0	5	1	1
Apprenticeship education	0	0	0	0	8	0
Short-cycle	1	1	2	0	4	0
Technical education	0	0	1	3	3	1
Technical-vocational education (TVE)	0	0	0	4	3	0
Higher colleges of technology	0	0	0	4	0	3
University colleges	0	0	0	4	1	2

Polytechnics (Wong 2015). Many institutions do not allow transfer as the intent is for direct entry into employment. No institution has the sole mission of transfer. Multiple accreditation agencies govern institutions in this cohort, including Governmental ministries, local industry, and local universities (Raby et al. 2016). In terms of curricula emphasis, some institutions offer shorter-term programs of a few weeks or months that specialize in apprentice training, paraprofessional, occupational,

practical vocational, or technical training. While in the past many institutions offered only a singular vocational or technical curriculum, today, most offer a multi-functional, multipurpose mixture for youth and adult learners in vocational, occupational, technical, and academic studies of 2–3 years in duration (Wong 2015). Marginson (2016) notes that in Germany, Korea and Taiwan, institutions emphasize technical–vocational education while in the Netherlands they emphasize middle professions such as teaching and/or local employment. Throughout the world, an increasing number of institutions also offer practical baccalaureate degrees.

Despite differences that can complicate comparison (Skolnik 2016), it remains the similarities that permit academic comparison (Dennison and Levin 1989; Brawer 1996; Raby and Valeau 2009). Initial constructs for comparative research were identified by Raby and Tarrow (1996) and later refined by Wiseman et al. (2012) who suggested that this cohort of institutions are most successful in countries where (a) market forces create a need for postsecondary institutions whose skilled technicians are in demand to support technological, vocational, and industrial development; (b) adult and continuing education is legitimized as postsecondary education; and (c) postsecondary education is equated with social and economic mobility.

Historical Foundations of Scholarship

There are four generations of scholarship on Community Colleges and Global Counterparts in which both United States and non-United States scholars defined institutional developments within and between countries. A more detailed discussion of this history can be found in Raby and Valeau (2013).

Generation One: Discovery. The first generation of scholarship occurred in the 1970s with case studies of institutional structures. Many of these studies resulted from first-hand visits, international development projects, and educational borrowing projects that focus on stipulations of the viability of implanting the Canadian or US Community College model in other countries and the steps needed to make it happen.

Generation Two: Educational Borrowing and Collaboration. The second generation of literature detailed educational borrowing patterns that branded the US concept of the Community College as having “resources and expertise especially in applied technology, that could serve [others] well” (ACIIE/Stanley Foundation 1994, 1; World Bank 2003) and that documented resulting international development projects involving a US Community College working with an international like-institution. Comparative scholarship also emerged that examined institutional leadership practices (Burgos-Sasscer and Collins 1996) and that identified common characteristics between institutional types (Cohen 1995).

Generation Three: Theoretical Analysis. The third generation of scholarship applied theoretical models of globalization in terms of privatization policies aimed at making a profit (Schugurensky and Higgins 1996) and humanitarian policies aimed to provide socio-cultural aid (Carter et al. 2014) to explain why this cohort expanded globally. Studies showed how institutional mission and structure were

adopted from one country to another, such as borrowing the French model in Senegal (Gueye and Sene 2009), how specific characteristics were modified, such as adoption of US-style ESL curriculum in Lebanon (Al-Kafaat 2012), and how purposeful rejection instituted new institutional forms (Wiseman et al. 2012).

Generation Four: Academic Studies. Since 2010, numerous empirical studies have been conducted. Some studies focused on student financial aid in China (Song and Postiglione 2011), governance in British Columbia and California Community Colleges (Levin 2001), financing of UK Further Education Colleges and California Community Colleges (Jephocete and Raby 2012), missions of Turkish and Taiwanese colleges (Wang and Seggie 2013), completion policies of 41 institutions globally (Raby et al. 2016), and international rankings for European model and American model institutions (Skolnik 2016). All studies begin with an acknowledgment that a sector of institutions exist and share enough similarities for comparison.

Theoretical Discussions

Two theories ground research on Community Colleges and Global Counterparts. The first theory identifies open access as either an opportunity to build social mobility or as a limitation that maintains societal inequalities. The second theory examines educational borrowing flows and their impact.

Open Access

Substantial literature exists on the importance of massification for higher education, which Trow (1973, 1–2) predicts and explains how university access would transition “from elite to mass higher education, and subsequently to universal access.” While massification was intended for universities, the similarities in Community College and Global Counterpart sector is striking. Literature shows that “non-universities have shift[ed] the centre-of-gravity of mass higher education systems towards greater instrumentality” (Teichler 2004, 3–16) and have changed a “scale of the social transformation in higher education” (Scott 2010, p. 2). Indeed, since 1991, there has been a global rise in higher education participation with rates rising 7% in upper middle income countries, 5% in lower middle income countries, and 4% in low income countries (UNESCO 2017). We suggest in this book that the introduction of Community Colleges and Global Counterpart institutions is a contributing factor to this change.

Two theoretical perspectives explain the extent to which open access is linked to socioeconomic mobility gains in Community Colleges and Global Counterparts (Raby 2000). Stratification perspectives claim that different institutional types other than universities perpetrate an already stratified system which mirrors existing social class inequities. Social mobility perspectives allege that access to higher education leads to enhanced social and occupational mobility and societal equity.

Open Access as Way to Maintain Inequities and Societal Stratification

Community Colleges and Global Counterparts are depicted as a sorting mechanism that directs nontraditional students to educational experiences that are not equal in prestige to those offered by universities (Marginson 2016), direct students into jobs that are of lower status (Shavit et al. 2007) and whose vocational mission channels students into – un- or underemployment (Brint and Karabel 1989) or “cooling out” which truncates graduation (Clark 1960). The stratification of institutions “disadvantage those whom the Community College model should serve” (Strydom and Lategan 1998, p. 98) and helps to maintain societal inequalities.

Limited Access. Open access is the grounding principle for admitting a large number of students without preselection. Yet, competition for limited spaces results in creating prerequisites that channel underprepared students into a spiral of remedial development courses, or in raising tuition costs, that while comparatively low, are still out of reach for the poorest students.

Lack of Completion. Open access allows entrance to students with a range of abilities. Some students lack the academic preparation to succeed, others lack the social capital to know how to achieve their goals, and still others are purposefully tracked into low level programs which have limited levels of progression. The low rates of completion are examined in the United Kingdom (Frumkin and Koutsoubou 2013) and in Hong Kong, where transfer rates are low (Postiglione and Kwok 2015).

Low Budget and Weak Infrastructure. Ishumi’s (1998) prediction that “wherever short-cycle colleges are found, financing is the primary dilemma” (p. 163) remains true today. Community Colleges and Global Counterparts receive a small share of national higher education funding (Jephocte 2011) and low budgets impact faculty salary, student-faculty ratio, student- support services, and facilities maintenance, which affect student achievement (Wang and Seggie 2013).

Low Status. Community Colleges and Global Counterparts are labeled by some governments, employers, and academics as “lesser-than” institutions. Even some literature labels them by what they are not, especially, in terms of not being a university (Kintzer 1998; Kyvik and Skodvin 2001; De Wit et al. 2015). Low status is compounded by location in rural or low-income areas (Aypay 2015). Graduates are perceived to be less competitive than those who attend 4-year universities which impacts job attainment and supports a hierarchy in which elite students choose universities while lower-ability and lower-economic students choose Community Colleges and Global Counterparts (Davidovitch and Iram 2009). In turn, these institutions are cast as a “second chance” (Cohen 1995) or labeled the “Cinderella sector” (Rushbrook 2010). The dichotomy is seen in North Cyprus where Turkish Cypriot students see these institutions as a “Cinderella sector” while Turkish mainlanders view the same institution as a choice of last resort (Kusch et al. 2009).

Un- and Underemployment. There is no guarantee that graduates of Community Colleges and Global Counterparts will be employed, that jobs will be commensurate with a level of study achieved, and that these jobs will result in social mobility. Studies link low status to un- and underemployment in Hong Kong (Postiglione and Kwok 2015) and in United Arab Emirates (Drummond and Hartley 2015).

Institutional Conversions. In response to low status, many Community Colleges and Global Counterparts have transformed into a variation of a University College. While this process is not new (Wilson 2009), the magnitude in which conversions are occurring is today noteworthy and is seen in Vietnam (Oliver and Engel 2015), in Finland (Skolnik 2016), and with the recent rebranding of the Association of Canadian Community Colleges as Colleges and Institutes Canada (Colleges and Institutes Canada 2015).

Open Access as a Link to Opportunity and Societal Mobility

Many publications maintain a philosophical belief that higher education results in better jobs, higher income, and social mobility (OECD 2015b). Research shows that this type of success does happen under certain circumstances and are related to (a) what type of education offered (technical or vocational, personal development, professional, or academic), (b) the kind of student targeted, (c) the relationship of the type of education to the college's mission, and (d) what students actually do with this education (i.e., transfer to a university, work or drop out) (Raby and Valeau 2009).

Access. Open access does expand student diversity (Ayalon and Yogev 2006) into higher education as well as access for underprivileged students such as youth in Venezuela (Castro and Garcia 2003), nontraditional students in Poland and Canada (Butler et al. 2008) and is a reason for why students choose to attend Vietnam Community Colleges (Epperson 2010).

Local Geographic Locations. Location in remote, rural, or urban poor areas around the world increase accessibility. It is the physical placement close to home that is a noted element for students choosing to attend Canadian CÉGEPs (Bègin-Caouette 2013), and Japanese Jr. Colleges (Anazi and Paik 2012). Curricular development intersects with local need such as Taiwan grassroots social action curriculum (Chen and Wang 2009) and Nunavut Arctic Community College (Canada) workforce sustainability curriculum (Gaviria 2012).

Nontraditional students. Open access for nontraditional students has been demonstrated as a way in which "Community College can redress inequalities" (Ural 1998, p. 1999) by serving students who are older, have nontraditional entry qualifications, work full time, have family commitments, come from low income and minority populations and are often first-generation students. Open access has positive outcomes in Wales Further Education that attract lower-income women ages 24–40 who were initially disengaged from learning and then given an opportunity to reenter higher education (Jephocote 2011), in Brazil for lower-income students (Castro and Garcia 2003), and in Europe where there is a growth in participation by women, ethnic minorities and immigrants, and to some extent those in the working class. This, despite existing external and internal barriers, there is success of these groups towards completion (Schofield and Dismore 2010).

Jobs. Literature shows that for those who have taken some postsecondary courses but have not graduated can still gain individual benefits that include wage increases,

improvement of job prospects, and improved physical and mental health (Chen 2009; Mullin 2012). Research documents a gain in jobs for women in Japan (Anazi and Paik 2012), and higher wage earnings in Australia (Herault et al. 2012). Studies show that graduates get jobs at a rate higher than nongraduates from Tunisia Higher Institutes of Technology Studies (Shumaker 2013), from Denmark Further Education Colleges (Shapiro 2015), from Haiti Bishop Tharp Business and Technical Institute (BTI) (Connell 2013), and from Malaysian Community Colleges (Sun Daily, August 31, 2016). Many authors writing from other countries acknowledge stratification as an inherent component of society which is being specifically addressed by the existence of reforms that promote access. In this context, *any* job is better than unemployment, *any* education allows an ability to translate into social mobility, no matter how small the impact. Concurrently, non-participation in higher education can lead to downward mobility (Panwar 2013; Marginson 2016).

Educational Borrowing

Through globalization, similar policies, ideals, and programs transverse from country to country aided by colonialization, transnational corporations, technological changes, nongovernmental organizations, and student and scholar mobility. Patterns show how sparks of interest contain appeal and applicability that transcend geographic space. Change readily occurs when new options become the easier alternative to reform. Educational borrowing is reshaping the landscape of higher education (Shahjahan and Kezar 2013, p. 20; Lee 2014). As such, Steiner-Khamsi and Quist (2000) suggest that the elements of discussion need not be on “what was borrowed” but rather on “why” the transnational borrowing occurred. Two patterns emerge when examining the “why” in educational borrowing. In the first, institutions seek out others through student and staff mobility and via collaborative projects. In the second, outreach from donors, often from the United States, Canada, and Australia to other countries for either neoliberalism or humanitarianism purposes, defines and facilitates collaborative projects. In both patterns, the “why” for Community Colleges and Global Counterparts remains the need to educate students postcompulsory schooling and to outreach those who are not served by traditional universities.

Many maintain that higher education flows are unidirectional in that “there is only one common academic model worldwide” (Altbach 2011, p. 16) and “with few exceptions, knowledge and institutional patterns are transferred from the major industrialized nations to the Third World – or even to more peripheral industrial countries – with very little traffic in the other direction” (Altbach 2011, p. 19). Similarly, the Community Colleges and Global Counterparts sector has roots that came from the nineteenth-century *Scandinavian Folk High School* that introduced localized nonformal adult education, the German *Volkhochschulen* and *Fachhochschulen* that formalized postsecondary, preuniversity institutions and pioneered open access policies for nontraditional students later and the *European Polytechnic* and *Institutes of Technology* which offered alternatives to university

academic programs. Later, British and Australian *Further Education* added components of professional education, Canadian and US *Junior/Community Colleges* added multiple missions within the same institution along with open access supported by low tuition and European *Applied Sectors of Higher Education* emphasized job and career training for students with a wide variety of educational backgrounds (Raby and Valeau 2013). The unidirectional flows are evident in educational borrowing patterns.

Educational Borrowing Initiated by Local Institutions

Collaborative projects stemming from an initial site visit facilitate educational borrowing. In some contexts, it is the centralized government that develops policy to build a new higher education sector. In other contexts, local educators, ministry representatives, nonprofit organizations, Fulbright scholars, and local entrepreneurs are the impetus for establishing educational reform through collaborative programs (Raby and Valeau 2013). Recent examples include the Brazil Coordenação de Aperfeiçoamento de Pessoal de Nível Superior – CAPES program (WFCP 2016) and a collaborative between Universidad Autonoma de Occidente, Cali, Colombia, and Arizona Community Colleges to build joint first nation projects (Elsner and Sanchez 2015). Often when the local reaches out externally, reform efforts are often based on the belief that adopting the Community College model will benefit the economy through a stronger and more diverse workforce (Kotamraju 2014; Hargreaves 2012).

Educational Borrowing Initiated by Donor Institutions

Educational borrowing emerges as a result of a planned transfer of policy and structure initiated by donor institutions and associations (Raby 2000). There are two, not necessarily contradictory rationales that govern this transference. For some, educational borrowing is a result of humanitarian aid to promote socioeconomic reform. For others, it is a direct result of revenue-generating policies aimed at making a profit. A common stereotype is that all educational borrowing originated with the United States. Yet, literature shows that purposeful transfer stems from many countries. The Canadian International Development Agency sponsored collaborations in over 60 countries (ACCC 2016). Flows are also seen from French technical institutes to institutions in Iran, Mexico, Senegal, and Venezuela, from German technical colleges to institutions in South Africa, India, and Thailand (Barabasch et al. 2009), from Netherlands Upper Secondary Vocational Education to institutions in East Asia and the Middle East, from Japanese International Cooperation Agency to South African colleges (WFCP 2008), from Australian TAFE colleges to institutions throughout Asia (Barnaart 2015), and through the Caribbean Community Regulations and the Caribbean CAPE Degree (Morris 2012). Wright (2000) concludes that Community College is not an American “thing” anymore.

Humanitarian Rationale. Much of donor directed educational borrowing uses a humanitarian focus which views aid as a means to create societal change to provide opportunities for the disenfranchised. Contextually, Community College international development aims to build human capacity through education which in turn strengthens democracy and the socioeconomic future of world citizens (Elsner et al. 2008). This thinking is in alignment with the World Bank (2009) report that neglecting tertiary education could seriously jeopardize longer-term socioeconomic growth and hinder progress of the Millennium Development Goals which require tertiary-level training to implement. Current examples include developing the “college of the people” in the Dominican Republic (Halder 2015), and adding programs that fashion a US model in Yemen (Alsohybe 2015) and in Tunisia (Hagedorn and Mezghani 2013).

Revenue-Generating Rationale. Many international development projects include market-oriented policies in which the donor institution receives payment for their expertise in training, curriculum delivery, and management style (Schugurensky and Higgins 1996; Quint-Rapoport 2006) as well as in projects funded for the specific creation of Community Colleges (World Bank 2016; Australian Agency for International Development 2016). In 2013, 10 of 54 US HED (Higher Education for Development) funded partnerships involved Community Colleges (Connell 2013). Revenue earning was a driving force behind the Southern Alberta Institute of Technology (SAIT Polytechnic) revenue generating, energy training program (Nixon 2011), and a combination of profit generation and humanitarian aid continues to support a number of collaborations throughout the world (Whissemore 2013). The “branch campus” is another example of blended humanitarian and privatization from the first American College in Singapore (1988) and Los Angeles-Tokyo Community College (1996) (Yamano and Hawkins 1996) to current campuses that exist throughout the world and include curriculum sharing, faculty training, and infrastructure building (Li 2010; Hartenstine 2013).

Moving Forward

A literature review of the Community College and Global Counterpart sector shows that comparative study has been a focus of scholars and practitioners for a half-century and began before technology allowed for easy travel and access of communication. By 1996, with increased communication and mobility, a more defined field of academic study emerged guided by an increase in the number of publications that were written by scholars from other countries about their own institutional constructs. Contributions by non-US authors reinforce as well as challenge the branding of US Community Colleges as a point of emulation and in so doing helped to define a context for one example of the politics of educational borrowing. When examined as a composite, publications show how shared commonalities exist in diverse institutions.

The existence of Community Colleges and Global Counterparts continue to impact social change at global and local levels. Students, in large numbers, enroll because the opportunity exists and sometimes because it is the only opportunity that

exists. The process of introducing a Community College or Global Counterpart into a society results in increased access for nontraditional students, and at some level, opportunities for jobs and career/personal advancement. This is illustrated in Target 4.3 of the UNESCO Sustainable Development Goal (SDG) that by “2030, countries should provide equal access for all women and men to affordable and quality technical, vocational and higher education, including university” (UNESCO 2017). Global links are cultivated by global mobility, sharing of curriculum, and imitation of institutional forms. These relationships are dynamic and establish bonds between individuals on campus, the local neighborhood, and the global community.

Many of the theories that we introduced in our 2009 volume to explain the proliferation of institutions in this sector remain valid today in 2017. Also similar is the continued lack of budget, power, and prestige given to these institutions largely due to their physical location, their curriculum, and their open access for non-traditional students. Moreover, in a world obsessed with global rankings and world-class universities, Community Colleges and Global Counterparts are not only outside these connections but represent institutions that are not even acknowledged as possible players in the field. This includes the lack of support academically for research on these institutions effectiveness in meeting the needs of students. Even the names by which these institutions are referred lack continuity and validation.

Although numerous scholars from throughout the world contributed to the 2009 volume and to this Handbook, few international associations include these institutions in their focus. These institutions provide foundation for social equalization in contexts where none previously existed, even in the poorest nations, they provide new opportunities and at a great or even minimal level, represent the opportunity for change. We believe these are new and extended voices and through our effort to date assert a bold statement which declares that they need not only be heard but recognized as part of the higher educational landscape. In that context, more research by universities and associations is needed to discover new strategies for change and for addressing challenges that hampers these institutions from having a greater impact on the constituencies they serve.

The various chapters in this book illustrate the diversity of Community Colleges and Global Counterparts throughout the world and continues the dialogue related to research and change. Resulting changes to access, enrollment numbers, and facilitation of socioeconomic mobility sustains the image of these institutions as symbols of equity and opportunity. As such, in an era of expanded educational reform for higher education, the role of the Community College or Global Counterpart is pivotal for a society whose varied workforce is ever demanding and changing.

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The Changing Shape of Further and Higher Education in the UK

3

Martin Jephcote

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Abstract

This chapter sets out the current and likely changing shape of the Further and Higher Education sectors in the United Kingdom, with a particular focus on the Further Education sector which most closely resembles the definition of an American Community College counterpart. Both sectors have operated under financial constraints, but it is arguably the Further Education sector which so far has had to face greater reductions in real terms funding. As a consequence, the greatest pressure has been on the provision of adult education, that is, for those who return to learning at various stages of their lives, and reductions to it undermine the dual goals of increasing economic competitiveness and improving social mobility. At the same time, the attention of some senior managers in Further Education has been drawn to a centrally driven agenda of efficiency and merger rather than driving up the capability and performance of learners.

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Keywords

Department for Business and Industry · England · Further and higher education · Higher Education Funding Agency for England · National Student Survey (NSS) · Russell Group

Introduction

This chapter sets out the current and likely changing shape of Further and Higher education making clear the underpinning economic and political priorities. Illustrative of this is the changing profile of learners in both Further and Higher Education including increasing uptake of higher education by nontraditional learners in higher education settings, changing patterns of geographical engagement, and introducing government policies aimed at increasing competition within and between further and higher education providers. In the main, the focus is on England because increasing devolution of policy-making powers to Wales, Scotland, and Northern Ireland limit scope for generalization. Data cited are unless otherwise stated for England.

Further Education in the UK is a distinct sector which is set apart from Higher Education Institutions (HEIs). Further Education is the sector which most closely resembles the definition of an American Community College counterpart in that, in the main, it serves local students, many of whom are returners to learning, where programs are often linked to low and intermediate skills acquisition and are all subdegree level. The Higher Education sector, that is universities, more or less have a monopoly on degree level study and its accreditation, many students live away from home while studying, mostly undertake degree or postdegree level qualifications and their aim is to find graduate-level employment. For a number of years there has been an ongoing marketization of Further and Higher education, characterized by the desire to expand student numbers and income derived from them, resulting in increased competition within and between the sectors. As a consequence, activities thought the domain of one sector or the other have become more mobile. An obvious example is in the amount of what is regarded as Higher Education activity, such as diploma level and degree-level programs which are delivered in Colleges of Further Education. In relation to undergraduate programs, there has been a marked downturn in the numbers of students registered for franchised provision, that is those registered at a Higher Education provider but taught at a College of Further Education, and a 57% increase since 2010 in those directly registered at a College (HEFCE, Key Facts 2014–2015). And in 2014–2015 there was a further 5.5% fall on franchised provision and a 1% increase in direct registrations at Colleges.

An Overview of Further Education and Higher Education

Whereas the numbers attending Further Education Colleges has remained fairly constant, there have been changes in the age profile of the student population and with no regulatory limit to the numbers that can be admitted into undergraduate

programs (delivered in an HEI or a College of Further Education), Higher Education has witnessed ongoing “massification” with more than 40% of qualifiers gaining access to an undergraduate degree program. There is, however, increasing debate and questioning of the value of a degree as opposed to other routes, such as an apprenticeship, not least because of the high fees and living costs which many students are expected to finance through long-term student loans. Put simply, increasing numbers of graduates erode what is termed “the graduate premium,” that is the higher lifetime earnings than those who do not enter the graduate labour market. Whereas the premium remains high for high status professions such as medicine, economists, and geologists, at the same time there has been an erosion of the graduate labour market with increasing numbers of graduates undertaking what would not be classified as graduate work, yet are burdened with hefty student loan debts which they may never pay off. In turn, with central government facing the prospect of having to fund these unpaid loans, this is seen by them as a way to leverage universities to utilize some of their fee income for wider social advantage, such as the provision of bursaries to applicants from disadvantaged backgrounds, or involvement in local community projects including the running of schools.

With regard to Universities (HEIs), in 2014–2015 there were 159 HEIs across the UK, with 2,266,075 students of whom 1.73 million were undergraduates, 538,000 postgraduates, 1.7 million studying full and 569,000 part-time, 1.83 million from the UK, 125,500 from the European Union, and 312,000 from non-EU countries. The number of part-time, typically older undergraduate students, has been in decline with a fall of 58% since 2010. Fifty-six percent of HE students were female, and 45% of students studied science subjects. Across all ethnic groups, the biggest increase in numbers starting a full-time first degree was among black students and the numbers of UK-domiciled black and minority ethnic (BME) students starting full-time first degrees increased by 63% in the 10 years to 2014–2015, making up 28% of all entrants. About three quarters of undergraduate postgraduate university entrants are to programs in the Arts, Humanities, and Social Science, with the most popular subject area being business and administrative studies (HEFCE, Key Facts 2014–2016; and Universities UK 2016).

There are 732 Alternative Providers of Higher Education who do not directly receive public money but whose students attend one of the 122 with “designated” status, many linked to universities, can access loans and grants. The majority of students on designated programs are over the age of 25, London based and studying full time, most on business and management programs. These providers are mostly small scale, providing specialist courses, with business management the largest, half having less than 100 students, ten more than 1000 students, and only seven having degree awarding powers of some description. A study conducted on behalf of the Department for Business and Industry estimated there were between 245,000 and 295,000 students attending such providers, with the expectation that numbers would increase in coming years (IFF Research 2016). There was some evidence from the survey of students that alternative providers were fulfilling a widening participation role with 46% of students from an ethnic minority background and 15% with a disability.

There were an additional 189,635 HE students at FE colleges (<https://www.hesa.ac.uk/data-and-analysis/publications/higher-education-2014-15>). There is no single reason to explain this rising trend. For some students, it may be the attraction of lower fees, living closer to home, or the preference of the classroom to the remoteness of the lecture theatre. It also fills what Doel (2015, cited by Garner) calls “cold spots.” This is where, outside cities, there is limited or no local provision of Higher Education. Also, it is because Further Education Colleges are more likely to provide courses that focus on the sorts of practical vocational skills which are often shunned by Higher Education providers such as manufacturing and agriculture, and which often reflect the needs of the local labour market.

Since 2009 the number of students in Further Education in England has remained fairly constant at around four million. In 2015, there were 335 Further Education institutions in England (Colleges, and Sixth-form colleges), that is a decline of 31% since 2000, accounted in the main because of mergers, with a projection that by 2018 there will be fewer than 250, larger colleges (Eduserv 2016) driven by efficiency reviews. Further Education Colleges are broadly conceived in terms of two distinct groups of students, that is, those aged under 19 and those 19+. Under 19 provision targets those with different attributes and aspirations and are a source of competition for income between other colleges and with schools. To put this into context, the proportion of 16–18-year-olds in full-time education (at school or college) rose by 15 points to 71% between 1997 and 2015 and the full-time education rate increased for each single age group. At the end of 2014, an estimated 12% of 16–18-year-olds were not in any education or training. Only 63% of UK 18-year-olds were in some form of education in 2012 – below all other EU states apart from Malta and Cyprus (House of Commons Library, July 2016). The under 19 group includes those studying on programs that qualify them for entry to an undergraduate program, many of whom have a choice whether to attend a college or a school. Other provision is taken by those who have, in academic terms, not done well at school, and is described as “the last chance saloon.” A more distinctive part of the college offer is in vocational areas which are not provided in many schools. In recent years, there have been ongoing reductions in the number of adult learners – those aged 19+ in government-funded adult further education, at 2,032,500 in 2015/16, a fall from over three million in 2010 (BIS 2016), see following.

Marketization

In 1993, Colleges of Further Education were given their autonomy as independent corporations, but with it came a tight regulatory regime of new managerialism and public accountability. This was at a time of an increasingly globalized education agenda, based on the principles of neoliberal economics and the privileging of the market as a means of regulation and control. As a result, Colleges were to feel the effects of marketization and new managerialism ahead of older established universities, who remained relatively immune from government intervention, although that has now changed and continues at a pace (see following).

In the period immediately post-1993, incorporation had an impact on how Colleges of Further Education were managed, and on those who worked and studied in them. This new “marketized” approach led to intense competition to attract students and, in turn, income, and in the case of publicly funded students placed a premium on economically valuable skills. On the one hand, Colleges were forced to operate to meet their own self-fulfilling interests, and on the other, were driven externally by the demands of efficiency, value for money, and performativity (Jephcote 2011). The college sector in general and the college managers of whom it comprised were coerced into adopting the principles of “new managerialism” (Gleeson et al. 2005) having to give equal if not greater focus to financial management than student learning and welfare. Teachers were faced with larger classes, the threat of the closure of courses deemed nonviable and in response adapted their styles of teaching and interaction with students.

Not least because of increased undergraduate tuition fees (see following), providers of undergraduate degrees, whether in a College of Further Education or a University, have been subject to more scrutiny and public accountability. Launched in 2008, the National Student Survey (NSS) of final year students gathers students’ opinions on their experience and the quality of courses. As the Higher Education Funding Agency for England states, its purpose “is to contribute to public accountability, help inform the choices of prospective students and provide data that assists institutions in enhancing the student experience.” It provides a basis for comparison universities and programs (subjects) between providers and along with other data is used to compile league tables and university guides published by national newspapers (<http://www.hefce.ac.uk/lt/nss/future/>). In turn, this has to an extent shaped behavior in an attempt to improve NSS scores, such as focussing on the quality of assessment and feedback and the overall student experience. Similarly, and not least because of concerns about high fees, graduate employment destinations and earnings, a measure of destinations 6 months after graduation also acts as a measure of performance and a means of “consumer” accountability.

Funding and Access

It is the period since 2008, characterized as that of financial downturn and in the UK one of economic austerity measures, which has played out differently for the College, Further Education sector, and the University Higher Education sector. From September 2006, universities were allowed to charge up to £3000 per year in tuition fees, with additional government funding per student, and from 2012 this was raised to £9000 per year, without any additional government funding for students. This meant that by the beginning of the 2015 academic year, a 2012 entrant was paying £27,000 for a standard 3-year program. There are two aspects of this to note. First, that as those enrolled prior to 2012 completed their program, to the benefit of the university sector, they were being replaced with those paying much increased fees. Second, however, the fee set at £9000 in 2012 has not risen and any future rises are likely to be dependent on university performance measures, including

National Student Survey scores, and a measure of graduate employability and earnings. Although at the time of the raising of fees, there was an initial fall in the rates of applications, over time numbers have mostly recovered, partially offset by demographic change in the form of a smaller 15–18 cohort now feeding through. Moreover, there was no negative impact on numbers of those from disadvantaged backgrounds but, unrelated to fees, there was a marked drop in the number of mature and part-time students, with a drop of 40% of mature students between 2007 and 2013, and a drop of 47% of part-time undergraduates between 2010 and 2014 (Lupton et al. 2015).

Since 2010 funding for Further Education has fallen in real terms by 14% whereas over the same time period the number of universities has remained unchanged while funding for Higher Education has risen by around 20% (Eduserv 2016). Powell (2015) suggested that Further Education had been a soft target for government, and cited the then Minister for Education as saying that the sector was “in a fragile state.” Suggestions of further cuts were met with alarm by college principals with projections that 4 in 10 colleges would be forced to close. The more immediate impact was being felt in terms of staff redundancies and dropping of courses. As Powell (2015) stated:

These cuts are being made at the same time as our country is facing a significant skills gap – shortages that will cost our economy £10bn this year. Across science, technology, engineering and manufacturing industries the picture is the same: there is a significant mismatch between the number of vacancies and the dearth of young people qualified for those roles. Yet these subjects – so vital to our country’s competitiveness – are among the first being dropped as a result of the immense pressure on budgets in sixth forms and further education institutions. Limiting opportunities for young people, including some of the most disadvantaged in our communities, comes at an enormous cost.

It is the adult education provision within Further Education that is facing the greatest pressure. Writing in the *New Statesman*, Plowden (2015) pointed out that with one million fewer adults in further and continuing education since 2010, current cuts to the further adult education budget are an easy target. Those paying the price are those who teach, with 61% on part-time or hourly paid contracts with little job security or career progression, and those adults already lacking basic skills whose chances of enhanced employability are undermined. A similar picture was presented by Whitaker and Offord (2015) who drew on research undertaken by the Association of Colleges, an organization of College Principals. Their members reported a 35% cut to the adult skills budget since 2009 and expressed fears that adult education and training could disappear by 2020 if cuts were to continue at the same rate. It is courses in health, public services, and care sectors that are expected to be hit hardest by coming cuts, with the loss of 40,000 course places in these areas, and consequently undermining routes into nursing and social care. With people living and working longer, this scenario seems counterintuitive and it would seem that more not less training is needed for the adult population. It also seems counter to declared public recognition as stated by the Department for Business Innovation and Skills (BIS 2016):

Having a skilled population is vital to maintaining the international competitiveness of our economy and creating high quality jobs. Improving our skills does not just improve our economy; it also has the potential to make the UK a fairer place by creating more social mobility and enabling people to play their part in society.

Moreover, with 57% of adult participants' female, 16% with a declared learning difficulty, and 20% from a black or minority ethnic background, negative consequences of falling participation rates might be amplified among these groups.

Instead, as a means of maintaining income, Colleges may be forced to turn to their pre-19 age group to underwrite activities, especially those willing to undertake an apprenticeship for which funding is more forthcoming. Indeed, an expansion in the number of apprenticeships on offer was in the period 2010–2015 a key government goal although in practice the majority of those who took up an apprenticeship were already in work, but at least however, there was a growth in the numbers participating in the over 25 age group (Lupton et al. 2015). Attention has now been turned to attract younger entrants into apprenticeships as an alternative to a degree, and marketed with the advantage of no fees and earning while learning. Only time will tell what the take up will be and the impact on subject choices in both the Further and Higher education sectors.

New Directions

In the global era and the positioning of the UK as a knowledge-based economy, there is widespread recognition on the part of policy makers, educational providers, and “consumers” that further and higher education will both play a key role. Those buying into Higher Education are who, in the main, have the social and cultural capital, that is, those expecting to be prepared for and in turn work within the knowledge economy, especially in the professional, service, and technology sectors. They recognize the mutual benefits of investing in themselves, their human capital, in the same way that governments see the benefits to the wider economy and society. The growing dilemma is what will be on offer both educationally and in terms of employment opportunity for those who sit outside of this taken-for-granted social contract.

Historically the Further and Higher Education sectors have been considered as separate and distinctive, yet at the same time complimentary. For example, there has been the growth of foundation degrees, introduced in 2001, which combine academic study with workplace learning, and focus on the skills for a particular job or profession. They are the equivalent of two-thirds of a full-time honours degree, with an option to complete the full degree. Currently these are designed as a partnership between Further and Higher Education, but taught in Further Education Colleges, and there are possibilities for Further Education to develop and award their own foundation degrees. Indeed, the market for degrees is being opened up to private providers including manufacturing and service sector businesses and commercial educational companies. These are able to compete with universities because they mostly offer a limited range of programs, such as law or humanities, and avoid high cost activities such as science and medicine.

Yuan and Powell (2013) couple the possibilities offered by MOOCS with the opening of space for the entry of new providers targeting professionals and those who cannot afford traditional forms of provisions. This is a form of “disruptive innovation” which creates a new market for the needs of either new “consumers” or for existing “customers” so that “disruptive innovations have reshaped markets and shifted the power from the established players to new start-ups and alternative providers in the global technology, social media and music industries” (14). Paradoxically, for Higher Education providers this may result in them having to establish their own low-cost alternative forms of provision. The setting up of Futurelearn is one such example. This is a private company owned entirely by The Open University, the UK’s most established and largest provider of higher education programs. Launched in 2013 and with just under five million users, it is a collaboration between universities, the British Council, the British Library, the British Museum, professional bodies such as the Association of Chartered Certified Accountants (ACCA) and Institution of Engineering and Technology (IET), and businesses including the BBC as well as UK Government. Unlike the Open University whose online courses are supported with by a tutor, Futurelearn participants join a community of peers.

There are other changes that also signify a disruption to the established groupings of providers and the established status hierarchies. The most prestigious grouping is the collection of twenty-four research intensive universities known as the “Russell Group” which between them produce two-thirds of the UK’s world class universities’ research output. Next is the “Millionplus,” a group “modern” or “new” universities who between them educate in excess of one million students. Another is GuildHE, an organization that facilitates the grouping together of some universities and colleges, particularly those specializing in drama, design, teacher training, and agriculture although, tellingly in the status hierarchy, Colleges of Further Education can have only associate membership.

University Technology Colleges and Studio Schools provide an alternative and direct competition to Colleges of Further Education for 14–19-year-olds. University Technology Colleges combine technical, practical, and academic learning that underpin advanced technical skills and. Their purpose is to fill skills gaps and promote social mobility especially among those not suited to traditional academic education. Each is supported by employers and a university to ensure that the curriculum is innovative and responsive to local labour market needs, so that what is learned can be applied in the workplace. At Studio Schools, their curriculum includes enterprise education in which students engage in simulated business experiences and real work, all built upon enquiry-based learning.

Concluding Comments

Compared with Further Education, the future of Higher Education looks more certain. For Higher Education, the future will be around issues of fee income and measures of teaching quality and the relationship between the two. For the

foreseeable future, this will lead to increased competition for students, to the extent that is, that applicants give priority to the so-called teaching quality rather than other indicators of success given that some of the UK's top rated universities, including Imperial College, Edinburgh, and University College London, are ranked in the bottom quartile on teaching quality.

For Colleges of Further Education, the future is less certain, not in that they face decline, but because of the magnitude of the challenge and to ongoing reorganization of individual colleges. Thus, in a leading review Smith (2016, p. 3) suggested that “We are currently experiencing the most significant period of change the Further Education sector has seen for a generation.” As already noted the key drivers for change include the role of Colleges in meeting labor market needs, mergers and a squeeze on funding. Her survey of 240 senior leaders placed as their key challenges learner performance (32%), ensuring staff have the right capabilities (30%) and generating new income streams (29%), but all of which were deemed low priority. Instead, their priorities were to do with managing the outcome of government initiated reviews (29%) which they thought would lead to further merger and a reduction in the number of Colleges by more than 25%, the wider take up of apprenticeships (23%) and employer engagement (19%). As she suggested, giving attention to these priorities is something of a mismatch with what are seen to be the most pressing challenges and may divert attention away from other pressing needs. Giving a low priority to learner performance will undermine the goal of increasing productivity, and the low prioritizing of staff training both compounds that issue and does little to address issue of staff retention. In England, Colleges of Further Education have to work within the parameters of the government-led reform of the sector, and “move towards fewer, often larger, more resilient and efficient providers. We expect this to enable greater specialisation, creating institutions that are genuine centres of expertise. . . and that the final outcome will deliver on the Government’s wider economic and educational objectives and ensure best value for taxpayers’ money” (BIS 2015).

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Abstract

This chapter looks at the development and current rendition of TAFE across Australia. The development is divided into four historical periods. The first period is one where aspects of European Technical Education are introduced and established across the country. The second period is associated with a federal government inquiry into Technical and Further Education (TAFE) that culminates with the two volume report being tabled in the federal Parliament in 1974, (ACOTAFE 1974). This is often referred to as the Kangan Review after the Chairman of the committee. This review laid the foundation and in using the acronym saw the formal appearance of TAFE as a label for a sector of Australian education. This review defined the sector then allocated federal funding. The third period is associated with the National Training Reform Agenda which saw a national umbrella placed over the sector and the emphasis shift to that of

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providing vocational education and training aimed at achieving labour market and productivity outcomes. The fourth and current period in TAFE's development is one of adherence to neoliberal agendas and earmarked in this chapter as an age of mutual responsibility. In this period the focus of TAFE has further sharpened around the use of taxpayers funds to provide vocational education and training that is designed to satisfy the needs of employers and current labour market requirements.

Keywords

Kangan Review · National Training Reform Agenda · Private providers · Technical and Further Education (TAFE) · Vocational education and Training (VET)

Introduction

This chapter draws on a selection of historical and contemporary literature to provide an introduction and overview of TAFE in Australia (Bowman and McKenna 2016; Department of Employment 2016; National Centre for Vocational Education Research (NCVER) 2016a, b, c, d; Zoellner 2016; Rushbrook 1995, 2001, 2004; Goozee 2001). TAFE is an acronym that stands for Technical and Further Education. Australian TAFE Institutes are similar in form, function, and mission to Community Colleges in other countries around the world. TAFE offers access, equity, and lifelong learning through the provision of post-compulsory education and training programs such as access to 2-year diploma courses that provide an exit point from study, and/or articulate into an undergraduate degree with credit (Harbour 2015; Wheelahan 2004). Programs are offered to learners of all ages giving access to continuing post-school education and training through a gamut of offerings and pathways including short cycle higher education (Wheelahan 2004). This chapter reviews the emergence and development of TAFE Institutes across Australia. These developments are presented as four distinct historical stages.

The first stage reviews the rise of technical education across Australia. Technical education in Australia was influenced and adapted from innovations and practices occurring in other parts of the world, particularly the United Kingdom. These early Technical Colleges offered classes and programs in Applied Science, Engineering, Arts, and in the trades. These programs spanned from preparation and entry level through to education as para-professions. The requirement to complete a university degree is considered mandatory and stands as a defining criterion for a profession. Technical education stands alongside and in contrast to universities and covers the rest.

The second stage in the advent of TAFE occurs through the Review into Technical and Further Education chaired and lead by Myer Kangan in 1974. This federal Review marks the beginning of TAFE and the appearance of the acronym. The Kangan Review provided TAFE with a vision, and its mission. The Kangan Review saw TAFE as addressing the technical and further education needs of the individual

learner, the community, and employers (Rushbrook 2004; Goozee 2001). Working under the direction of the Whitlam labor government, the Kangan Review saw a willingness to address the issue of providing federal funding into this sector for what was essentially working class education. Federal funding was provided to complement that of the individual states and territories despite the Australian constitution designating jurisdiction for education to be the responsibility of the individual states and territories.

The third stage in the Australian story of TAFE is the implementation of the National Training Reform Agenda (NTRA). This began in the late 1980s and early 1990s and as the name implies saw a raft of national reforms. Among these were the introduction of competency-based training and the opening up of training as a demand driven training market (Anderson 2014; Brown and Rushbrook 1995; Brown 1994). Up until this time TAFE was the public and major provider of technical, vocational, and further education across Australia. During this stage the Further Education component of TAFE lost much of its public funding and if it was offered, it was done so under short time funding, or as fee for service. TAFE was left to focus on vocational education and training and was the provider that offered open access to the public. It received its funding from the commonwealth and the various states or territory and it began to provide, nationally accredited, vocational education and training. This public provision stood alongside enterprise-specific workplace-based training that was used to upskill internal labor markets.

The fourth stage in the development of TAFE in Australia is as the main public provider of highly systematized Vocational Education and Training (VET) within the National Training System (NTS). A major reform of the NTS is an entitlement to training. This entitlement is offered to all Australian citizens for training up to and including Certificate 3 level (equivalent to trade level). Under the influence of a neoliberal policy agenda, (Avis 2016; Toner 2016; Harvey 2007), and the expanding training market (Anderson 2014; Wheelahan 2013), TAFE remains the major public provider of technical and vocational education and training, but recently it has lost market share to relatively new Private Providers, and even, to a small group of other community providers.

There are numerous complexities and tensions within the historical development of TAFE. One of the complexities to emerge is around the dynamic and fluid mixture of funding that comes from the states and territories as per the Australian constitution on the one hand, but with substantial complementary federal funding on the other. This tension continues to play out as a jurisdictional issue with questions around who leads and directs the priorities of TAFE across Australia, and who pays. There is also a tension around the use of standards as a means of ensuring quality. This feeds into the juggling of how providers, and the system, retain the flexibility and differences to be responsive to local needs in different regions and states across the country while simultaneously balancing the need for providing nationally consistent training with comparable outcomes. A final and somewhat different tension is that the system is predicated on a belief in a basic human capital theory (Becker 1993), yet where is the voice of the students as one of the major stakeholders and an end user of this system (Zoellner 2016).

The Four Historical Periods That Have Formed TAFE in Australia

Pre-TAFE and the Rise of State-Based Technical Education

Initial provision of technical education in Australia began in the nineteenth century with the introduction of Mechanics Institutes, Working Men's Colleges, along with some regionally located Schools of Mines (Goozee 2001). Offering classes and courses in art, mechanics and trade training from apprenticeships to diplomas demonstrated the breadth and depth of provision that is still apparent in many TAFEs today. As adult-orientated technical education developed and spread across the country, it remained under the jurisdiction of eight different states and territories. Some Technical education institutions such as those located in the state of New South Wales originally had a Board of Technical Education which provided some unity across the state (Goozee 2001). While in other states development was very different with provision in states such as Victoria and South Australia occurring mostly through individual standalone colleges with some central supports.

Technical education in Australia emerged as an institution-based model of mostly vocational learning that offered an alternative to learning on the job. It arose in parallel with manufacturing, factories, and changing technologies prominent in the Industrial Exhibitions across Europe like those seen at the Great Exhibition held at Crystal Palace in 1851 and later in Melbourne, in 1880. But Technical education was also a more inclusive form of education, giving access to a new cohort of learners who until this time had limited experience of education. Following the same pattern, Working Men's colleges were established in Sheffield and London and with just a few years' lag time were then taken up in Sydney in 1878 and Melbourne in 1887 (Goozee 2001).

The first goldfields opened in outback New South Wales and inland Victoria in 1851 some 3 years after the Californian gold rush. This brought large populations of immigrants to Australia seeking to make their fortunes. This had the effect of transforming the Australia economy from its beginnings as a British penal colony to one that offered opportunity to many. Initially the gold rush caused skill shortages across the country as whole families moved to the goldfields but gradually this gave way as the influx of new comers caused increased demand for goods and services, and industries began to grow (Blainey 2014). Immigration emerged as the main response to the shortage of skills, with training and technical education as the secondary strategy (Scofield 1994).

In 1869, the state of Victoria established a Technological Commission which had Technical education among its responsibilities. Some 16 Technical Institutes were established in Victoria between 1870 and 1890. These earliest forms of Technical education emerged with a number of School of Mines opening in the areas adjacent to the goldfields, though at this stage it was sometime after the initial rushes and more to support the skill needs of the local population and emerging industries. The Ballarat School of Mines opened in 1870 (Perry 1984), Bendigo in 1873 (Cusack 1973), and Geelong in 1887 (Long 1987). In some cases, the original and early

buildings of these Institutes are part of today's TAFE institutes that still occupy these sites. Significantly, these institutes in Victoria stood alone as autonomous institutions with their own independent Boards and governance while the forerunners of TAFE in the adjacent state of New South Wales formed more of a network of colleges as a state-based system.

Technical Colleges at Hobart and Launceston in Tasmania were established in 1888 some 5 years after a Royal Commission into Technical Education. In Queensland, the Brisbane Technical College along with the School of Arts started in 1882 and in South Australia the Schools of Mines and Industry was established in 1889. The courses that these institutes offered were aligned to the needs of the local communities and included: trades such as, Plumbing, Printing, Carpentry, and Shoemaking; to Diploma programs offered in fields of Engineering, Mining, and Chemistry. Significantly, Drawing held a specific place in technical education with its significance as a language of technology.

Awareness of changing technology was at the forefront for governments as they sought to keep pace with changing work practices and an increasing scale of production. Industry was expanding and the two decades of the 1880s and 1890s were a time where factories and mass production became prominent. In 1897 an international conference was held that focused on technical education. European systems of technical education in France, Germany, and Russia were considered far superior to those of England and Australia. For example, Victor Della Vos, a Russian engineer located in Moscow had been developing his systematic approach to training which utilized a mixture of authentic, simulated workshop and classroom-based training (Bennett 1937).

The first years of the new twentieth century saw Victoria hold a number of Royal Commissions and reforms were instigated in an effort to lift the effectiveness of technical education. In Queensland and Tasmania, the institutes changed from independent technical schools to government institutions. Sydney Technical College was also subject to reforms offering programs in Engineering, non-trade science, Applied Art, and Women's industries (Goozee 2001). Some oscillation occurred in the debate around the depth and breadth of learning within apprenticeships. Some employers wanted only training that directly aligned to the work at the workplace where the apprentice was employed, while others such as unions argued for a broader conceptualization, of learning the whole trade. This is a debate that still continues into the present (Brown 2015). Some employers took advantage of off the job technical education and released their apprentices on full pay to attend trade school for one day each week (Scofield 1994).

As soldiers returned from World War I, there was an influx of Commonwealth funds to support these returned servicemen gain technical and trade skills. Additional federal funding ensured that many technical education facilities were upgraded. Once again in the 1940s, technical education was variously used as a means of, aiding the war effort, recovering from the war, training return servicemen, minimizing the effects of recession, and assisting structural change. Around this time, Technical education colleges reviewed and upgraded their programs and these remained virtually unchanged up until the 1970s.

The postwar years saw the population rise sharply due to migration. This era was a time of high and continuous economic growth. Industry and commerce expanded, as did standards of livings and achievement of education qualifications. In 1954, the Wright Report concluded that technical education and apprenticeship training were underfunded, yet still the Menzies government refused to provide any recurrent federal funding (Rushbrook 2001; Wright 1954). Menzies argued that his government was unable to fund technical education because the Australian constitution gave responsibility for education to the states. However, this claim was considered hollow by many as his government was already providing significant federal funding to the universities. This tension around who pays for technical education was further sharpened as the commonwealth had the ability to raise taxes, but no inclination to fund Technical education. Meanwhile the states and territories had the expenditure responsibilities for education – but less ability to raise the taxes to pay for it.

Complexities arose around governance of the technical education colleges. Some were autonomous and others networked across the state. No one approach or model prevailed. Likewise, jurisdictional tensions appeared around issues of federal or state governance and sources of recurrent funding. Innovation tended to come from England and be adapted, while skill shortages were first addressed by increasing immigration and only secondly through providing training.

TAFE Begins with Kangan

In 1972, Whitlam was elected as Prime Minister, bringing the conservative years of postwar government to an end. The Whitlam government was active in social reform and set its sights on improving educational outcomes across Australia, particularly through the inclusion of the socially disadvantaged. In January 1973, the TAFE Teachers Association of Australia (TAFETAA) urged the Federal government to hold a national inquiry into technical education. Subsequently, a delegation met with the then new Minister for Education, Kim Beasley. He took the idea to Clyde Cameron, the Minister for the allied portfolio of Labour and Immigration. In April 1973, Beasley announced the inquiry into Technical education in Australia and Cameron who saw political possibilities in the idea suggested that the Deputy Secretary of his portfolio, Myer Kangan, chair the inquiry (Rushbrook 2004). By necessity, the terms of reference were wide ranging as the task involved blanketing a diverse array of provisions loosely labeled as technical education. ACOTAFE (the Australian Committee of Technical and Further Education) was established to support this process (Goozee 2001).

Beasley argued that Technical education and the people that it aimed to serve were having their post-school education and training needs ignored by governments. Beasley addressed ACOTAFE and argued that technical education was the Cinderella of the education sectors that had been left behind and it needed to be funded so the princess could emerge and take her rightful place. Accordingly, the terms of reference for the inquiry included identifying priorities, and ascertaining much needed funding. The findings of the review were to have a balanced development

of TAFE across Australia, giving consideration of overall manpower policies and requirements, the current and future needs of industry, community attitudes, and optimum use of resources (Rushbrook 2004).

In April, 1974 the two-volume report was given to the minister, a week later it was tabled in the federal parliament. This report was the first to use the TAFE acronym and to offer a definition and vision for TAFE which it described as “all organised and sustained programs designed to communicate vocationally orientated knowledge and to develop the individual’s understandings and skills and it includes what is usually known as adult education” (ACOTAFE 1974, v). As Goozee (2001) explains, more than defining the sector, this report offered TAFE an identity, a philosophy, and it presented TAFE as a national sector of education.

This landmark report was able to build upon the government’s social justice agenda and make this the platform for the provision of Technical and Further Education in Australia. TAFE was to be used to redress social imbalances (Hawke and Sweet 1983). TAFE reflected the needs of the individual with an aim to develop their abilities to their best advantage (ACOTAFE 1974). The major recommendations were that more people needed to have access to Technical and Further education, and in the 3-year period of the labor government, participation in this sector increased by nearly 60%. Interestingly, some 20 years later, in 2004, 12%, or one in eight of the population between 15 and 65, were participating in this sector of education. In the 7-year period of 1975–1982, TAFE became the largest sector of education, female participation significantly increased, and it was drawing its students from all social groups in proportions consistent with their representation in total society.

The facilities where TAFE education took place were often found to be outdated and recommendations were made for their upgrade. Many received considerable federal funding and instigated major overhauls. Unfortunately, the progressive momentum that were occurring in this sector was not to last as the Labor government faced a double dissolution and were re-elected with a decreased majority. As a result, funding was substantially reduced on many of their initiatives in this sector. In 1975, the conservative Fraser government came to power intent on making funding cuts and reduced federal outlay in the area from 9% to 7%. However, Fraser did carry through on some of the report’s recommendations. Prime Minister Fraser had previously served as Minister of Education in the earlier coalition government and saw the connection between Technical education and economic development. He subsequently retained some sympathy for and understanding of the TAFE sector.

In many ways, the 1970s were the golden era for TAFE. The federal budget of 1974 provided \$96.5 million to be spent on TAFE over the coming 2 years, this was in comparison to \$106 spent by the previous conservative governments in the 7 years from 1964 to 1971 (Schofield 1994). TAFE was defined and a national presence was established with Commonwealth funds to compliment that of the states. At the state level, much work was still needed in developing coherent directions and lines of funding. Likewise, the governance of institutions was far from homogeneous. In Victoria: there were two self-governing colleges, a number of self-governing colleges that were part of advanced institutes, technical colleges administered by the

education department, and others that were run in conjunction with technical schools.

Rushbrook (2001) explains that the Kangan review provided TAFE with a coherent philosophy encapsulated by the terms, access, equity, and lifelong learning (p. 60). Recognizing the later transition in the different approaches from Kangan to that of the National Training Reform Agenda (NTRA) has been described by Schofield (1994) as representing *A Clash of the Titans*. The Kangan reforms were derived from a belief in the rights of the individual to have access to a relevant, continuing post-school education. Federal funding was provided for much needed curriculum work and TAFE Colleges were active in designing such courses. However, this also laid the foundations for the criticism to be made of TAFE that it was not strong enough at serving the needs of industry. Instead reforms were instigated and one of the main features was to involve the implementation of a more demand driven system.

Among the tensions and complexities emerging from this second stage was the provision of federal funding for this Cinderella sector of Australian education. Some states saw this increased federal money as an opportunity for them to reduce their funding contribution to this sector. Policy initiatives of the federal government were often implemented in different ways across the different states' and territories' jurisdictions. The original TAFE vision included what had been considered general adult education. This was reflected in the Further education component of TAFE. Access to lifelong learning was being offered to a cohort of learners who in the past had been ignored. Overall participation in this sector increased rapidly as TAFE grew to become the largest of the education sectors. New facilities were built and others refurbished, some commentary appeared on the emergence of the new "Taj Mahals" of TAFE. Interestingly, the original TAFE mission put individual and community needs before those of industry. While the sector had funding reduced, the genie was out of the bottle. A once neglected sector of the Australian population had obtained access to lifelong learning. The emphasis and content of that lifelong learning however was up for debate and contested by different interests and stakeholders.

The National Training Reform Agenda (The NTRA)

A federal Labor government was re-elected after Fraser and it continued to implement numerous loosely connected national initiatives around curriculum, facilities, and funding throughout the 1980s. The National Training Reform Agenda (NTRA) was instigated around 1989. This was a suite of interacting initiatives that represented a more systematic and national approach with a move towards providing demand driven training directly aligned to the needs of industry. Under these arrangements, training was argued to empower the individual by giving them the training designed around what industries identified as useful knowledge and qualifications aligned to the needs of the job market. Industries developed plans for their workforce development and training needs. The imperative for skill formation was

justified through adherence to human capital theory (Becker 1993; Zoellner 2016). A high-profile trade mission toured Europe and released the influential report *Australia Reconstructed* (ACTU/TDC 1987). This provided much of the initial drive for the restructuring of industrial awards in the metals and engineering industries. Through its alignment to the manufacturing base in the Australian economy, this industry sector had been very powerful and formative in its influences and flow on effect to other sections of industry. It was not surprising then when these industries became the site chosen to lead the way with restructuring awards, changing work practices and alignment with accredited national training.

While there was much focus on the National Training Reform Agenda, it is important to note that no explicit agenda was formally declared. Some researchers summarized the NTRA as involving: the introduction of nationally consistent competency-based training, national recognition of competencies however attained, the development of an open training market, fair participation in vocational education and training, and an integrated entry level system (Brown and Rushbrook 1995, 21–24; Curtain 1994; Lundberg 1994).

In April 1989, John Dawkins, the Federal Minister for Employment, Education and Training, released a report, *Improving Australia's Training System*. Dawkins had taken the mantle of Minister in a new “super” portfolio of Employment, Education and Training in the re-elected Hawke government. His report mapped the federal government’s priorities in the area of VET. Among these was a call to increase the national investment in training, to improve quality, flexibility, consistency, and the coordination of training arrangements (Curtain 1994; Dawkins 1989; Employment Skills Formation Council 1992). Two special conferences were convened to try to ensure national coherence and consistency. These were attended by federal, state, and territory ministers who had the relevant responsibilities for Vocational Education, Employment and Training. This group became known as MOVEET. This was a further sign that the federal government was tackling the inconsistencies in VET that occurred from state to state. The federal government was working to develop a national VET system. MOVEET was formed from the collective of Ministers of Vocational Education, Employment and Training across the country in an attempt to gain national support and consistency.

The National Training Board (NTB) was established in 1990. It had a well-publicized charter to assist with the development and endorsement of Competency Standards. These standards became an imperative for the strategies associated with reform. Initially the standards were used to span both the industrial and educational systems. With respect to industrial relations, this occurred through the classifications system, and educationally it occurred in the VET sector as it moved to align education and qualifications in this sector to the requirements of industry. To ensure consistency across industries, the NTB established guidelines for the content, the development process, and the format of the standards. They shifted the outcome of training when they stated that the concept of competency needed to focus on what was expected of an employee in the workplace rather than within the training process. Further, they directed that competency must embody the ability to transfer and apply skills and knowledge to new situations and environments (NTB 1992, 29).

The NTB explained that they had intentionally promoted a broad concept of competency. This was further assisted by the requirements of the Competency standards to encompass task skills, task management skills, contingency management skills, and job/role environment skills. The standards also needed to relate directly to realistic workplace practices, they had to be expressed as outcomes, and made comprehensible to trainers, supervisors, and potential employers. The format for the standards comprised a Unit of Competency. This was further subdivided into Elements of Competency, Performance Criteria, Range and Variable Statements and Evidence Guides. To ensure that Competency standards were comparable across industries, the NTB developed the Australian Standards Framework (ASF).

The ASF consisted of eight levels and served to benchmark and organize occupations and job roles into a hierarchical arrangement. Of the eight levels in the ASF, Levels 1 and 2 was considered entry level. Level 1 covered work roles and programs such as basic enterprise-based induction programs. Level 2 was an all-subsuming category of semi-skilled worker that covered production workers and operators. Level 3 was considered equivalent to base trade. Employees, who had in the past completed an apprenticeship, were considered typical of this level. Level 4 in the ASF was often expressed in terms most familiar to the male dominated fields (such as the metals and engineering industry) and what those within the manufacturing sector might call a technician or an advanced trade classification. Levels 5 and 6 were considered to be the “Para-Professionals.” These typically included graduates of the VET sector in fields like Food Technology, Accountants, and Office Supervisors. ASF Levels 7 and 8 denoted the “Professions”; education for these positions typically involved completion of a university-based undergraduate degree. Educational programs that were aimed at preparing people to be professionals at ASF Levels 7 and 8 were considered to be outside the VET sector. The ASF provided a means by which occupations and industrial classifications were connected and benchmarked against each other. It was a requirement for accreditation that each VET curriculum document designated and aligned to a level of the ASF. This hierarchical skills framework was later superseded by the eight-tiered Australian Qualification Framework in 1995.

The tensions and complexities arose around the swing to serving the needs of industry. This put learners, teachers, and the community into the back seat. Vocational education and training was being systematized and the major decisions that effected the sector were being made by actors and parties outside the sector (Billett 2011). Funding for Further education was discontinued as this component of working class education was considered less important to the needs of the economy and therefore less deserving of public money. Markets were argued to present a means of ensuring efficiency in the provision of vocational education and training. Tripartite arrangements of shared governance between employers, unions, and government representatives were formalized (Employment Skills Formation Council 1992). The provision of VET continued to be open to competition beyond the publicly owned TAFE institutes. TAFE begins a new phase of mutation. It is the public and main provider of vocational education and training around the country. Learners still have access to lifelong learning at TAFE; however, most of the learning offered is

vocational education and training much like the Berufsschulen in Germany and the Further Education (FE) Colleges in Britain (Billett 2011).

Contemporary TAFE within the National Training System

The systematic national training reforms included the shift in the design of curriculum and pedagogy to competency-based training and the formal rise of the national VET system. The National Training System (NTS) focused on the provision of nationally recognized VET qualifications through the publicly funded and very loosely coupled network of TAFE Institutions across the country. This stage saw the development of a training market and the rise of VET provision being shared with for-profit Private Training providers. It was at this time that TAFE lost its umbrella meaning as an educational sector and instead was subsumed and became the public providers within the national VET sector.

All Registered Training Organisations (RTOs), public and private, tender to their state or territory government training authority offering a profile and scope of provision to provide designated programs at various qualification levels for a particular number of students. If the state or territory government views their offers as appropriately aligned to their requirements and as value for money then they will contract them to deliver their programs paying them for these services. Contemporary TAFE has come to be the public, and not for profit, provision/providers of vocational education and training (VET) occurring under the auspices of eight different state and territories systems albeit with a mixture of federal and state funding. In reality, this also means that different mixes of revenue from federal and state or territory governments are in existence. These governments use tax payer funding to purchase training from all the registered training providers of vocational education and training – public and private, across the country.

Technical education has always attempted to be relevant and responsive to the needs of industry and aimed at educating nonprofessionals. This is also the case of contemporary vocational education and training (VET). The Australian VET system is argued to be demand driven, or put another way, it trains people for the jobs that are in demand within the existing labor market. Arms of government analyze what jobs are needed, manage the development of Training Packages, and allocate training contracts accordingly. Training packages are industry and occupational specific clusters of nationally recognized competency standards that are designated at a specific qualification level (Australian Qualifications Framework 2013). They are the standards that need to be achieved by a learner in order for them to qualify for a particular credential in a particular occupation – for example, there are 28 units of competency listed for completion of a Certificate III in Hairdressing, 21 are considered core and 7 are electives.

Different providers submit bids to their various state training authorities making an offer for what they want to provide. This is where quality and consistency are important. Providers must have the staff and the appropriate facilities and equipment to provide the training. To this end, they apply for registration as a provider. This

involves providing assurances around the quality of their prospective service (the training) in order to become registered. Registered Training Organisation (RTO) status is based on the ability to provide quality programs, in appropriate facilities with trained teachers. The minimum teaching qualifications for a VET/TAFE teacher are that they have the qualification that they are teaching, a Certificate IV in Training and Assessment, and currency (have worked in the industry in the past few years). RTOs are subject to external audit to ensure they are providing what they say they are providing.

Contemporary models of TAFE provision across Australia has therefore come to mean – the public provision of the national VET system that occurs through the forty or so government owned TAFE Institutes, and the six or so TAFE Divisions which are part of dual-sector universities, that operate across eight different state and territories, throughout the country. TAFE Institutes receive approximately 47% of their money from the Commonwealth, some funding is raised from fee for service activities, and the rest comes through the TAFE Institutes corresponding state or territory government (NCVER 2016a).

In recent years, the state of Victoria has been experimenting with the marketization of VET. Yet, the most recent Victorian state government was elected in part on its commitment to restore public provision and eliminate the gouging that has occurred through the extensive growth of private providers. Subsequently, Victoria has put the ‘TAFE Rescue Fund’ through its parliament as one of its budget papers (Department of Treasury and Finance 2015). As of January, 2017 Victoria’s training is being overhauled through the Skills First program. Under these arrangements, TAFE is being placed back at the center “as the engine room” for training (Department of Education and Training 2016:2). Increased marketization and the private provision of VET that has been driven by profits has also had an effect on the quality of VET. There has been a marked drop in the public confidence of private providers of VET (CEDA 2016; Simon 2016) with the rise of the “dodgy provider” tag gaining widespread recognition (Camm 2016). There are many instances of providers being audited and found to not be conforming to the standards and therefore the provisions of their training contracts. This has spread more broadly across the country. This is a general problem impacting on the quality of the outcomes and the employability of the graduates (Riordan 2016). The industry association for hairdressing, the Australian Hairdressing Council, is calling for the closing down of up to two thirds of the 131 providers of training in this industry, which they describe as turning out graduates that are unemployable at the end of their courses (Mannix 2017). Similarly, an industry review of the training of apprentice chefs found many irregularities which resulted in the cancellation of over 90 training contracts (VRQA 2015). In New South Wales, last year some 11 private providers were de-registered for noncompliance leaving some 3000 students stranded mid-course (McGhee 2016), another 18 private providers were de-registered in Victoria (Newcastle Herald 2017).

Research by Anderson (2005, 2014) into the effects of the training market in VET concluded that while choice was being expanded, there was generally a negative impact of market reforms on efficiency, responsiveness, quality, access, and equity. Subsequently there is conjecture that in some instances competitive market forces

and the profit motive have contributed to a decline in the quality of VET pedagogy and assessment. Some RTO managers suggest that there has even been an unfortunate shift by some providers to provide training programs that produce the minimum amount of evidence as needed to comply with the requirements of an external audit. The outcomes of the training are being driven by the requirements of the audit rather than by effective learning and the achievement of workplace competency. In this way, the story of publicly funded TAFE Institutes is one of quite resistance to the full impact of competitive forces so that the social and public good can continue as a feature of TAFE provision.

In the September 2016, there were 1866 training providers across Australia who received government funding. Of these, 40 or so were standalone TAFE Institutes, 13 were other government providers; 372 were community education providers such as Adult and Community Education centres, and close to 1500 were registered as private training providers (NCVER 2016b). Some universities are dual sector in that they provide both higher education and substantial vocational education and training. Moodie (2008) distinguishes single sector institutions as those which offer 97% of their teaching in one sector, mixed sector institutions which teach between 3% and 20% of their students in their smaller sector, and dual sector institutions which have substantial or more than 20% of their load in each of their vocational and higher education sections. Some of these mixed sector and dual sector institutions appear under the 13 other government providers cited throughout this chapter. Counting the dual sector provision as a TAFE provider, there is generally considered to be around 50 or so TAFE institutes, across Australia.

In 2015 the operating revenues for the government-funded VET system totaled \$9812 million of which 47%, or nearly half, came from the Australian federal government, while 34% or just over a third came from the states and territories, 11% was raised through fee for service activities, 5% from student fees and charges, and 3% from other auxiliary sources. In some instances, as federal funding increases some state governments take this as an opportunity to reduce their expenditure. However, these sources are reversed when considering capital revenue, \$94 million was provided by the states and territory governments and \$16 million (or 14.5%) came from the federal government (NCVER 2016a).

The governments are pushing to increase the levels of attainment in education and training and lift the capacity of the Australian workforce. VET and TAFE, as the public arm of VET, are directly tied to industry and the labor market. Australia has a total population of 24 million people with around 16.6 million considered to be of working age between 15 and 65 years. The current Australian workforce consists of 11.9 million people with two thirds working full time, and 54% are male. About one third are employed in rural or regional areas. Around 39% of the total workforce are aged 45 years and above and 16% are between 15 and 24. Unemployment runs at about 5.8% while the participation rate is now 65.2%. While the proportion of young people participating in full time education stands at 52% (Australian Govt, Department of Employment 2016), the unemployment rate for young people aged 15–24 is running at about 12.2% or one in eight. Of particular concern are the 11% of young people who are not in work, nor are they attending education and training.

Australians are considered to work across 19 broad industries with the four largest being, Healthcare; Retail; Construction; and Professional, Scientific, and Technical Services. Collectively these employ about 40% of the total workforce. In the past 5 years, employment has grown in 15 of the 19 industries with falls in employment being experienced in Manufacturing, Agriculture, Wholesale, and Electricity, Gas, Water, and Waste services. Most women work in Healthcare and Social Assistance, Retail, and the Education and Training industry sectors. Over the past 5 years just over one in four of the new jobs have been in Healthcare and Social Assistance (27%); Professional, Scientific, and Technical Services (18%); Education and Training (9%); Retail (7%); and Accommodation and Food Services (7%) industry sectors. The three industries that employ the most number of young people are Retail, Accommodation, and Food Services, and Construction.

In terms of occupations, the proportion of professionals has grown from 16% in 1990 to 23% in 2015, of these, 74% have a university qualification. Managers have increased 1% over the same time from 12% in 1990 to 13% in 2015, with 37% of managers having a university qualification. Clerical and Administrative workers have declined 4% to currently be 14% of the share of total employment. Technicians and trades people have declined 2% to 15% and laborers from 14% to 10%. Likewise, machinery operators have declined from 8% to 6%, and Sales people have decreased by 4%, of which some 56% have no post-school qualifications. Meantime Community and Personal workers have increased from 6% to 10% (Australian Govt, Department of Employment 2016).

Future jobs growth is expected to occur in the higher skilled fields and progress is being made in increasing levels of qualifications. Across the Australian workforce, 31% have a Bachelor degree or higher. Significantly this is up from 23% in 2005. Currently 32% have a Certificate 3 or higher VET qualification, this is also up from 26% in 2005. While 32% have no post-school qualification, this too is moving in the desired direction and is down from 42% 10 years ago. The remaining 5% have some other qualification. For female workers, the proportion who hold a Bachelor degree has increased from 25% to 35% and those who have no post-school qualifications fell from 43% to 35%. Employed women with a Certificate 3 or higher VET qualification rose from 20% to 27%.

In 2014, 594,000 females and 432,000 males were enrolled in universities. This trend is reversed in the VET sector with 838,000 women and 915,000 men enrolled in VET courses. Of the cohort of young people, some 727,800 people younger than 25 are enrolled in VET while some 625,700 are enrolled in university. The rate of participation in higher education for young people between 15 and 24 was just over 6% or 1 in 12, the participation rate for this age group in VET was over 11% or 1 in 9. Very importantly, of these VET participants 82% were enrolled part time (Atkinson and Stanwick 2016).

High educational attainment assists people to be successful in achieving labor market outcomes. University reforms have seen a rise in the number of young people who are participating in higher education with an increase over the past decade of 43%. While over the same time, growth in VET enrolments has grown 13%. One of the reforms of the National Training System introduced in 2012 was a training

entitlement. Under this reform every Australian of working age who does not have a Certificate 3 or above qualification is entitled to a government subsidized training place to obtain their first Certificate 3 qualification at any RTO of their choice, should they wish.

The participation rate in the labor market for those with a Bachelor's degree is 87.2% with a corresponding unemployment rate of 3.4%. While the median starting salary for university graduates is currently around \$54,000. The participation rates for Advanced Diploma/Diploma is 83.6% and for Certificate 3 and 4, it is 85.7%. The unemployment rate for those with an Advanced Diploma and Diploma is 4.1% and for Certificate 3 and 4 workers it is 4.9%. Participation in VET is being used as a strategy to fight unemployment. Unemployment for those who have left secondary school differs with the year level. For those who graduated with Year 12 unemployment is 7.7%, while for Year 11 it is 10.4% and for those with Year 10, it is 11.3%. In a similar way, graduate salaries in the VET sector differ by qualification level, those with a Certificate 3 received on average \$51,700, for the Certificate 4 it was \$63,400. Interestingly, for Diploma and Advanced Diploma average graduate salary was \$61,800 or slightly lower than for Certificate 4 graduates.

In 2015 of all VET graduates, 74% were employed within 6 months after graduation and for apprentices and trainees this rate was 84%. For those with a Certificate 3 this rate was 75%, for a Certificate 4 it was 81%, and for Diploma and an Advanced Diploma the rate employed 6 months after graduation was 79% (Department of Employment 2016). Apprenticeship enrolments have fallen in recent years yet those who do complete, experience strong employment outcomes. In terms of employment of apprentices and trainees, 2014 figures show Construction to be the largest industry employing around 77,000. Manufacturing is next employing approximately 43,000 apprentices and trainees. Accommodation and Food services employs 31,000, Administrative and support services 30,000, Healthcare and Social Assistance 26,000, Retail 23,000, and the combined Other category employs around 53,000. Some 60% of all apprentices and trainees are aged 15–24 and around 30% are female (Department of Employment 2016).

Using figures from the first 6 months of 2016, there was a total of 850,000 students enrolled in government-funded VET. This represents about 5% or 1 in 20 of the total population of working age. Of these participants in VET, around 58% of students were enrolled at TAFE institutes and other government providers (493,000), 5% at Community education providers (43,000), with 36% enrolled in Private training providers (305,000). In a state by state breakdown, 270,000 students received government-funded VET in the state of New South Wales, 243,000 in Victoria, 152,000 in Queensland, 84,000 in Western Australia, 53,000 in South Australia, 20,000 in Tasmania, 15,000 in the Northern Territory, and 12,000 in the Australian Capital Territory (NCVER 2016b).

In the period from 2010 to 2014 the percentage of VET students who attend TAFE has declined with market share falling from 73% to 57.3%. In the same period enrolments at Private RTOs has risen from 14.3% to 23.3%. In 2014, NCVER introduced its Total VET Activity (TVA) initiative which allowed them to collect data and report on all training activities regardless of funding source. This analysis

showed that there were just over 2 million TAFE students enrolled with Private RTOs (52%) and around 1 million in TAFEs (27.6%) another 800,000 (20%) were with "Others." The "Others" category consists of community providers, schools, universities, enterprise providers, and other private organizations (NCVER 2016c). In 2015, 83.4% of the 1.5 million young Australians aged 15–19 were enrolled in education and training; 56.8% or 839,300 were at school; 16% or 334,200 were in Higher education; 4.5% were undertaking apprenticeships or traineeships; and 5.9% were enrolled in VET programs (NCVER 2016c).

As a comparison for provision of each qualification level, at Certificate 1 level, the Other category (which consists of community providers, schools, universities, enterprise providers, and any other private organizations) and TAFE both provide just under 40%, with Private RTOs providing just over 20%. At the qualification level of Certificate 2, the Other category of providers holds about 40% with TAFE having 32% and Private RTOs around 25%. For Certificate 3, Private RTOs provide 44% while TAFE has 35% of the market share and the others were around 20%. For Certificate 4, Private RTOs had 50% of the market, TAFE had 35%, and the others had 15%. For Diplomas and Associate Diplomas with TAFE and Private RTOs both with 45% and the Others with 10% (NCVER 2016d).

Recently NCVER conducted a study of the enrolment figures for the three areas of plumbing, electrical, and aged care to compare TAFE enrolments with that of Private RTOs and the Other RTOs category from 2010 to 2014 (NCVER 2016d). The researchers found that program enrolments for plumbers were some 90% in TAFE in 2010 and that this declined slightly to 80% 4 years later in 2014. Private RTOs stayed constant at around 5%, while by 2014 the Private RTOs and the Other category together had about 20% share of the provision. For electrical apprentices the 2010 TAFE share was 85% and this declined to 78% while Private RTOs had 15% which remained stable over the 5 years, meantime the Other category went from 2% to 10% of market share. For the courses for carers of the aged and disabled the TAFE share declined from 60% in 2010 to just under 40% in 2014. Private RTOs in contrast have risen steadily from just over 20% in 2010 to over 40% in 2014, and the Other category has remained steady between 2010 and the 2014 with 20%.

Access and participation of equity groups is a feature of VET and of high significance to TAFE in particular (Simon 2016). Of the six main equity groups, in 2015, Indigenous Australian participation was 5.4%, (Atkinson and Stanwick 2016), of these over 70% were enrolled in TAFE (Yu and Oliver 2015); people with a disability participated at a rate of 7.7%, (Atkinson and Stanwick 2016), of these over 70% were enrolled in TAFE (Yu and Oliver 2015). For women, the rate of participation was 47.1%, while for people from a Non-English-speaking background it was 19.2%; remote and very remote location participation was 3.5%, for each of these, over 70% were enrolled in TAFE (Yu and Oliver 2015). For low socioeconomically disadvantaged backgrounds participation in VET was 23.1% (Atkinson and Stanwick 2016), and for those with a prior level of education at Year 11 or below, participation was 32.9%, of which around 63% were enrolled in TAFE (Yu and Oliver 2015).

Yu and Oliver (2015) in a report prepared for the Australian Education Union (AEU) conducted an extensive analysis of the effects of competition and the development of private for-profit providers into the Australian VET system. They concluded that the business model used by Private providers of VET in Australia led to an excessive capture of around 30% of public wealth going as profit to these Private providers. They reported that in Victoria just three Private providers extracted around \$18.3 million in profits from tax payers in 2013. Their analysis shows that rather than encourage competition, the entitlement reform and the development of the training market led to a decline in the average government spending per hour of VET delivery across the country from around \$16.25/student hour in 2002, to a 20% reduction down to \$12.80/student hour in 2012. VET is getting more for less. Further from 2008 to 2012, government funding to non-TAFE providers increased nationally from around \$490 million to \$1,400 million, a rise of 285%. Of this, 42% of the increase occurred in just one state – Victoria, where the government paid Private RTOs \$137.6 million in 2008, rising to nearly \$800 million or by 580% in just 4 years later. In 2012, government funding to Private RTOs in the state of Victoria exceeded 50% of the total national expenditure (Yu and Oliver 2015).

TAFE Institutes are a part of the public state infrastructure that produces outcomes for the public good. These Institutes, their teachers, and their support staff have traditionally developed practices that are supportive and effective for a very broad range of students including those within the six designated equity groups. TAFE Institutes provide extensive library and study facilities. Some provide access to subsidized childcare, counselling, and welfare advice. They teach a very broad range of programs including those that use expensive equipment, digital technologies, and consumables, those which require specialized facilities and learning environments, along with those that can be run using just the most basic of classrooms. TAFEs don't pick and choose what is most profitable to provide, but rather they provide the spectrum of what is needed. Finally, the cost of the TAFE courses that is incurred by the students is consistent and transparent according to pre-set fees and charges. This contrasts with some students accruing expensive hidden debts associated with their training through Private RTOs (McGhee 2016; National Audit Office 2016).

Changes and reforms in this fourth stage in the development of TAFE coincide with what Toner (2016) explains as the adoption by all parties in Australian VET to the principles of neoliberalism. He cites the four main principles of neoliberal as, (1) dramatic reduction in the scale and role of the public sector, along with the tendency to outsource training to private providers. Toner explains that rather than reducing government spending what this actually does is redirect government spending to private enterprise. As TAFE institutes, are then providing less training, they require less government employees. In this way, the public sector is downsized. (2) Managing better by employing more managers, likewise generic managerial skills are brought in to replace those of educational managers and professional teachers who get promoted into management roles. (3) Shifting power to employers – the interests of employers are paramount and those of the worker/citizen/learner are subordinate. Tripartite agreements and the compromises of the shared management between unions, employers, and government are replaced with the dominant voices of

employers. Industry Skill Councils which have also been the site and forum for compromise between traditional interest groups are de-funded and competency-based training is instituted as the dominant approach to curriculum and pedagogy. (4) There is a prevailing belief that the market will provide. Further, it is believed that markets will produce competition which will then produce efficiency, creative points of difference and flexibility. Toner concludes that whatever the future holds there is no option to go back.

Conclusion

This chapter has provided an overview of Australia's TAFE identifying it as going through problematic changes despite being a unifying concept. TAFE is different from state to state and even from institute to institute. With its roots in technical education TAFE found its place through the Kangan review. This review argued that individuals and community needs were important but opened the ground for the criticism that TAFE failed to adequately address the needs of industry. This was the basis of the backlash that then instigated the National Training Reform Agenda and continues as a foundation stone for the current rendition of TAFE within the National Training System. As various state and federal governments pursue and adopt the principles of neoliberalism in various ways, what remains constant is that TAFE has become the public provider of Australian Vocational Education and Training (VET). TAFEs provide a wide range of courses in a wide range of learning environments and TAFEs continue to do the heavy lifting when it comes to providing training to the equity groups. TAFE stands in contrast to Private providers in that any profits that TAFE generates have the potential to be put back into the sector.

At present TAFE Institutes receive nearly half of their recurrent money through the Commonwealth government and about a third comes from their corresponding state or territory governments. The final section of the chapter refers to the entitlement to training and education and its impact on the corresponding training market reforms. These figures show that TAFE is losing market share as Private for profit and Other providers expand. Some evidence is presented showing some of the trends occurring in the VET sector from within the state of Victoria. This state has been aggressively experimenting with the marketization of VET. However, the most recent Victorian state government was elected in part on its commitment to restore public provision and eliminate the gouging that has occurred by for-profit private providers. Some data suggests that increased marketization and the profit motive are having an effect on the quality of VET. It has been shown that competitive market forces have contributed to a 20% decline in government spending per student hour. This inevitably results in staff cuts. Some industry associations and regulating authorities are suggesting that the quality of pedagogy and assessment is deteriorating across VET with an unfortunate shift occurring to what is the minimum evidence needed to comply with the requirements of the external audit. In this way, the story of publicly funded TAFE Institutes is one of pushing back against the impact of competitive forces and resisting entanglement in a race to the bottom.

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Sustainability of Massification in East Asian Higher Education: Community Colleges in Hong Kong in Retrospect and Prospects

5

Hei-Hang Hayes Tang, Chak-Pong Gordon Tsui, and
Chi-Fung Wilton Chau

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Abstract

While higher education can serve the instrumental role in global knowledge-based economy with financial risks, the case of Hong Kong reflects that global discourse is potent in regard to generating government rhetoric of lifelong learning for “enterprising” oneself for the knowledge-based twenty-first century. This chapter presents the empirical data to illustrate how educated youths respond to the global discourse and government rhetoric of lifelong learning, namely, by continuing their study with community colleges in Hong Kong. It will discuss the conceptual framework for understanding the scenarios for sustainability in Asian higher education. Yet in critical perspectives, this chapter will analyze the way in which the Hong Kong’s community colleges are governed and the imperative of family social class in making sense of the study pathways through community college. The notion of “knowledge economy” will be put into critical examination, and we will consider the alignment problems between employment market and higher education massification in Hong Kong as a postindustrial Asian city. This chapter finds that the sustainability of Hong Kong higher education massification is not the core issue facing the higher education sector itself. Without a proactive direction and sense of progress, the sector tends to maintain its massified segment intact without making significant changes in inputs and costs. While it is responsive to the public consciousness and demands for accountability, the massified sector, as second tier of the system, continues to make forward “progress” but without a clear vision and strategies for significant improvement, fit for purpose, or pursuit of enhanced educational equality. The Hong Kong higher education sector, alongside the public consciousness, shares the consensual value that the way in which its mass higher education segment will be sustained should be left to the market forces to determine. What always matters most is the figure of student enrollment as it determines whether the colleges can sustain themselves in the competitive education market through a viable financial model. Economic climate, ability to respond to employment market and global economy challenges, technology, level of political and social stability, and more importantly demography are the determinants of the progress which the massified segment of Hong Kong higher education can make in the decades to come.

Keywords

Higher education massification · Sustainability of massification · East Asian higher education · Community colleges · Graduate employment · Social class

Introduction

Massification of higher education has been an indicator of socioeconomic development of the contemporary world. It was suggested by Trow (1973, 2007) that the admission rate within the range of 15% to 50% is viewed as mass higher education. According to Gibbons (1998), the motives for massification of higher education are

multifaceted. Under the context of democratization of politics and society, the public policy sector is expanding, whereas the development of industrial and post-industrial economies is propelled by the supply of more high-skilled labors. Education itself is attractive as a major element of modern economies and new welfare states. Hong Kong, a former British colony in East Asia, underwent a substantial industrialization in late post-World War II era. Elitism had dominated the ideology of higher education sector in most periods in British colonial rule of Hong Kong (Lo and Tang 2016; Tang 2015a). Tang (2015a) historicizes the development of Hong Kong mass higher education as two waves of massification. The first wave of massification took place against the backdrop of decolonization from 1984 to 1997; the admission rate of higher education rose from 2% to 18% in the public higher education institutions with self-accredited status (UGC 1996). Before massification, Hong Kong students who failed to be admitted to a Hong Kong university could consider studying abroad or enrolling with the Open University of Hong Kong as alternatives of access to higher learning. Although the Open University of Hong Kong was founded by the Hong Kong Government, it was required to operate on a self-funding basis, not unrelated to the elitist ethos in Hong Kong education sector.

When Hong Kong returned to China as a Special Administrative Region in 1997, the year marked the beginning of the second wave of higher education massification. The second wave, emerged in postcolonial circumstances, was the result of the Hong Kong Special Administrative Region's (HKSAR) policy response to the globalization of knowledge economies. Also, the emerging democratic demand for Hong Kong civic life and its discourse of social equity (e.g., Tang 2015b) were juxtaposed with the democratizing initiatives of higher education through liberating the access to post-secondary institutions. The beginning of 1990s saw the policy agenda for pervasive transformation of Hong Kong economy into a knowledge-based one. The discourse of higher education policy has been fundamentally influenced by the linkage between the expansion of post-secondary education and enhancement of economic competitiveness. Tung Chee-hwa, the first HKSAR Chief Executive, discoursed in his policies the correlation between competitiveness of Hong Kong and manpower quality and, on that basis, considered the imperative role of education in producing better human resources so as to foster economic development (Tung 1997, para 79).

As the former higher education system did not sufficiently fuel the workforce for the emerging knowledge economy transited from a manufacturing one, the Hong Kong Education Commission (1999) advocated in its consultative document *Learning for Life* that Hong Kong citizens should be educated as lifelong learners under the education and economic systems. The HKSAR government was prompted to increase the access to higher education with a view to enhancing Hong Kong economic competitiveness and upgrading the quality of its workforce (Kennedy 2004). The Chief Executive expressed that the government should achieve the aim of 60% participation rate of the tertiary education by 2010 (Legislative Council 2006; Tung 2000).

Neoliberal policies and practices materialized the massification direction of Hong Kong higher education (Lo and Tang 2016; Tang 2015a). One justification for massifying Hong Kong higher education through private means is the economic

context of post-1998 Asian financial crisis, which made the financial budget for higher education continuously decreased. The fiscal circumstances limited the policy options of Asian governments for expanding their higher education section (Postiglione 2005; cited by Lo and Tang 2016). Within the higher education private market created by the governments, the private institutions found their ways to recruit students by marketable programs and viable financial models. This way the governments only needed to make minimal fiscal commitment in the policies. In fact, around 1% of the Hong Kong gross domestic export was spent on higher education funding in the 2000s, generally lower than the international average. If the newly massified tier of Hong Kong higher education was operated as a public provision, the government would need to cover a recurrent expenditure of nearly US\$440 million every year (Legislative Council 2008, 3). In operation level, self-financed programs were offered in the fields where the public higher education institutions had not faced problems of financial severity (Wan 2011). A list of supportive measures such as a start-up loan scheme and grant scheme was approved by the Financial Committee of the Legislative Council in 2001 to support less economically privileged students to study with the programs in the self-financing sector, which demands a relatively higher tuition fee than its public counterparts. A former education minister, Arthur Li (2005), stated that “the government pledged to ensure that no one would be deprived of further education opportunities because of the lack of means.” Different means of financial assistance such as means-tested grant, low-interest/non-means-tested loans, and travel subsidies have been offered to eligible students (Legislative Council 2006).

The self-financing sector has shown enthusiasm in response to the policy objective, providing an enabling environment for the second wave of higher education massification in Hong Kong. According to Information Portal for Accredited Post-secondary Programmes (IPASS), the 2-year associate degrees from the community colleges, mirroring the American 2-year community college model to a certain extent, have been the major outcome of the higher education expansion with an exponential increase of tertiary education places (IPASS 2016). The higher diploma programs, which inherited from and modeled after the British further education system, are incorporated into the Hong Kong’s community college model. The same institution, i.e., the community college, usually offers both the associate degree and higher diploma programs as study options for potential applicants. Compared with associate degree programs, higher diploma programs offer majors which tend to more cater for training of technical knowledge and job preparedness of the students. The community colleges, as sub-university institutions, in Hong Kong do not own the academic authority to confer degree at bachelor level or above but up to associate degree or higher diploma levels (which are collectively known as “sub-degree” in the Hong Kong educational context). As a result, the Hong Kong’s community colleges are operated either in the form of (1) extension of the public degree-awarding universities (e.g., department/school of adult and continuing education), (2) collaboration between public universities and charitable organizations, or (3) independent post-secondary colleges.

Given the “educational desire” in Hong Kong as a Confucian society (Lee 1996; Kipnis 2011; Tang 2015a), the total supply of self-financed sub-degree places has

increased by ninefold during the period from the 2000–01 to 2005–06 (Legislative Council 2008, 16–17). The education opportunities for the 17–20 age cohort have doubled in 5 years from 33% to 66% (Legislative Council 2006; Legislative Council 2008). According to IPASS (2016), in the academic year 2001–02, 38 accredited self-financed sub-degree programs with 8,895 students were provided by around 11 institutions. In the academic year 2012–13, 315 accredited self-financed sub-degree programs with 58,694 students were provided by around 24 institutions. The phenomenal expansion of the sub-degree sector demonstrates the demand of Hong Kong students/parents for higher learning, as well as the community's readiness and capacity of the Hong Kong in investment into the sector (Legislative Council 2006, 5–6). The expansion is understood as a “spectacular” one because the transition from elite to mass higher education was taken place in a compressed time span and at minimal economic cost to the government (Kember 2010, 167). It was claimed that the expansion of Hong Kong higher education has been more intensive than other East Asian countries (Hayhoe 1995) and China (Mok 2003). As abovementioned, mainly the expansion was realized by the introduction of the 2-year associate degree programs. Quite a variety of subjects – particularly liberal arts subjects – are offered to the associate degree students who distinguish their study pathway from secondary school and other sub-degree programs, especially higher diploma programs which are more vocation oriented.

While higher education can serve the instrumental role in global knowledge-based economy with financial risks, the case of Hong Kong reflects that global discourse is potent in regard to generating government rhetoric of lifelong learning (Tang 2015a; Lo and Tang 2016) for “enterprising” oneself for the knowledge-based twenty-first century. The next sections present the empirical data to illustrate how secondary school leavers respond to the global discourse and government rhetoric of lifelong learning, namely, by continuing their study with community colleges in Hong Kong. Then we will discuss the conceptual framework for understanding the scenarios for sustainability in Asian higher education, regarding the case of Hong Kong's community colleges which continues making forward progress for its higher education massification. Yet in critical perspectives, our discussions will move on to analyze the way in which the Hong Kong's community colleges are governed and highlight the possibility of market failure as well as the imperative of family social class in making sense of the study pathways through community college. Lastly, the notion of “knowledge economy” will be put into critical examination, and we will consider the alignment problems between employment market and higher education massification in Hong Kong as a postindustrial Asian city.

Spectacular Transition from Elite to Mass Higher Education in Hong Kong through the Model of Community Colleges

Empirical data in this section highlights the number and enrollment status of sub-degree programs within the timeframe from 2001–02 to 2014–15. Some researches previously published figures about the statistical patterns of student enrollment of

Hong Kong post-secondary education (for example Lo and Tang 2016; Tang 2015a; Jung and Postiglione 2015). As illustrated in Fig. 1, the locus of offering discretionary places to students, who failed to gain entry to universities, had attracted a wide demand and hence stimulated the supply of programs and places available over the first 4 years since 2001. Seeing the new initiative, the change of student enrollment in self-financed sub-degree has increased by 67.5% from 5,546 in 2001–02 to 17,077 in 2004–05, followed by a mild, upward tendency to 19,806 in 2005–06, while the significant increment on publicly funded sub-degree occurs between 2001–02 and 2003–04, surging from 7,667 to 10,822, then followed by a continuing drop from 9,813 to 9,301 over the next 2 years. However, from 2006–07 to 2011–12, the growth of student enrollment in publicly funded sub-degree is not as significant as the self-financed ones: the data are intertwining with gentle increases and decreases within the range of 8,700 to 10,500, while student intake in self-financed sub-degree is mostly climbing upward to its second highest of 28,400 in 2010–11 and the peak of 31,600 in 2012–13, disregarding a slight drop in 2008–09 and a sharper recession in the following year 2011–12. In the period between 2011–12 and 2014–15, the enrollment trends of self-financed and public funded go in diverse directions. The enrollment of publicly funded sub-degree has been rising steadily since 2011–12 from 8,700 to 12,500 in 2014–15, with an average percentage increase of 7.6% per annum. In contrast, after reaching the highest peak of 31,600 in 2012–13, the student enrollment for self-financed sub-degree drops to 21,500 (31%) in the year after and then continues to decrease in 2014–15.

Figure 2 outlines the student enrollment changes in both publicly funded and self-financed top-up degree programs from 2006–07 to 2014–15. “Top-up” degrees refer to the study programs for transfer students from community colleges. The programs mean the second “2” of the 2 + 2 model, and they “top up” the associate degree to make a full 4-year undergraduate degree. For students who can enjoy direct entrance to a Hong Kong university/degree-awarding institution, they start their degree study from year 1. But for transfer students from community colleges, they usually start from year 3, study 2 years for the “top-up,” and then get the undergraduate degree. The growth of student enrollment of top-up degree programs is mild and steady in

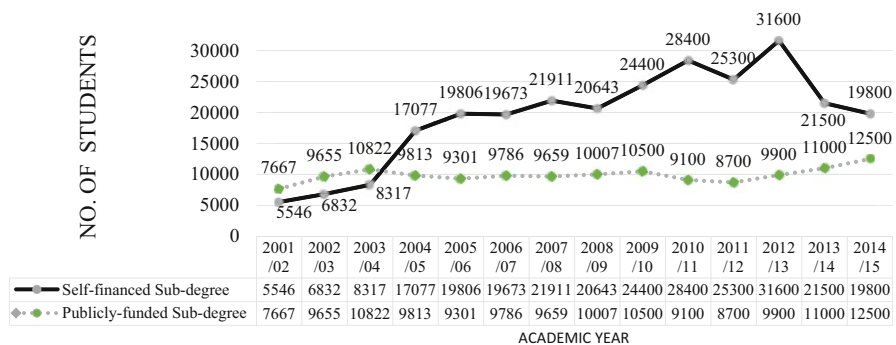


Fig. 1 Student enrollment in sub-degree programs 2001-02–2014-15

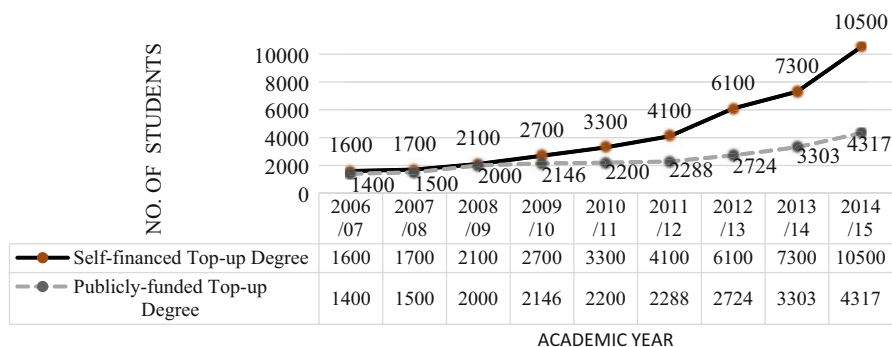


Fig. 2 Student enrollment in top-up degree programs 2006-07–2014-15

the first 6 years (2006–07 to 2011–12) since the first datum was available: for self-financed top-up degree, the number rises from 1,600 to 4,100, while publicly funded top-up degree lingers from 1,400 to 2,288 with moderate ascend. In the seventh year (2012–13) onward, both self-financed and publicly funded top-up degrees experience substantial escalation in terms of student enrollment. The number for self-financed top-up degree jumps from 6,100 to 10,500 in 3 years' time with an average percentage increase of 13% per year. In contrast, publicly funded top-up degree programs remain a low profile of increase from 2,724 to 4,317 within the same period, accounting an average increase of 12.3% annually.

In terms of program development, the growth of both self-financed associate degree and higher diploma programs from the year 2006–07 to 2014–15 is considered mild, though fluctuating, whereas the provision ranges from 140 to 169 and 113 to 198, respectively. The number of top-up degree programs available has been growing substantially from 55 in 2008–09 to 175 in 2014–15 with an average growth rate of 9% per annum.

As illustrated above, the student enrollment and study programs in Hong Kong's community colleges underwent a specular expansion in the first decade of the twenty-first century. But is this Hong Kong college model sustainable? We will discuss the sustainability issues of Hong Kong higher education massification in the next section.

Scenarios for Sustainability in Asian Higher Education: The Case of Hong Kong's Community Colleges

While massification is a key phenomenon in higher education systems worldwide, sustainability of mass higher education has become a timely and significant issue, especially in societies with lowering/unstable birth rate, overtly academic capitalism, and precarious education finance. Neubauer (2016) conceptualizes and delineates some varied scenarios for sustainability in Asian higher education. This section borrows liberally the ideas and thematic discussions from the conceptual model to inform the review of Hong Kong's community colleges in retrospect and prospects.

This conceptual section will introduce the differing notions of “sustainability” and challenges for sustainability in Asian higher education. Namely, the differing scenarios and notions are the following four types:

Keep the system intact. One scenario is keeping the system intact without making significant changes in inputs, outputs, or the costs of processes. The conditions which enable a mass higher education sustainable depend on the larger context of demographic change, economic change, technological change, level of political and social stability, and ability of the mass higher education to respond to globalization challenges.

Don’t fall backward. This scenario refers to a mass higher education in a state that no forward progress and improvement are proactively sought but can maintain the current performance indicator, for example, stable student enrollments. This can be a condition that, for example, the current system has significant inequalities, but it does not fall backward even without improvement on those inequalities. Sometimes the mass higher education system somehow goes “forward” in certain ways.

Continue making forward progress and continuous improvement. This is a scenario featured by proactive changes underpinning a sense of progress and direction, which are usually driven by the concern for accountability to the stakeholders outside higher education sector. More significantly, progress and direction in that sense should be measurable and can be examined empirically. Assuming the higher education sector is part of the change processes in the larger global and socioeconomic development, the device of strategic planning should be responsive, relevant, effective, and flexible to contend with institutional and systemic changes attributable to the exogenous variables. “Making continuous quality improvement” has then become the conventional buzz word in quality assurance and accreditation of most mass higher education systems.

Continue “fit for purpose.” Neubauer (2016) argues that one distinctive characteristic of massification in East Asia’s higher education is the reorientation of their education institutions’ purpose and capacity in alignment with the demands and concerns of the economic system and societal needs. New visions and missions are emerging as the higher education sector strives to align their capacity with the newfangled goals of the knowledge economy and precarious global environments with a view to ensuring fit for purpose. An alignment between institutional capacity and purpose is also essential for the “fit.” Examples are the conversion of China’s universities from technical institutions, the quest for world-class university status through Brain Korea 21 (1999–2012) and Brain Korea 21 Plus (2013–19) projects in South Korea, as well as the twenty-first Century Center of Excellence (COE) Program (2003–07) and the Global COE Program (2008–12) in Japan.

As a result, what is imperative to the notion of sustainability are the extent to which a higher education system or individual institutions commit to make their mass higher education sustainable and how (best) the sustainability endeavors are conceptualized, operationalized, and measured. Sustainability is not merely a rhetorical commitment. When the notion is being operationalized and measured, what are the outputs that maximize the impact in terms of social and economic values? What is the system (or a new segment of it) designed to produce? What is the point of

reference, or to what is a mass higher education system being compared? Clarity of purpose, alignment of strategic plans/goals with institutional capabilities, and systematic identified levels of support are all conducive to effective sustainability of mass higher education. Moreover, systematic and holistic assessment of the future changing socioeconomic and political environments can always inform the input of changes necessary to a sustainable mass higher education (Neubauer 2016).

Continue Making Forward Progress for the Hong Kong Higher Education Massification

Since the 2000–01 academic year, it is observed that the actual enrollment in Hong Kong’s community colleges against the policy plans is generally satisfactory, “indicating a genuine and robust demand for post-secondary education which is met by a market-responsive self-financing sector in a timely manner” (Legislative Council 2006, 5). The spectacular quantitative expansion of the associate degree sector reflects the forceful drive by the ample market demand (Legislative Council 2008). It is also stated that “not only has post-secondary education offered a more comprehensive and diversified learning environment, it has also supplemented the conventional articulation pathway by opening up alternative routes for further studies and better employment prospects at the junior professional or managerial levels” (Legislative Council 2006, 6). With the 60% policy objective having been met, some have suggested that instead of further expansion, the remaining resources under the various government support measures should be redeployed to other areas, for example, internationalizing the student intake which can diversify the student body, lead to the healthy development of the sector, and establish Hong Kong as an “education hub” in Asia Pacific (Legislative Council 2006).

The phenomenal expansion of the sub-degree (associate degree and higher diploma) sector in a very short time span has stirred concerns about quality. Over-supply of post-secondary places, leading to unhealthy competition, may also result in deterioration in education and program quality. In fact, community colleges, in particular their associate degree programs, have been recurrently reported as newspaper headline stories in a critical and negative way. There were cases among the associate degrees in vocational tracks that were refused accreditation by professional bodies in Hong Kong. Either the degree can be accepted as a qualification leading to a decent employment or articulation to full bachelor degrees, the policy of associate degree will otherwise be perceived as a costly route to nowhere (Kember 2010). It is still fuzzy in the Hong Kong public perception that in what ways associate degree deserves to be categorized as higher education or higher education of an inferior version in the “second tier” (Tang 2015a). Notwithstanding massive numbers of students enrolled in them, the deeply rooted meritocracy of the Hong Kong public culture accounts for the general view that these degrees are seen as “less than,” because higher achievers in the university entrance examination, following the social norms, usually prefer studying with a well-established public university.

Therefore, a steering committee was formed by the HKSAR Legislative Council to review and assess the development of Hong Kong post-secondary education. The

steering committee comprises members from institutions/service providers for post-secondary education, quality assurance agencies, and the general public (Legislative Council 2006). Phase 1 of the review primarily assessed the development of the higher education massification since the policy objective announced in year 2000. Four aspects, namely, recognition, quality control, finance, and facility support, were examined and recommendations were made. Phase 2 of the review focused on the implementation of the phase 1 recommendations and other policy issues which require detailed analysis and deliberation. In response to the concerns about quality, two quality assurance mechanisms were set up. While the programs offered by non-self-accrediting providers are to be accredited by the Hong Kong Council for Accreditation of Academic and Vocational Qualifications (HKCAAVQ), the programs by self-accrediting providers, albeit self-financed, are subject to the same quality assurance process as the publicly funded degree programs (Legislative Council 2006). The steering committee noted that most institutions were able to provide sound financial plans for application for a start-up loan scheme and to maintain the operation in a financially viable and healthy manner. The review also acknowledged the government's vigilance in approving land grants and the use of public expenditures and resources in a prudent manner, complying with the principle of cost efficiency conservatively. Aligning with the principle of "multiple entry and exit points" which promotes sub-degree as exit qualifications, more than 20 professional bodies from different sectors recognized the AD qualifications and granted partial exemptions from their professional examinations (Legislative Council 2006, 11). The steering committee of the review panel also recommended conducting graduate tracking surveys to assess the professional comments of employers on the job performance of self-financed sub-degree graduates. In a meeting at the Executive Council in the spring of 2008, the HKSAR Chief Executive, upon the advice of the Legislative Council, announced the order that the mechanisms of quality assurance for the Hong Kong post-secondary self-financing education sector should be enhanced and the recognition to associate degree graduates should be improved, with the lead by the government in its recruitment in civil service appointment.

To promote sharing of good practices of administration, teaching, and learning in the sub-degree sector, an expert group was set up to research and publish good practices for the sub-degree sector." For providing references by institutions and quality assurance agencies in the sub-degree sector, the expert group sets out general principles and good practices of effective quality assurance. Moreover, the Quality Enhancement Grant Scheme (QEGS) amounting to US\$13 million was launched in 2008–09 covering a period of three academic years to fund worthwhile nonrecurrent nonwork projects which aim at improving the teaching and learning of sub-degree programs and upgrading the overall standards of the self-financing sector. Teaching and learning projects which enhance the effectiveness of language proficiency, effective pedagogies, quality assurance, and career guidance services or student support in general are eligible for application. Meanwhile, a Tripartite Liaison Committee comprising the Education Bureau (EDB), the Hong Kong Council for Academic Accreditation and Vocational Qualifications (HKCAAVQ), and the Joint

Quality Review Committee (JQRC) were set up to administer the quality assurance of Hong Kong's community colleges (Legislative Council 2008).

Having said that, other than program quality, opportunities for articulation and educated unemployment are the key issues to be critically addressed after satisfactory student enrollment (Wan 2011). Unlike their international counterparts, Hong Kong's community colleges do not have the authority to confer bachelor degrees; graduates of sub-degree need to look for top-up degree programs offered by degree-awarding institutions if they want to continue their studies. Although the government committed to adding 1,680 publicly funded senior-year places/top-up degree programs for transfer students since 2005–06 by phases (Legislative Council 2006, 10) and there was a tremendous increase in transfer rate from 3% to about 33% (Mingpao 27 March 2012, cited by Wong 2016), the demand for further studies of Hong Kong students could not yet be answered satisfactorily. It is because completing a “full” undergraduate degree, as a terminal award, has been viewed as the necessary next stage of personal development by many associate degree graduates. This is attributable to the traditional respect for education and “educational desire” in Confucian societies. Studying hard and aspiring for attaining an educational qualification higher than their parents are both the motivation and obligation for young people in Confucian families (Kember 2010). The educational desire leads to the demand for self-financed top-up undergraduate programs. To address the needs of more associate graduates to study undergraduate programs, a significant number of self-financed top-up degree programs have been launched. Therefore, Hong Kong higher education system saw an emergence and significant growth for self-financed top-up programs from the mid-2000s to the late 2000s (see Fig. 2). As abovementioned, Hong Kong's community colleges do not have the academic authority to grant bachelor degrees; the top-up degree programs for transfer students are mainly conducted in collaboration with overseas universities including Australian and British universities.

However, in local sense, top-up degrees for transfer students from community colleges are perceived as inferior to the full bachelor degrees offered by the Hong Kong public universities. Such local sense was formed according to the streaming function of education against the backdrop of the academic pyramid. Majority of students would prefer direct entry into a public university, but only a minority of them are successful. The reality caused students' disappointment and, more problematically, a sense of inferiority. Regarding the academic staff at community colleges, they are employed mainly for teaching without expectations of research commitment. They enjoy less opportunities for research funding and research facilities. Meanwhile, their contact hours for teaching and student-teacher ratio are higher than their counterparts, especially academics of professorial rank, in public universities in Hong Kong. It is still fuzzy in the Hong Kong public perception in what ways associate degree deserves to be categorized as higher education or higher education of an inferior version in the “second tier”.

Entering into the mid-2010s, under-enrollment is common among the majority of self-financing higher education institutions. Oversupply of the education programs has been worsened by the declining birth rate of the corresponding youth cohort. Several academic programs without successful operational/financial

performance in the sector have been closed while the concerned academic staff will be laid off. Making the continuous development of Hong Kong higher education more uncertain and complex, the neoliberalized trend in Hong Kong higher education policies tended to be recalibrated when a HKSAR Chief Executive was appointed in 2012, specifically to better align Hong Kong sociopolitical development with the mainland China's political agenda (Lo 2017).

In 2015, a research report was released by the HKSAR Legislative Council to review the results of the new industries promotion. It revealed that job creation and GDP contribution from education services and other new industries, except creative and cultural industries, do not bring much contribution in diversifying the economic structure of Hong Kong (Legislative Council Secretariat 2015). The HKSAR Chief Executive expressed in the 2013 Policy Address that the public was having a debate about whether an "industry" is a more proper term for education. Another debate is that contradictions arise concerning whether education should be promoted as an industry in service of a regional hub or should cater to for the local needs. How Hong Kong's community colleges are to be governed remains a key question in the massified Hong Kong higher education sector.

Governing the Hong Kong's Community Colleges: Possibility of Market Failure and Limitations of the "Invisible Hands"

The governance of Hong Kong higher education massification has predominantly been driven, operationalized, and maintained by the market ideology. Within the market ideology, it allows winners take all, but the situations will become especially problematic regardless of market functions or fails. When the education market functions, market share is concentrated in the hands of a few big players (Legislative Council 2006, 3). Among the key players, it was empirically found that "articulation," "career service," "financial aid," and "program design" are the areas the institutions can work with to increase their competitiveness and maximize the market share (Wong et al. 2016). When the market fails, the resources invested in the institutions and the sector will be wasted, and the prospects of the students and teaching staff concerned will be affected. According to Educational Bureau (2008), there has been request to the government to take a more significant role in controlling the quality of sub-degree programs, instead of letting the sector develop on its own according to market forces. The government should step in when there are market inefficiencies or failures (Legislative Council 2008, 16–17). Positive discrimination measures can be set up in favor of new and smaller players with a view to diversifying students' choices and contributing to the long-term development of the sector. Instead of promoting direct competitions, the government should encourage role differentiation and collaborative efforts among institutions so that the institutions can put in collectively their resources and share them alongside their expertise in institutional governance, pedagogy and curriculum development, as well as teaching materials (Legislative Council 2006, 8–9). After all, the government should be prepared to increase the provision of publicly funded sub-degree courses (Legislative Council 2006).

In *Legislative Council Brief Phase 2 Review of the Post-secondary Education Sector*, it claims on the ground of social equity that “as students facing financial difficulties are provided opportunities to acquire further education and professional training, their earning capability will be lifted. This has positive effect on social mobility and is conducive to social harmony” (Legislative Council 2008, 31). However, sub-degree graduates have an apparently lower level of earnings compared to the graduates from publicly funded institutions (Chan 2012). Unlike their publicly funded counterparts, students of self-financed programs are not eligible for means-tested loans to cover their living expenses. This may pose a heavy repayment burden on students of self-financed sub-degree programs, especially those from less well-off families and earn less after graduation as compared to university graduates. Family social class may determine a different reality the students face amidst their educational failure and subsequent study pathway for further education.

Small World, Different Worlds: Family Social Class and Study Pathways through Community College

Arguments in this section are mainly based on Wong (2016) whose research findings are derived from a qualitative study of 85 students from a self-selected community college as a small convenience sample. From 2006 to 2009, 85 respondents joined the first interview, whereas 64 of them joined the follow-up interviews in 2010. The respondents expressed how they perceived and received the study pathway through community college as a second chance for university admission. The gender distribution of the respondents is 32 males and 53 females. Middle class occupies 30 respondents and working class occupies 55 respondents.

The two major problems community college students face are high tuition fees and low level of financial assistance than the university students (Wong 2016, 10). On the one hand, the community colleges provide other educational options for students who fail to enter public university directly. But on the other hand, students and parents from different social classes do not share a similar level of capacity of taking advantage of it, when the educational option is contextualized owing to one’s social class background (Wong 2016, 14). As the educational options are very new, pricey, and hence dicey, guidance and advice from well-informed and resourceful parents are important to take advantage of the second chances for university admission available in the market. Since their educated parents could provide more relevantly informed academic advice and adequate financial support, middle-class community college students can take a better advantage of their sub-degree program to rectify their previous failure in public examination and subsequently get university admission out of the second chance. While middle class parents have a better knowledge of community colleges than the working-class parents, working-class students have to explain to and persuade their parents that the option of community college is a worthy option by explaining to them the costs and opportunities offered by the option.

Wong (2016) argues that due to possession of cultural capital, parents from middle-class background are better informed of how the education system is

operated and can therefore provide more relevant academic advice and utilize their financial resources for making the most from the available opportunities. As they are usually better educated than their lower class counterparts, they had direct institutional experience of post-secondary education and the disposition rewarded by the education system embodied within themselves (p. 4). They can also transfer the “hot knowledge” about educational options and study pathways and prospects to their students. “Hot knowledge,” including study information collected from social networks (as social capital) and academic recommendations informed by direct education experience (as cultural capital), is arguably of higher value than “cold knowledge,” meaning the information which is officially and publicly open to the public. It has always been their parents, embodying the cultural and social capital, who inform the middle-class students that community college is a newly available educational option, whereas working-class students, relying on “cold knowledge,” are advised to consider such educational option by their teachers or peers. To realize the educational option as a possible study pathway, the working-class students need to acquire their own cultural and social capital and more essentially figure out their financial arrangements. In the study by Wong (2016), although there were no middle-class students who show any worry about financial arrangements for their community college study, many working-class respondents were concerned about their employment and salary after investing in a sub-degree. While the middle-class students largely take their parents’ financial support for granted, nearly half of the students from working-class background need to finance their study by part-time jobs and government loans (instead of grants). Unlike their middle-class peers who can enjoy their parents’ informational resources and whole monetary sponsorship for study, working-class students consider the financial support from the family as the sacrifice of their parents (Wong 2016, 11). Given the different perceived realities, the working-class students feel an intense pressure from parents to excel in their studies, namely, being transferred to university. More interestingly, it was also discovered that middle-class parents, rather than the working-class counterparts, demonstrate a “critical tone of the education system” (Wong 2016, 8). After the education failure, some middle-class parents comfort and encourage their child by suggesting that their failure may not be the result of personal inadequacy or being lazy but due to the systemic problem of Hong Kong education.

Before the new educational option offered by Hong Kong’s community colleges in 2000, a second attempt for high school leavers for university admission refers to retaking the designated public exam(s). In theory, their initial educational failure ought not to terminate their opportunity for university education. Yet educational option by Hong Kong’s community colleges requires compensation with greater finance and time resources. Where education is neither publicly funded nor compulsory in the capitalist societies, the socioeconomic status of the students’ parents (and “parentocracy” as coined by Brown (1990) results in educational inequality, in which middle-class parents and hence students are privileged in many pursuits for academic excellence (De Graaf et al. 2000; Kim and Schneider 2005). Parental resources, capitals, and coping strategies in educational planning and making educational decisions are far more imperative than students’ own endeavors, competence,

and actual learning (Ball 2003; Savage and Egerton 1997 cited by Wong 2016). Notwithstanding, the HKSAR government believes that the class gap for academic achievement can be narrowed by the financial support offered to bridge the disparity, the employment reality after graduation also needs to be taken in account to have a more holistic assessment. The next section will discuss the alignment problems between employment market and higher education massification.

Knowledge Economy: Alignment Problems between Employment Market and Higher Education Massification

From 1994 to 2016, there are 40,000 degree-holding labors joining the workforce each year, accounting for 9–29% of the total labor population. Although the general advancement in education is considered beneficial to the Hong Kong society, the creation of high-end job vacancies seems to fail to keep pace with the manpower adjustment. Worse still, it is found that sub-degree graduates have apparently a lower level of earnings compared to the graduates from publicly funded institutions (Chan 2012). Such phenomenon is ascribed to the decelerated economic development and handicapped progression toward a knowledge-based economy (Legislative Council Secretariat 2016, 7). In a survey by Forestier et al. (2013), only one out of three respondents indicated their sub-degree as offering “value for money,” in the condition that the sub-degrees demand higher fees than publicly funded program.

More problematically, as saturation gradually arises in the higher end of the labor market hierarchy, degree-holding labors are forced to attempt lower-end occupations that require less professional knowledge regardless of their education and qualifications. During 2008–2015, there were around 26% of the new degree-holding labors engaging in clerical, service, or sale-based employment, doubling the percentage of 12% from 1994 to 2001 (Legislative Council Secretariat 2016). By carefully examining the career distribution of the degree-holding labors in the past 21 years, it is noted that managerial and professional occupations barely house two-fifth of the new degree-holding labors. The percentage of university graduates employed by the managerial, administrative, and professional occupations has decreased significantly from 47% during 1994–2001 to 38% during 2008–15 (Legislative Council Secretariat 2016, 7).

In the past, associate professionals had been perceived as shelters to degree-holding labors who could not get a place in the managerial and professional sector. However, scarcity emerged in recent years in the supply of associate professional occupations. The percentage of degree-holding labors within this sector has hence decreased from 38% during 2001–08 to 33% during 2008–15 (Legislative Council Secretariat 2016, 8). As saturation gradually arises in the higher end of the labor market hierarchy, degree-holding labors need to attempt lower-end occupations that require less professional knowledge. For example, during 2008–15, there were around 26% of the new degree-holding labors engaging in clerical, service, or sale-based employment, doubling the percentage of 12% from 1994 to 2001 (Census and Statistics Department 2016, 8).

It is inevitable that workers engaging lower-end jobs will receive a wage cut regardless of their higher education background. Taking the year 2015 as an example,

the monthly income median for managerial or professional positions is around US\$4,870; for associate professionals, it has almost reduced by half to US\$2,560. It will be further reduced to about US\$1,410 to \$1,667 for clerical or sale-based jobs. It is deduced that a portion of the younger generation may feel upset and disappointed when facing such discrepancy in wages, notwithstanding the higher education they have received previously (Census and Statistics Department 2016, 8).

In fact, income mobility in the Hong Kong opportunity structure deteriorated across the generations. According to *Study on Earnings Mobility* released by the HKSAR government, the average monthly income of labors graduated from universities in 2002 could be tripled in 2014 after joining the workforce for more than a decade (Census and Statistics Department 2016). Highly educated labors were most likely to have rapid income increase at the early stage of their careers compared to the less educated. Findings indicate that the first batch university graduates who were born in the mid-1960s could earn a monthly median of US\$4,295 (in the equivalent cost of 2013) by the time they hit 35–39 years old, that is, 10–15 years after their initial employment. However, when the third batch university graduates who were born in the mid-1970s reach 35–39 years old, their monthly income median would barely be US\$3,346. For the fifth batch university graduates who were born in the mid-1980s, the wage level at the initial stage of their careers would be among the lowest, although they had not reached 30 in the benchmark year of 2013 (Census and Statistics Department 2016).

Therefore, even though graduates from the younger generation have successfully fixated a position at the labor market, it is obvious that their wages are lower than the previous generations'. Taking the fifth batch university graduates who were born in the mid-1980s as an example, if they could attain the highest 10% of the income ladder with success, their income earned between the ages of 35 and 39 would be US\$7,000, still considerably lower than US\$10,000 from the first batch university graduates under the same circumstances. Therefore, it is noted that the upward mobility has alleviated from the young elites than the older graduates (Legislative Council Secretariat 2016, 10).

As illustrated above, through envisaging their importance in preparing younger generation for employment in a knowledge-based economy (Legislative Council 2008, 25), the supply of high-end jobs fails to catch up with the continuous massification of higher education and corresponds to the demand of labors with post-secondary education. The problem is especially severe among the associate degree graduates. The reality echoes the argument by Kember (2010) that “the value of an associate degree as a suitable terminal award for employment in a knowledge-based economy is yet to be clearly established” (p. 167).

Conclusion

In all, the sustainability of Hong Kong higher education massification is not the core issue facing the higher education sector itself. Without a proactive direction and sense of progress, the sector tends to maintain its massified segment intact without making significant changes in inputs and costs, especially public expenditure of the

processes. While it is responsive to the public consciousness and demands for accountability, the massified sector, as second tier of the system (Tang 2015a), continues to make forward “progress” but without a clear vision and strategies for significant improvement, fit for purpose, or pursuit of enhanced educational equality. Although one common indicator of “progress” is the attainment of university status by individual colleges, what always matters most is the figure of student enrollment as it determines whether the colleges can sustain themselves in the competitive education market through a viable financial model. Economic climate, ability to respond to employment market and global economy challenges, technology, level of political and social stability, and more importantly demography are the determinants of the progress which the massified segment of Hong Kong higher education can make. Higher education is considered by Hong Kong society essentially the public universities, which comprise the first tier of Hong Kong higher education sector. This group of first-rate universities is particularly keen on their quest for world-class university status, as measured by research productivity, ownership of competitive research grants, and definitely global university rankings. The Hong Kong higher education sector, alongside the public consciousness, shares the consensual value that the way in which its mass higher education segment will be sustained should be left to the market forces to determine. Among the excellent institutions is the City University of Hong Kong which has been making significant improvement in university ranking. In 2014, the University decided to sell out its well-operated community college to an Australian university (University of Wollongong) which aspires to turn the college into a private university.

A question remains is: to what extent Hong Kong higher education has changed into a mass system in actuality? According to Scott (1995), the main difference between elite system and mass system lies in the matter of fuzziness and permeability. Comparatively speaking, while there are distinct boundaries that define elite higher education, some fuzzy boundaries are needed to be embraced for the transition to a mass higher education. Kember (2010, 173) argues:

While the Government might claim that mass higher education has been achieved, many do not accept the new provision as constituting higher education. The literature may note that moves towards mass higher education require fuzzy boundaries (Scott 1995) and new types of provision (Kaiser and de Weert 1994; Trow 1973), but the Hong Kong population has been reluctant to embrace this degree of fuzziness.

Depending on how “higher education” is being redefined and classified, Hong Kong higher education can still be elitist (Kember 2010; Tang 2015a; Wong 2016;). The positional good and elitist position of Hong Kong public universities are reinforced by admitting the elites of high school graduates who excelled in the public examinations for university entrance as well as international students. The tight and hence illiberal control of access by graduates of associate degree to their undergraduate places can help maintain their reputation (Kember 2010, 171,175). After all, the degree of articulation into the undergraduate places is not within their strategic plan for aspiring to attain the status of “world-class universities.”

Rather, the creation of sub-degree programs has helped to reinforce the idea of the elitism of publicly funded degrees by first-tier Hong Kong universities (Kember 2010). In tradition, universities served the social elites and were seen as places for nurturing young adults from prestigious upper class. This had been a cultural value consensual to the lay population of colonial Hong Kong. In fact, the adoption of the American 2 + 2 community college system has been unusual to British Commonwealth systems, including Hong Kong system where elitism has (once) been core to the dignity of higher learning. To some, the addition of one aspect of the American higher education model to the Hong Kong higher education system, which shared the legacy of the British system, is groundbreaking and uncommon. Nonetheless, a significant process of massification via the introduction of a hybrid community college model has taken its place in the short history of Hong Kong higher education, while meritocracy and educational desire prevail in many aspects of its society and culture. All things taken into account, whether the massification through the development of community colleges can be considered a “democratic reality” or simply a “democratic rhetoric” (Tang 2015a) still remains the question.

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Transnational Education Policy and a Globally Competitive Workforce: A Comparative Analysis of Vocational Education and Training Policy in the European Union and the United States

M. Allison Witt

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Abstract

This research examines parallel multilevel political entities as they competitively position education within a global education polycscape. Building on a growing body of research that compares policy of the European Union (EU) and the United States (US), this chapter considers the emphasis and purposes of the Copenhagen process policy in the European Union to the Department of Labor Trade Adjustment Assistance Community College and Career Training (TAACCCT) grants in the US policy to consider how vocational education and training (VET) is being reconstructed as a neoliberal response to globalization.

Policy responses to global market forces are shifting VET from the local and nation-state policy realm into global labor policy tuned to multinational labor demands and competitive global markets for labor and production. The EU and the USA employ similar rhetoric for policy framing and justification despite

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variances in governance structure and regulatory environments. Critical comparative policy analysis reveals not only a shift from local or national orientation to the transnational through similar policy discourse but also a shift of power from a locally based collaboration of individuals and the institutions that serve them to competitive multinational labor flows.

Keywords

Community colleges · Vocational education · Globalization · Trade policy · European Union · USA

Introduction

Historically, vocational education and training (VET) has resided at the border between education and industry, with allegiance to both spheres of society. Tasked with meeting local workforce training needs, variations of an apprenticeship model have long served much of Europe, while secondary schools, proprietary career schools, and increasingly, community colleges have been the site of this training in the USA. VET governance and policy have had a corresponding local orientation as well. However, recent policy changes in both Europe and the USA indicate a dramatic transnational shift occurring in VET policy, moving it beyond its local roots and placing it in the global policy sphere.

Previous international comparative studies on VET have often been centered on comparisons between national systems in Europe (Brockmann et al. 2008; Clarke and Winch 2007; Ryan 1991) and do not typically include the USA with few studies looking across these two arenas (Gonon 2009). Moreover, owing to its local orientation, research on vocational education policy has traditionally been localized as well, focused at the nation-state level in Europe and to the state in the USA (Payne 2000). However, policy-making processes at the local or state level are no longer independent from broader global and transnational processes. As scholars note, it is in this transnational space that the nature and scope of vocational education are currently being revised (Raby and Tarrow 1996, 2014).

Taking into account state and national policy processes, this chapter considers VET policy from a comparative transnational perspective. Building on the framework established by Erichsen and Saljan (2013), as well as Fabbrini (2010), Kelemen (2003), and others, this research compares the EU and the USA as federal systems (Tortola 2014; Glencross 2009). Without minimizing the marked differences in the political systems of the EU and the USA, the argument here works from the assumption that as polities operating as federal systems working through a separation of powers, similar policy functions and processes are evident in the EU and the USA. In the case of VET, both the EU and the USA are aimed at amalgamating multiple systems from the state or national level into a comprehensive federal standard. In both polities, cooperation is being incentivized through policy and funding but is not strictly coerced. Examining this phenomenon from a transnational perspective provides an opportunity to observe how VET systems are being

reconfigured as a neoliberal response to globalization and to conceptualize this phenomenon across states and regions. This research critically analyzes policy from these multilevel political entities as they competitively position their vocational education in a global education policyscape and then considers the impact on the institutions that have traditionally offered VET and by implication, the individuals that they serve.

The first objective of this chapter is to further the growing body of research comparing the EU and the USA by using major policy initiatives of the Copenhagen process in the EU and the Trade Adjustment Assistance Community College and Career Training (TAACCT) grants in the USA. Transpiring at roughly the same time, and targeting similar groups of participants as well as citing the same benefactors, these initiatives have not been considered in a comparative context, despite both subtle and pronounced mention of the causal relationship between the two policies. As the policies are rescaled beyond the local, the analysis of the policies must be as well. As this chapter will discuss, comparing policy across these two federated systems reveals the extent to which similar conceptions of heightened global competition among knowledge societies is permeating current attempts to reform VET. It is not only Europeanization, as previous studies have suggested, or a move to federal control in the USA but also includes a larger, more complex alignment of policy responding to global pressures.

The second objective of this chapter is to critically examine how federal political entities have used policy to strategically position VET with what is argued to be a neoliberal response to perceived global market flows, global labor demands, and global economic competition. This chapter then critically considers the ramifications of this competitive positioning for those institutions and individuals that are most impacted by VET policy as they are shifted out of a locally oriented policy system and instead are incentivized to individually assume the burdens of flexible global labor demands. For example, emphasis on employability and the appropriation of lifelong learning are themes that echo across the Atlantic in this transnational policy space.

Globalization, Neoliberalism, and Education Policy

Scholars generally concur that the intensification of worldwide social relations now links distant localities in such a way that local happenings are shaped by events occurring miles away and vice versa (Giddens 2009, 64). These forces of globalization are described as “the increasingly interdependent relationships between economies, nation-states, cultures, and even institutions” (Burbules and Torres 2000, 22). The prevailing metaphor of global analysis is the multicentered, informal, and flexible notion of flows, webs, and networks functioning in complex, uncertain global environments (Castells 2000).

Globalization theory has had significant implications for higher education research on education policy since previously held assumptions about the sovereign policy formation within the nation-state have been challenged. Scholars have noted the

emergence of a post-national polity associated with the networks and flows of globalization (Lingard and Rawolle 2011; Appadurai 1996). Of course, the nation-state remains significant within these global education policy networks, yet now it is but one level of the multilevel political entity working to strategically position the national economy for survival or even dominance in a competitive global economy (Rizvi and Lingard 2010). In light of this intensification of global flows and shifts in national authority, the theory and methodology of education policy research must be concerned with both documenting and accounting for this rescaling as national sovereignty is reconstituted, and relationships between national and other multilevel political entities are reconfigured. Due in part to this emergent global education policyscape, many countries are enormously influenced by ideas and norms espoused in foreign models of education as well as those of supranational organizations.

Neoliberalism has flourished in these flows of globalization, becoming a dominant thread in modern educational ideologies (Collier et al. 2017; Davies and Bansel 2007; Olssen 2004; Rizvi and Lingard 2000). Since the 1970s, scholars have detailed ways that have been adapted in various forms around the globe (Spring 2008). Loosely defined, neoliberalism is a theory of political economic practice that espouses free markets, free trade, and property rights, with a limited role for the state except in maintaining such freedoms (Olssen and Peters 2005). Deregulation, privatization, and a simultaneous withdrawal of the state from social provision have been hallmarks of neoliberal policy and practice (Apple 2009). The neoliberal state has been characterized by the transformation within government to a responsibility for human well-being supported by the economy, into a state that gives power to global corporations and installs apparatuses and policy through which humans are reconfigured as responsible for directing their own lives in support of the economy (Davies and Bansel 2007). Many scholars have noted the values of individual choice, self-determination, efficiency, and competition as rooted in neoliberal economics embedded in transnational education policyscape at all levels (Apple 2009; Rizvi and Lingard 2010). The corresponding conceptualization of nations as competitors for global industry has led to increased global attention on national policy and at the same time, increased transnational borrowing in education policy (Steiner-Khamsi 2004).

Conceptual Considerations that Inform the Comparison

Research has shown that within the global flows, global policy diffusion processes depend on a range of mechanisms including social construction, policy learning, competition, and coercive governance (Dobbin, Simmons, and Garrett 2007; Raby and Valeau 2013). According to Steiner-Khamsi (2010), transnational educational borrowing often acts as an effective strategy for coalition building, smoothing policy conflicts by enabling competing interest groups to consensually support seemingly neutral “international standards.” Rooted in the social constructionist perspective, the comparative analysis here reveals similar construction of policy in these two systems of the EU and the USA, shedding light on the indirect flows of policy formation in this emergent global policyscape and the resulting impact on VET

policies. This chapter considers how transnational standards as applied to global labor market competition are used to influence VET reforms and, further, as a device to increase the legitimacy of rescaling and other neoliberal reform agendas moving beyond a focus on Europeanization or regionalization.

While a small but growing body of research compares education policies between the EU and the USA, few studies consider specific VET policies despite the recognition that the Copenhagen process, for example, was developed in part to compete with the USA (Powell and Trampusch 2012). In the policies examined here, both the EU and the USA attempt to coordinate and unify various locally determined and locally governed systems into a coherent consistent federal whole. In both Europe and the USA, institutions and states are incentivized to participate in intergovernmental processes but are not strictly coerced into doing so. Soft law used in the European VET reform depends largely on normative mechanisms with national policy-makers volunteering to participate in intergovernmental processes. Similarly, in the USA, through large federal grants and the soft law mechanisms that develop in the wake of grant awards, state level governance and even institutions are strongly incentivized to participate and capitulate to federal initiatives. While recognizing the limits of this comparison, this research rescales the examination of VET policy to the transnational level.

Methods

The research process began with an extensive literature search for scholarly works on VET policy and identification of policy documents and relevant agency and organization reports in the EU and USA with the primary considerations of origin and scope. Specifically, the policy texts selected for inclusion in the study were “monumental documents” in that they represent a point of reference for a given discourse (Neumann 2001). Because this study is concerned with the European Consensus and reflected policy, as well as federal level consensus and reflected policy in the USA, the documents selected represent the result of negotiation and resolution of conflicting views in the EU and, similarly, of agreed-upon adoption of official policy goal statements in the USA. While much could be learned by examining the debates that occurred in both the EU and the USA to arrive at the consensus, the myriad influences on the formation of federal level policy are beyond the scope of this study. Instead, the focus here is to compare and then critically examine the emergent global education policy field and the policy lexicon surrounding VET that flows through this polycscape.

The documents selected for inclusion pertaining to the Copenhagen process are the Copenhagen Declaration of 2002, Maastricht Communiqué of 2004, Helsinki Communiqué of 2006, Bordeaux Communiqué of 2008, and Burges Communiqué of 2010. For the TAACCCT grant policy, the documents selected are the original legislation regarding the TAACCCT program including the Trade and Globalization Adjustment Act of 2009; Amendment to the Trade Act authorizing and funding the TAACCCT for FYs 2011–2014 included in the Health Care and Education

Reconciliation Act of 2010; Economic Report of the President 2013; and Annual Reports from the Department of Labor regarding TAACCCT implementation.

Using critical theory as a lens, this analysis takes a broad view of the globalization policy discourse at the transnational and federal level and then a fine-grained look at the local impacts of this policy discourse (Yang 2003; Capper et al. 1994). Drawing on Bacchi, this research critically considers the policy problem construction and the different ways in which political subjects are conceptualized (2009). The education policy documents in this study were used to offer insights into what Rose and Miller have termed governing rationalities or the way that authorities seek to define the objectives of government (1992; 2008). This includes perceptions about whom and what should be governed and the problems and goals around which government should be directed. In the context of neoliberalism, governments will seek to impose economic risk onto the individual and to constitute citizens who hold themselves responsible for assuming the risks associated with global flows (Peters 2005). Such considerations become particularly relevant as we trace the shift from local governance to federal response to perceived global demands as it relates to VET. Traditionally, many of those whom VET has served, particularly in the USA, are disadvantaged learners and low-skilled persons and have often been those with fewer career or educational alternatives. Therefore, a critical analysis is useful to consider the impact of this globalization of VET policy on individuals as well as the local institutions that have served them.

Discussion of Copenhagen Process Policy

The Lisbon European Council (2000) outlined the important role of education as an instrument for strengthening Europe's competitive role worldwide, identified as a crucial part of the overall strategy toward economic competitiveness. In response, the Copenhagen Declaration (2002) outlined specific goals for VET across the EU member states which were to promote cooperation by developing mutual trust, enhancing transparency, increasing mobility, and facilitating lifelong learning. Similar to the Bologna Declaration in higher education, this declaration responded to a request from the Barcelona European Council to take action in the field of vocational training. The declaration followed a resolution of the Education Council (November 2002), which gives it legal basis. The purpose of the declaration was to commit all stakeholders to the priorities and follow-up of the council resolution. The overarching goal of the declaration was to strengthen the European dimension in VET and establish Europe as a world quality reference.

This call for European coherence culminated in the establishment of the European Qualifications Framework (EQF), begun in 2006 as a mechanism to compare across national qualification systems and ensure transferability and mobility within Europe (European Ministers of Vocational Education and Training et al. 2006). Developed by expert groups from all EU countries, the EQF grades qualifications according to eight reference levels and across the dimensions of knowledge, skills, and competences. While still voluntary, developing, testing, and implementing common

European tools for VET across Europe became the new standard expectation, later strengthened in the Bordeaux Communiqué of 2008.

This aim of creating a European dimension for VET occurs across national systems that have historically been quite distinctive. Research in vocational training has identified three classical models of VET within Europe exemplified by the liberal market economy model in the UK, the state bureaucratic model in France, and the dual corporatist model in Germany (Greinert 2002). These distinct models took shape as early as the First Industrial Revolution and developed out of even older craft-based models of vocational training (Finegold and Soskice 1988). Varying characteristics in the balance of power between the state, unions, business, and labor have led to these structural distinctions across the continent. In fact, historical analysis reveals that the great variance observed across Europe can be attributed to varying resolutions of political struggles that occurred at critical junctures in the division of labor between state, employers, and their associations centered on issues of who provides, who finances, and who regulates VET (Busemeyer and Trampusch 2011; Finegold and Soskice 1988).

While the Copenhagen process aims to make Europe a world quality reference in VET, many would argue that at least part of Europe already was. The collective skill formation systems as developed in Germany, Austria, Switzerland, the Netherlands, Denmark, and others have been admired by scholars and international policy makers because they are linked to low levels of youth unemployment, high-quality occupational skills, and generally competitive economies (Busemeyer and Trampusch 2011; Hall and Soskice 2001; Finegold and Soskice 1988). While we might expect that these highly regarded models would be replicated across Europe, instead, these models are also subject to adapt to new standards as a part of the Copenhagen process.

While VET has always been tightly linked to labor, the Copenhagen process is aimed at a labor market that is expected to be the same across Europe and is rescaling the governance of VET from the nation-state to the European scale. The distinctiveness within the national systems developed through locally based balances of power, over centuries, and out of apprenticeship practices are now, through the Copenhagen process, recast as a policy problem. Even those national systems that have achieved world-renowned status as models are subject to EQF and are portrayed in increasingly normative measures as systems that create potential barriers to mobility and social cohesion and may be impeding the development of individualized career paths.

Similar to the Bologna Process induced reforms in national HE systems across the EU, scholars have noted the pressures for convergence across Europe due to the Copenhagen process (Powell and Trampusch 2012; Munk 2003; Ertl 2002). The soft governance methods in EU education policy can decisively affect national education systems (Powell and Trampusch 2012; Busemeyer and Trampusch 2011; Powell and Solga 2010), yet other scholars note that distinctions persist at the state level in interpretations and degrees of VET policy. Brockmann, Clarke and Winch, for example, note the convergence in VET policy across Europe, yet their comparative analysis across countries finds differences in the social construction of terms associated with the process (2008). Given the long-standing historical differences in state systems, it seems likely that these national distinctions will continue to persist to varying degrees for some time; however, what is of interest here is the trend toward

convergence at the European level. Whatever the extent of realization, the push toward Europeanization has become explicit. Moreover, it is important to note that despite these major historical distinctions, scholars have found that socioeconomic changes and global economic pressures have triggered remarkably similar responses across the European countries (Powell and Trampusch 2012; Boreham 2002).

In addition to a more unified European VET, the Copenhagen process also incentivizes VET providers to develop even clearer links between VET and the labor market and a corresponding increased role for the individual to manage the changes in labor markets that are assumed to be a part of a globalized economy. Beginning in the Bordeaux Communiqué (2008), a new objective of the Copenhagen process was the stated goal of strengthening the links between VET and the labor market, including an emphasis on anticipating and matching labor market and skills needs. The Bruges Communiqué continues the call for increased cooperation with business to ensure training is relevant, providing teachers the possibility of practical training in companies as an example. Certainly, VET has always been about preparing participants for work, but a review of the Copenhagen-related documents finds minimal emphasis on citizenship, social cohesion, or personal development. Instead, from the Bordeaux Communiqué forward, the labor market is driving the process, a shift that follows a “market model” of VET as described by European Center for the Development of Vocational Training (Cedefop) (Descy and Tessaring 2001). This market model is not native to Europe and is instead aimed at being more similar to the USA, notable for more strictly focused goals toward work-based competencies, with less emphasis on the overall citizenship participation and personal development of participants.

In earlier national models of European VET, workers were apprenticing in specialized crafts or skills, with a presumed expectation toward lifelong work and development in a particular occupation. Now, however, VET participants’ work is expected to change over time, and both the workers themselves, as well as VET providers, are expected to prepare for this mutability. For example, the Burges Communiqué speaks to the need to empower people to adapt to and manage change by enabling them to acquire key competences (2010). Related to this expected fluctuation in labor market is an emphasis on lifelong learning. Scholars have noted this trend in the EU policy, and this policy discourse is clearly evident in the Copenhagen process in which lifelong learning means individuals are expected to retrain and update skills in order to meet labor market demands (Biesta 2006; Green 2002). Rather than developing a skill that will be used, refined, and developed throughout one’s career as in the apprenticeship model, the Copenhagen process encourages VET to provide a broad knowledge and skills base relevant to working life (European Ministers of Vocational Education and Training, the European Social Partners, & the European Commission 2006). The emphasis on working life contrasts with earlier renditions of this concept, notably lifelong education. Widely discussed in the 1970s, the idea of lifelong education was actively promoted on a global scale by UNESCO, particularly through *Learning to Be* (1972), which emphasized broad access to higher levels of education and greater support for and recognition of informal and nonformal learning in order to encourage personal fulfillment and development (Field 2011; Jakobi 2009). Lifelong learning strategies,

in contrast, are aimed not at personal development of workers but to a well-functioning training market and a broad skills base among the labor pool (European Ministers of Vocational Education and Training et al. 2008).

Despite marked national differences in the historical development and conceptualization of VET (Brockmann et al. 2008), the pressure for European convergence is explicit and will continue since the Copenhagen process forms an integral part of the “Education and Training 2020” strategic framework and will contribute to policies aimed at achieving the education-related targets of the Europe 2020 strategy. The prevalence of key tenants of European-wide coherence of VET as well as the emphasis on employability and individual responsibility for lifelong learning tuned to labor market needs also seems likely to continue to be emphasized in the strategic framework for Europe going forward (European Ministers of Vocational Education and Training et al. 2010).

Discussion of TAACCCT Policy

In 2009, the American Recovery and Reinvestment Act amended the Trade Act of 1974 to authorize the Trade Adjustment Assistance Community College and Career Training (TAACCCT) Grant Program. In 2010, President Obama signed the Health Care and Education Reconciliation Act, which included \$2 billion over 4 years to fund the TAACCCT program. TAACCCT provides community colleges and other eligible institutions with funds to deliver education and career training programs that are directed to workers who are eligible for training under the Trade Adjustment Assistance for Workers program to prepare for employment after jobs have been lost to companies that have moved operations overseas. Through these grants, the Department of Labor in partnership with the Department of Education incentivized US community colleges to train adults in acquiring specific skills, degrees, and credentials which are directly targeted to the needs of employers and also include an emphasis on lifelong learning.

By law, the federal government in the USA can only indirectly drive education reform through incentives or sanctions, a strategy the Obama administration also employed through a competitive grant process aimed at education reform in the K-12 level (McGuinn 2011). Though previous administrations enacted programs through the Department of Labor to affect community colleges, the size and scope of President Obama’s DOL TAACCCT grants are unprecedented and, in many respects, represent the culmination of trends that are increasingly impacting the US community colleges.

Community colleges began as a social movement to provide opportunity for education for students that would otherwise not have had access due to economic, mobility, or social barriers (Boggs 2010). As their name implies, since their earliest inception, US community colleges have strived to serve local community goals in a local context. Funding, other resources, and students were primarily locally drawn. Partnerships were mostly with local industry and local schools. Governance has often been decentralized to the institution or has resided at the state level. In contrast to the US universities which follow an isomorphic structure regardless of location

(Frank and Gabler 2006), community college programs and curricula have been reflective of the needs of local economies, with a functionalist variability evident in community colleges across the nation (Boggs 2010). Paper technology programs are on offer in Alabama, petrochemical technician training occurs on the Gulf Coast, and viticulture in Napa Valley, as examples (Boggs 2010).

However, scholars find that in the last 20 years, economic objectives have supplanted earlier goals of accessibility, personal and social development, and a general, liberal education for students who were not able to move beyond the confines of the community or who were not academically prepared to do so in a 4-year degree-granting institution (Ayers 2011; Levin 2001; Schugurensky and Higgins 1996). The effects of globalization have resulted in a move away from local community social needs toward local market needs (Levin 2001). Since the 1990s, policy aimed at community colleges has directed these institutions to a greater emphasis on work-based training, specifically targeted at global competitiveness (Van Noy et al. 2008; Levin 2001). The TAACCCT grants represent the next step in this policy trajectory, moving community colleges beyond local market needs into a global labor market. Based on a national response to competitive global labor flows, the TAACCCT grants encouraged broad partnerships across districts and states, along with direct participation from industry sectors, incentivizing community colleges to grapple with a far broader landscape than has traditionally been required.

Shifting away from their historic local emphasis, the TAACCCT grants incentivize community colleges to align VET curriculum across multiple institutions and what is more, to work with state government to align licensure and certification requirements regionally or federally in fields that have traditionally been housed in locally run, state-licensed disciplines (Trade and Globalization Adjustment Assistance Act 2009). Encouraging the use of technology to span the distances and create open courseware, large TAACCCT grants are awarded to consortia that can deliver industry-tied credentials across states and regions (Trade and Globalization Adjustment Assistance Act 2009). Officially targeted to workers that have been displaced by factories and industry being moved overseas, in the wake of other funding shortfalls, community colleges are using the TAACCCT funding to increase and develop employer-driven credentials across the curriculum and to align state systems around employer-based goals. While the move toward an emphasis on employability and employer-directed curriculum began in the 1990s, TAACCCT grants target employers at a new scale. The curriculum developed in partnership with industry partners is not specific to local institutions but is targeted to large industry sectors and then offered consortium wide across as many as ten community colleges. Instead of working with local business, consortiums of institutions are incentivized to work across regions and state lines to align on a broad scale.

In addition to industry sector-driven credentialing, the TAACCCT policy documents are replete with references to lifelong learning. However, this is not a lifelong education of UNESCO, with an emphasis on individual growth. The lifelong learning in TAACCCT is geared toward workforce needs, leading to retraining or skill building, throughout life as the labor market demands (Olssen 2006). In some cases, it means a complete retraining for a different career line altogether. For example, when multiple

furniture-making factories closed in the northeast, community colleges spanning the region were awarded a TAACCCT grant to retrain workers for nursing and other health-care-related fields. While the grants do encourage programs that are developed so a student may quickly advance in the field of study, when industry needs shift, workers are expected to completely shift to different career tracks as well. As this example makes clear, individuals and institutions that serve them locally are now responsible for following global industry needs and training to meet them, and they are further expected to add skills or completely retrain as industry needs shift.

Comparison Findings

This research finds the EU and the USA employing similar rhetoric for policy framing of VET despite variances in governance and regulatory environments. Comparing the EU and the USA as multilevel political entities aimed at reform and alignment across local systems reveals the flows of the emergent global education policyscape and the resulting convergence around VET reforms. Due to global market forces and federal responses to them, vocational training is being rescaled from local individual and industry needs into federal labor policy aimed at perceived global level workforce needs in a competitive global marketplace.

As discussed, the Copenhagen Declaration and policy process is predominantly voluntary but increasingly normative with an emphasis on uniformity across diverse national systems through a framework of competencies, a system of credit transfer, shared quality criteria, as well as access to lifelong learning (Powell et al. 2012). While scholars have characterized this policy as Europeanization, comparing transnationally finds parallel trends in the USA. US TAACCCT grant-related policy requires previously locally oriented community colleges to partner across state lines in order to develop uniform quality criteria and a framework for lifelong learning that is based on industry sector demands.

Within this global policyscape around VET, one of the most notable areas of convergence is around the emphasis on employability. Although the Copenhagen process continues to reference broader social and civic goals, the move is away from previous emphasis on social cohesion, equity, and citizenship toward more singular focus on employability, a shared primary goal of the TAACCCT policy. Content analysis of policies pertaining to both of these initiatives finds employability as a primary policy goal paired with multiple references to heightened global competition for jobs. In accordance with neoliberal objectives, this discourse of employability in policy arenas strategically positions the talents and achievements of individuals (Brown et al. 2004, 22). “Employability” holds conceptual and contextual meaning linked to a set of skills required for a competitive workforce in a globalized economy. Such skills can then be used to meet altering job requirements linked to increasingly flexible labor market structures, diversification of employment, and the globalization of market economies impacting vocationally oriented work. In this emergent global policy discourse, institutions and individuals alike are incentivized in increasingly normative neoliberal policies to see this interpretation of employability as the primary

goal of VET with little to no emphasis on broader goals of social cohesion, personal development, or democratic citizenship. Institutions are increasingly held accountable for their ability to prepare a competitive workforce by providing the certificates and degrees that are closely linked to shifting employer demands. While Copenhagen still allows for goals of education beyond employability, it, like the TAACCCT policy in the USA, incentivizes close links to industry in order to increase employability for VET. Creating a workforce at the ready for the varied needs of the global workforce is a goal which VET providers are financially rewarded for attempting to meet.

Another shared emphasis in both the EU and the US policy is on lifelong learning as a part of VET reform. This study reveals the importance of this shift particularly in Europe where lifelong learning is a relatively new addition into VET goals. The USA, which has emphasized lifelong education since the 1970s, has now replaced the phrase with lifelong learning, which carries a neoliberal connotation to mean that individuals are responsible for continually repurposing and retraining to meet the vagaries of labor market needs. Lifelong learning is promoted as a means by which individuals are urged to insure themselves against the risk of unemployment and as a way to retrain when unemployment occurs. The assumption that one would train for a craft or skill and hone that skill throughout one's life is discredited through the repeated insistence on the need for retraining and increased training throughout one's life. Through the policy discourse around lifelong learning, the responsibility for global flows of labor is shifted to the individual.

What this comparison of the Copenhagen process and the TAACCCT grants makes clear is that local orientation for vocational education has become increasingly more complex. Due to global market forces and federal neoliberal responses to them, VET providers and students are now recruited into large federal initiatives aimed at global competition and must respond to the impact of competitive global trade flows and markets on their local environment. Providing local solutions for local community partners now requires VET providers including community colleges and other institutions to negotiate complex global networks of knowledge, technology, and resources. In order for VET to remain responsive to local demands, including providing links to employment, these local expectations must be negotiated among pressures that are beyond the immediate bounds of the community, extending to national labor policy, multinational corporations' labor demands, global networks and markets for labor and products, and even global political trends.

These pressures extend to the individual student, the trade-impacted displaced worker, and community college student enrolled in VET who is expected to prioritize employability and engage in lifelong learning to hedge against the lifelong threat of unemployment.

Conclusion

This research adds to the growing body of literature that establishes a framework for comparing education policy from the EU and USA as federal systems, important to understanding the current global pressures impacting federal VET policy and other

education policy as well. Though the USA has been generally recognized as the primary model in higher education due to its strength in research and development (Witt 2011), European countries, especially Germany, have been the leading global exporters of models in VET (Culpepper and Finegold 1999). This comparative analysis captures ways in which these models may be disrupted as the emergent global policyscape allows multidirectional flows of ideas and influence in which federal structures borrow and learn from each other to competitively position their workforces to meet global labor demands. This study exposes the rescaling that is occurring in both Europe and the USA as previously locally rooted VET training is now reformed, unified, and deployed to target labor markets at federal levels. What has previously been cited as Europeanization, or loss of state control in the USA, can be seen as a part of larger more complex policy trends when compared in a transnational context.

Second, this research demonstrates the increasing emphasis on employability and lifelong learning as goals for institutions and individuals. Because VET programs are seen as responsive to labor market needs in both the EU and US contexts, this policy framing creates a shared ideal of continuously developing knowledgeable individuals who will link their education to work-based outcomes to ensure employability in knowledge societies. This critical analysis finds students of VET increasingly assumed responsible for meeting employers' needs by continually updating skills to meet the vagaries of shifting global markets. In this way, the private benefit of education has now come to include the private assumption of responsibility for repeatedly being retrained throughout life as needed to meet the fluctuating demands of a global workforce.

Despite the emphasis on mobility that is frequently espoused in both Copenhagen- and TAACCCT-related policies, it should be noted that the individuals who typically engage in vocational training are themselves not necessarily mobile. Particularly in the case of the USA, community colleges primarily serve students who are place bound and cannot access education outside the local community. The mobility targeted by the policy is not the mobility of liberated individuals but instead is the mobility of corporations and industry that will move to access the workforce that is most profit generating. Through these policy developments, VET institutions are expected to compete on a global scale to prepare the workforce that will lure global industry into their locale. Individuals are expected to respond to this mobility of labor with retraining and lifelong learning to satisfy the immediate yet shifting needs of global industry. Consequently, the VET policy currently flowing through the global policyscape places the most disadvantaged and vulnerable groups on the front lines of global labor market competition.

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Developments in the Postsecondary Education Niche in South Africa

7

Cassie Kruger and Charl C. Wolhuter

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Abstract

This chapter focuses on recent developments regarding policy in the Technical and Vocational Education and Training College Sector in South Africa, in the South African postsecondary education niche. The term “postsecondary

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education” is first clarified, and the present state of research on this niche in education is surveyed. Subsequently the national contextual forces shaping education in South Africa are portrayed. The education system is then explained, followed by an exploration and evaluation of recent developments in the post-secondary education sector in the country.

Keywords

Access to education · NEETS (Neither in Employment nor in Education and Training) · Post-Secondary Education · South Africa · Technical and Vocational Education and Training Colleges

Introduction

The aim of this chapter is to investigate recent developments regarding policy in the technical and vocational education and training college sector in South Africa, in the South African postsecondary education niche. The chapter commences with a clarification of the concept of postsecondary education and a depiction of its place in the research agenda of education. Subsequently, the national contextual forces shaping education in South Africa are surveyed. The education system is then portrayed, followed by an investigation and assessment of recent developments in the postsecondary education niche in the country.

Concise Global Overview of the Postsecondary Education Niche and Its Place in the Education Research Agenda

Level 4 of The United Nations Educational, Scientific and Cultural Organization’s (UNESCO) International Standard Classification of Education (ISCED) eight levels of education (UNESCO 2012) is entitled postsecondary nontertiary education. This level is defined as postsecondary nontertiary education provides learning experiences building on secondary education, preparing for labor market entry, as well as tertiary education. It aims at the individual acquisition of knowledge, skills, and competencies lower than the level of complexity characteristic of tertiary education (UNESCO 2012, p. 43). Despite being a burgeoning education sector, assuming increasingly more importance in an age of nascent knowledge economies (cf. Cetai et al. 2016; Odo et al. 2012), this niche in the education ladder has not received the same amount of attention from the scholarly community as other levels of education. The database of *Education Resources Information Center (ERIC)* (2016) has the following number of sources for the various level of education:

- Primary education: 59, 821
- Secondary education: 322, 984
- Postsecondary education: 9, 739
- Higher education: 342, 447

A survey of ERIC's 2016 database indicates that the most salient themes of scholarship on the postsecondary education niche are:

- Access to and equity issues (Cetai et al. 2016; Paquette and Fallon 2014; Wang 2013)
- Quality assurance (Law 2010)
- (Government) policy analysis and evaluation (Smith 2015; Axelrod et al. 2011; Stasz et al. 2007)
- Tracer studies (National Centre for Vocational Educational Research, Australia 2012)
- Transition from postsecondary to higher education (Wiseman and Chase-Mayoral 2013; Tieben and Wolbers 2010)
- Student matters (Ratbalasurir 2012; Sciarra and Ambrosino 2011; Andres 2009; Heslop 2006)

While none of these themes are without value, there seems to be an absence of the place of postsecondary education and a critical interrogation and assessment of this niche (and its shortcomings in particular national contexts).

It is also apt to clarify the distinction between postsecondary education and higher education (as used in this chapter). Higher or tertiary education are programs pertaining to levels 5 and higher of ISCED, i.e., tertiary education builds on secondary education, providing learning activities in specialized fields of education. It aims at learning at a high level of complexity and specialization. Tertiary education includes what is commonly understood as academic education but also includes advanced vocational or professional education (UNESCO 2012).

South African Context

In order to investigate this sector within the South African context, the South African societal context will first be surveyed. As (national) education systems do not exist in a vacuum, but are shaped by societal or contextual forces, a survey of these forces salient in the South African context are apt. These forces include the geography, the demography, social system, economy, politics, and religion and life and world views.

Geography

South Africa occupies 1.2 million square kilometers (463,323 square miles) at the southernmost part of the African continent. South Africa is bordered by the Atlantic and Indian Oceans, as well as by Lesotho (an enclave in South Africa), Swaziland, Mozambique, Zimbabwe, Botswana, and Namibia. The topography of South Africa is made up of two major physiographic regions, namely an interior plateau and the land between the plateau and the coast. Rainfall generally decreases from east to west, the 500 mm rainfall line marking the border of arable land. The 500 mm rainfall line runs

through the center of the country, north-south, and thus divides the country into a semiarid Western half and an eastern half with 500 mm plus rainfall per year. The South-Western tip of the country has a Mediterranean climate. The geographical context of being surrounded by economies way down the development spectrum compared to South Africa and being located far from the economic heart of the global economic system (Western Europe, North America, and East Asia) means that there is no strong and easy flow of human resources from neighboring countries, and that as far as postsecondary education is concerned, South Africa is much left to its own resources. Secondly, the large Western half of the country, being a large tract of land not well endowed with natural resources (arable land) and therefore thinly populated, will not easily be served by postsecondary education facilities readily accessible to all.

Demography

The population of the country totals 55 million. Statistics South Africa (2015) gives the current population composition of South Africa as follows: Blacks (South Africans of African descent): 80.5%, Coloureds (South Africans of mixed-racial descent): 8.7%, Indians (South Africans of Indian descent): 2.6%, and Whites (South Africans of European extract): 8.2%. About a third of the population is 14 years of age or younger, while around 7.5% are older than 60. This means that South Africa has a fairly young, though maturing, demographic pyramid. The population growth rate stands at 1.65% per annum. For most of the past century, the country was characterized by a swift population growth rate, driven by a high and increasing birth rate. This has placed the educational infrastructure and the increase of this infrastructure under tremendous pressure. The annual number of births peaked in 1990, after which it decreased by about 35,000 each year (Wolhuter 2000, p. 155).

Social System

South Africa has 11 official languages. These are (in bracket after each language appears the percentage of the population who speaks that language as their first language): isiZulu (23.8%), isiXhosa (17.6%), Afrikaans (13.3%), Sepedi (9.4%), English (8.2%), Setswana (8.2%), Sesotho (7.9%), Xitsonga (4.4%), siSwati (2.7%), Tshivenda (2.3%), and isiNdebele (1.6%). The incidence of social pathologies, such as corruption, violence, gangsterism, crime, and socially unacceptable behavior (including racism and xenophobia) assumes hair-raising proportions (cf. Pinnock 2016). The rate of murder in South Africa is 34 per 100,000 people per year; on average, 51.2 murders are reported in South Africa every day (Bothma 2016).

Economy

The annual *per capita* Gross National Income of South Africa stands at US\$12700 (World Bank 2016, p. 51). This places the country comfortably in the World Bank

category of upper-middle income countries, actually on the cusp of the high-income category (the World Bank classifies countries with an annual per capita income of US\$4126–US\$12735 as upper-middle income countries). While, according to the latest available figures, the economy does register a modest positive economic growth, this is wiped out by a concomitant population growth, so that in 2013–2014, the per capita growth rate was 0.0% (World Bank 2016, p. 51). Socio-economic inequalities are rife. The Gini-index of 65.0 is the second highest in the world (World Bank 2015). What makes the inequality more problematic is that, although diminishing, the contours of the socio-economic stratification run largely coterminous with that of the racial divide – with Whites concentrated in the affluent echelons, Blacks in the bottom strata, and Coloureds and Indians somewhere in-between.

Poverty levels are high and the incidence of poverty is increasing. The number of people living on less than US\$1.90 per day (international poverty line) increased from 15.1 million in 2008 to 16.6 million in 2011 (World Bank 2016, p. 58). Blacks make up a disproportionate number of these poverty-stricken people. The unemployment rate increased from 17.6% in 1995 to 25.4% in 2015 (Yu et al. 2016).

Political System

The basis of the post-1994 political dispensation has been laid by a Constitution that was drafted from the liberal democratic Western European model and a Bill of Human Rights that has been widely praised as one of the most progressive in the world. Since the beginning of the new political dispensation in 1994, the African National Congress (ANC) has dominated politics, though its share of the vote has slipped to a bare majority in the most recent election (local authorities election of 2016).

A number of problems beset government and the political system. The country is increasingly becoming an overregulated environment. Service delivery is poor in many areas, such as health services, policing, municipal services, and immigration control. In some areas, government and the civil service have become dysfunctional. Finally, government's increasing undermining of the autonomy of civil society and of many of the institutions underpinning the democratic dispensation (such as the independence of the courts, the free flow of information, the freedom of the press, and the autonomy of the universities) as well as talk of cutting down the power of provinces and of local authorities constitute a danger signal (cf. Mathenjwa 2014).

Religion and Life Philosophy

According to population census returns, 76% of South Africans proclaim to be Christians. Here too, the social divide is visible. Afrikaans-speaking Whites belong mainly to the Calvinist-Protestant churches which can trace their descent to the Calvinist church in the Netherlands. The biggest denomination of these is the Dutch Reformed Church. English-speaking Whites belong to churches such as the

Anglican Church, the Roman Catholic Church, and the Methodist Church. While all these churches also have Black members, Blacks are concentrated in the Africanist churches, such as the Zion Church of Christ. Many Blacks of all denominations practice a kind of syncretic religion, combining Christianity with elements of traditional African religion, such as the worship of ancestors. Eighty percent of South Africans of Indian descents are Hindus, and 8% are Muslim.

On a secular plane, the modern Western liberal, individualistic, and materialistic philosophy, with its attendant value system has taken root in the country among all population groups, existing side by side with traditional cultures and their philosophical systems, with religious groupings with their philosophical systems, and with political groupings, with their philosophical overtones (cf. Johnson 2015, p. 224–225; Joubert 2012, p. 588–589).

Education System

In the next section, the role of these contextual forces in the shaping of an education system will be unpacked. After taking over government in 1994, the African National Congress (ANC) spelled out an education policy based upon its ideals. The principles of this policy, the *intrinsic* goals of the post-1994 education systems, were the following:

- Desegregation
- Democratization
- Decentralization
- Equal educational opportunities
- Multicultural education

The entire education system will aim to develop the entire population and to promote various societal goals. These goals, the *extrinsic* goals of education, include

- Economic goals: the eradication of poverty and the promotion of the country's economic productivity and development
- Social goals: building a society free of racial, gender, and other forms of unfair discrimination, creating a socially mobile society and the removal of artificial hierarchies and abstractions in the way of progress
- Cultural goals: empowering people so that they can participate in the process of cultural expression
- Political goals: empowering citizens to take part in the processes of a democratic society, nation building: building a communal value system for a society characterized by democracy, equality, freedom, peace, justice, tolerance, and stability (Wolhuter 2015, p. 63–64)

While the achievement of the economic goals is directly and obviously contingent on the development of a vibrant technical and vocational education sector,

realization of the other extrinsic goals is also related to the existence of a strong technical and vocational education sector. For example, values of democracy, peace, and stability, the existence of a large class of schooled unemployed youth, susceptible to socio-political mobilization, can easily defeat these objectives.

Educational management and administrative structures exist at three levels: central government, provincial government, and institutional levels. At national (central) level, the Minister of Education is empowered by the *National Education Policy Act, Act 27 of 1996*, to determine national norms and standards for education planning, provision, governance, monitoring, and standards. A national Department of Education exists, with the role of translating education and training policies of government and the provisions of the Constitution into a national education policy and legislative framework (Steyn 2008, p. 69). Each of the nine provinces of South Africa has its own provincial Minister of Education and provincial Department of Education. Provincial legislatures may pass laws on any aspect of education pertaining to that province, except universities. These laws are enforceable, on condition that they do not contradict national policy.

At institutional level, school governing bodies consist of representatives of parents of students, teachers, nonteaching staff of the school, the school principal, representatives of the students, and co-opted members from the local community. The powers and functions of school governing bodies include the management and exercise of control of the school and the recommendation of the appointment of teachers to the provincial education department. In May 2009, a separate national Department of Higher Education was established. The intention was to create a separate ministry to pay more focused attention to the development of higher education.

South Africa has a 12-year school ladder, a 7-year primary school cycle, followed by a 5-year secondary school ladder. While South Africa has a relatively high gross secondary school enrolment ratio of 73.3% (cf. Wolluter 2014), the quality of school education is under suspicion. The 2011 Progress in International Reading Literacy Study (PIRLS)- and the 2011 Trends in International Mathematics and Science Studies (TIMSS)-results paints a disconcerting picture of the quality of South African education. South African Grade 4 learners who wrote the 2011 PIRLS test obtained an average score of 461 (Mullis et al. 2012). A total of 37 of the other countries which participated obtained higher scores, including two of the other upper middle-income countries which participated, namely Georgia (488) and Azerbaijan (462) (Mullis et al. 2012). Only 12 countries obtained lower scores than South Africa, including two of the other upper middle-income countries, which participated, namely Colombia (448) and Botswana (419) (Mullis et al. 2012). In the 2011 TIMSS science test, South African learners obtained the second lowest score (332) of the 45 participating countries: only Ghana (306) was lower (Martin et al. 2012, p. 44). All of the other 11 countries of category 5 of the 2011 international taxonomy (cf. Wolluter 2011), which took part in the 2011 TIMSS study, obtained higher scores than South Africa: Honduras (369), Botswana (404), Georgia (404), Syria (426), Malaysia (426), Saudi Arabia (436), Armenia (437), Tunisia (439), Jordania (449), Thailand (451), and Iran (474) (cf. Wolluter 2011). Singapore obtained the highest marks of all the participating countries (590) (cf. Wolluter 2011).

When interpreting these scores, it should be mentioned that the South African education system is highly unequal, with achievement level disparities most starkly between the historically White and historically Black schools. For example, in the historically White schools in the Western Cape province, for example, 62% of grade 3 learners can read and write on the required level, but in schools in the Black townships in the province, the figure is 3% (Bloch 2009, p. 13). These poor and unequal levels of K12 school achievement places a question mark over policy to focus post-K12 education on the university sector exclusively (to be explained in more detail in the next section of the chapter); as most K12 students will not be university material, and in the interest of equalizing society and making the youth employable, the development of a vocational education sector beyond the level of the university seems to be advisable.

Higher Education

Until very recently, the higher education sector in South Africa has consisted of two kinds of institutions, namely universities and universities of technology. Twenty-six such public institutions (universities and universities of technology) exist. While the *Higher Education Act* of South Africa allows for private higher education institutions, this sector currently is of miniscule proportions. Ninety registered (and 26 provisionally registered) private higher education institutions exist, but their combined enrollment is in the region of 100,000 (Smit 2016, p. 21). Government is not very keen on registering such institutions because of “fly-by-night” scams in the past and the fear that top, well-endowed private universities will bleed public universities of the best students and academic staff (Burger 2016, p. 1).

Higher education enrolments have surged in recent years. In 1994, university enrolments totaled 495,355; these have grown to 539,271 in 1999, to 736,105 in 2005, to 1,005,721 in 2012, to 1,035,594 in 2013 (UNESCO 2016; Republic of South Africa 2005; 2007). The gross higher education enrolment ratio rose too, albeit not as spectacular: from 13% in 1999, to 15% in 2006, to 18.99% in 2012, to 19.66% in 2013 (UNESCO 2016; Wolhuter et al. 2010, p. 203). However impressive these figures are, the gross higher education enrolment ratio in South Africa still is much lower than is the case in other upper-middle income countries, where this figure, constantly rising, already in 2010 typically was around 40% (cf. Wolhuter et al. 2010, p. 203).

A number of additional problems beset the South African university sector. Being modeled on the British liberal model of the university, there is a complaint that South African universities are very Eurocentric, “ivory tower” like, cut-off, and even irrelevant to the contextual realities and exigencies of South African society (cf. Wolhuter 2009). Attrition rates at South African universities are high. Fifty-five percent to 60% of students leave universities after 4 or 5 years’ studies without having graduated (Smit 2016, p. 21). The number of applicants to university places exceeds capacity by far. The University of Johannesburg, for example, has received 92,000 new applications for the 2016 academic year but had space for only 10,000 (ibid.). These high rates of university drop-outs and large numbers of unsuccessful

applicants once again underscore the need for the development of an education and training sector below that of the university level, to absorb all these who have come to a dead end in their education.

Postsecondary Education (ISCED Level 4)

The postsecondary education niche finds itself in the context of the existence of a substantial body of NEETS (youths “not in employment neither in education and training”): 41% of the people in the 18–24 year age group (Cloete and Butler-Adam 2012). The presence of such an ever increasing group of NEETS is not only detrimental to the economy but also to the socio-political stability of the country. According to the Centre for Development and Enterprise, unemployment levels in South Africa are as follows: among graduates: 5%, among those with a tertiary qualification lower than a degree: 16%, among those with a Grade 12 certificate: 29%, and among those with less than Grade 12: 42% (Centre for Development and Enterprise 2013).

The education institution in South Africa at the postsecondary level is the TVET colleges or technical and vocational education and training colleges (formerly known as the further education and training colleges), offering postsecondary education of a vocational-technical bent. There are 50 of these institutions with 300 campuses all over the country. Recently, in 2013, these institutions, also called colleges, have become the focus point of a major education reform initiative in South African education. TVET colleges have been the object of recent attention by government, an indication of that these institutions are being taken more seriously is that they have been taken from the Ministry of Basic Education and placed under the Ministry of Higher Education. It was envisaged that total headcount enrolments have increased from just over 345,000 in 2010 to an estimated 650,000 in 2013; they will increase to one million by 2015 and 2.5 million by 2030. The White Paper for postschool education and training emphasizes that the TVET colleges sector should be strengthened to improve access to school leavers. The school leavers are not necessarily matriculants. The majority of adults in our country do not have matric. In view of the fact that these TVET colleges do not provide free education and the fact that their programs are offered full-time and during day time, it is difficult to see that they will be very readily accessible to many adults. By providing postsecondary education of a vocational-technical nature, below the level of universities, these TVET colleges corresponds to the global community college model.

Key objectives in strengthening colleges include improving their management and governance, developing the quality of teaching and learning, increasing their responsiveness to local labor markets, improving student support services, and developing their infrastructure. In addition, emphasis will be given to strengthening partnerships with employers, both at the system level and that of individual colleges. Each of these will now be expatiated upon.

On management and governance, the White Paper states that leadership is vital for creating an effective system providing quality education and training and erasing

historically developed inequalities in education (Republic of South Africa 2013, p. 18). Leadership will be developed at institutional level by means of leadership training courses, including training in the objectives of the colleges, training in financial management (deemed to be sorely needed), and training in latest informational technologies (Ibid.: 19). With regard to raising the quality of teaching and learning, the report stresses the setting in place of minimum requirements for college lecturers and development and assessment of academic staff (Ibid.: 16–17). Class size should be contained (i.e., the ratio students:lecturer should not be too high) and student support structures and services should be developed (Ibid.: 17–18).

The report places much emphasis on linking education and workplace. Consistent findings that low levels of skill development are hampering the economy; and the fact that the Skills Levy Authorities can spend only 20% of the funds accumulated from the 1% salary bill levy all employers are obliged to levy and pay into this fund, are indicative of a serious mismatch between education and workplace (Republic of South Africa 2013, p. 57–58). This fund should support employers in getting existing as well as new workers trained, and in this regard, public educational institutions should play their part (Ibid., p. 63–64). On student support, the report envisions academic support, social support, assisting students to get bursaries and complete their programs of study, and assistance with finding workplaces for the practical components of their programs and jobs on completion of their studies, sport and recreational and cultural facilities, and career counseling services (Ibid., p. 16–17).

There is an expectation that these colleges will become the cornerstone of the country's skills development system focusing on acute skills shortages. There is a serious skills shortage of qualified artisans. Artisan training will remain the main focus area of technical and vocational education and training colleges training in the foreseeable future. It is true that the White Paper supports that technical and vocational education and training colleges progressively shift to increase access to students in Higher Certificates (National Qualification Framework level 5 programs). These Higher Certificates are currently offered at universities and quality assured by the Council of Higher Education. The Continuing Education and Training Act (which regulates Technical and Vocational Education and Training Colleges) makes provision for these colleges to offer these Higher Certificates in partnership with universities. These certificates are the equivalent of the first year of bachelor degree study at university.

The intention is to increase the number of certificate holders; although the possibility also exist that such certificate holders could later transfer to universities, or that colleges later offer the entire bachelors degree program, although at this state neither of these are stated objectives. The White Paper further supports the introduction of foundation programs to colleges. These programs will focus on matriculants who need additional instruction in maths and science. (These programs are currently offered at universities.) Although it is not impossible for a TVET college to offer a bachelors-level qualification in partnership with universities, it may be the way these colleges are heading.

The Ministry of Higher Education and Training now has four types of institutions under their auspices. The first is universities, which admits those who have graduated

from secondary school as well as graduates from technical and vocational education training colleges, at a level regarded as sufficiently high. The second are the technical and vocational education and training colleges, responsible for those adults who have completed the compulsory portion of schooling (grade 9) focusing on preparing for a vocation. This does not exclude grade 12's. The third type of institution is the community college. For the first time in the history of education in South Africa, official policy mentions this type of institution. The 2013 White Paper spells out the intention to establish community colleges, serving the needs of NEETS and providing a chance for second education and retraining; apart from expressing these objectives, and emphasizing that education and training provided at these colleges should be closely aligned to the world of work, the document is very sparse on detail as to how and when the community colleges will be established (Republic of South Africa 2013, p. 20–21).

At the outset of the chapter, it was stated that education is shaped by contextual forces. The chances of success of reforms should also be assessed by taking context into account. While the upgrading and attention given to the further education and training colleges in South Africa and the establishment of community colleges offer exciting possibilities and opportunities for large numbers of NEETS and for the economy and society at large, various contextual realities will have to be taken into account to ensure that this expanded landscape of postsecondary higher education institutions and complementary institutions realize their massive potential in addressing South Africa's educational, social, and economic challenges. The technical and vocational education training colleges have at least four limitations. Firstly, these colleges are expensive to maintain, the problem of affordability accentuated by the poor financial position of many families in the country, and the presence of other pressing priorities on the focus. Secondly, their space for enrolments is exceeded by the number of NEETS, ever growing in the context of a burgeoning population growth on the one hand, and a painstakingly slow growing economy on the other. Thirdly, at present the technical and vocational education training colleges are plagued by high levels of internal inefficiency. Only 10.6% of students enrolled for national vocational certificates eventually succeed in gaining this qualification (Van Rensburg 2016, p. 1). Finally, there is the problem of aligning work of education with world of work. A substantial percentage of students at technical and vocational education training colleges do not find suitable places in industry for practical training, which is a prerequisite for them attaining their formal qualifications. The unemployment rate for those with a N4–N6 qualification (the qualification typically awarded by the technical and vocational education training colleges) is high, in the region of 34% to 39% (Van Rensburg 2016, p. 1).

In view of these problems, it may be advisable to at least supplement existing policy regarding postsecondary education and training with facilities offering less formal and lengthy training, with the immediate supply and transfer of skills which can enable NEETS to eke out a living themselves, e.g., as plumbers, motor car mechanics, or builders. This chimes in with the views of Garson (1989) and Blinder (2006) as to how to best address gaps in the alignment of education and training with the world of work in the early twenty-first century.

Conclusion

It seems that at present the TVET colleges, within the South African societal and educational context, cannot offer what is needed on postsecondary education level. By far not all of the burgeoning numbers of secondary school leavers and dropouts before completion of secondary school can be accommodated in the TVET and university institutions. This leads to the conclusion of a need for centers where skills be taught which can enable trainees to eke out a living immediately and after the shortest possible period of training.

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Economics of Education in Afghanistan: Expanding Academic Programs Based on Market Demands Dictated by International Agency Funds Toward Self-Sustainability

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Abstract

From primary to tertiary education, economics and politics play critical roles in determining how institutions are structured, classrooms managed, and what curricula is offered. More than any other segment of education, however, technical and vocational institutions exemplify how economics in particular represent the driving force in determining the courses of study and degrees. In the case of Afghanistan, strong gender-biased cultural traditions, a lack of financial and human resources, and continued unrest within the country present unique challenges when considering how to train, retrain, and maintain a skilled workforce. Pressing needs for vocational careers such as agriculture, information communications technology, and construction present challenges for vocational institu-

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tions. What results from these workforce-training challenges is the need for these institutions to turn to the private sector and corporate businesses, which might include for-profit and nonprofit organizations and facilities beyond the current government system, for assistance with course development, the provision of instructors, and often times actual financial resources. However, in providing a short-term solution to long-term education and training issues, are technical and vocational institutions run by the Afghan government supporting educational progress or the best interests of organizations in the private sector? Alternatively, are private sector resources a critical part of Afghan technical/vocational institutions in their goal to provide relevant and meaningful skills for graduates to enter the workplace? This chapter will begin to explore these questions of the economics of vocational education in Afghanistan as influenced by private sector interests.

Keywords

Afghanistan · Vocational education · Workforce development · Community colleges · Higher education · Sustainability in education · Economics in education

Introduction

Afghanistan's education system has made great efforts to reform and rebuild in the aftermath of the Taliban regime (1994–2001). Yet, organizations like the World Bank continue to focus educational analysis on failed reforms of problematic curricula and school infrastructure within the K-12 educational system. For example, during the year 2002–2003, “an internationally led educational campaign in Afghanistan failed to remove messages of hate and intolerance from [K-12] curricula (The World Bank 2011, p. 169).” Many high-level organizations neglect to acknowledge the significance of the contribution of higher education institutions to the systemic health of a country and their role in promoting progress and reform within the country. Klees (2016) asserts that the rate of return of human capital could easily be higher for institutions of higher education, but educational researchers often ignore it. While Klees' assertion is not specific to Afghanistan, it is applicable in the Afghan context, as Afghanistan is a country that recognizes the need for a strong tertiary system, but has been thwarted by internal conflict during its tumultuous history, hindering progress.

The foundation for the higher education system in Afghanistan began after Amanullah Khan rose to leadership and seized national independence in 1919. In 1922, Prince Abdur Rahman established the Ministry of Education and appointed himself as the country's first Minister of Education. From that time on, enhancing education outcomes and accelerating human capital accumulation have been the focus of the Afghanistan National Development Strategy (ANDS). From the 1930s to the 1970s, the educational system in Afghanistan was relatively stable. Education through high school was becoming more common throughout the country. Technical Vocational Education (TVE) was established with the help of other countries such as

the US, the USSR, Germany, and the United Kingdom, but the development of TVE was slow compared to the general education of first through twelfth grades, because of the lack of resources.

The Faculty of Agriculture and Engineering was founded in 1956 with the help of USAID and throughout the Communist regime (1978–1992) the educational system became compromised. In 1989, after the Soviets left Afghanistan, TVE buildings were heavily damaged or destroyed throughout the country. Since a more stable government was established, recovering the country's higher education system has been slow and there are pressing needs for teacher training, infrastructure repair, and providing educational supplies (Baha and Baha *n.d.*).

The methodology applied in this research is supported by the research conducted by the Higher Education Academy study (Rickinson and May 2009), in which literature is reviewed that addresses evidence-based agenda driven by governmental agencies. Defined as “an approach that helps people make well-informed decisions about policies, programmes and projects by putting the best available evidence from research at the heart of policy development and implementation... evidence based agendas represents an international phenomenon that ‘has become a major part of many governments’ approaches to policy making” (Davies 2004, p. 1). Regarding education, evidence-based approaches have become part of the political discourse in many countries and have made an impact worldwide. An emphasis is also placed on evaluation, which is sometimes lacking in determining the effectiveness of private sector involvement in the technical vocational landscape in Afghanistan. To improve the evaluation process, private sector partnerships might consider the conclusions from the Rickinson and May (2009) study, whereby an eight-project study determined that evaluations conducted “on the hoof” tends to be less effective than utilizing more thoughtful review processes (p. 58).

Economics and Politicalization

Aware of the rising importance of human capital in the modern global economy (Ministry of Higher Education and US Agency for International Development 2012), educational policymakers have realized the contribution that education can make in promoting the civic values and attitudes needed for the development of a socially cohesive nation. Despite the myriad of success in attempting reform in the educational system after the Taliban rule, education remains one of the top three priorities relating to Afghanistan's economic and social development (Government of Afghanistan 2008). Since the Afghan government is limited in its ability to address all higher education needs, the private sector and entrepreneurs fill the gaps by establishing their own versions of higher education institutions. According to Santhakumar (2011), government-based colleges and universities sometimes suffer from politicization (defined as recruiting of potential unqualified political party members and/or relatives as faculty), that results in the degrees offered by these institutions invalidated in the marketplace. In researching, analyzing, and proposing educational reform, the policy is informed in complicated ways. Torrance and Sebba

(2007) suggest that reviewing educational needs and situations can be accomplished in such ways as “rapid reactive; rapid informative; policy reporting;... comprehensive review(s) on ‘what works;’... and effective practice (curriculum, pedagogy and outcomes)” (Torrance and Sebba 2007, p. 2). In contrast, private educational institutions do not face issues of politicization but instead operate with a business model of profit and loss, one in which closure is an option if they fail to address the demands of providing competitive skills for the workplace (Santhakumar 2011).

The Afghan Technical Vocational Institute (ATVI) was one of the first of the private entrepreneurial institutions to address the educational and economic development needs of the Afghan people. With the support of collective funds from international organizations such as the US Agency for International Development (USAID), the United Kingdom Department for International Development (UK-DFID), and the Small Business Association for International Companies (SBAIC), the Afghan Technical Vocational Institute (ATVI) was founded in 2007 with \$1.8 million (USD) investments in private funding and a donation of land by the Ministry of Education to address immediate workforce and training needs of young Afghans.

Diverse philosophical frameworks contribute to the institutionalist approach of why and how educational models spread worldwide and how they are both global and local at the same time (Wiseman et al. 2012; Meyer et al. 1992, 1997; Meyer 1980). Borrowing aspects of the North American community college model, ATVI began as a public institution managed by the private sector responding to both global and local needs, but has now altered into a more self-sustaining model of governance. Leveraging seed money from the aforementioned international agencies, ATVI is an emerging entrepreneurial institution funded by not only private sector interests, but now also by student tuition. Enrolling more than 1,200 students, the main campus of ATVI, located in Kabul, provides specialized and intensive instruction to provide Afghan students the skills needed to access employment more effectively. More than 40% of the students at the main Kabul campus are women, “making it one of very few truly coeducational institutions in Afghanistan” (Afghan Technical Vocational Institute 2016). Improving education for women and children cannot be underestimated in developing nations like Afghanistan where even effective humanitarian projects are challenged by female illiteracy and the fact that girls’ education “is often seen as antithetical to religious and social norms” (Nutt 2011, p. 164). Another example where education for girls was supported is through the efforts of the Afghanistan Reconstruction Trust Fund (ARTF) and the World Bank, where these two organizations, along with other partners in Afghanistan initiated an educational project increasing enrollment for girls. This program also served to train teachers and school principals, building more than a thousand new schools (ARTF 2017). Sharing the responsibility for the entire education system, the Ministry of Education primarily is assigned the responsibility for primary, secondary, and vocational education. Figure 1 indicates that access to education and illiteracy are the most challenging problems faced by women in Afghanistan, followed closely by the lack of job opportunities (unemployment), and the lack of rights.

The second campus of ATVI is located in the Laghman province, a northeast rural regional area of the country, and enrolls more than 1,000 students. The third campus,

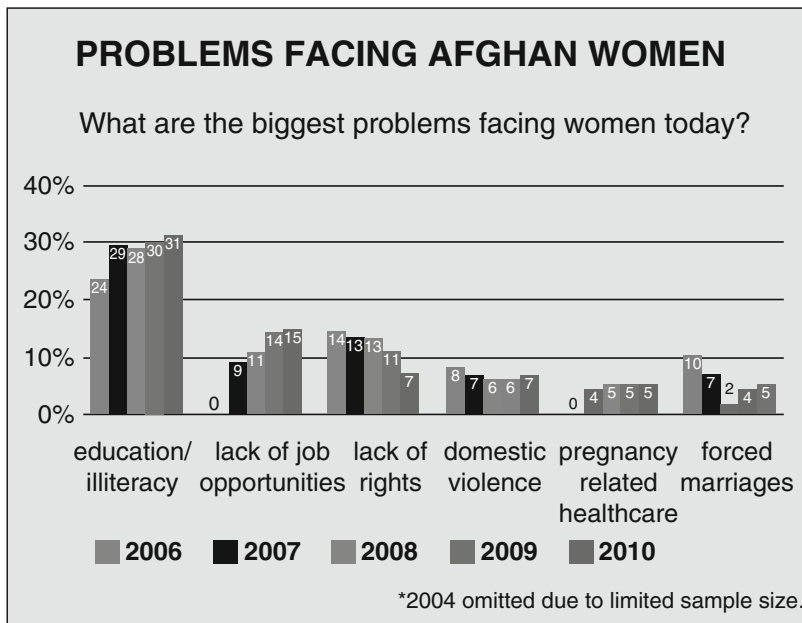


Fig. 1 Biggest challenges facing Afghan women (Afghanistan Group Weebly 2004. <http://afghanistangroup.weebly.com/economic-and-social-development.html>)

with the capability of serving 2,000 students, will be located in Lashkargah, in the southwest of Afghanistan (Afghan Technical Vocational Institute website 2016). Since its inception, ATVI courses addressed economic concerns in Afghanistan, and its innovative practices illustrate how it is addressing the country’s economic and educational needs, while simultaneously becoming a self-sustaining entity. As a clear response to economic and social demands, the establishment of ATVI addresses post 9/11 educational needs of Afghanistan. In this regard, the first courses of study offered were Computer sciences, Horticulture, Automotive services, and Construction. Courses have now expanded, however, to include Journalism, English as a Second Language, and Business Administration, which are representative of current economic and workforce needs faced by the country.

As in other democratic nations, the private sector, i.e., business and industry, contributes to the formation of curricula and training programs at two-year institutions (Kabul Polytechnic University 2013). This is true also in Afghanistan, as the vocational-technical institution directly addresses workforce development needs. International and domestic business and industry are assisting in the funding and development of the coursework at ATVI so that graduates are well prepared to fulfill the workforce demands required by local businesses. The development and funding of institutions and curricula, and how they relate to the importance of educating a skilled workforce is filling a critical need by technical and vocational institutions in Afghanistan to meet economic, social, and cultural demands of Afghan students in

their quest to obtain meaningful employment that, no matter what the compensation or position, will help Afghans support themselves and their families.

Fulfilling a unique role in tertiary education, the concept of a two-year vocational/technical institution affords Afghans the opportunity to obtain skills they never learned in high school or to improve or add to existing skill sets for the workplace. For example, the Information Communications and Technology Institute (ICTI) in Kabul, which evolved from a Technical Institute begun in 1964 and growing into a Junior College in 1971 and finally a comprehensive Technical Institute in 2007. The current institution is supported by local telecommunications industries in Afghanistan via the provision of monetary support, instructors, and the offering of internships to students (ICTI 2017).

Background

During the past decade, due to technological and communications developments, transportation facilities, and the global economy, the world has become more connected. Globalization affects higher education as it responds to economic demands, but just as there is international economic dependence, “there is also evidence that localization encourages the independent growth of community college global counterparts” (Wiseman et al. 2012). According to a US Agency for International Development report (2011), 70% of training and vocational education is provided through the private sector, NGOs, and businesses. Importantly, the report concludes efforts to improve technical and vocational education in Afghanistan is problematic because donor-driven efforts cease when funding ceases (U.S. Agency for International Development 2011). Technical Vocational institutions, in Afghanistan, however, are not to blame for outdated or inadequate curricula. Teacher training and development of curricula in local languages and machinery are outdated, modern curricula is not available in local languages, and most technical vocational education trainers created “their own curricula based on subject knowledge” (U.S. Agency for International Development 2011, p. 22). Ensuring broad-based reform across the country is challenging. Provincial or subnational planning is lacking in national discourse, as these discussions often draw on the theoretical, rather than practical benefits of reforming or coordinating subnational activities. “However, these views are often put forward in a contextual vacuum, without discussion of how different approaches to ‘planning’ might fit into overall government structures, especially current or proposed budget processes” (Lister and Nixon 2006).

Building on identified training needs, the Ministry of Education (MoE) along with other institutions and private organizations started the Afghan Technical and Vocational Institute (ATVI) (2016). Established in Kabul, the first campus of ATVI originated in February 2006, as a private, nonprofit, postsecondary educational institution that provided students with knowledge and skills to make them qualified employees for local businesses. Managed entirely by Afghans at all administrative levels, the first-degree programs offered at ATVI were in four different fields: Information Communications Technology (ICT), Construction, Horticulture, and

Automotive (Vehicle Maintenance). Students matriculated to different departments after passing a national entrance exam on various subjects of Math, Science, Social Studies, and Languages. The first class of students completed their fourth-semester program in March 2008 with 453 graduates, 68 girls and 385 boys. While a majority of the female students majored in ICT, a smaller number of female students received degrees in nontraditional female professions, such as Construction and Horticulture. However, still no female graduates received degrees in the automotive field (Afghan Technical Vocational Institute 2016).

ATVI offers courses taught in an accelerated manner, unlike other schools or institutions, students experience class times longer than other undergraduate programs, starting at 8:00 am and concluding at 4:00 pm. ATVI offers lunches for all students enrolled in the four departments, with theory classes offered in the morning and practical classes offered in the afternoon. In the first year of the program, ATVI offered only four programs to their students.

The main reason for the choice of academic programs is due to the labor market demand and large numbers of youth willing to work for international NGOs who require knowledge of information communications technology. The ICT major is the most popular degree, as it required youth to know how to use computers, have good knowledge of English and ICT skills. As such, the Computer Science Department has remained one of ATVI's leading departments. The academic degree that is second in demand for skills training is Construction, since internal conflict destroyed most of the houses, schools, and businesses. The Construction degree program exists to improve the engineering skills of students and to train them vocationally. Designed to educate youth to be engineers, this academic program trains students to work in various construction projects and to build facilities where people live, thus responding to critical market demands. In a Labor Market Survey commissioned by Mercy Corps, construction in Kandahar City, for example, is perceived as being an essential skill by 62% of employers and 61% of employees (Hall 2017). Table 1 below indicates detailed responses of members of the workforce and employers in Kandahar City. It is but one snapshot of perceived need by employers and employees of in-demand industries requiring specialized skill sets addressed primarily by technical and vocation institutions.

Academic programs at ATVI support USAID's long-term goals of supporting the economy and small businesses, increasing the employability of Afghan youth, and developing a competitive Afghan workforce. In addition to ATVI, which contributes significantly to the increase of practical skills training in Afghanistan, other institutions with myriad economic and educational objectives participate in preparing traditionally underserved students for the workforce.

The Politics and Economics of Education

Coupled with the economic need to educate a skilled workforce within a nation in conflict is the political aspect of education as it relates to private sector interests. According to McCowan and Unterhalter (2015), the business of education remains

Table 1 Utility of vocational trainings in the fulfilment of mandated roles

Vocational training	Perceived utility	Employers (percent)	Employees (percent)	Mean (percent)
Animal husbandry	Little or none	54	57	56
	Useful	22	25	23
	Very or essential	24	18	21
Bicycle repair	Little or none	61	55	58
	Useful	23	25	24
	Very or essential	16	20	18
Machine lathing	Little or none	32	37	35
	Useful	27	30	29
	Very or essential	40	33	37
Carpentry	Little or none	38	34	36
	Useful	27	32	29
	Very or essential	35	34	35
Construction	Little or none	19	17	18
	Useful	19	22	20
	Very or essential	62	61	61
Generator repair	Little or none	26	31	29
	Useful	24	23	23
	Very or essential	50	46	48
Masonry	Little or none	68	64	66
	Useful	16	16	16
	Very or essential	16	20	18
Mechanics	Little or none	18	14	16
	Useful	30	27	28
	Very or essential	52	59	55
Sewing/ embroidery/ Carpet making	Little or none	21	25	23
	Useful	26	26	26
	Very or essential	53	50	51
Welding/ Blacksmith	Little or none	26	26	26
	Useful	29	25	27
	Very or essential	45	49	47
Tailoring	Little or none	20	16	18

(continued)

Table 1 (continued)

Vocational training	Perceived utility	Employers (percent)	Employees (percent)	Mean (percent)
	Useful	19	18	18
	Very or essential	61	66	63

Hall (2017), p. 99.

“an area in which profit can be made by...national and local players and the significance of the private sector is growing” (p. 9). Even prior to 9/11, education entwined with international development activity was complicated further by a “security agenda” that involved establishing educational institutions in Afghanistan (McCowan and Unterhalter 2015). Concurring with the viewpoint of Klees (2016), the rate of return to higher education are significant, “and such education is an important determinant of the income status of individuals and hence inequality in society” (Santhakumar 2011, pp. 39–40). The relatively slow development of education in Afghanistan directly results from traditional sociocultural perceptions that education in rural areas did not register as an important commodity (Samady 2001). Part of these perceptions result from sectarian groups being resistant to government control, including the realm of education. In rural areas, particularly, Internet access is unreliable, textbooks are outdated, and educational institutions are structurally weakened (Tobenkin 2014). In addition, despite the fact that donor agencies are constantly working together to ensure synergy with development efforts at all levels, “implementation remains difficult given the sheer number of actors, priorities, and interests on the ground, not to mention the continuing counterinsurgency operation against the Taliban and related security problems” (Berdal and Wennmann 2010, p. 67). Rural areas of the country, such as Kandahar, Kunduz, and Kazar-I Sharif, reported high levels of illiteracy, with only an average of 0.2% claiming vocational education and 2.1% receiving university education (Hall 2017). Countries at risk face challenges of allocating limited resources such as capital, skilled and unskilled labor, land and other natural resources to a variety of different uses such as production of consumer goods, investment in industry, infrastructure, education, and health with the goal to reach a more fundamental goal of reducing poverty, accelerating economic growth, and reducing income inequalities. Given limited resources, choices must be made between alternative uses of these resources such that the benefit to the economy and society is as large as possible. However, when Afghanistan recognized the need to progress in the area of education, the government realized that its limited resources would preclude the widespread establishment of a technical and vocational education system to address skills training. After the war in 1978, the economic development needs of the country were “transport and communication infrastructure, mining, industrial and energy sectors, and the modernization of agriculture, [which] required trained manpower, which necessitated more investment in secondary, vocational and higher education than primary education” (Samady 2001).

Multisector partnerships (MSPs), as opposed to straightforward contractual partnerships, represent one solution to addressing educational challenges. Ginsburg (2012) writes that “multi-stakeholder partnerships (MSPs) do not necessarily entail a contractual relationship with a definable commercial benefit...[they involve] actors from the private sector (private corporations, corporate foundations, groups or associations of businesses) and the public sector (Ministry of Education and schools). This concept entails reciprocal obligations and mutual accountability” (p. 156). In addition to the creation of ATVI, the private sector, as well as multi-stakeholder partnerships such as the United Nations, the International Monetary Fund, the World Bank, and the World Economic Forum, has responded with at least two other entrepreneurial educational systems. One of these examples of a MSP initiative is the Kabul Polytechnic University Information Technology Community College program, established in 2013, which offers an Associate of Science degree designed to provide market-based technical and professional IT education programs for a student in the workforce and those wishing to enter the workforce to contribute to modern Afghan society and economy (Kabul Polytechnic University 2013).

Shifting to a logistics-of-education perspective, the number of students completing secondary schools grows steadily and graduates need training that is more specialized. In other words, the number of university-ready students in Afghanistan has never been higher. Although, recently, the number of university ready students in Afghanistan has increased, the number of students who have work experience and are expected to start working in various national and international organizations are limited. According to the Afghan Central Statistics Organization, public university enrollment has increased from 7,800 in 2001 to 174,425 in 2015, 21% of which are women, and demand for higher education continues to grow.

USAID is helping Afghanistan’s higher education professionals effectively manage the growth in demand for higher education while also improving academic quality. The University Support and Workforce Development Program helps improve the management capacity of the Ministry of Higher Education and 11 public universities to manage this growth, improve academics, and create new opportunities for Afghan students pursuing higher education. USAID helped develop Afghanistan’s first Information Technology associates degree at Kabul Polytechnic University to link students with growing industries; launch the first associate degree in Biomedical Equipment Technology at Kabul Medical University to develop local healthcare talents; establish a new Master’s Degree in Educational Leadership and Management at Shaheed Rabbani Education University to cultivate Afghan educational leaders. The main areas of concentration are in software development and networking, and the curricula comply with “international certification programs like A+, Cisco, Oracle, Microsoft, etc. The students will be prepared according to industry based standards” (Kabul Polytechnic University 2013). The student handbook states that stakeholders be linked closely with developing the curricula, providing teachers, providing internships for students, and becoming participants on the institution’s board of advisors. While the identity of these “stakeholders” is not identified in the student handbook, it is implied that they are members of the local business community, presumably those who need computer

programmers, web designers, computer support specialists, and network analysts (Kabul Polytechnic University 2013). The authors postulate that the Kabul Polytechnic University IT Community College emerged from the former Kabul Polytechnic University Information Technology Center, funded by the Korea International Cooperation Agency and USAID. Visual Basic, Computer Fundamentals, and AutoCAD were offered to the first-fifth year students (Kabul Polytechnic University 2016).

Similarly, with USAID's assistance, the American University of Afghanistan (AUAF) enroll 41% female students which is one of the highest percentages of female enrollment in Afghanistan. AUAF has offered Afghanistan's first Western-style Master of Business Administration degree since 2011 as well as opened Professional Development Institute to provide professional training and certification programs (USAID 2017). However, for Afghan women, there are limited female faculty in technical institutions and universities, making many families in certain locations of the country resistant to sending "daughters to universities due to lack of security and cultural challenges" (Tobenkin 2014, p. 32).

Interestingly, South Korea pledged \$85 million since 2009 for Afghan development programs. These projects focus on the development of information technology infrastructure, schools, hospitals, and agricultural development (Ku et al. 2011). Thus, it is not only the private sector involved with establishing academic programs in technical institutes, structuring curricula, and serving as instructors. Foreign governments also play roles in shaping academic programs and curricula at two-year institutions in Afghanistan. For example, in 2013, a \$91.9 million project funded by the USAID Afghanistan University Support and Workforce Development Program (USWDP) is providing resources to the Ministry of Higher Education and eleven selected public universities to support the establishment of higher education programs that are relevant to the job market for Afghan students. The project links universities and potential employers in the public and private sectors, helps Afghan higher education institutions create and tailor curricula to market needs, and strengthens the management of eleven public universities. Partnering universities include Kabul University, Kabul Polytechnic University, Kabul Medical University, Shaheed Rabbani Education University, Nangarhar University, Herat University, Balkh University, Kandahar University, Kunduz University, Khost University, and Jowzjan University (USAID 2016). The characteristics of a public-private partnership involve a "voluntary alliance between various equal actors from different sectors whereby they agree to work together to reach a common goal or fulfill a specific need that involves shared risks, responsibilities, means, and competencies" (World Economic Forum 2005, p. 8). By contrast, multisector partnerships, "are a larger-scale form of public-private partnerships, which often push school-level reforms," and furthermore they are "often dominated by multinational corporations [that] promote business and a neo-liberal ideology that sees government as the problem...as businesses have their own views of what is wrong with education" (Ginsburg 2012, pp. 160–161). While strength in numbers, both in financial and intellectual resources, exist in multistakeholder partnerships, prevailing thought is that it is difficult to determine whether or not project goals are met, partly due to lack

of clear objectives and the limited ability to organize and conduct comprehensive evaluations (Ginsburg 2012). Thus, the appeal of multistakeholder partnerships is broad because of their capacity to act as significant agents of change, however, these partnerships could simply be “another form of corporate philanthropy that is directed by either the profit motive or some notions of the public interest” (Ginsburg 2012).

The two-year National Institute of Management and Administration (NIMA), established in Kabul in 2008 with financial assistance from The World Bank and the Afghanistan Reconstruction Trust Fund, worked with government and the private sector to determine the curricula based on market demands. NIMA provides post-secondary education in Management and Administration, Information Technology, and Accounting. It prepares qualified female and male professionals for the job market and public service in Afghanistan and produces skilled workers to meet the needs of Afghanistan and the region. Taught in English, courses include the three academic topics of management, accounting, and information-communication technology (Crouch 2014).

Addressing the shortage of higher education and training for women, the United Nations Women’s Organization established an Information, Communication, and Technology (ICT) Center in northeastern Afghanistan in 2011. If a woman does not pass the “kankor” (college entrance exam), English and computer skills are available at the ICT Center. Intended to bolster the education of Afghan women, the ICT Center trains students with specific skills needed to directly enter the workforce. Despite some cultural opposition, the United Nations Women’s group work to challenge the traditional beliefs that suggest Afghan women should be at home and not in the workplace (United Nations Women 2013).

Following on the ICT Center is the International Center for Afghan Women’s Economic Development (ICAWED), established as part of the American University of Afghanistan in 2013. ICAWED received a grant from the U.S. Department of Defense Task Force for Business and Stability Operations and its mission dictates offering business classes for women in the areas of Business Planning, Communications and Public Awareness, Branding and Packaging, and Women in Business Management and Leadership (Zenat 2015). Having the political support of a Former First Lady of the United States, Laura Bush, and the ICAWED continues to offer courses to advance women’s education in Afghanistan. In a video congratulating the work of the ICAWED and reiterating the importance of improving and increasing women’s education in Afghanistan, Bush reaffirms her support for the importance of women contributing to the workforce. As illustrated in the video housed on the George W. Bush Presidential Center website (see link to video in references), Bush sends a personal message to the ICAWED leadership and students who will study there, and stated it exceeded enrollment expectations since its inception (George W. Bush Center 2013).

Just as foreign leaders and governments seek to influence curricula and education writ large in Afghanistan, foreign media corporations also make an impact. The British Broadcasting Company (BBC) collaborated with the International Finance Corporation (IFC) to create radio “edutainment programs that combine education with entertainment on issues such as unemployment, lack of infrastructure, and

inadequate service provision” (World Bank 2011). The programs sought to provide information and raise awareness on how to establish small businesses and stimulate the Afghan economy. While it is unclear what the BBC hoped to accomplish by funding this initiative, their involvement is yet another example of foreign interests allowed to play a role in the improvement and development of education in Afghanistan. As stated above, telecommunication companies in Afghanistan also support the development of curricula and hire graduates from ATVI and ICTI.

Conclusions and Future Directions

Leveraging relationships with the private sector and foreign entities is critical to the advancement of technical and vocational education in Afghanistan. GIZ, a German development organization, supported a Teacher Training Academy focusing on training in plumbing and electricity. The Government of the Netherlands funded a Teacher Training College concentrating on Agriculture, with curricula provided by a Dutch university cooperating with Purdue University and an NGO based in the Czech Republic. The Khurasan Institute of Higher Learning “has agreements with Ataturk University in Turkey and Stratford University in Virginia to conduct faculty exchange that will elevate teachers’ knowledge of . . . practice-based teaching methodology” (USAID 2011). These examples are indicative of the breadth of need in nearly every sector of education in Afghanistan. Challenges are so numerous that the educational system almost demands assistance from the private sector and foreign interests.

Increasing numbers of students at all levels of education in the past decade continue to improve the economy. Although in 2009, Dodge and Redman (2011) reported that of the 95,200 university students, only 17,150 of them were female (p. XVII). Numerous factors affect the efficiency and quality of technical and vocational trainings in Afghanistan, for example, a significant industrial base existed in the country to provide the appropriate environment and structure for the development of vocational training. As per Samady (2001), “The economy was based on agriculture, which was developed in traditional ways with little modern technology. [In the past], vocational training schools did not have the desired social prestige and [thus] attracted students who could not continue their studies in secondary education” (p. 47).

According to some projections, secondary school graduates will continue to increase by 14% per year until 2022, and university student enrollment will nearly double by 2025. According to the USAID (2011) report on the Technical and Vocational Education Training Providers Industry, technical vocational education and training institutions are approaching their physical capacities to address the influx of students. The need for additional infrastructure to support these growing institutions reinforces providing instruction for students in the construction industry. Additionally, administrators in technical and vocational institutions face increasing social and governmental pressure to admit students who cannot pass the university entrance exam. Only 35% of the test takers are admitted to public

universities funded by the government, however, Santhakumar (2011) concurs with the importance of administering an entrance exam for higher education, as not “everybody can be provided with higher education in society. However, this does not mean that the provision can be based on the willingness to pay” (p. 43). When choosing to enter a university, students recognize that while Afghan universities may be lower in quality than neighboring countries’, so they might be less competitive for jobs when they graduate. Therefore, many students choose to attend ATVI, compared to teacher colleges and other four-year colleges and universities, since they offer programs that are in market demand, and people obtain jobs even if they must pay tuition to attend.

An obstacle for graduates of any higher education institution in Afghanistan remains the high rates of unemployment. Given the still unstable political climate in Afghanistan, donor logic suggests, “gainfully employed young men are less likely to participate in political violence, implying a positive correlation between unemployment and violence in locations with active insurgencies” (Berman et al. 2011, p. 496). However, research conducted by Berman et al. (2011) found that no significant correlation existed between unemployment and violence. However, it is clear that the rate of return on education, and by extension, employment, is reflected in economists’ theory of externalities, “that education has benefits to other people in addition to the person being educated – to their family, friends, coworkers; better health, lower crime, less welfare; more technologically sophisticated workplace; greater international competitiveness” (Klees 2016). According to Santhakumar (2011), a student who is capable of pursuing higher education, but is unable to do so, it is negative for the society. If only middle-class and wealthy segments of society can afford higher education, then the number of students qualified to receive a tertiary degree is limited. In the same regard, intelligent students from poor socio-economic situations “should not be deprived of higher education just because they do not have the money” (Santhakumar 2011, p. 40). Technical and vocational institutes with private support are capable of addressing students demonstrating the most need, as privately funded colleges “may have greater incentives to minimize the cost. . .and maximize the benefits. . .to make courses more client-oriented” (Santhakumar 2011, p. 44).

Funded by independent agencies initially, ATVI previously organized a job fair at the end of each year. Many students attend these job fairs to obtain employment with businesses, and national and international organizations participating in the job fair. One of the compelling reasons that the demand has increased for this type of vocational institution is due to the job fair and organizations obtaining access to local markets. Graduates likely will earn lower wages, but recognize the fact that since they are new employees, they will gain experience. Thus, the job fair presents a mutually beneficial situation for new employees and the organizations that hire them. Hiring organizations obtain access to youth with theoretical knowledge and youth gain employment with their first job. Although the newly employed graduates of technical institutes typically earn less money, they benefit from gaining real world examples of jobs working with local businesses, and national and international organizations.

Further Research Areas

Despite being faced with unmet demands for education, the Afghan government finances the provision of schooling to the best of its ability, while simultaneously faced with shrinking government budgets. Therefore, the public sector in several parts of the world is developing innovative public-private and multistakeholder partnerships with the private sector for justifiable reasons to overcome significant obstacles they face. Private education encompasses a wide range of providers including for-profit schools that operate as enterprises or business, religious schools, nonprofit schools run by NGOs, publicly funded schools operated by private boards, and community-owned schools. In other words, there is a market for education. Increasingly, however, the quality of education remains somewhat ignored. Additionally, the issues of accreditation are often unclear. Various private organizations such as USAID, the World Bank, and the British Council are working on accreditation and quality control, but so far no research has taken place on how quality control or accrediting systems are designed. Further, the main rationale for public-private partnership programs is the potential role of the private sector for expanding equitable access and improving learning outcomes.

In addition, the private sector is sometimes not entirely overt with how and why they finance higher education in developing nations. As this chapter shows, both private industry and unlikely foreign governments (like South Korea) invest heavily in higher education without regard for their influence or unintended consequences. These consequences could include graduates of technical and vocational education programs feeling a sense of indebtedness to the country or private industry responsible for their education. Related to the lack of quality control, technical and vocational institutes likely consider themselves fortunate to have instructors from industry to teach courses. Conversely, there are many positive aspects of these partnerships with a \$1.2 Million US State Department grant to San Jose State University's School of Journalism and Mass Communication in 2011. This program created a journalism program for Herat University in Western Afghanistan and the university later received an additional grant to refine a journalism program in Northern Afghanistan (Tobenkin 2014).

In a country rife with near daily conflict and change, it is unlikely that private sector interests in education writ large will cease. The constantly changing climate will continue to require additional research and analysis. For example, whether or not the qualifications of technical vocational instructors are approved by college leadership and determined appropriate to teach the courses in unclear and requires further examination. More research is also needed to unpack and discover the complicated web of multisector partnerships that support tertiary education. While undeniable that graduates of these institutions benefit greatly from the influence and impact of industry and private sector involvement in tertiary education, economic implications exist with respect to the shaping of graduates' perspectives. Existing literature, however, supports the necessity of private sector and foreign involvement to improve the quality of and access to tertiary education in Afghanistan. Clearly, the overarching goal of providing sustainable and equitable educational opportunities

for the Afghan people, fueled by concerted and strategic planning, and coupled with sound evaluation plans, needs to be implemented and enforced by both public-private and multistakeholder partnerships. Challenges with outside funding for educational and training programs remain, especially donor-funded programs that cease when funding concludes; however, ideally these programs at least provisionally and temporarily can serve to provide education to traditionally underserved students, especially women and girls. Additionally, the educational system is changing so rapidly that it is difficult to encompass all the true impact that public-private and multi-stakeholder partnerships have made in Afghanistan.

Indeed much of the research in this chapter was drawn from online reports and websites struggling to stay current with both challenges and success stories. Perfectly illustrating this point, a World Bank article, published just 1 week ago, reported that the Afghanistan Reconstruction Trust Fund is sponsoring a pilot entrepreneurial program, and one-third of the participants were female, which is reflective of a shifting perspective of the country's "gender norms around the economic participation of women" (World Bank 2017). Furthermore, in a 2016 survey of Afghans, "74% of respondents felt that women should be allowed to work outside the home" (World Bank 2017). These shifts in viewpoints are dramatically different from just a few years ago and could well be attributed in part to the progressive nature of selected public-private and multistakeholder partnerships, and thus, an entirely new area of research. While it is arguable that large amounts of foreign aid and private sector investment in Afghan higher educational systems exist, without the sharing of these financial, practical, and intellectual resources, the government would be even more compromised, facing insurmountable hurdles to increasing access to education and improving the economy.

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Video Link

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Part II

Institutional and Cultural Adaptations



From Pilot Project to Permanent Status: Community Colleges in Vietnam

9

Mary Beth Marklein and Mai Van Tinh

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Abstract

The primary goal of this chapter is to trace the evolution of the community college concept in Vietnam in light of local demand, national goals and global trends. Emphasis is placed on how Vietnam's adaptation of a community college model meets the economic needs of a country in transition while also preserving its cultural identity and social values. It is the strategic relevance of these institutions in Vietnam's changing economic structure that is of significance to "Vietnamize" elements borrowed from foreign systems of thought while maintaining Vietnamese traditions. Drawing from the personal experiences of one co-author, interviews with

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key stakeholders and document analysis, the authors aim to explore and contextualize how Vietnam's community colleges have managed the forces of globalization.

Keywords

Vietnam · Community colleges · Higher education

Introduction

Community colleges have traditionally served the needs of their local constituencies, but around the world, they are increasingly being established as national initiatives for the purposes of global integration (Van Tinh 2016; Marklein 2009). Though no single definition can reflect the diversity of community college models across the more than 90 countries in which they can be found, most do share a mission: to promote equal access and social mobility in the community it serves, usually through some combination of short-term training to meet rising workplace demand for skilled technicians, access to adult and continuing education for lifelong learners, and pathways, particularly in poor or remote areas, for undergraduates to pursue an academic degree (Raby 2009). In Vietnam, the first community colleges arose in the early 1970s, when the US government established three such institutions in the South. Community colleges were dismantled after the reunification of North and South Vietnam in 1975, when the entire country adopted the Soviet higher education model. The introduction by the 6th National Congress of the Communist Party of Vietnam (CPV) in 1986 of a major economic plan called *Doi Moi*, or “renovation,” heralded a new direction for the country as the Party sought to embrace capitalism while retaining its commitment to the socialist legacy of the country's beloved revolutionary leader, Ho Chi Minh. In 1991, the 7th National Congress of CPV introduced the concept of a “socialist-oriented market economy” that would reflect cultural values such as self-cultivation, moral responsibility, and concern for social equity.

The primary goal of this chapter is to trace the evolution of the community college concept in Vietnam in light of local demand, national goals, and global trends. Of particular interest is how Vietnam's adaptation of a community college model meets the economic needs of a country in transition while also preserving its cultural identity and social values. While education has always been held in high esteem in Confucian societies (Tran and Marginson 2014; Ashwill 2006; Jamieson 1995), its strategic relevance in Vietnam's changing economic structure would take on new significance under *Doi Moi*. This shift, which relies to some extent on policy borrowing, did not occur without controversy (Tran and Marginson 2014). As more developing countries look to Western models to create higher education systems that can compete in a global economy, prospects of neocolonialism loom (Collins and Rhoads 2010). At one extreme is the potential homogenization of higher education to the point where indigenous traditions fade into obscurity; at the other is localization to the point where the education institutions are isolated and unrecognizable outside a country's borders. Vaira (2004) argues for a third possibility that allows for the integration of both forces. Despite the potential for integration to simply be a dressed-up form of neocolonialism, the concepts of flexibility and adaptation are well understood in

Vietnam, which has staked its very survival on its ability to “Vietnamize” (Tran and Marginson 2014, p. 7) foreign systems of thought, including Confucianism, Taoism, and Buddhism. Similarly, East Asian scholars have theorized the emergence of a Confucian model of the university, one that represents a hybrid of Western, market-oriented systems while maintaining Asian traditions (Zha et al. 2016; Shin 2013). Drawing from the personal experiences of one coauthor, interviews with key stakeholders, and document analysis, the authors aim to explore and contextualize how Vietnam’s community colleges have managed the forces of globalization.

A Brief Chronology

The birth of the first community colleges in Vietnam has been well documented (Epperson 2010; Oliver 2009; Lam and Vi 2009; Khe 1970, 1992). With assistance from the United States, three community colleges made brief appearances in the South in the 1970s before being abolished at the close of the American war in 1975. In the decade that followed, the reunified Vietnam’s higher education system followed the Soviet model, which organized universities into mono-disciplinary institutions that focused primarily on producing bachelor’s, master’s, and doctorate degrees in a particular field. In launching *Doi Moi*, officials with the Ministry of Education and Training (MOET) studied higher education systems around the world before developing a comprehensive road map. While MOET’s higher education officials did not say so at the time for fear that Party leaders would reject it, they settled on a structure patterned after the US system (personal communication with Lam Quang Thiep, April 14 2014). First, the government, through MOET, established five multidisciplinary universities, including two national universities, in Hanoi in the North and Ho Chi Minh City in the South, and three regional universities, in Hue, Da Nang, and Thai Nguyen. MOET also proposed that community colleges be established outside Vietnam’s major urban areas as a way to spread equal opportunities for higher education across the country.

A 1995 government report identified MOET’s objectives, which align closely with the description (offered above) by Raby (2009):

As Viet Nam makes the transition from a centrally planned economy to a market-oriented economy, it faces difficulties in the distribution of human resources throughout the country and especially in economically backward areas. The northern mountains, the central high plateaux (sic), the southeastern provinces is (sic) southern Viet Nam and the Mekong Delta are such under-privileged areas. It is anticipated that the need for local human resources training and research into the socio-economic development of these areas will increase. The aim of this project is to assist such areas in supplying human resources able to respond to demands in the near future. The community college will create a new skilled labor force and mobilize it to supply youth to remote areas. (Socialist Republic of Vietnam 1995, p. 57)

MOET and the central government appeared to support the community college concept. In 1993, the 7th Communist Party of Vietnam’s National Congress declared education and training as top national priorities by Decree No. 90/CP/1993. In 1996, MOET asked the Prime Minister to allow for the permanent establishment of

community colleges (Report No. 8195/DH); in 1997, the Prime Minister (Vo Van Kiet) and Deputy Prime Minister (Nguyen Khanh) issued a communique (No. 30/TB of the government cabinet dated on March 24, 1997) requesting that MOET officials look into establishing a community college system that would link with universities and other higher education institutions – setting the stage for a postsecondary system that allowed for both short-term training programs and transfers to 4-year universities. Three years later, community colleges in Vietnam were granted provisional status (Provisional Charter No. 37/2000), paving the way for six pilot community colleges, the first since reunification in 1975.

One of the most influential community college projects in the reunified Vietnam was funded by the Dutch Embassy. The Netherlands does not (and did not at the time) have a community college model of its own, but beginning in 1998, it supported a development project in Vietnam, carried out by the University of Amsterdam, that furthered the “humanitarian philosophy of community college model” (de Geoje 2012). The Netherlands’ participation in the project ended early, however, when the Dutch Embassy withdrew further funding because negotiators on the two sides could not reach agreement on financial details of the project (personal communication, Peter de Geoje, September 13, 2016). The six community colleges continued to operate using state funds provided by provincial authorities.

By 2005, the number of community colleges in Vietnam had doubled, to 12, and a year later, there were 15. Also that year, the Vietnam Association of Community Colleges (VACC) was established to represent “a common voice” for supporters of the community college mission (VACC). One of the group’s main objectives was to see that community colleges are made permanent entities within Vietnam’s higher education infrastructure. Without that designation, the future of community colleges remained at risk, subject to the whims of government leaders. Indeed, by 2007, three colleges had reorganized themselves into provincial universities and are now legally recognized as such. In 2012, VACC formally requested that MOET and other related government agencies acknowledge the role of community colleges, still holding provisional status, within a stratified higher education system; later that year, MOET issued a decision (No. 1666/QĐ-BGDĐT) explaining that its plan for higher education includes both research universities, universities that primarily emphasize transfer and application of knowledge, and community colleges (Resolution No. 06/NQ-CP dated on March 07, 2012).

Over the next few years, VACC proposed several initiatives designed to help define and clarify the purpose and operation of community colleges, such as offering civil servant exams for educators, piloting a curriculum appraisal board and a plan for transfer articulation, and setting up distance education courses. In 2014, it recommended that community colleges be placed under the direction of the provincial People’s Committee for state management and the direction of MOET for supervision of academic affairs. In late 2014, VACC’s standing committee pressed its case during a working meeting chaired by the Deputy Prime Minister Vu Đức Đam; also attending were MOET’s Vice Minister and representatives from other related government agencies (VACC 2016). A major turning point was reached in January 2015, when MOET for the first time recognized community colleges as a distinct category of

institution, specifying their function, tasks, and special characteristics and acknowledging the model's and the network's role in the economic and social development of the country (Circular No. 01/2015/TT-BGDĐT, Chap. I, Article 2 (Item 6) and Article 5 (Item 4), dated on May 15, 2015 on the Charter of the Colleges).

In all, 17 community colleges have been established in Vietnam, though just 14 have continued to operate in that capacity (Table 1). Meanwhile, the rest of Vietnam's tertiary education sector was expanding and diversifying. Between 2000 and 2012, the number of higher education institutions had grown from 178 to 419, and student enrollments grew from 918,228 to 2.2 million (Tran and Marginson 2014). Today's higher education landscape in Vietnam includes public, semipublic, nonpublic, and foreign-owned institutions, as well as specialized institutes and academies. Vietnam

Table 1 Timetable of establishment of community college in Vietnam

		Date/ year	Decision No. of MOET	Status
1	Community college of Hai Phong city	30/8/ 2000	No. 3634/QD- BGDDT	Exists
2	Community college of Dong Thap	31/8/ 2000	No.3633/QD- BGDDT	Exists
3	Community college of Kien Giang	01/4/ 2002	No. 1368/QD- BGDDT	Exists
4	Community college of Hanoi city	19/12/ 2005		Exists
5	Community college of Ha Tay	03/10/ 2003	No. 5345/QD- BGDDT	Exists
6	Community college of Ba ria-Vungtau	/2000		Exists
7	Community college of Vinh Long	01/4/ 2002	No. 1369/QD- BGDDT	Exists
8	Community college of Hau Giang	01/8/ 2005	No. 4128/QD- BGDDT	Exists
9	Community college of Soc Trang	08/06/ 2006	No. 2917/QD- BGDDT	Exists
10	Community college of Binh Thuan	13/12/ 2000	No.3519/QD- BGDDT	Exists
11	Community college of Ca Mau	20/9/ 2007	No. 5986/QD- BGDDT	Exists
12	Community college of Tra Vinh	2000		2006 became 4-year university
13	Community college of Quang Ngai	2000		2007 became 4-year university
14	Community college of Tien Giang	2000		2005 became 4-year university
15	Community college of Lai Chau	2008		Exists
16	Community college of Lao Cai	2011		Exists
17	Community college of bac Kan	2010		Exists

Source: Vietnam Association of Community Colleges

saw a proliferation of junior colleges, which offer 3-year associate degrees in specialized fields, mostly in education and teaching but also in areas such as accounting, civil engineering, and agriculture. Like community colleges, junior colleges offer a transfer option. And junior colleges primarily enroll students who score too low on entrance exams for admission to a university.

Another option, introduced in 1998, was vocational training junior colleges, which focus primarily on practical hands-on training for skilled labor such as automobile repair. These institutions fell under the authority of the Ministry of Labour, Invalids and Social Affairs (MOLISA), whose responsibilities include vocational and technical training. Finally, specialized ministries, such as the Ministry of Construction and the Ministry of Culture and Tourism, also have some domain over education and training institutions in their field.

In 2016, in addition to its community colleges, Vietnam's tertiary education institutions included 209 universities, 217 junior colleges, and 190 vocational training junior colleges (Association of Vietnamese Universities and Colleges 2016). VACC also has expanded its reach. In 2016, it had 67 members, including institutions and individuals, 59 of them from inside Vietnam and 8 affiliated with overseas organizations or individuals. In addition to institutions that specifically identify themselves as community colleges, members include the three universities that were launched as community colleges. Other members include several junior colleges and vocational high schools that have a demonstrated interest in the community college principle and philosophy. VACC also has recommended a stronger articulation between vocation-technical institutions under the MOLISA umbrella and community colleges that report to MOET. In addition, noting the potentially disproportionate effect of climate change and national disasters on rural areas, VACC has expressed interest in contributing to environmental protection research projects focused on those and related issues.

The Path to Performance

Vaira (2004) describes the process by which institutions of higher education adopt to globalization as one replete with conflicts, resistance, and other disagreements, as well as one that will demand conciliation, adaptation, translation, and creativity. The process by which community colleges have become part of Vietnam's higher education infrastructure – and, in essence, its response to globalization – reflects a range of cultural, political, and economic considerations. This section briefly demonstrates how local factors may have slowed the path to the permanent status that many community college advocates wanted.

Cultural Heritage

While MOET and top party leaders saw community colleges as an economic imperative for the country, one that would attract employers offering good salaries to skilled workers, provincial leaders were less enthused, as were their

constituencies. Reputation is an important factor: provincial authorities have typically aspired to host universities, which are (still) deemed to be more prestigious than colleges (Epperson 2010). Tertiary higher education is in such flux in Vietnam that published enrollment data are difficult to compare. But the general trend, based on the 2016 national university entry examination, finds that both community college and junior colleges continue to face enrollment challenges (Anh and Huyen 2016), while only a sliver of students who apply to universities will gain acceptance. A proposal in 1994 for a pilot community college in Hai Phong, a seaport city 100 km east of Hanoi, was dropped, for example, because local officials wanted to have a national university such as the one in Hanoi. Provinces also have had a financial incentive for upgrading community colleges to universities in that funding was based in part on enrollments, and universities were more likely to draw larger numbers of students.

Politics and Power

Lingering mistrust of the United States continued even as the two countries worked toward restored diplomatic relations, which took place in 1995. Some Party members resisted efforts by MOET to study the community college model from what is arguably the model's birthplace: the United States. In 1994, the US government proposed funding a \$4 million community college project in Vietnam on the condition that it be completed by the time normalization occurred. At one point, officials in Hoa Binh province – home to a Soviet-built hydro-electronic plant – hoped to explore the possibility of hosting the project. But when a US consultant asked for the master plan of a city map, top officials of some ministries, including those for internal affairs, construction, and planning and investment, forbade it, arguing that the contents contained national security secrets. A recommendation by a staff specialist (and a coauthor of this paper), who had studied community colleges in the United States and Canada, had proposed adopting a North American governance model but that also was rejected. Top MOET authorities insisted the CPV to continue to hold decision-making authority over academic affairs of public colleges and universities.

Economic Disincentives

Some influential MOET officials also were reluctant to grant permanent status to community colleges because doing so would limit their personal influence as well: because day-to-day operations of community colleges would fall under provincial authority, those party officials would have fewer opportunities to line their own pockets as beneficiaries of what is sometimes called the “asking-giving mechanism” a reference to what Westerners might call bribery – a long-standing practice in Vietnam of powerful officials granting favors in exchange for personal gain. Asking-giving may help to explain, for example, why 54 colleges were upgraded to

universities between 1998 and 2008 (Harvard Kennedy School Vietnam program 2010). Corruptive practices created other challenges as well. For example, students at Lao Cai and Ca Mau Community Colleges who completed short-term community college training in tourism programs have run into red tape with authorities in the provincial-level Department of Culture and Tourism, which is responsible both for awarding professional licenses and which manages tourism and hotel management programs (personal communication with presidents of Lao Cai and Ca Mau Community Colleges September 20, 2016).

New Law: New Challenges

Even as it strengthened the standing of community colleges, the 2015 College Charter introduced new concerns. Under the new law, community colleges are defined as offering “educational activities and training of multi-level, multi-sectoral programs and flexible training plan to meet the needs diverse learning community, in line with the needs of economic development, culture and local society” (Charter of the Colleges, Circulars No: 01/2015/TT-BGDĐT May 15, 2015). But it did not clarify the ministry-level oversight or management for community colleges, junior colleges, and vocational junior colleges. Traditionally, MOET had been responsible for community colleges and profession-oriented junior colleges such as teacher-training institutions, while MOLISA had authority over vocational training. The legal recognition of the community college model offers the possibility of more workforce-oriented training opportunities, including short-term certificate programs, but under the new College Charter 2015, community colleges can offer vocational training only if they get permission from the provincial branches of MOLISA. Follow-up efforts to clarify questions about management added to the confusion. First, in June 2016, the outgoing Prime Minister announced that MOET would be responsible for all vocational programs. Three months later, in September 2016, the new Prime Minister announced that, with the exception of teacher-training colleges (which stay with MOET), authority for colleges that offer career, professional, and vocational training falls under MOLISA’s authority (Government’s Resolution No. 76/ND-CP dated on September 03, 2016). This development has led to a new round of concerns, particularly on the part of specialized junior colleges that had previously reported to MOET. An association of medical-pharmacy junior college and professional high schools, for example, has submitted a letter of protest. For its part, the MOLISA vice minister has promised to retain the name “community college” (a concern of VACC) and said he will invite community colleges to participate in discussions about how to maintain and further develop community college policy (Ty 2016). In moving toward a more entrepreneurial model for higher education, the central government’s 2015 College Charter also relinquished some control of governance, introducing a pilot project through which 14 public institutions were granted more authority to determine their own objectives and develop their own curricula (Government’s Resolution No. 77/2014). A 15th institution was included in 2016. Under a separate resolution (Resolution No. 16/2015) affecting community

colleges, the provincial government must provide about 50% of the funding for its local community colleges (and other public services units), leaving it largely up to institutions to find the remaining funds, through tuition, private-sector (including foreign) investment, and other sources. Some VACC members say the new measures are vague and therefore have been difficult to implement (personal communication, President of Hau Giang Community College, September 30, 2016).

Just as governments and institutions around the world have struggled with the economic crisis of the late 2000s and its aftermath, Vietnam's community colleges over the past decade have experienced spending cuts. The local government's contribution to Ha Tay Community College near Hanoi, for example, dropped from 30 billion VND to about 11 billion VND per year, covering only normal expenditures including staff salaries (personal communication with Dr. Nguyen Ngoc Xuan, President of Ha Tay Community College, May 20, 2016). At Hai Phong Community College, the local government's contribution toward equipment purchases was reduced over the last 10 years from 2 billion VND annually to 400 million VND (personal communication, with Dr. Dong To Thanh, President of Hai Phong Community College, August 5, 2016). Since 2014, when a new funding formula put more emphasis on enrollments, community colleges found themselves disadvantaged by their lesser reputation (Resolution No. 77/2014 and Resolution No. 16/2015). As the government nudged institutions toward privatization in 2014, it stated an expectation that these more autonomous institutions would define and ensure quality and "must not reduce access to higher education of poor students" (Resolution No. 77/NQ-CP). Toward that end, the government also is looking into various financing strategies, including high-tuition, high-aid models in which low-income students could be subsidized directly through loans.

Discussion

The permanent status for community colleges comes at a time when Vietnam is stepping up its profile on a global stage. In 2007, Vietnam joined the World Trade Organization, which requires that member countries comply with the General Agreement on Trade in Services (GATS), a controversial 1995 pact that liberalized international trade in higher education and other service sectors. In 2015, Vietnam became a founding partner in the Association of Southeast Asian Nations, which was established to promote "economic, political, social and cultural cooperation across the region" (World Economic Forum 2016). In 2016, it joined 11 other Pacific Rim countries in signing the Trans-Pacific Partnership Agreement, created to ease trade barriers.

Vietnam is not unique in trying to revamp its education systems to better perform in a free-market economy. Japan, South Korea, Taiwan, Hong Kong, and Malaysia, to name a few, have established the community college model as a foundation for national strategies for economic development and global integration. Developments in Vietnam similarly reflect processes and patterns familiar to other countries, such as turf battles between central governments and autonomous universities, as well as tensions between efficiency and equal access in education and the struggle to align

supply and demand (Mok 2007; Ngo et al. 2006). Like Vietnam, Thailand is facing challenges as it develops a community college system based on decentralized governance (Intarakumnerd 2012). Mainland China also has struggled to distinguish the roles and responsibilities of the government and private sector (World Bank and Development Research Center of the State Council of China 2013). Those factors notwithstanding, the larger challenge facing Vietnam's higher education sector may be how to raise awareness among provincial governments of the potential for community colleges to attract good-paying jobs, offer quality undergraduate courses, and increase international competitiveness. On its current trajectory, Vietnam is poised to miss out on attracting employers looking for employees with the skills they need. Singapore, Malaysia, and Thailand are on track to capture the high-skill jobs, while the remaining ASEAN countries, including Vietnam, will primarily attract jobs requiring low-skilled or non-skills labors (Lan 2015). Surveys in 2010 by associations linked to the Vietnamese government showed not only that Vietnamese universities are not producing "the educated workforce that Vietnam's economy and society demand" but also that "as many as 50% of Vietnamese university graduates are unable to find jobs in their area of specialization" (Vallely and Wilkinson 2008, p. 2). More recent figures show that the unemployment rate for bachelor's degree-holding graduates is increasing (Anh 2016). If current trends continue, for example, an estimated 70,000 graduates from teacher-training institutions and teacher education universities will not find teaching jobs (VOV 2016; Cafebiz 2016).

In 2013, Vietnam's Prime Minister adjusted the master plan for its tertiary education network, setting a goal that, by 2020, 70% to 80% of enrollments will be in professionally oriented vocational programs and 20% to 30% in research-oriented programs. MOET's new minister, Dr. Phung Xuan Nha, is a strong proponent of a triple helix model, which is based on partnerships involving the central and local governments, universities and colleges, and businesses and industry (Tapchi.vnu.edu.vn 2009). In a country that has traditionally placed a high value on learning – exemplified by an academic degree – an added dilemma is how Vietnam might funnel more students into education programs that emphasize professional skills that employers demand while also taking care not to limit the full range of academic-oriented options available to students, especially in remote areas or to disadvantaged populations (Raby 2008; Brint and Karabel 1989; Clark 1960). MOET officials in recent years have declined to approve many proposals by provincial authorities to transition local junior colleges into local universities. In 2014, for example, the People's Committee officials in Lao Cai Province wanted to merge its community college with a nearby teacher education junior college to create a local university, but its efforts were unsuccessful.

The Case of Kien Giang

The Mekong Delta, one of the poorest regions of Vietnam (after the northeast mountainous area), showed early promise as a place where community colleges could create both academic education opportunities and job training. Founded by the

Delta's Rach Gia Province in 2002, Kien Giang Community College offered courses in food safety, processing, and preservation which were designed to enhance the export capabilities of the region's rich supply of fruit, vegetables, rice, and seafood (Marklein 2009). It launched a tourism training program to prepare skilled hospitality workers for the burgeoning resort community in Phu Quoc Island, a short ferry ride from Rach Gia. Kien Giang students taking academic courses such as accounting and information technology had the option of continuing their education at Can Tho University, one of the most highly respected institutions in the country. In the community college's first 6 years, the number of educated workers in the Kien Giang Province labor pool nearly doubled, from 8.5% in 2002 to 15% in 2008. Enrollments during that period more than doubled, from 3164 to about 6500, though a number of factors contributed to that surge (Marklein). Do Quoc Trung, then the rector of Kien Giang Community Colleges (he retired in 2009), fears the new generation of leadership of community colleges is not as committed to the traditional mission of community colleges – a mission he argues is crucial in filling the skills gap and providing access to higher education (personal communication, Do Quoc Trung, May 25, 2016).

Today, the college faces more competition for students; Phu Quoc Island, for example, is collaborating with a South Korean institution to offer tourism training. And the vagueness of the 2015 law has thrown the institutions into further turmoil, with disputes among stakeholders over whether community colleges have the authority to offer training. In Kien Giang Province, the People's Committee is preparing a proposal that would merge the community college and a technical-economic junior college. Also under discussion is what to call the institution. VACC members want to preserve the word "community," but local authorities are leaning toward the College Kien Giang (personal communication with acting president Mr. Nguyen Dong Hai, October 14, 2016).

Conclusion and Future Directions

Vaira (2004) argues that the transformation of higher education structures across the globe is a (coercive) product of supranational agents, including United Nations Educational, Scientific and Cultural Organization, the World Bank, International Monetary Fund, Organization for Economic Co-operation and Development, and the European Union. In terms of higher education (and Vietnam) specifically, critics of neoliberal policies argue that a market economy erodes the function of the university as a public good because market demands, as opposed to social needs, drive planning (Nguyen 2011). It is in this context that Vietnam seeks to stake out its intent in moving toward a "socialist-oriented market economy." To date, Du (2016) argues that the "imperfections of the market" outweigh the socialist dimension and have "led to many problems such as inequality, wealth disparity, pollution, corruption, wastefulness and moral decadence as well as social conflicts which are becoming more intense and more severe" (p. 49).

A 2016 report prepared by the Party Central Committee (the 11th Tenure) emphasizes its aspirational quality, describing the country as making a transition to socialism:

While striving for key economic, social and environmental targets as stated in the Socio-Economic Report, we should continue to be innovative and creative in leadership and governance. To focus on further improving the institution of a socialist-oriented market economy, which operates fully, synchronously and effectively by market laws. The State is to use institutions, laws, resources, regulating tools, and distribution and redistribution policies to develop culture, practice democracy, social progress and equity. (Socialist Republic of Vietnam 2016)

How Vietnam will move forward remains to be seen. In terms of Vietnam's higher education reform, Tran and Marginson (2014) note that many of the changes that have already taken place "subtly conform to neoliberal ideology and global forces" but "by themselves are an incomplete blueprint for a distinctively Vietnamese strategy of development in higher education" (p. 137). They suggest that Vietnam's demonstrated history of flexibility, adaptability, and practicality makes the country well positioned to finding a solution. In so doing, Vietnam may contribute to the emerging concept of a Confucian model of higher education. Noting the tendency among Asian universities to imitate Western approaches, Yang (2016) argues that "it is now time to devise an East Asian distinctive 'Idea of University.'" As Tran and Marginson (2014) suggest, Vietnam might do well to look again for answers in the teachings of Ho Chi Minh, who continues to serve as wellspring of inspiration.

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Developing Community Education: A New Model of Community Colleges in Mainland China

10

Yi Leaf Zhang

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Abstract

The American community college model has been gradually adopted by other countries in the world. In recent years, for instance, a growing number of institutions with a title “community college” were established across mainland China. Different from higher professional and technical colleges, most of these community colleges were built upon a well-established system of Radio and Television Universities. This chapter provides an overview of this new model of community colleges in China, how it has been developed, and challenges and opportunities that these institutions are facing as they continue evolving.

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Keywords

Community college · China · Radio and Television University · Community education · Lifelong learning

Introduction

Although the American community colleges were uniquely developed in the USA, they have been adopted in other educational systems in the world (Cohen et al. 2014). These institutions are recognized by a wide variety of names, such as technical universities, career and technology institutes, and regional colleges. Due to the difficulty of achieving a succinct definition for all community-college-like institutions in a global context, researchers (Elsner et al. 2008) summarized the common features that shared among these institutions: (1) mostly open access, (2) non-elitist oriented, (3) focused on student learning, and (4) more flexible in response to the local environment. In addition, Raby (2009) added that these institutions normally (5) offer short-term, semi-, and professional, terminal courses, (6) offer an academic curriculum and confer associate degrees in arts or sciences, and (7) provide pathways to transfer to 4-year institutions.

Resembling the above characteristics, higher professional and technical colleges (HPTCs, *gaodeng zhiye jishu xueyuan*) are often viewed as community-college-like institutions in mainland China (hereafter China), although the majority of them do not hold the name “community college” (Fleishman and Luo 2013; Kong and Gimmetstad 1999). Interestingly, in recent years, a growing number of institutions with an actual title “community college” were established across the nation. Different from the HPTCs, most of these newly developed community colleges were built upon a well-established system of Radio and Television Universities (RTVUs, *guangbo dianshi daxue* or *dianda*). The RTVU system ranks the first in size among the world’s top mega-universities (Elsner et al. 2008) and plays a significant role in China’s online and adult higher education (Wu and Chen 2015). To differentiate these recently developed community colleges from the other community-college-like institutions in China, the former institutions are referred as RTVU-based community colleges in this chapter.

Despite the fact that the RTVU-based community colleges have been rapidly emerging in China’s higher education arena, little is known about the development and current status of these new institutions. In addition, it remains unclear how these community colleges are different from or similar to the other types of community-college-like institutions in China. To address this gap in the literature, therefore, this chapter focuses on this new model of community colleges. First, this chapter provides a brief overview of China’s higher education. It then illustrates the development of the RTVU-based community colleges with detailed examples. Next, this chapter discusses advantages of developing community colleges on the existing RTVU system and challenges faced by these institutions in transition. This chapter concludes with recommendations for future development of RTVU-based community colleges in China.

An Overview of Higher Education in China

China's higher education has a long history; it can be traced back to approximately 3,000 years ago. During the Eastern Zhou Dynasty (770–256 BC), Confucius and his followers established a scholarly and educational tradition that has influenced societies and cultures of China as well as other East Asian regions for centuries (Tu 1990). The contemporary higher education in China began with the birth of the People's Republic of China in 1949. Since then, the higher education system has undergone numerous reforms in responses to the political movements, cultural changes, and socioeconomic development. Notably, China's higher education experienced a rapid increase in enrollment, reforms in educational structures, and improvement in education quality in the past three decades (Cai 2013). According to the Ministry of Education (MOE) of the People's Republic of China, the total number of higher education institutions increased from 1,022 in 1998 to 2,852 in 2015; the number of college students rose from less than 5 million to over 36 million; and the size of faculty and staff grew from 1 million to almost 2.5 million over the same period of time (MOE 1999, 2016).

Higher education institutions in China are typically classified into two major sectors: *conventional* (or *regular*) and *adult* higher education institutions (Li and Chen 1999; Kong and Gimmestad 1999). In 2015, more than 26 million students enrolled in the conventional higher education sector, with an increase of 776,000 students from 2014. Approximately 6.4 million students studied in adult higher education institutions, which decreased 171,900 from the prior year (MOE 2016).

The conventional institutions enroll mainly high school graduates into full-time programs. The conventional higher education institutions comprise graduate and undergraduate degree programs and 2- or 3-year short-cycle programs, which do not award any degrees but diplomas that are similar to associate degrees conferred by US community colleges (Min 2004; Yu et al. 2012). These degree and nondegree conventional programs are provided by a variety of colleges and universities, including (1) comprehensive universities that offer programs across a full range of disciplines; (2) specialized institutions that focus on a particular discipline, such as science and technology, chemistry, medicine, agriculture, music, or fine arts; (3) higher polytechnic institutions that offer mostly short-cycle courses; and (4) independent vocational institutions providing short-cycle courses (Min 2004).

Adult higher education institutions admit not only high school graduates but also workers, employees, and unemployed persons with a secondary education background, into mostly part-time programs (Min 2004). Adult higher education contains a diverse group of colleges and universities, such as workers' universities that prepare employees of state-owned companies; colleges of management that train Communist Party cadres and leaders; cadre management colleges in mining, banking, and other industrial services; women's union colleges; workers' college; ethnic minority colleges; and the correspondence departments and evening schools of conventional institutions (Min 2004; Postiglione et al. 2015). Another noteworthy

component of the adult higher education in China is the RTVUs that offer distance educational programs for both full- and part-time students (Wu and Chen 2015).

These adult higher education institutions are traditionally viewed as a “remedial form” of the conventional higher education, which has rigid enrollment restrictions and rigorous entry requirements (Postiglione et al. 2015, p. 124). As the Chinese government pays more attention to community education to build a learning society and to develop sufficient human resources for national growth, adult higher education has become “a driving force that figures prominently into national development planning” and acts as a key contributor to the workforce preparation for the country (Postiglione et al. 2015, p. 124).

Evolvement of RTVUs

The history of China’s RTVUs can be traced back to the early 1960s when most of the distance learning was delivered through radio, television, and correspondence communication (Wei 1997). The first RTVUs were founded in major cities in China, such as Beijing, Shanghai, and Shenyang, and achieved great success in a relatively short period of time (Wang 1984). For instance, over 8,000 students graduated from the Beijing RTVU, and more than 50,000 students completed single-course studies (Wang 1984). However, the development of RTVUs, along with other types of institutions, was halted due to the Great Cultural Revolution beginning in 1966 (Wei 1997). During this nationwide political movement, the national college entrance examinations (*gaokao*) were rescinded, and many universities and colleges were shut down. In the early 1970s, some colleges and universities started admitting worker-peasant-soldier (*gongnongbing*) students, who were viewed as pillars of the communist society, but the admission decisions were made based solely on political considerations rather than students’ academic preparation (Yu et al. 2012; Min 2004). The college enrollment declined dramatically in 5 years since the beginning of the Cultural Revolution, from 674,400 in 1965 to 47,800 in 1970 (Min 2004, p. 62).

Finally, this radical movement ended a decade later. In 1977, China’s higher education restored the entrance examinations and reopened for enrolling students based on academic performance. This decade-long political movement resulted in a serious recession of conventional higher education development and led to a severe shortage of well-trained labor force. The country needed desperately educational programs that could develop human resources to achieve the “four modernizations (i.e., the modernization of industry, agriculture, national defense, and science and technology)” (Wei 2010). Although the college enrollment increased rapidly to 273,000 in 1977 and to 401,000 in 1978, the nation’s needs of the well-educated workforce remained unmet (Postiglione et al. 2015).

Under this circumstance, the government turned to distance learning to expand higher education access and to produce the needed human resources on a large scale but within a relatively short time (Wei 1997; Hu et al. 1996). This effort led to a full establishment of China Central RTVU (CCRTVU) in Beijing in 1979 and a network of RTVUs across the entire country in the subsequent years (Wei 1997). The *General*

Provisions of Radio and Television Universities (MOE 1988) described the mission of RTVUs as “producing qualified talents to support the socialist construction and to improve the educational levels of the workers in the entire nation” (Section 1, item 3). By 2002, the national RTVU system has established a comprehensive distance learning network that covers all provinces and autonomous regions in China (China Open Education *n.d.*, para 6).

The RTVU network is structured like a pyramid, with a national headquarters and multilayer administration. This system includes different levels of government at different administrative divisions and regions in China, from provinces and municipalities to counties. The headquarter of this system is the CCRTVU, which is located in Beijing and under the direct supervision of the MOE (Xiao 2008). The CCRTVU is responsible for developing a national curriculum and distributing teaching and learning materials for the entire RTVU system. It also determines the examinations and evaluates academic outcomes for the system. Each level of the network is under the supervision of the corresponding educational authority for determining annual appropriation, appointing personnel, and making plans and policies (Keegan 1996). The provincial RTVUs are responsible for admitting students, organizing teaching and learning, and awarding certificates (McCormick 1992).

In total, the China’s RTVU system contains a headquarter (i.e., CCRTVU), 44 provincial RTVUs (PRTVUs), 965 municipal RTVUs (MRTVUs), 1,875 county-level RTVUs (CRTVUs), and over 3,000 teaching and learning centers (Wei 2010). Figure 1 illustrates the structure of the system. This pyramid model is designed to ensure education quality in curriculum design, course delivery, learning evaluation, student support, and staff development. It has also maximized the use of educational resources and reduced discrepancies of policy making among the different institutions in the vast system (Xiao 2008).

Over the years of development, the national network of RTVUs has grown into one of the top ten mega-universities in the world (Postiglione et al. 2015). The RTVU system offers both credited and noncredited programs in various disciplines that are needed to build a skilled workforce for the nation. It offers over 500 diploma

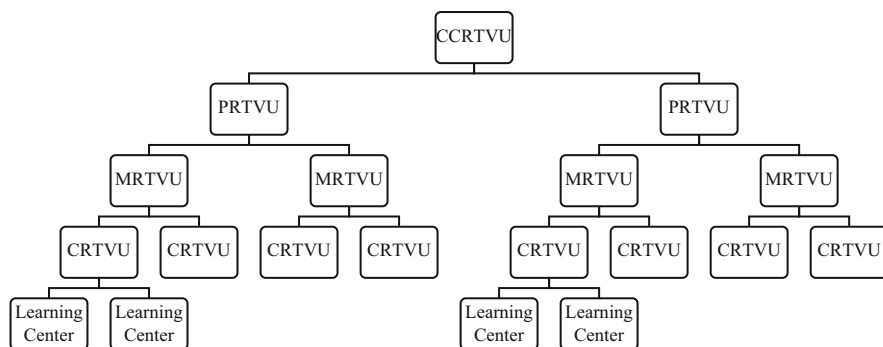


Fig. 1 The RTVU system in China

courses in more than 30 disciplines in economics, law, education, literature, history, science, engineering, agriculture, and medicine (China Open Education n.d.). It has produced 6.95 million degree-education graduates by 2008, which accounted for over one-fourth (27.6%) of students graduated from the adult higher education sector (Wei 2010). Students graduated from the credited programs receive college diplomas, which are recognized by the government as equivalent to ones conferred by conventional colleges and universities (Wei 1997). Additionally, RTVUs provide a wide variety of nondegree programs, such as vocational training, on-the-job training, and continuing education (Wei 1997).

When they were first established, RTVUs delivered educational programs through radio and television lectures, incorporated with textbooks and face-to-face teaching (Wei 1997). With the development of technology in the past decades, self-paced multiple media learning materials have been adopted as primary media of teaching (Xiao 2008). To better reflect the new teaching technologies and delivery mode, the CCRTVU was renamed as the Open University of China (OUC, *kaifang daxue*) in 2012 (OUC n.d., para 1). This CCRTVU's new identity has gradually become known in the society, but its heritage as the national headquarters of RTVUs is still commonly used in public and research. The traditional RTVUs are developing into two major identities: community colleges and distance learning institutions (the RTVU headquarter has been renamed as Open University). I intentionally limited the distance learning aspect of the RTVUs in this chapter, because the focus is on the RTVU-based community colleges. Most of the RTVUs at the lower levels in the system continue using their heritage identity and provide a wide variety of educational programs, through mostly online delivery method, for students at different stages of life.

RTVUs and Community Education

Since the 1990s, China has experienced massive social and economic changes. The society gradually transitioned from a planned to a market economy and became more open to the outside world (Ding et al. 2005). Meanwhile, China's higher education broadened its access to high school graduates, transitioning from systems of elite universities to mass higher education. More students graduated from high schools enrolled in full-time programs offered by conventional higher education institutions (Li and Chen 1999). Studying abroad has also become a more available and affordable option for high school graduates, especially with the assistance of education agencies (Hagedorn and Zhang 2011; Zhang and Hagedorn 2011). Additionally, adult education began to be offered by conventional higher education institutions and has been rapidly developed by departments of regular colleges and universities that provide in-service training and distance education (Li and Chen 1999). Consequently, increased opportunities in other higher education sectors led adult higher education, particularly RTVUs, to struggle with student recruitment.

Meanwhile, the government called attention to continuing education to respond to the increased demands in training migrant and unemployed workers, improving

knowledge of social workers and advancing skills of in-service employees (Xu and Pan 2010). However, institutions in the traditional education sectors could no longer satisfy such needs. As a result, researchers, administrators, and policymakers suggested establishing a more accessible educational system, which has a greater capacity to provide needed programs for people from all walks of life. With a particular focus on community education, the government endeavors to create a learning society, in which every citizen has the opportunity to access learning anywhere anytime. As stated in the *Outline of China's National Plan for Medium and Long-Term Education Reform and Development 2010–2020* (2010), “community education shall be carried out extensively in urban and rural areas, and all kinds of learning organizations shall be established at a faster rate” (p. 21).

Taking the national call for community education as an opportunity to overcome challenges caused by a decline in student enrollment, RTVUs at the provincial or city level transitioned their priority to community education. In addition to the continuous development of online education, many RTVUs have established a *community college/university* (*shequ xueyuan/daxue*) on their campuses, providing mostly non-credited educational programs for a broad range of local learners, such as youth, young adults, and seniors (Liu 2008). The CCRTVU selected over 50 local RTVUs to serve as community education experimental centers or filed schools in 2014 (OUC 2014) and sponsored another six local RTVUs to be community education field schools in 2015 (OUC 2015).

As RTVU-based community colleges are continuously emerging in China's education system, discussion of community college missions has been developed. Zhou (2010) suggested that these RTVU-based community colleges should focus on providing lifelong learning opportunities and building a learning society. Zhou further indicated six major roles that RTVU-based community colleges should play: (1) assisting government with local community education, (2) providing adult education, (3) offering noncredit education and skill training, (4) constructing community cultures, (5) developing modern distance learning programs, and (6) establishing connections among local community colleges and other education agencies in the community. Other researchers (Postiglione 2009; Cai 2008; Liu 2008; Sun 2005) proposed similar responsibilities that community colleges should take. However, such discussion has not been included in a national dialogue, and these community colleges are still unrecognized as a type of institution by national education legislation (Liu 2013; Postiglione 2009).

Examples of RTVU-Based Community Colleges

Most of these newly developed community colleges coexist with the local RTVUs. For instance, Zhejiang (province) RTVU, which comprises 1 central campus, 9 directly governed branch campuses, 10 city-level RTVUs, and 59 county-level RTVUs, is one of the RTVU systems that have explored innovative ways to incorporate community education component in their mission. From early 2008, Zhejiang RTVU built community colleges at each level of its campuses, and it has

developed 11 community colleges at the municipal level and 54 at the county level (Zhejiang RTVU, "College review," n.d.). Zhejiang RTVU focuses primarily on degree-bearing programs, while the community college sector offers noncredit, lifelong learning opportunities for the residents.

Henan province is another example of the new community college model in China. Henan developed its first community college on the campus of the Zhengzhou (the capital city of the Henan province) RTVU in 2013. This new institution, named as Zhengzhou Community College (ZZCC), serving as the headquarters of community colleges in Henan, provides online resources and guides community education activities in the entire province (Fan 2015). ZZCC focus primarily on community education, offering both online and face-to-face classes. During the past few years, ZZCC has developed more than 12,000 video lectures in a wide variety of fields of studies through a community education website (<http://www.zzxue.net>), such as preparation of job interviews, creation of Microsoft Word documents, early childhood education, and physical fitness and deity (Fan 2015; Zhengzhou Online Learning n.d.). In addition, ZZCC has developed software applications that enable learners to access educational materials on their mobile devices, such as smartphones, iPads, and other types of tablets. Besides online learning resources, ZZCC organizes face-to-face courses and learning communities to engage local citizens in lifelong learning opportunities (Zhengzhou Online Learning n.d.).

Demonstrated through above examples, the RTVU-based community colleges have turned themselves into learning centers for local citizens of all ages and serve as the focal point for expanding community education. These functions closely resemble major roles that American community colleges play in community education in the USA. Most 2-year colleges in the USA have developed adult and continuing education programs, in both credit and noncredit forms, for learners with all needs and goals (Cohen et al. 2014). In this respect, the adult education, vocational education, and technical education that is part of RTVU community education can be seen to be a global counterpart institution.

Advantages and Challenges of Developing RTVU-Based Community Colleges

Advantages

A notable achievement of the RTVUs lies in educational access and equity. Over the past three decades, RTVUs have established a comprehensive network that covers not only urban areas but also reaches out to rural regions in China. RTVUs have largely increased higher education participation in rural areas and regions where ethnic minorities predominantly reside and have helped students who otherwise would not have had access to higher education. Students who graduated from RTVUs became more competitive candidates in the job market or successfully entered graduate programs (Ding 1998). Built upon the existing RTVU system, the

community colleges can serve as centers for lifelong learning, benefit a broad range of learners, and continue promoting equal access to education (Zheng 2008).

Another advantage of building community colleges on RTVUs' campuses is the infrastructure for distance education. RTVU-based community colleges can offer educational programs not only in face-to-face classrooms but also in an online learning environment (Zheng 2008). The online community education opportunities can greatly serve people who are unable to physically attend face-to-face classes due to work obligations, family responsibilities, or health issues. With distance learning resources, the RTVU-based community colleges can cast a wider influence on adult education, vocational training, and lifelong learning (Tang and Wu 2008).

Challenges

Although RTVUs have successfully educated many adults through its comprehensive, nationwide learning network, they are facing challenges when building community colleges that aim to provide educational opportunities to *all* citizens. The first challenge is due to the nonformal nature of community education. Most programs offered by the RTVU-based community colleges are noncredit programs that do not lead to a college credential (Liu 2013). RTVU faculty and staff may be concerned whether the institution will become less prestigious when primarily nondegree programs are offered to educate all citizens at all levels. As a result, these RTVU-based community colleges enroll mostly nonelite students. Serving these students may mean "a loss of power" for the community colleges, and such a loss often "corresponds to low budgets, leaders with limited voices, and the systematic undervaluing of education when it comes to the less fortunate" (Raby and Valeau 2013, p. 115). Consequently, administrators, faculty, and staff may not be fully committed to community education nor endorse the RTVU's transformation to a new community college identity. Without the support of the RTVU professionals, local citizens will be less likely to understand what community college is, appreciate the value of community education, and participate in lifelong learning activities (Xu and Pan 2010).

The centralized structure of the RTVU network brings additional challenges in establishing RTVU-based community colleges. As discussed earlier in this chapter, China's RTVUs were created in the late 1970s by the central government to train the urgently needed manpower to realize the "four modernizations." A centralized governance has been developed since then. The CCRTVU is the headquarters of the national system, and likewise, each provincial RTVU serves as the headquarters of the province (Xiao 2008). This pyramid model may work effectively when the government must ensure the development and quality of these institutions at all different levels. However, it might impede RTVUs from catering community education to a variety of needs in the local community, such as children's development, health-related issues, social work, seniors' activities, and vocational skills (Postiglione 2001).

Most importantly, community colleges in China still play a peripheral role in higher education; missions of community colleges have been discussed among scholars and researchers, but have not been articulated by educational authorities or included in state education legislation (Liu 2013; Xu and Pan 2010). Additionally, there is a lack of national guidelines for developing community colleges and support in promoting the community education concept among students, parents, educators, and administrators (Liu 2013). Such marginalization could greatly hinder the community college development in China and limit its potential in serving the society.

Future Directions

As community education is continuously developing in China, establishing community colleges based on the existing RTVU system is a way worth trying to provide educational opportunities not only to meet individual interests but also satisfy the demands of the local community. The following strategies can be considered to promote the community college concept in China and to allow community education to fully blossom.

Autonomy

To better serve the local community, the RTVU-based community colleges should be granted more autonomy in designing courses that are most relevant to the demands of the society (Cai 2008). They should also be supported to collaborate with traditional colleges and universities, government agencies, and not-for-profit organizations to develop programs that are most needed by the public. To achieve this goal, the RTVU-based community colleges should adopt a bottom-up approach, rather than top-down governance. The community colleges should also develop strategies to assess their learners' interests periodically so they can offer programs that always stay abreast of their needs (Zhou 2010; Cai 2008).

Funding Resources

Despite the dramatic increase in the number of community colleges on RTVU campuses in the past few years, the central government still prioritizes funding for its top research universities (Jiang 2010). If the state truly believes RTVU-based community colleges should serve as resource centers for anyone seeking educational opportunities, it should provide sustainable funding for these institutions. It is especially critical for community colleges because they endeavor to promote community education, which normally does not generate large revenue, if any, for the institution. With sufficient government funding, community colleges do not have to make revenue-driven decisions and can offer a wide variety of programs that indeed

benefit the society (Gao and Zhang 2012). In addition to the government support, private funding should be encouraged. The community colleges should be granted more flexibility in raising funds from local resources and collaborating with local agencies to maximize continuing and community education (Kong and Gimmestad 1999).

Redefining Community College

When discussing China's community colleges, researchers often refer to vocational and technical higher education institutions as counterparts of the American community colleges or referred as "community-college-like institutions" (Fleishman and Luo 2013). However, most of these institutions do not actually hold "community" in their title. In addition, in the early 1990s, a number of community colleges, with "community" in their names, were established with the support of Ford Foundation and the US-China Education Foundation (Postiglione 2009). These colleges were closely modeled after the US community colleges and were intended to offer both degree and nondegree programs (Postiglione 2009). Different from these models, RTVU-based community colleges have been rapidly emerging in the past few years to respond to the social and educational demands of community education. Many adopted "community college" in their official titles and offer primarily noncredit programs without any college credentials.

Given such a diverse background, it can be challenging for the public to develop a truthful understanding of what the community college is and what role it can play in their education. It also causes confusion when scholars and researchers discuss ways of developing community colleges due to the lack of a clear classification (Postiglione 2009). Thus, redefining community college and clarifying its mission are critical steps for the future development of China's community colleges. Meanwhile, the state should enact national education legislation to recognize roles of community colleges play in China's education, to promote the community college concept, and to ensure their rights to succeed. National guidance and policies for community colleges are also urgently needed to boost community education in China (Xu and Pan 2010).

In summary, as China embarks on promoting community education and building a learning society, the RTVU-based community colleges have evolved into a new model of community colleges and will continue to develop over the coming years. It is believed that these institutions, as new counterparts of American community colleges, can best respond to the education and training needs in the local community, advance regional economic development, and address the ever-growing demands for lifelong learning opportunities. To better understand this unique phenomenon of community college development and maximize the RTVUs' resources in the adult and continuing education in China, the RTVU-based community colleges warrant more systematic analysis and empirical investigation.

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Reenvisioning Community Colleges in Nepal: Preparing All Students for Success

11

Krishna Bista and Uttam Gaulee

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Abstract

This chapter presents an overview of Nepalese higher education and envisions an integrated system that mirrors the framework and mission of US style community colleges. It also highlights a policy discussion with higher education leaders from Nepal regarding the creation of alternative models of higher education that can be based on existing community-based colleges. The discussion illustrates how the rapid expansions in higher education in Nepal is demanding the creation of new

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policies and the possibility of even creating a new system that can accommodate the increasing number of students wanting access to higher education every year.

Keywords

Community college · Higher education · Nepal · Student success

Introduction

In recent years, the government of Nepal has been working on refining the higher education policy to guide the strategic planning of the higher education system. These discussions are being made in order to address the need for economic and workforce development, college effectiveness, governance, and leadership roles and introducing college credit transfer and semester system. In November, 2011, a conference was held in Kathmandu in which the National Planning Commission and University Grants Commission collaborated with the United Nations Educational, Scientific, and Cultural Organization (UNESCO) and the World Bank to design a policy framework in order to capitalize on Nepal's achievements within the nation's short history of higher education (first University opened in 1959). The framework emphasized that the war-torn country's higher education policies have not been brought up to date due to long-standing political deadlocks that have led to extreme complexities and fluidity in the political system. Finally, the framework acknowledged that the rapid expansions in higher education urgently demanded new policies and the possibility of even creating a new system that can accommodate the increasing number of students wanting access to higher education every year.

Higher Educational Reform Policies

Reform of higher education has been a high priority for Nepal to help expand access and to enhance the quality of higher education. The World Bank is playing a major role in assisting Nepal to reform higher education. First, the World Bank's Country Assistance Strategy (2004–2007) supported Nepal's poverty reduction strategy. This strategy was based on four pillars: broad-based economic growth, social sector development, social inclusion, and good governance. The higher education sector played a critical role in supporting the first two pillars, of broad-based economic growth and social sector development. One result was implementation of the first Higher Education Project (HEP) which decentralized campuses in Tribhuvan University (TU). These actions improved financial sustainability and quality through the Engineering Education Project. The World Bank's Second Higher Education Project (SHEP) had several aims to improve Higher Education. These goals were to enhance access of higher education for marginalized populations, to enhance the quality and relevance of higher education, to develop new research through a set of incentives for promoting effective management, and to gain financial sustainability of academic institutions (The World Bank 2014).

Currently, the Higher Education Reform Project (HERP) is being implemented through the University Grants Commission, which acts as the higher education regulatory body of the country. HERP has similar goals to those of SHEP. The HERP projects' intent is to aid in "improving quality, relevance, and efficiency of higher education and supporting underprivileged students for equitable access; and promoting research, innovation and academic excellence" (UGC 2015, p. 2). The HERP has two major components, (a) implementation of reforms and (b) capacity building and project management. The first component, implementation of reforms, has seven target areas.

- National accreditation system established and functioning
- Performance-based financing extended to higher education
- Autonomy extended to additional campuses/schools (known as community campuses)
- Examination reforms implemented and academic calendar enforced in TU
- Academic reforms introduced
- Poverty targeted financial support for underprivileged students
- Academic excellence and research

The HERP framework has laid out institutional arrangements for the project implementation by applying key performance indicators to measure success. The faculty and students of the universities, as well as the affiliated community campuses, are among the beneficiaries of the project (UGC 2015).

Nepal's current, postconflict emphasis is on poverty alleviation, creation of jobs, and strengthening the newly achieved democracy through social harmony. Although significant progress has been made toward providing basic education, higher education is still a distant dream for a staggering majority of qualified youth. Nepalese higher education gross enrolment ratio of 17.11% is one of the lowest in South Asia (The World Bank 2014). At the thirteenth South Asian Association for Regional Cooperation (SAARC) Summit held in Dhaka in November 2005, the leaders of these South Asian nations noted the achievements of the Member States during recent years in primary education and stressed in order to meet the challenges of all seven member countries, they must make important strides in the areas of science, technology, and higher education. As described in the World Bank's 2000 report "Higher Education in Developing Countries: Peril and Promise," Nepal is no exception to many other developing countries, with a dual challenge of expanding their higher education system and improving quality, all within continuing budgetary constraints.

According to the World Bank (2015), there are over 28.51 million people living in Nepal, with a 65.9% literacy rate, and classified by gender literacy rates are male 75.1% and female 57.4%. Nepalese higher education system, based on British educational system, is highly traditional, without much focus on workforce market or the empowerment of the disadvantaged and the underprivileged people. Traditional college degrees are either a three-year bachelor's degree or a 4-year degree, in all disciplines. Current Nepalese education has failed to offer appropriate content

knowledge, skills, hands-on training for employment in partnership with local industry and community programs. A large number of college graduates from liberal arts, education, and sciences are unemployed, and many of them have gone to India and Middle-East countries for labor. Over 300,000 people leave Nepal each year to find work, much of it backbreaking labor in Kuwait, Malaysia, Qatar, Saudi Arabia, South Korea, and India (Harris 2014).

An alternative system of higher education in Nepal is needed to overcome high unemployment rate, illiteracy, social-cultural discrimination, gender discrimination, and underprepared manpower in the country. There are limited vocational or community-based colleges that promote job oriented, work related skills for adult students in Nepal. We, therefore, strongly propose the concept of the community college system as one of the effective educational models to address these major issues of Nepal. In this chapter, we share how the US community college model as a potential framework for Nepalese postsecondary education.

History of Postsecondary Education in Nepal

The establishment of Tri-Chandra College in 1918 marked the beginning of modern higher education in Nepal. Since Nepal did not have a university of its own, Tri-Chandra College was affiliated to Calcutta University in India. The Himalayan Nation was under the autocratic rule of Rana family, who were against educating people. “With the opening of this college, I have hacked my own leg,” Chandra Shamsher, then Rana Prime Minister of Nepal, reportedly made this remark at the 1918 inauguration of Nepal’s first institution of Tri-Chandra College, whose name, ironically, combines the first name of Shamsher himself with an abbreviated form of the then King Tribhuvan’s. Tri-Chandra College was not accessible to the general public, as this college served only elites, mainly to produce bureaucrats for the government or to prepare some for advanced studies in India. Shamsher, as a member of the autocratic ruling family of the time, was opposed to higher education for the masses because he saw it as a threat to himself and the other rulers of that time. In fact, his fear was warranted because a small number of educated people in Nepal did join hands with the other educated in India to topple the 104-year-old Nepalese aristocracy in 1951 (Gaulee 2014).

The first university in Nepal, Tribhuvan University (TU), was established in 1959. A few years before, in 1951, the first public colleges and the first community colleges were opened. In Nepal, a public college, is usually funded by the community (e.g., from local taxes) and a community college is one that is funded privately. Unlike a community college in the US or Canada, a typical Nepali public college and a typical community college are satellite campuses of a larger university. Neither the public college nor the community college has an independent curriculum or degree-granting authority. Students enroll based on the university enrollment exam and receive a university degree if they pass the nationally administered examinations

externally controlled by the affiliated university (in most cases Tribhuvan University). In addition, the terms colleges and campuses are synonymous in Nepal because all colleges are affiliated with a university for examination and degree granting purpose and while they are all satellite campuses, some like to call themselves colleges. Due to lack of an accreditation system, an independent degree-granting “college” did not exist.

By 1965, there were five public colleges with a total enrolment of 5,000 and 51 community colleges with a total enrolment of 10,000 students. In 1971, all community colleges were nationalized and became part of Tribhuvan University (TU). During the 2014/2015 academic year, there were over 384,499 students enrolled in Tribhuvan University academic programs; one third of the total students were from 60 constituent campuses and central departments, the other two third were from 1063 affiliated public colleges and/or community colleges (Tribhuvan University 2016). A constituent campus is one owned by the university itself while public or community colleges are considered to be affiliated in that they pay an affiliation fee to the university (somehow like a franchise). Currently, there are nine universities that offer a wide range of programs in natural sciences, social sciences, medical sciences, business and computer sciences, education, and other technical fields. The funding to all universities is channeled through the University Grants Commission (UGC) with the exception of B. P. Koirala Institute of Health Sciences, which receives grants from the Ministry of Health. It is important to note that the Nepal community colleges are not an integral part of the university, but nonetheless must follow the university syllabus, examination, and degree programs.

Current Structure

The Nepal higher education system includes four institutional forms. There are nine universities. Only one university, Kathmandu University, is private. However, it is important to note that no university is 100% public or private. Some public universities rely on varying degrees of private funds whereas the private university also receives government grants. The constituent campuses are an integral part of their respective universities. As noted previously, these institutions can be called: campuses or colleges. Constituent campuses are large centers and are located in main cities of the country. All institutions that are non-constituent campuses are called affiliated campuses. Affiliated campuses are located throughout the country and are all affiliated with a specific university. The affiliated campus follows the same admission requirement, curriculum, and examination as the university to which they are affiliated to. There are two types of nonaffiliated colleges: (a) Public colleges: These are community funded and, therefore, are sometimes referred to as community colleges; (b) Private colleges, although are privately funded, otherwise operate in the same ways as do community colleges. In addition, there are also International Colleges in Nepal.

International Colleges are located usually in the capital and are a branch of an international university. They are funded from the international university and use their enrollment, curriculum, and examination structure. Finally, there are institutions that offer Technical Education and Vocational Training (TEVT) at the high school and posthigh school level. Most of the TEVT institutions are not considered to be part of the higher education system.

According to the Ministry of Education (2015), there were 1,369 higher education campuses in Nepal. Out of these campuses, 98 (7.2%) are constituent campuses of universities, 839 (61.3%) are private, and 432 (31.5%) are community college campuses. In recent years, many private campuses have been established with foreign university affiliations. Tribhuvan University still has the largest share (83.8%) of the total higher education enrollment. The share of remaining universities and medical academies is less than 15% and below 1%, respectively. The enrolment proportion in terms of field of study is very high in the general programs (86.33% of the total) and low in technical programs (13.66%). Table 1 illustrates the status of higher education institutions.

Student Enrollment

Even though private colleges (many of which are affiliated with international universities) outnumber community colleges (i.e., satellite campuses of existing Nepal universities), a majority of students still attend public or community colleges and to constituent campuses. Enrollment wise, the share of community campuses is 32.8% while the share of constituent campuses is 31.4% and that of private campuses is 35.8%. Looking at the level of degree enrolment distribution, the vast number of students (82.52%) is at bachelor's level followed by 17.4% at the master's level. These figures for M.Phil. and Ph.D. are less than 1%. Enrolments in education, management, and humanities are 34%, 30.5%, and 20.02%, respectively. For engineering, medicine, science, and technology, this value is 5%, 4.5%, and 4.2%, respectively. The forestry, agriculture, Ayurveda, and Sanskrit faculties have below 1% students in each (UGC 2012). Humanities and social sciences have been the most popular programs in Nepal (Table 2).

However, management and education are growing fields. There could be many reasons including accessibility and affordability, but obviously, humanities have low job prospects. Hence, the number has continued to decline. Table 3 illustrates the UGC-affiliated community colleges.

Students in public and community colleges, similar to the university, take college courses during morning or evening shifts. Most Nepalese undergraduate students are full-time students and may not work elsewhere while studying. As a cultural norm, parents pay the cost of education for their children and follow the wishes of parents. Sometimes college students have little motivation or no interest in pursuing a traditional college degree because of the growing number of unemployed graduates (Khaniya 2007). There are many cases where students have dropped the programs or changed their majors frequently.

Table 1 Status of higher education institutions in Nepal, 2015

University/Academy	Number of campuses			Enrollment				
	Constituent	Community	Private	Total	Constituent	Community	Private	Total
University	60	424	639	1123	126590	149044	108865	384499
Tribhuvan University (TU), 1959	14	2	2	18	3387	151	324	3862
Nepal Sanskrit University, 1986	6	0	15	21	5476	0	9074	14550
Kathmandu University, 1991	5	6	120	131	887	1149	22405	24441
Purbanchal University, 1994	4	0	58	62	1782	0	23472	25254
Pokhara University, 1997	1	0	5	6	112	0	129	241
Lumbini Baudha University, 2005	1	0	0	1	1944	0	0	1944
Mid-western University, 2012	2	0	0	2	446	0	0	446
Agriculture and Forestry University, 2012								
Far-western University, 2012	1	0	0	1	2461	0	0	2461
B.P. Koirala Institute of Health Sciences (Medical Academy), 1993	1	0	0	1	443	0	0	443
National Academy of Medical Sciences (Medical Academy), 2002	1	0	0	1	245	0	0	245
Patan Academy of Health Sciences (Medical Academy), 2009	1	0	0	1	235	0	0	235
Karnali Academy of Health Science (Medical Academy), n/a	1	0	0	1	0	0	0	0
Total	98	432	839	1369	144008	150344	164269	458621

Source: Ministry of Education (2015)

Table 2 Students enrollment in higher education (universities)

Faculty/Discipline	2012/13	2013/14	2014/15
Buddhist Studies	33	302	241
Ayurveda	104	86	N/A
Forestry	996	1122	597
Agriculture and Animal Sciences	1524	1444	1660
Sanskrit	1485	1151	3862
Law	4198	816	3832
Medicine	13782	18817	17857
Engineering	10998	12402	18216
Science and Technology	7127	21258	28296
Humanities and Social Sciences	178666	86580	57424
Management	107087	193716	168843
Education	97706	226390	157793
Total	423706	564084	458621

Source: Central Bureau of Statistics of Nepal (2016)

Table 3 UGC-affiliated community colleges in Nepal (2016)

Colleges and locations	Degree programs
1. Balkumari College, Chitwan	B.Ed., B.Sc., B.B.S, M.B.S, M.Ed.
2. Janapriya Multiple Campus, Pokhara	B.Sc., B.B.A, M.B.A
3. Baneshwor Campus, Shantinagar, Kathmandu	B.Ed., B.B.S., B.A., M.B.A.
4. Pashupati Multiple Campus, Kathmandu	B.Ed., B.A., B.B.S., M.B.A., M.A.
5. Saptagandaki Multiple Campus, Chitwan	B.Ed., B.A., B.B.S., M.A.
6. Makwanpur Multiple Campus, Hetauda	B.Ed., B.A., B.B.S.
7. Lumbini Banijya Campus, Butwal	B.B.M., B.B.S., M.B.S.
8. Kailali Multiple Campus, Dhangadi, Kailali	B.Ed., B.A., B.B.S., M.A.
9. Damak Multiple Campus, Jhapa	B.Ed., B.A., B.B.S., M.A., M.B.S.
10. Tikapur Multiple Campus, Kailali	B.A., B.B.S., B.Ed., M.A., M.Ed., M.B.S.
11. Shaheed Smriti Multiple Campus, Chitwan	B.A., B.Ed., B.B.M., B.B.S., M.Ed., M.A.

Note. Bachelor in Education (B.Ed.), Bachelor of Arts (B.A.), Bachelor in Science (B.Sc.), Bachelor in Business Studies (B.B.S.), Bachelor's in Business Management (B.B.M.), Master in Business Studies (M.B.S.), Master in Education (M.Ed.), and Master of Arts (M.A.)

Funding and Oversight

In Nepalese postsecondary education, the University Grants Commission oversees the funding and monitoring of all educational programs that includes bachelors, masters, and doctoral degrees. Universities in Nepal enjoy significant autonomy. The duration of a bachelor's degree is 3–5 years and a master's degree is 2 years. Nepalese doctoral degrees are research-based degrees, and are rigorously evaluated by a team of experts, usually consisting of at least one renowned scholar from an external university. Constituent campuses or colleges receive public funding and universities oversee their academic, administrative, and financial management.

Affiliated campuses do not receive public funding, but universities are still responsible for supervision of their academic programs and examinations. In addition to public and private, there are some campuses which are funded and managed by the communities. Community colleges receive very small amount of financial support for capital costs from the government through the University Grants Commission. Since there is no accrediting body so far, degree-granting power only emanates from the government – the legislature to be precise. Each of universities in Nepal is established by an act passed from the national legislature. This makes colleges follow the “academic” subjects prescribed by the university that they are affiliated with. As a result, colleges lack engagement with community or industry.

Technical and Vocational Education (TVE) in Nepal

The Council for Technical Education and Vocational Training (CTEVT) constituted in 1989 is an autonomous body of technical and vocational education and training in Nepal. It is mainly involved in policy formulation, quality control, and preparation of competency-based curriculum, developing skill standards of various occupations, conducting research studies, and training assessment. CTEVT offers proficiency (high school equivalent) and short-cycle diploma level (posthigh school degrees), technical school certificates, and short-term vocational and skill training. CTEVT programs range from 39 h to 1500 h. Students with high school certificate (grade 10) can complete the technical education degree in 15 months and those who come without high school diploma can take a minimum of 29 months.

CTEVT courses are offered in the field of agriculture, engineering, health, office management, social mobilization, and tourism. Table 4 shows some of the courses offered. CTEVT’s higher level courses, also known as Certificate/Diploma, require at least 3 years to complete, after posthigh school degree. Most of the students find jobs or can generate income by working on their own because these programs are designed to address community need. However, a direct business partnership model with the educational institution does not exist.

While CTEVT is an extended part of the secondary construct, because it has a resemblance with the vocational and technical mission of US or Canada community college, it may be considered to have similarities to a community college global counterpart (CETVT 2016), especially as many are being upgraded to serve the postsecondary market.

Need to Create a Vision for a New Nepalese Community College

As per the University Grants Commission, there are 343 community colleges (38.2%) of all higher education campuses in the country (UGC 2012). As previously mentioned, community colleges are affiliated with existing universities and all of them offer bachelors and master degrees conferred by that university. Most of these community colleges tend to operate like “ivory towers” in which the central

Table 4 Selected CTEVT vocational and technical courses/programs

Vocational programs (2 years or less)	Technical programs (3 years or more)
Animal/Agricultural Science ✓ Dairy Product/Sweets Makers ✓ Community Livestock Assistant ✓ Tea Plantation and Management ✓ Assistant Florist/Garden Designer ✓ Beekeeper	Animal/Agriculture ✓ Junior Technical Assistant (Plant/Animal Science) ✓ Diploma in Food and Dairy Technology
Computer/Electronics/Mechanical/ Medical ✓ Computer Service Technician ✓ Telecom Technician ✓ Building Electrician ✓ Motorbike Mechanic ✓ Refrigerator and Air Conditioner ✓ Assistant Welder ✓ Lab Assistant	Computer/Electronics/ Engineering/Medical ✓ Diploma in Civil Engineering ✓ Diploma in Computer Engineering ✓ Sub-Overseer in Automobile/Civil ✓ Diploma in Electrical Engineering ✓ Diploma in Dental Science ✓ Diploma in Pharmacy ✓ Certificate in Ayurvedic Science

Source: CTEVT (2016)

university controls the curriculum and examinations. Credentials are seen to be more important than skills in these community-based colleges. As such, the framework and curriculum of these programs are different from the US community colleges in terms of structure, types of programs, entry requirements, community partnership, and collaboration, and autonomy of the colleges.

There are currently no colleges in Nepal that offer a US 2 year of college degree (Associate Degree) for students after completion of high school (grades 11 and 12). There is also no structure in which a student can attend a college and then transfer completed academic work to a university. Moreover, the existing Nepalese community college programs and courses do not suggest there are community colleges that help meet the workforce needs of the local communities. As such, the existing Nepal community colleges cannot be considered to be a global counterpart as identified in this book.

However, there are two characteristics of the community colleges in Nepal that share characteristics with US community colleges. Noteworthy is that the University Grants Commission of Nepal (2016) listed 11 institutions as community campuses affiliated with Tribhuvan University as participating in the Secondary Higher Education Project (SHEP). The SHEP project aims to (a) enhance quality and relevance of higher education and research through a set of incentives for promoting effective management and financial sustainability of academic institutions; and (b) improved access for academically qualified underprivileged students, including girls, dalits, and educationally disadvantaged janjatis to higher education through financial assistance and enhanced capacity of higher secondary schools (World Bank 2014). The nontraditional student outreach of existing community colleges of Nepal and the location outside of major cities share commonalities with US community colleges.

There is also acknowledgement of the role that a US-style community college could play in reforming Nepal higher education. Nagasundaram and Deosthale

(2013) suggest that “the establishment of community colleges could provide an opportunity for the youth to acquire tangible skills that are directly transferable to the marketplace” (p. 24) as well successfully complete the degrees. It remains possible that a new community college model, similar in style to the US or Canadian model, could facilitate changes to help higher education transformational approach to address unemployment and social and cultural disparities in Nepal.

US community colleges play a role in workforce training, open access, and flexible pathways (Hartenstine 2013). The influence of US community colleges is strong as Mellon and Heelan (2014) noted that “AMERICA as we know it today would not exist without her community colleges. The inclusive, democratic, and meritocratic impulses of the community colleges, and the transparent boundaries between college, work, and social life, have kept alive a promise of advancement and opportunity unlike any other institution in the United States” (p. xiii). Looking at history of America’s higher education, it becomes clear that US adopted a policy of democratizing education to propel the economy forward (Brown 2012). Mellon and Heelan (2014) argued that community colleges focus on multiple constituencies within the community, identify the community needs and provide increased opportunities for education for larger numbers of both new, traditional-aged students, and older incumbent workers. Hence, “. . .the community college model may form a powerful example for developing countries ... which will need to educate an increasing percentage of their populations” (Mellow and Heelan 2014, p. 3). Refining this argument more contextually, Raby and Valeau (2009, 2012, 2016) observe that multiple systems of colleges around the world are conforming to the globalized concept of a community college by offering flexible post-secondary education to underserved students in a local context. US community colleges are also known as learning-centered colleges as they put students’ learning first. The learning-centered college offers educational programs and experiences available for learners based on individual needs. Whatever is done in the learning college is done for learners (Bista 2011). This as well can benefit the students and the emerging local Nepal economy.

A few aspects of the US community college can be applicable for a developing country like Nepal to strengthen workforce education in Nepal. Traditional universities (Tribhuvan University, Kathmandu University, Mid-Western University, and other affiliated campuses) do not have precise programs and resources to address the workforce need of the entire country. Existing Nepalese college degrees also do not support workforce development. Nepalese colleges offer numerous humanities courses, which could be transformed into or supplemented with technical and vocational types so that students can hit the ground running with such income generating courses. Today, there is a dire need of technical, vocational, and workforce suitable degrees in the Nepalese labor market.

A new version of Nepalese community-based colleges can offer more practical job-oriented associate degrees and make a pathway to university education. In collaboration with the university, CTEVT, and the US Agency for International Development (USAID), Nepal has a high potential to develop strategy for career suitable program, faculty recruitment, and professional development. Similar to

Hartenstine's (2013) recommendation, a government level policy and a strong strategic plan would help in developing a meaningful outcome. As an example, Panwar (2013) explained how Indira Gandhi National Open University established a large Indian community college system (includes more than 540 colleges) in collaboration with National Knowledge Commission, Distance Education Council, and other government parties.

Based on Alphonse (2013) suggestion to consider the need of the communities and people, a new version of the Nepalese community college curricula can include as many components as life coping skills, international relations, computer skills, developmental English, work skills, internship, and preparation for employment. These elements are important to make the system applicable to community people. As seen in American community colleges, Nepalese community colleges can also offer courses a wide range of associate degrees and certificates. Valeau (2013) believed that the aim of these community colleges is to empower disadvantaged groups through skills development leading to gainful employment. Bearing in mind, Nepal has a growing agro-based economy, social stratification based on caste and cultural variations, low literacy rate, and high unemployment, education received by a US-style community college could provide a successful bridge between quality life and social transformation. Based on our experience and teaching in both the US and Nepal, we strongly believe that the US or Canadian model of the community college could play a key role in reinforcing skills, knowledge, and workforce manpower of the country.

Another application is increasing access. A new version of Nepalese community colleges could be a global counterpart of community colleges had they not been parts of comprehensive university. The missing part is community engagement in economic sense. As mentioned above, these "community colleges" in Nepal are serving as satellite campuses for universities to further education serving as instructional centers. However, the decentralization of colleges is reducing the burden on Tribhuvan University and independent-style community colleges could help in that process.

The final application is to apply the US community college model characteristic of flexibility to select the courses of their interests or individual needs. Currently, students do not have an option to select the courses that suit individual needs in their degree programs. However, adoption of the US or Canadian model community college education would allow working individuals to take classes that coincide with their schedules, and financially support themselves and their families. Since there is no credit transfer system in any college degrees in Nepal, the new version community college model could be a practical gateway to help students not only to earn a college degree but also later transfer credit to another college or university in Nepal or elsewhere. Having developed such credit transfer process, Nepalese students coming from community college can pursue future education in the United States, Canada, and elsewhere.

A new system of community colleges would be complimentary to what exists because the existing universities operate without much community engagement or industry partnership. While they behave like the "ivory towers," they complain that

they have to admit too many students. They cannot focus on quality education and scholarship due to a growing pressure of higher education access. A new system of community college could therefore address the issues of access, as well as employability while allowing the university system to be “selective” as they would like to be and also focus their attention more on research. During one of the coauthor’s visit to Nepal in the summer of 2015, numerous higher education leaders talked about new options for higher education. A new community college model could support these ideas.

Challenges for a New Nepalese Community College Model

Although some vocational and technical colleges (VET) offer a wide range of programs to help students and communities in Nepal, there are some clear distinctions that remove them from the university sector. First, Nepalese vocational and technical colleges are structured in such a way that they do not give students a pathway to university education. Secondly, existing curricula are different as the Nepal CTVET is limited, less practical, and institutions have failed to offer skills and knowledge to meet the knowledge economy demand of the Nepalese labor market. There are also no bridge courses or 2-year associate degree programs for students to ensure employability and competency of individual trained, life skills, and communication in English.

One of the major challenges in adopting the US Community college model could be establishing a system of trust so that individual colleges receive autonomy to conduct their own admissions, curriculum, examinations, issue certificates and diplomas, partner with local communities, and recruit teachers and students. The flexibility by becoming an autonomous entity could result in developing a stronger collaboration between the government and the community. Valeau (2013) believed that the community college model is “one of the most widely adopted forms of education world-wide and portends to be one of the systems of choice for reforming education” (p. 28). To maximize this potential opportunity, the existing Nepalese higher education system can adopt such a shift to bring a reform in academia. One option is to take the case of Indira Gandhi National Open University, on how a university established more than 540 community colleges in India, loosely based on the US model. Since Nepal and India share similar social, cultural, and educational characteristics, this could be an example of the emergence of community college as a positive change agent for Nepal. However, as Gross (2017a, b) noted, the concept of community college has yet to obtain full recognition in the Indian higher education system and hence community colleges are “in danger of falling victim to the fickle winds of political and economic change” (para. 30). Tracing more than two decades of community college development initiative in India, Gross (2017b) argued that the future of community college would depend on the “collective action of many” (p. 14). Apparently, Nepal would require strong political commitment backed up by a concerted effort from the higher education leaders to transform the system.

Conclusion

Are there community colleges in Nepal? The answer is complicated. If we look at Nepal's existing system of colleges, there is neither community college nor an institution that could be considered a global counterpart. The reason for this is that existing community colleges all follow a curriculum prescribed by the university that they are affiliated with. At the same time, the link to the local community, the access to students who do not live in the capital cities, do have elements of an US community college.

It can be argued that the establishment of a system of community college education would be a promising road for Nepalese postsecondary education to enhance economic, social, and cultural shifts. As seen in other emerging countries, Nepalese community college could become a change agent to help promote labor market with skills, technology, knowledge, and experience for youth. The US community college model can be built in the existing vocational and technical colleges as well as universities and their affiliated colleges. As an option, current colleges and universities can partner with American community colleges. A new model can be replicated and refined by its programs and courses depending on the local needs, depending on the economy and infrastructures. Nepal can promote social justice, support job market, and build mechanism to reduce poverty, unemployment, and gender inequality by establishing and implementing a community college education successfully. Such education system will not only allow Nepalese students be productive contributors of local economy, it can also better equip with the multitude of Nepalese youth seeking employment or further education abroad. In order to have such reforms in existing education, Nepalese educators, policy makers, and researchers should examine the best practices of community colleges in the US and other countries. This will allow them an opportunity to consider local resources, potential future collaboration, and restructuring current programs in higher education. Based on our higher education experience and expertise in the United States and Nepal, we strongly believe that community college education system would be an effective educational transformation for preparing all students for success.

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Translating the Community College Concept in India

12

Jillian Gross

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Abstract

Since 1995, Indian educational reformers have promoted the community college concept as a tool for national development. Educational reformers regularly position the community college as a tool to remedy systemic issues of quality and inequality in India's postsecondary education. Guided by a mandate for quality educational reform through skill development, community colleges have spread to every state in the nation. Regardless of their field position in higher

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education, community colleges are framed as providing “education for employment” and as a “vehicle” to transform a rigid and inequitable education system. Institutional theory would predict that a single stable organizational model would result from the unified effort of advocates advancing the community college concept. Yet, implementation remains fragmented with community colleges operating as nongovernmental organizations (NGO) at the periphery of formal education or as small departments embedded in government-funded institutions (Gross 2017a). Therefore, I explore the translation of the community college concept in India. Data include interviews with 27 community college advocates supplemented by policy documents, reports, and popular media portrayals of community colleges. Findings suggest that advocates of both models adhere to a widely popular narrative about educational reform through skill development, but differ in their approach to implementation. The result is parallel organizational forms that converge conceptually on the goal and purpose of the community college, but diverge in terms of policy and regulatory backing. In addition to providing theoretical insights into how institutional phenomena function in an emerging economy, this research has critical policy implications for community college development.

Keywords

Community Colleges · India · Institutional Entrepreneurship · Translation · Skill Development · Educational Reform

Introduction

Countries around the world regularly invoke community colleges as a tool for economic and social justice; India is no exception. Educational reformers regularly position the community college as a tool to remedy systemic issues of quality and inequality in India’s postsecondary education (Valeau and Raby 2015). Guided by a mandate for quality educational reform through skill development, community colleges have spread to almost all the 29 states and 7 union territories in India since 1995. Yet, implementation remains fragmented with community colleges operating as nongovernmental organizations (NGO) at the periphery of formal education or as small departments embedded in government-funded institutions (Gross 2017a). Regardless of their field position in higher education, community colleges are framed as providing “education for employment” and as a “vehicle” to transform a rigid and inequitable education system.

To date, a small troupe of national advocates including NGOs and foundations, highly influential academics, and government officials has driven community college development, each with differing levels of interaction with practitioners (Gross 2017a). Conceptualized as institutional entrepreneurs, these advocates are “socially skilled actors who work to justify and legitimate new kinds of social arrangements” (David et al. 2013, 358). The primary legitimization project of institutional entrepreneurs is translation, which occurs when a common idea, such as the community

college concept, is taken from one context and is promoted in another as an appropriate problem solution set (Sahlin and Wedlin 2008; Czarniawska and Joerges 1996). Translation is a multilevel process that incorporates appropriately framing ideas for broad public acceptance, implementation through practice, and securing public policy support. With few exceptions (e.g., Delbridge and Edwards 2013; Dunn and Jones 2010; Purdy and Gray 2009), extant literature assumes that the translation process led by institutional entrepreneurs should result in a single stable organizational model with some local variation (Boxenbaum and Jonsson 2009; Sahlin and Wedlin 2008). Yet, the fragmented community college system in India does not conform to theoretical expectations.

Instead, advocates of both NGO and government-funded models adhere to a widely popular narrative about the goal and purpose of the community college, but differ in their approach to implementation. For NGO community colleges, practice preceded policy while the reverse is true for government-funded community colleges. Thus, NGO community colleges maintain a stronghold of legitimacy based on their outcomes and reputation in the local community, while government-funded community colleges can rely on the legitimacy of regulatory support and the reputation of their parent institution. This difference in translation has resulted in parallel organizational forms that converge conceptually on the idea of educational reform through skill development – a comprehensive term for technical and vocational education and training – but diverge in terms of policy and regulatory backing.

As a result of advocates' efforts, the community colleges concept has infiltrated national level policy and practice, but the stability of community college form, function, and field position remains in flux. Hard won legitimacy that community colleges have achieved through practice *and* policy is currently under threat due to a shift in public policy priorities at the national level as well as a near complete turnover among community college advocates. Therefore, understanding the translation of the community college concept is critical if this potentially transformative educational approach is to be saved from a fate of “fester[ing] rather than flourish [ing]” (Swidler 2009, 197). In response, this study explores how advocates perceive challenges and opportunities facing the multiple models of community college.

Institutional Entrepreneurship and Translation

Emerging economies, like India, are by nature in a state of “institutional transition” where institutional change is swift and widespread (Jain and Sharma 2013; Peng 2003). India's changing expectations regarding the role of education in social and economic development have created a space where a new organizational form, like the community college, has been able to gain legitimacy as a solution to address mounting critiques of its higher education system (David et al. 2013; Fligstein 2013). Enabled by these environmental conditions and leveraging their own social positions, institutional entrepreneurs are able to actively drive divergent change (Battilana et al. 2009). In India, community college advocates drive institutional

change by embracing skill development curricula and challenging the status quo of an elite, theory-based higher education system (Agarwal 2009).

The translation of the community college concept, or the creation of local meaning from global concepts – depends on how advocates shape the interaction of people with ideas and objects to influence the social environment (Sahlin and Wedlin 2008; Boxenbaum 2006; Czarniawska and Joerges 1996). This multilevel process includes framing ideas in terms of individual preferences, compelling public arguments, and local practices (Boxenbaum 2006). In this light, how institutional entrepreneurs translate ideas into action can be understood as a response to the interplay between social forces and localized practices (Pache and Santos 2010). Given the Indian community college's pluralistic environment, the strategic action of community college advocates can dramatically influence policy, practice, and outcomes at multiple levels.

Because the community college is currently in the process of institutionalization, or the conflict-ridden route toward becoming a taken-for-granted solution, (Thornton et al. 2012), its fate is far from sealed. Rather than moving toward stability or sameness, as much institutional theory would predict (e.g., DiMaggio and Powell 1983; Meyer and Rowan 1977), community colleges may remain fragmented with multiple models that never converge (Delbridge and Edwards 2013; Dunn and Jones 2010; Purdy and Gray 2009). Regardless of their ultimate goal, all community college advocates focus their efforts on securing the legitimacy of regulatory support through public policy processes. As Bastedo (2007) points out, “divergent organizational change. . . [is] only possible when it is consonant with the desires and expectations of policymakers.” The question remains, how did advocates of government-funded community colleges successfully translate the idea of the model into regulatory support, while NGO advocates – with a much longer history of policy influence and practice – failed to navigate this hurdle?

Data, Analysis, and Interpretation

Using evidence from a larger project (Gross 2017b), the study asks how institutional entrepreneurs translate the community college concept in India and what barriers must be overcome to ensure ongoing sustainability of one or both models. This study is a qualitative exploration of the translation of the community college model in India. Data include interviews with 27 informants intimately involved in community college policy development. Participants include academics serving as national experts on community college committees, Indira Gandhi National Open University (IGNOU) officials that oversaw the failed attempt to establish a community college scheme, nongovernmental actors from two influential organizations, and state and national government officials overseeing skill development education in different capacities. In total, 27 recorded interviews and extensive field notes from eight unrecorded interviews collected in two waves between 2013 and 2015 comprise the bulk of the data. Six participants were available for multiple interviews in 2015.

To ensure a comprehensive data collection effort and triangulation, relevant meetings and training observations along with pertinent organizational and policy documents were also analyzed (Miles and Huberman 1994). Drawing from, but not limited by, the techniques of grounded theory's "constant comparative method of analysis," I conducted multiple phases of coding using a set of inductive and deductive codes (Glaser and Strauss 1967, 22). I have tried to approach this work with a sense of humility so that the voices of the research participants guide my analysis while recognizing that any insight into this deeply fraught struggle for educational justice in India's complex society is, and can only be, partial.

Public Perception

An important framing concept for community colleges centers on the challenges associated with a generally negative perception of skill development in India. In the case of community colleges, the impetus for 20 years of recognition chasing by community colleges advocates can be summed up precisely by a technical education official who said, "in my country people don't learn skills if they are not shown the bait of a degree or a diploma." Underlying all discussions of the community colleges is this "degree obsession" that permeates educational expectations. Because skill development has never been a core tenet of formal higher education, another higher education official pointed out that, "social acceptability was not very high in the beginning." The official also shared that vocational courses are viewed as "second rate" and that "only the poor students should go there." Explaining the basis for this "mindset," one IGNOU official stated, "we don't establish dignity of labor. [The] caste thing is a big hindrance." While most participants did not explicitly refer to caste, universally participants expressed concerns over the lack of "dignity" related to skilled trades. A public policy professor suggested that, "there are a whole lot of sectors which are equally important but we don't have takers for it because of the social stigma."

Compounded by low awareness of the existence of community colleges, public perception makes student mobilization exceedingly difficult. Participants, however, remained optimistic believing that, "we are overcoming this thinking every day," in the words of one higher education official. Generally, public perception is expected to improve as employment opportunities for community college graduates improve; bluntly one technical education official suggested that "social acceptability is directly related to your income." He continued by saying that only when students serve as "brand ambassadors for these community colleges. . . they will have to go and spread the success story of these colleges" will parents, communities, and employers be convinced. To date, community college graduates have used word-of-mouth advertising to buoy enrollment based on their increased earnings and upward mobility. This type of success is expected to continue to help ensure the sustainability of new government-funded community colleges.

A Brief History of Community Colleges in India

On a growth trajectory since its inception 20 years ago, Indian community colleges have developed in an iterative series of models marked by efforts to increase the number of community colleges while simultaneously engaging in a “constant struggle to receive recognition” within formal higher education (Alphonse and Valeau 2009, 84). As one participant said, “we are a nation obsessed with degrees,” and the state alone controls educational certification in India. To secure credibility, community college advocates successively pursued various routes to government recognition including distance education, open universities, and traditional diplomas and degrees. Because implementation requires multilevel leadership in order to garner the political, financial, and reputational resources necessary to legitimize a new organizational arrangement (Battilana et al. 2009; Purdy and Gray 2009), each phase of community college development has met with varying levels of success.

Early community college efforts were largely shaped by the efforts of Dr. Xavier Alphonse, a Jesuit priest and university administrator who was inspired by US-based community colleges. With the support of a grant from the UK and the local Archdiocese Alphonse created the Indian Centre for Research and Development of Community Education (ICRDCE) to coordinate community college development in 1999. Early advocates conceived community colleges to “help the socially, academically, economically disadvantaged groups to gain middle level skills to provide work-related and employment oriented education with employability guarantees” (Alphonse 1998, 27). Early on the movement spread largely through the religious higher education network, but it has since diffused widely through secular community-based NGOs operating at the edges of formal education. To this day, Alphonse continues to promote community colleges as a solution to an ailing educational system that largely ignores marginalized students (Alphonse 2013).

Currently, approximately 240 NGO community colleges operate throughout the country. As an outgrowth of the first model, the second focused on widespread expansion through the nation’s open and distance education system. Tamil Nadu Open University (TNOU) began recognizing NGO community colleges in 2008 and now has 204 community colleges operating in the state, most of which are also associated with ICRDCE. Between 2009 and 2012 the Indira Gandhi National Open University (IGNOU) expanded registration to approximately 600 community colleges across the country, many overlapping with ICRDCE and TNOU. This increased community college awareness dramatically, but due to the speed of implementation compounded by a lack of oversight or accountability, the IGNOU program was discontinued in 2013. As IGNOU was closing, the Ministry of Human Resource Development, taking advantage of the new wave of popularity for the community college concept and building on years of internal policy discussions, initiated a plan to embed community colleges in government-funded higher education institutions replete with formal recognition and pathways to a series of stackable credentials. This initiative was met with great excitement and as of late 2015, 295 government-funded community colleges housed in colleges and universities (223), and polytechnics (73) had been approved. An additional 25 approved community colleges were upgraded

to offer both Masters and Bachelors degrees in 2015. A timeline of key events in the development of Indian community colleges is included in Table 1.

Regardless of founding context, all community colleges adhere to the definition of a community college global counterpart offering further education to marginalized and underserved students in a local context with a keen eye toward employability (Raby and Valeau 2009). In addition to conforming to globalized norms, this adherence can be attributed to the consistent and persistent advocacy of Father Xavier Alphonse, the founder of ICRDCE. Alphonse was a key actor in each iteration of community college development including serving as the chair of the committee established to write the national guidelines for government-funded community colleges. As the Ministry of Human Resource Development began its plans to give community colleges a formal place in the higher education system another

Table 1 Timeline

1995	Pondicherry University community college is established (first continuously operating)
1996	First NGO community college is established in Madras
1999	Indian Centre for Research and Development of Community Education (ICRDCE) is established to coordinate NGO community colleges under the leadership of Alphonse
2005	Ministry of Human Resource Development (MHRD) establishes a National Committee on Community Colleges
2007	University Grants Commission (UGC) appoints Alphonse as a member and chair of its own National Committee on Community Colleges
2008	Tamil Nadu State Department of Higher Education issues an order to recognize a Community College System under Tamil Nadu Open University
2009	Indira Gandhi National Open University (IGNOU) inaugurates a Community College Scheme
2009	First National Skill Development Policy released
2010	Wadhvani Foundation begins advocacy effort to promote Community College concept with the MHRD
2012	Conference of State Ministers unanimously endorses Community College concept and forms a committee to lead implementation under MHRD
2013	First round of government-funded Community Colleges are established at Polytechnics (72), Colleges (57), and Universities (7) across India – NGO Community Colleges are not eligible for approval under this plan
2013	UGC establishes committee to write Community College guidelines with representatives from ICRDCE and the Wadhvani Foundation
2013	IGNOU formally discontinues the Community College Scheme
2013	National Skills Qualification Framework is established
2014	UGC approves a second round of community colleges at colleges (92) and universities (10)
2014	Ministry of Skill Development and Entrepreneurship is established
2015	UGC approves a third round of community colleges at colleges (95) and universities (11) – for the first time ICRDCE was not represented on the selection committee
2016	UGC approves no new community colleges while 16 additional NGO community colleges are to be established
2016	Major staff turnovers at ICRDCE, Wadhvani Foundation, UGC, and MHRD

NGO, the Wadhvani Foundation, began playing an increasingly influential role in community college policy. Along with a handful of key government officials these advocates have shaped what it means to be a community college in India by communicating norms and expectations through mandated workshops and the distribution of guidelines, yet consistency and quality are difficult to ensure due to a lack of oversight and accountability measures (Gross 2017a).

With formal inclusion in higher education, regulations required community colleges to establish enrollment criteria that diverged from the historic open-access of NGO community colleges. This left NGO community colleges excluded from recognition despite serving as the “proof of concept” for the new government scheme. Thus, two community college models – NGO and government-funded – operate interdependently in India. Although regulated by the state University, TNOU community colleges are modeled on ICRDCE’s NGO community college and are therefore grouped with NGO community colleges for the purpose of this study. In addition to NGO and government-funded community colleges, there are a handful of autonomous community colleges efforts operating across the country that are not included in this study as they are not associated with the ongoing effort to gain national recognition as part of the higher education system.

The NGO model has been on a 20-year roller coaster advocating for government recognition while building legitimacy through practice in local communities. More recently, the Department of Higher Education created policy to implement a new system of government-funded community colleges that leveraged the legitimacy of the NGO model, but did not extend formal recognition to existing community colleges. Government-funded community colleges enjoy formal recognition but must start with no local credibility related to practice or student outcomes. This leaves both types of community colleges in the tenuous position of fighting for their own survival in the face of overlapping sustainability challenges.

Community Colleges in India: Education for Employment

Only a small sliver of students at any level pursue skills training, and evidence suggests that most students graduating from any part of the postsecondary education system are not adequately prepared for employment (Career Builder 2016; World Bank 2014). Under a new push for competency-based standards for vocational education and portrayed as the “need of the hour,” community colleges are positioned as an important “vehicle” to solve the “unemployability” crisis. Thus, most participants, particularly government officials, tended to define community college in terms of its focus on employment and measure success by the number of job placements, starting salary, and industry participation. Echoing the official government position on community colleges, one ICRDCE representative said, “community college [is a] response to the unemployed, it is the essence of community college, if you capture this you get the idea of the community college. It answers the un-employability problem.”

Referring to the perceived role of community colleges, a high ranking higher education official said, “we want them to produce students that are work ready, industry fit, . . . [our] single objective. . . is to cater to the local industry.” All participants agreed that community colleges, in a departure from “conventional education,” should prepare students for the world of work. One Wadhvani Foundation representative echoed this sentiment, “to my mind community colleges are what need to remain focused on meeting industry’s requirements and giving gainful employment to our youth, and with a option open for mobility to higher education.” Furthermore, this advocate went on to suggest that, “employers will decide what works and what doesn’t work. . . Not define what is community college, [but] the final pull comes from the employers, if employment is the objective.” Together these quotes demonstrate the framing of community colleges as a direct pathway to employment all while accommodating industry demands (whether implicit or explicit) in the interest of economic development.

While adherence to the education for employment framing is universal, several participants, especially those associated with NGO community colleges, tended to balance the importance of employability with “personal development,” “empowerment,” “building confidence,” and student “growth.” For example, an ICRDCE representative said, “community college helps an individual to discover his or her own talent, capacity. . . we make them aware of what they are capable of and we invite them to put that to use and the person discovers himself or herself. . . Community college is transformational.” In juxtaposition, government officials rarely refer to the personal development of students, focusing rather on more explicitly measurable outcomes such as job placements and completion of training programs aligned with the newly established National Skills Qualification Framework (NSQF) – a competency based approach to skill development education.

In conjunction with the first National Skill Development Policy in 2009 and as the culmination of an attempt to “vocationize” education that began in the 1980s (Singh 2013), the NSQF was created to standardize skill-based educational activities across the country. Despite being educational in nature, implementation of the NSQF falls under the purview of the Ministry of Skill Development and Entrepreneurship rather than the Ministry of Human Resource Development, which oversees education in the country. Accordingly, in 2015, Sector Skill Councils were granted independent power to award government certification for NSQF coursework in both formal and informal educational settings. Critics of the NSQF contended that the “soft skill” requirements are not adequate to “create a basic foundational backbone for a student to build skills for life, and skills. . . for a long span of career.” These advocates suggested that community college practitioners should go above and beyond the requirements of a centralized curriculum to focus more on developing students holistically, rather than for immediate employment.

This discrepancy in perspectives on the “education for employment” logic demonstrates Gross’s (2017a, 67) point that as “control has shifted from grassroots efforts to state-organized initiatives, the priority of national economic development has begun to overshadow the early goals of student development.” In this way, the state has significant power over the standards community colleges must meet while

giving industry experts – who populate the Sector Skill Councils – an increasingly critical role in determining the fate of community college students. Ultimately, economic justice will be achieved through employment, but participants who prioritize “transformation” view employment as a secondary benefit rather than a primary goal and fear that focusing purely on employment without the preceding developmental work will result in stagnant and terminal employment opportunities after training.

As a solution, advocates argued that organizational leaders must set a higher bar for success than those required by the government guidelines – one that accounts for both individual and national development goals. Overcoming a potential glass ceiling, set by the baseline criteria, will require the dedication of individuals at the practice level. As one former IGNOU official noted, “if you care, then half of the problem is beaten.” The hope among participants interested in student transformation is shaped by the efforts of ICRDCE who suggested that “eventually, community college should lead to a silent revolution of social change – change for the better through education, empowerment and employment.”

Community Colleges in India: Educational Reform

With advocates firmly rooted in the logic of “education for employment,” fulfilling these promises would only be possible in conjunction with considerable educational reform. As one higher education official expounded, “this is the most fundamental issue. . . we have to change the perspective of our entire higher education [so] that. . . we are producing graduates in consonance to the whole new economy that has emerged.” Echoing this sentiment, another technical education official suggested, “you really need to look at what kind of jobs are available at different levels in the industry and probably you need to redefine your education systems.” Backed by the staunch support of advocates inside and outside the government, community colleges are promoted as a “vehicle” to usher in this reform ultimately intended to breakdown “watertight” divisions that are the hallmark of “traditional” higher education and integrate practice with theory. Among participants the vision for reform took on the three primary dimensions of updating the curriculum to adequately prepare students for employment, expanding educational access, and building flexibility into an otherwise rigid system. The hope, in the words of a technical education official, is that “the community college concept would grow into a massive movement.”

Mainstream Skills in Higher Education

Generally, participants looked at reform in terms of “mainstreaming skills in higher education” as a primary goal. This juxtaposes “conventional education” that is theory based with an approach that integrates “general education” with “practical education,” in other words, a shift in focus from theoretical understanding to

application and employability. One Wadhvani Foundation representative asked, “why can’t we institutionalize and leverage that and make sure that we integrate skills into our general academics and get the things moving?” Participants almost universally indicated that application of theory has been basically absent from higher education and the current system supports a false division between vocational and general education where colleges and universities are theory-based while Industrial Training Institutes and Polytechnics focus on skills with little overlap. The purpose of the community college then is to bridge that gap by incorporating general and vocational education simultaneously in one curriculum and inculcating an ethos of employability throughout higher education.

Achieving this goal will require unprecedented collaboration between industry and the academy. Another Wadhvani Foundation member suggested that, “right now it is only a seeding which is happening but eventually community colleges will be a silent revolution because the teachers have started knowing how to talk to industry; they have started becoming sensitive to that.” This reflects the belief, echoed by several participants, that slow and steady exposure to new ways of designing curricula and teaching will break down barriers between the academy and industry. The community college will serve as a catalyst to this work while the experience is expected to have long-lasting reverberations.

Participants regularly acknowledged the great divide between the academy and industry, but most viewed this shift in education, the mingling of state and market priorities, as either inevitable or critical. This is true, even among those NGO community college advocates that prioritize student transformation. Advocates believe that industry and academic collaboration will help build confidence and trust in a mutually beneficial partnership that ultimately helps students pursue their academic and career goals. As one ICRDCE member suggested, “just the rapport with industries, that alone is enough.” Furthermore, as industry partners become more involved in the community college the hope is that they will begin to realize the value in hiring a skilled workforce rather than relying on hiring the cheapest available labor and providing on the job training with an expectation of high turnover.

Access

As one prominent government official proclaimed, “I would like to democratize this higher education business. . . [and] provide education to anybody and everybody who needs it so that they make a meaningful living.” Participants repeatedly discussed the potential role of improving access to higher education, a reform prioritized by many emerging economies across the globe (Carnoy et al. 2014; Altbach 2012), through community colleges. Improving educational access aligns with closely intertwined state and market logics at the societal level shaped by a consistent refrain in media and policy priorities, regardless of the party in power, that there is a skill development crisis and the nation’s future lies in the balance of how many students can be educated for the global work force.

Consistent with the national priorities of “harnessing the demographic dividend” and becoming “globally competitive” there is a zealous push to increase higher education enrollment with acute attention on the role of skill development programs. To satisfy both goals simultaneously, community college advocates focus on enrolling nontraditional and marginalized students. Underscoring this point, in a recent teacher training program for community colleges, an ICRDCE member extolled community colleges as “an opportunity college where the students are lacking, they do not have the opportunity to go forward. So, it is an opportunity college which gives hope and opportunity to those who otherwise will not have the opportunity.” Government guidelines make similar provisions that “Community Colleges will be located to facilitate easy access to underprivileged students” (University Grants Commission 2013, 1). However, the opening of the door is slightly more narrow than NGO community colleges as the guidelines go on to say that community colleges should “provide skill based education to *students currently pursuing higher education* but actually interested in entering the workforce at the earliest opportunity” (p. 3, emphasis added). It is important to note that higher education statutes regulating government-funded community colleges require minimum eligibility criteria for students that do not allow colleges and universities to admit students who are not 12th pass and polytechnics generally require 10th pass. Meanwhile, NGO community colleges remain committed to admitting a wider breadth of students including “dropouts,” “serving the poor,” “including the excluded,” and seeking ways to bridge the gap between informal and formal education.

This narrowing of eligibility as the community college has moved toward inclusion in formal higher education is perhaps the greatest point of tension between advocates. Despite ardent criticism among NGO advocates, guidelines for government-funded community colleges were designed to work within existing regulations, an approach that the Wadhvani Foundation, which also had representation on the expert committee to develop national guidelines, actively supported. A Foundation representative suggested that NGO community colleges are “neither in the formal system nor in the informal system” but that with government-funded community colleges “students should get an upward path” toward a much-coveted degree. Accomplishing this required that community colleges “need to be integrated to higher education system otherwise it doesn’t make sense really.” ICRDCE expressed grave disappointment in this policy development saying, “the UGC should not be bothering about starting the community college” because “it is not going to help out any dropout student,” but an ICRDCE did express the optimism that “now, at least, they [the government] know the concept of a Community College is a vibrant model for the entire system as alternative to higher education.”

Flexibility

While most participants desire the incorporation of skills in education and the expansion of access, the ultimate role and position of community colleges in higher education remains debatable. Participants tend to view the community college as

a way to build flexibility into a relatively rigid system that caters almost exclusively to traditional age college students on a linear path through higher education. Yet, most students are unable to pursue such a narrow path as evidenced by low enrollment and high dropout rates across Indian postsecondary education (MHRD 2014). To address these challenges, community colleges offer more flexibility in structure and schedule. NGO community colleges serve as “bridge courses” that help students expediently fill gaps in their education and training to continue an upward path toward higher education and better employment. Government-funded community colleges are intended to have a modular curriculum allowing for multiple entry and exit points, stackable credentials, and a pathway to graduate school. Additionally, across community colleges, classes are often conducted in the evenings and on weekends to allow working adults, parents, and students with family support obligations to enroll. This is a great departure from the “conventional” approach to higher education with its nearly linear process focused solely on credential completion without intermediate waypoints.

On a structural level, many participants view the community college as a bridging organization that could help build flexible pathways between NGO community colleges, Industrial Training Institutes (ITIs), polytechnics, and colleges and universities by offering general education courses in conjunction with skill-based training. To serve as a bridge, NGO community colleges are preparing underserved students for both employment and further education by helping them pass the necessary exams required to enter formal higher education. When asked about the possibility of articulation among community college models through the NSQF, one government official expressed a desire that “over a period of time we expect the two institution models to converge. . . we would also want ITIs to have equivalence in the formal higher education system. . . At the same time, liberal arts or language degrees are more occupational focused so they become much like ITIs.” Other participants advocated maintaining the distinctiveness of each organizational arrangement so that community colleges do not mirror the current ITIs and polytechnics, but instead offer a pathway for higher education students to pursue skill-based education with the vertical mobility offered by further education.

Although convergence is theoretically possible, NGO advocates who have spent more than 20 years pursuing inclusion in formal higher education are not relying on that promise. Instead, they are seeking an alternative route to recognition for community colleges and their students. ICRDCE is working to become a nodal agency for the National Skill Development Corporation that would coordinate NGO community college implementation of NSQF curricula. This would allow students to earn a skill development certification granted by the Sector Skill Councils. At the same time, Government-funded community colleges are required to offer NSQF curricula as a condition of their approval, and students receive both a certification from the Sector Skill Council as well as a credential from the affiliating polytechnic, college, or University. In this way, the NSQF offers a platform to develop articulation agreements between NGO and government-funded community colleges that break down the currently rigid barriers and provide pathways into higher education for students that are generally excluded.

Across founding contexts, all of these approaches rely heavily on the success of the NSQF as the foundation of “education for employment” in community colleges. Given these conditions, community college convergence is possible, but it will require advocates to reimagine a collaborative policy vision rather than the fragmented approach that has resulted from the separation of NGO from government-funded community colleges in policy and practice. Such an effort will require a new translation process balancing individual preference with public needs and local legitimacy (Boxenbaum 2006). Ultimately, through these multiple streams of educational reform, advocates expect that community colleges will usher in a sea change, one that helps an education for employment mindset infiltrate all levels of postsecondary education.

The Future of Community Colleges

Expressing great optimism for the future of community colleges as a vehicle for educational, economic, and social reform, advocates of both community college models identify similar hurdles for ongoing development and sustainability. How to successfully navigate the bureaucratic waters of public policy is a universal fear among NGO and government-funded community college advocates. Primarily, concerns focus on the politics of policy design, a disconnect between policy on paper and in practice, and the future of funding.

Policy Design Process

Bureaucracy and politics were primary challenges to community college sustainability that participants – inside and outside the government – identified. One academic working closely on national higher education policy summarized this ever present concern saying, “in India, networks, personal connections, political connections are the ones that make the world turn. . . Eventually politics overrides other issues, so in India. . . networks, patronage, and politics overrides merit.” As in many emerging economies, although there is a formal bureaucracy that wields great power in India, accountability for that power rests primarily on how “vertical ties of personal dependence” are served (Swidler 2009, 199). This “individual-centric” approach is further complicated by high turnover rates, misguided incentives, and short-staffed departments.

As part of this patronage system, bureaucratic appointments are used as reward and punishment, resulting in high turnover among officials. In the face of a recent “churn” among higher education officials, a Wadhvani Foundation representative pointed out that “for a new person to come and understand also takes time. Education is not a simple subject.” He further expressed concern about these new officials saying, “they don’t share the same passion, neither do they understand it [community colleges].” Often participants, government officials and external advocates alike, indicated that vacancies and new appointments disrupted the continuity of planning

and partnership. This left community colleges to “fend for ourselves,” in the words of an ICRDCE representative.

In addition to the revolving door of government officials, those dealing with higher education are also incomprehensibly overburdened. For example, one government official oversees 72 community colleges as well as *all* NSQF related programs in technical institutions *and* oversees all scholarships in those institutions and serves as the chief vigilance officer. This type of workload exists for most officials. Given these commitments, it is no wonder that interpretation of the guidelines and implementation is left to practitioners with minimal oversight or support. There simply are not enough bodies with the skills, knowledge, ability, let alone authority to help.

Another concern, repeatedly expressed, is that officials want to get “political brownie points” by starting something new rather than building on past initiatives. This political reality was given as an explanation for the recent shift away from Community Colleges toward upgrading ITIs, promoting short-term skilling initiatives, and reconfiguring higher education skill development into Skill Universities and DDU-Kaushal Kendras, or University programs that integrate skill-based education from community college credentials through PhD level coursework. Numerous participants used the metaphor of putting “old wine in a new skin” to describe this phenomenon. In large part, this is because officials operating in this environment are incentivized to “only pick the low hanging fruit” with little regard for the long-term ramifications of policy, practice, and accountability, according to one (former) technical education official.

Taken together, these conditions result in a lack of continuity among people and priorities where policy implementation is guided by personal passion and superordinate directives rather than responding to the needs of practitioners and communities. Therefore, as one government official adeptly observed, “champions in the system” are necessary to keep these efforts moving forward because “people come and go.” Champions, as this government official described them, are simply a quotidian title word for institutional entrepreneurs, but who those champions are may be in a constant state of flux.

Policy Implementation

Participants almost universally agreed that policy is “marvelous. . . on paper it looks fantastic,” but as policy moves from paper to practice, one government official acknowledged that, “field positions are entirely different from the ideal conditions [for which] the guidelines are prepared, idealistic.” In other words, policy rarely considers the complicated realities of inter-agency collaboration or the time needed to enact such comprehensive reforms. A Wadhvani Foundation advocate pointed out that despite the grand design, “putting all the pieces together right from day one is not going to happen, it’s impractical. . . But at a design level it’s built in. . . design elements ensure there’s a vertical mobility, okay? But at a field level, the implementation structures would take time to come up.” In other words, although transfer and

stackable credentials are designed as an integral part of community colleges on paper, in practice, mobility pathways may remain elusive (Raby and Valeau 2009).

Furthermore, one public policy professor suggested that, “implementation is left at the hands of one or a few individuals, so the implementation of that could be good or bad depending on that individual. It’s more individual-centric than systems-process centric.” As a result, practice rarely matches policy, a fact that holds true for both NGO and government-funded community colleges. Such a reality is hard to remedy because as one academic stated, “policy makers don’t realize and recognize the realities on the ground. . . therefore policy that is made without understanding local context can be detrimental.” Repeatedly participants explained that from the highest level of government to teaching in the classroom, many people are asked to promote and implement the community college concept without a firm understanding of its most basic tenets. This leads to incredible variation in understanding and practice from college to college, region to region, state to state, and policy maker to policy maker. In addition to individual interpretation, community college advocates regularly cited the size and scope of diversity in India as a complicating factor in policy implementation compounded by the symbolic but not substantive oversight by already over-extended government agencies.

Funding

A discussion of challenges would be incomplete without acknowledging that funding is a primary concern of all community colleges regardless of founding context. Discussing government-funded community colleges, one Wadhvani Foundation participant succinctly voiced an opinion that was repeated in almost every interview about all community colleges, saying, “On one hand government is saying that skill development is something which is important and we are committed towards it, and on the other hand we see that there is a lack of funds, budget has been cut down in skill development and stuff like that so there are two messages. . . [If they] are not giving resources then how do you implement these kind of programs.” Among government-funded community colleges, without future funding, participants are concerned that these initiatives will not survive. A higher education official suggested that “we’d like to, of course, pump money into the scheme” but he “can’t say right now” because community college funding “depends on government policy” that has been shifting toward prioritizing short-term skilling initiatives recently.

Seeing the writing on the wall, an ICRDCE member contemplated, “we have to wait and see. Even UGC Community Colleges, I’ve got a reservation in the sense that as long as money will be given grants will be given, these colleges will run. The moment the grant is not given, they will wind up.” This sentiment reflects a deep concern among community college advocates that the current government is shifting away from longer duration programs toward shorter initiatives that offer “skills without education.” For example, in a follow-up interview, when I asked one government official about a proposed expansion of community colleges through

polytechnics, he said that there was a “mismatch” between the definition of skilling between the National Skill Development Policy and formal educational norms because, “we are more interested in building up of the skills to award them some degree or diploma. So, that was the mismatch basically. They are more interested in just giving the skills, so that immediately. . .he can be employed somewhere.” One skill development official confirmed this fear saying, the “challenge is that community college is long terms skilling that is an integration of skills in higher education, which is unfortunately not the primary focus of MSDE [Ministry of Skill Development and Entrepreneurship]. That is the focus of HRD [Ministry of Human Resource Development].”

In the meantime, ICRDCE, representing NGO community colleges, is putting its eggs in the NSQF basket. Hope of a nonfinancial partnership with National Skill Development Corporation, which oversees the NSQF and Sector Skill Councils as the implementation arm of the Skill Development ministry, is ICRDCE’s latest step in a relentless pursuit of viable recognition accompanied by the reputational resources needed to attract sustainable financial backing. Although NGO community colleges have traditionally relied on philanthropic donations and minimal tuition and fees, ICRDCE affirmed that despite current instability and divergent models, “community colleges will continue to change systems.”

Conclusion

Community colleges are universally framed as an ideal way to address many of the social and economic development challenges facing the country. However, advocates responsible for development of the NGO and government-funded community college models differ in their underlying beliefs about the purpose for and desired outcomes of employability education and educational reform. These differences provide an explanation for the continued existence of multiple community college models in India despite the interconnected efforts of advocates to secure regulatory and public policy support for the “movement.” After 20 plus years of advocacy for the NGO model, ICRDCE was unable to maintain political support for its vision when a new organization, the Wadhvani Foundation, began influencing public policy. Wadhvani Foundation built personal relationship with government officials, wrote guidelines that worked within existing higher education regulations, promoted national economic development goals, and had enough financial and reputational resources to survive a national political party transition.

In short, the organization was better able to navigate India’s “individual-centric” bureaucratic process based on personal relationships, which ultimately left NGO community colleges outside the fold of formal recognition. Although government-funded community colleges enjoy a recognized position within higher education, both models are in a continued struggle to secure sustainable funding and maintain the integrity of the community college concept as it is interpreted through cascading levels of translation.

Community colleges have experienced steadily increasing political support for nearly 20 years, but in the last 2 years they have been slowly pushed out of favor. The current government, while remaining steadfastly if not more zealously committed to skill development, seems to be refocusing priorities away from long-term activities – like the community college – toward short-term programs that will more quickly meet national “skilling” targets. Rescuing the community college – both NGO and government-funded models – from a slow death in higher education will therefore require organizational leaders and practitioners to fight for its continuation. Whereas community college development to date has rested in the hands of the few, its future is likely to be decided by the collective action of many.

While leaders working at the national policy level have led much of the battle for community college translation and institutionalization, those individuals who have doggedly been pursuing community college recognition are, almost to a person, no longer leading community college advocacy efforts. In order to take action that will in fact sustain the movement, it will be important for practitioners at the organizational level to work together to influence the system moving forward. Effective collective action will require understanding the challenges to legitimacy perceived at the system level combined with the experience of how policy works in practice to ensure long-term viability of community colleges in India. Shining examples of success exist among operational community colleges, but it is yet to be seen if local success stories can be leveraged into widespread institutional change that fulfills promises of dignity and equity rather than, intentionally or unintentionally, reinforcing structural inequality related to caste and class.

It is too early in the institutionalization process to know if the community college will be able to deliver on its promises to reform education and serve as a “launch pad” for students to access otherwise unattainable educational and employment opportunities (Mullin and Phillippe 2013). Even with more limited eligibility, government-funded community colleges are opening the door to students who might otherwise have dropped out or never enrolled in higher education while NGO community colleges are providing opportunities for an even broader array of students. Although these openings may be only a crack, they can illuminate pathways for students too often left disenfranchised under the weight of an inequitable education system. Such opportunities will only endure if structural changes to ensure educational mobility are prioritized, employers begin paying a premium for trained employees, graduates experience upward economic and educational mobility, and community colleges become a first choice rather than a last resort.

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Part III

Theories on Achieving Equity: Philosophy and Practice



Center and Periphery in Israel's Higher Education

13

Nitza Davidovitch and Dan Soen

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Abstract

At present, students in many countries are enjoying extended opportunities for acquiring higher education, leading to increased achievements of higher education among the working class and minorities. However, a hypothesis formulated recently under the designation maximum maintained inequality (MMI) strongly

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rejects the assumption that the expansion of educational systems per se reduces social gaps. In fact, new educational opportunities are first utilized by less talented students who belong to privileged groups and much less by students from peripheral groups. The former, who have more considerable financial resources, are capable of better utilizing the new opportunities. Advantages stemming from social background factors help students from upper classes ensure themselves their own distinguished place. The central dominant groups retain their advantage for purposes of registration to higher education until their participation in this system reaches a saturation point. Only at this point does the expansion of education systems begin to contribute to reducing social inequality in registration.

Hence, while colleges provide less educated groups with an alternative to selective universities, the upper classes have a much greater chance of utilizing this opportunity and studying the most attractive fields. Since colleges that offer studies in these attractive fields (law, business administration, and behavioral sciences) are not subsidized by the state, tuition is very high, and members of the working class cannot afford to study there. Nonetheless, any solid conclusion on the impact the colleges have on social inequality must carefully take into consideration all the different aspects of this issue.

Keywords

Center · Periphery · Higher education · Undergraduate students · Israel

Introduction

Although schools existed in all known civilizations from ancient times, the educational system only became universal in the last century or so. As late as 1800, most Western European adults did not attend school, and 100 years later, only rarely did people receive more than 4 or 5 years of formal education (Williams 1960). The twentieth century created an educational revolution. Education became compulsory in Western countries during the first half of the century. In time, it was embraced in developing countries as well during the second half of the century, when they attained independence.

With regard to secondary education, the USA became a pioneer in this field when it established a comprehensive public education system (Krug 1969). In 1910, less than 15% of the 14–17 age group in the USA were registered as high school students. By 1940, 75% of teens in this age group were attending school. At that time, 50% were expected to graduate and receive a diploma (Trow 1974). In the 1960s this rate rose considerably and exceeded 85% (Hurn 1985, Chap. 3).

The case of higher education is slightly different. The system only began to grow in the second half of the twentieth century in the USA. Throughout history, the main role of higher education, in most societies, was to nurture an elite group and provide its members with the necessary knowledge and social ties to manage the country. The higher education system remained a setting for training the elites until the post-

World War II era (Morrison 1998). Thus, it is quite evident that for a long time this system served both as a mirror image of the elite and as an instrument for preserving the existing social order.

The second half of the twentieth century saw both development of the educational system throughout the world and a considerable improvement in educational opportunities. Once again, the USA was in the lead. In 1940 some 15% of the 18–21 age group in the USA were studying at colleges and universities. In 1970 their rate reached 45% (Hurn 1985). In France, the number of students was 123,000 in 1946; by 1961 it had reached 230,000 and by 1968 514,000 (Auron 1999, 16). In the welfare states of northern Europe in particular, educational reforms since the 1960s were motivated by the ideology of equal opportunities in education. This led to a significant increase in the growth and availability of institutions of higher education (Kivinen et al. 2001).

Rapid expansion of higher education was characteristic of many Western countries in the 1970s. This prompted the expression “massification of higher education” (Trow 1974). Higher education, previously defined as an opportunity reserved for the privileged few, eventually became the right of all and even a civil right (Trow 1974). Nonetheless, interestingly, it appears that in the USA people had the same chance of graduating from college in the 2000s as in the 1970s. The graduation rate remained constant – 27%. Moreover, in this period the mobility of higher education was reduced, as the capacity of universities and colleges diminished in light of the population growth as well as the rise in aspirations and achievements (Hout and Janus 2011).

It is worth mentioning that the rapid spread of higher education was not limited to Western countries. In fact, from 1970 to 1990, the number of university students in developing countries grew from 9 million to 32 million. This means an average increase of 360%. In Arab countries, the increase reached 625% and in Africa 550%. Nonetheless, the graduation rate in developing countries was much lower than in developed countries; in the first 5 years, it was only 6% (Bloom and Rosovsky 2007).

The Changing Context of Higher Education

Attention has recently been drawn to the changing context of higher education. Some researchers contend that the change is rooted in the role of higher education in modern societies and economies, as well as among countries in a process of modernization. The transition primarily involved a shift of higher education from an area of marginal to one of major significance (Morrison 1998). As reflected in Table 1, a transformation occurred during the 1990s. In the UK, for example, there was an enormous increase in the number of students. In 1991, some 216,000 students were admitted to the various higher education programs. By 1998 this number had grown by 53% to 330,000 (Tonks 1999), and another 100,000 were added by 2002. This was also true of Australia, where registration to institutions of higher education grew from 534,500 in 1991 to 604,200 in 1995 and 726,200 in 2001 (Breen 2002).

Table 1 Trends in achievements of higher education in OECD countries, 1991–2001 (proportion of 25–34-year-olds who had studied at schools of higher education)

	25–64-year-olds					25–34-year-olds					55–64-year-olds					
	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)
Country	2000	2005	2010	2014	2000	2005	2010	2014	2000	2005	2010	2014	2000	2005	2010	2014
Australia	27	32	38	42	31	38	44	48	19	24	30	33				
Austria	(–)	25	28	30	(–)	31	34	38	(–)	18	20	21				
Belgium	27	31	35	37	36	41	44	44	17	22	26	26				
Canada	40	46	50	54	48	54	56	58	28	36	42	45				
Czech Republic	11	13	17	22	11	14	23	30	9	11	12	15				
Denmark	26	34	33	36	29	40	38	42	18	27	28	29				
Finland	33	35	38	42	39	38	39	40	23	27	30	34				
France	22	25	29	32	31	40	43	44	13	16	18	20				
Germany	23	25	27	27	22	22	26	28	20	23	25	25				
Greece	18	21	25	28	24	26	31	39	8	12	17	21				
Hungary	14	17	20	23	15	20	26	32	12	15	16	17				
Iceland	(–)	29	33	37	(–)	35	36	41	(–)	20	23	29				
Ireland	22	29	38	41	30	41	48	51	13	17	22	24				
Italy	9	12	15	17	10	16	21	24	6	8	11	12				
Japan	(–)	(–)	(–)	(–)	(–)	(–)	(–)	(–)	(–)	(–)	(–)	(–)				
Korea	24	32	40	45	37	51	65	68	9	10	13	17				

Luxembourg	18	27	35	46	23	37	44	53	13	19	25	32
Mexico	15	15	17	19	17	18	21	25	7	8	12	13
Netherlands	23	30	32	34	27	35	41	44	18	24	26	27
New Zealand	(-)	(-)	(-)	(-)	(-)	(-)	(-)	40	(-)	(-)	(-)	29
Norway	28	33	37	42	35	41	47	49	20	24	27	32
Poland	11	17	22	27	14	26	37	43	10	13	13	14
Portugal	9	13	15	22	13	19	25	31	5	7	9	13
Slovakia	10	14	17	20	11	16	24	30	8	12	13	14
Spain	23	29	31	35	34	41	40	41	10	14	18	21
Sweden	30	30	34	39	34	37	42	46	23	25	27	30
Switzerland	24	29	35	40	26	31	40	46	18	22	28	31
Turkey	8	10	13	17	9	13	17	25	6	8	9	10
Great Britain	26	30	38	42	29	35	46	49	19	24	30	35
US	36	39	42	44	38	39	42	46	30	37	41	41
OECD average	22	26	30	34	26	32	37	41	15	20	22	25

Source: Table A1.4a. [3/3] Education at a Glance 2015, OECD Indicators, OECD Publishing. <https://doi.org/10.1787/eag-2015-en>

In this regard, it is notable that the transition in the role of higher education in modern societies was also evident in direct public expenditures for schools of higher education. Most Western European countries evidenced a rise in direct public expenditures in these institutions despite budgetary cuts and despite second thoughts about the limitations of social welfare policy. Surveys show that in France, Germany, Sweden, the Netherlands, and Austria, the rise in expenditures during the 1990s was modest. Nonetheless, it was consistent. In Great Britain and Denmark, the rise was significant. In Finland and Belgium, it was moderate but still considerable (CHEPS 2001).

Eventually the academic diploma became a popular norm, reminiscent of the high school diploma in the twentieth century (Allen and Allen 2003). The era of higher education as the exclusive claim of the elite had ended. The challenges now confronting higher education were planning, designing, managing, and funding of a comprehensive system. Contemporary discourse focused on the transformation, in a demand to improve access to higher education as a matter of social justice. As stated in the British Robbins Report from 1963, “Courses of higher education should be available for all those who are qualified by ability and attainment to pursue them” (Tonks 1999).

Not less important in this respect – in fact, some say even more significant – is recognition of the contribution of higher education to economic growth, which requires that its availability be improved at all costs. Economists say that education creates human capital, which directly affects the accumulation of knowledge and thus the rise of productivity. Furthermore, education is important for successful research activities, which have their own significance for increasing productivity. The literature on empirical growth draws attention to the following conclusions, with their effect on the economic significance of higher education on the national level:

- The economy of countries in which employees have a higher schooling average tends to grow faster than that of other countries under similar circumstances.
- OECD countries that expedited the expansion of their higher education since 1960 enjoyed effective economic growth.
- There is evidence that education affects the investment of physical capital in the economy, which in turn enhances income growth.
- It has been proven, both conceptually and empirically, that higher education may raise the revenues of a country beyond those it would have achieved if its level of schooling had been lower.

Certification Inflation and Inequality in Higher Education

Calls to Transform the System of Higher Education

The massification of higher education was accompanied by calls to transform the system from a reflection of the social structure to a gateway to social mobility while improving access to higher education. Even those who believe that “where there is a will there is a way” have to admit that in the human capital economy currently dominating the world, decency and hard work alone are not enough to ensure

success. Both personal well-being and social well-being are increasingly determined by formal education. Human well-being is currently dependent on educational achievements more than any other factors. On average, higher education can be said to consistently generate a higher income and a higher standard of living, and that is what most people strive for (Mortenson 2000). This association between income and education has intensified since the early 1970s. Due to the growing association between education and income, the life of the uneducated seems to be becoming more desperate and hopeless as explained in this chapter.

The demand to improve access to higher education has raised, in turn, interest in the effects of higher education expansion. In simple words, what is the connection between “who studies where” and students’ socioeconomic background and history of previous studies? At present, there is a pointed battle between two approaches, the *diversity approach*, representing the functionalist paradigm in sociology, and the *stratification approach*, represented by the conflict paradigm in sociology.

The Diversity Approach to the Massification of Higher Education

The diversity approach sees the massification of higher education as a process that contributes to educational and social equality by developing a wide range of institutions of higher education that operate side by side with classic research universities and aim to meet the different unique needs of various student sectors. In contrast, the stratification approach sees the massification of higher education as no more than competition between various institutions that offer different levels of education, which reflect the existing order and constitute a mirror of the social class structure.

In short, the diversity approach sees the wide array of higher education schools in a positive light. Its proponents contend that this diversity has contributed to a real change in the composition of the student population. It has enabled a considerable increase in the number of students aged 25 and older. This is also true of students from ethnic minorities or from other sectors that have so far been underrepresented. For example, the unprecedented increase in the number of higher education students in France from the mid-1940s to the late 1960s (see Table 1) led to an opening of the higher education system to new social strata, particularly from the lower middle class (Auron 1999, 16). Various representatives of this orientation have repeatedly claimed that different schools of higher education attract different consumer sectors. According to this concept, the variety of universities is “horizontal” and not “vertical.” Namely, the system of higher education is neither stratified nor hierarchical by nature (Meek et al. 1996; Goedegebuure et al. 1993), although the varied institutions reflect the needs of groups with different socioeconomic backgrounds.

The Stratification Approach to the Massification of Higher Education

The stratification approach has a completely different view of the massification of schools of higher education. Its general perspective is that the higher education

system replicates and intensifies social inequality (Archer et al. 2003). It claims a strong correlation between students' socioeconomic status and the various types of higher education institutions at which they study. The British system is brought as an example. It is widely agreed that the British system is very stratified (Scott 2002). The change in the demand for higher education transformed the map of higher education. On the one hand, there are the older universities, which in the past were intended to serve the elite but then came to focus on research excellence (Farnum 1990). On the other, there is a fairly varied array of institutions of higher education. Thus, besides the traditional elite universities, the UK has a variety of other schools of higher education, such as civil universities established toward the end of the Victorian era to supply the professional and commercial elites with alternatives to the traditional universities and to represent the growing strength of industrial Britain. This category also includes the "red brick universities" founded after World War I. To this were added the newer universities established by various governments who sought to develop world class science and technology universities. Also opened were colleges for advanced technology, known today as technological universities. Finally, the polytechnions were opened in the 1960s. Some called these "people's universities" (Scott 2002). The stratification was intensified in the UK by the Higher Education Commission (HEC), which funds universities according to their achievements in research and teaching (Watson 1999). Britain is not the only country with a stratified system of higher education. A study conducted in the UK, Australia, Japan, France, and the Netherlands showed that all these countries have a very stratified system of higher education (Teichler 1988).

The British and American Higher Education Systems in the Eyes of the Two Approaches

As stated, the British system is taken as an example. In recent decades, Britain's system of higher education has grown and expanded significantly. Nonetheless, nontraditional social groups show consistently limited use of this system (Archer 2000). Once again, this state of affairs is well known in many other industrial countries as well (Schuetz and Wolter 2000).

A survey held in the UK indicated (Archer 2000) that most respondents thought that only the less prestigious universities were accessible for working class students. "Dream colleges and universities" are considered accessible for members of the middle class and upper classes who have the necessary financial resources and social status and whose families were able to plan for the future. In contrast, respondents from the working class recognized that a combination of social and financial factors compels them to study at second-rate local universities. Thus, it is no surprise that another survey found that while 39% of all 18-year-olds in the UK belong to the two highest socioeconomic classes, some 70% of those admitted to the long-established acclaimed universities came from these two social classes (Hasley 1992).

This appears to be the situation in the USA as well. Here too the highest socioeconomic classes have advantage in admittance to the acclaimed universities

as claimed by Mortensen (2000). Some claim that both private and public venerable universities and colleges have become more selective in the last generation. Thus, the USA is rapidly retreating from its affirmative action policy in higher education, intended to ensure inclusion of the weaker groups (Mortenson 2000). Hence, the massification of higher education did not itself open the gates to equal opportunity in higher education (Bok 1998). It may even have intensified a preexisting problem.

Furthermore, some have already drawn attention to the fact that in the elite system of higher education, advanced degrees help those who earn them attain attractive administrative and professional jobs (Brown 1997). Nonetheless, the increasing competition for academic degrees is an undeniable social reality. It stems from the strict selection process embraced by employers in light of the mass pursuit of advanced degrees. Adding to all this, the excess supply of academic graduates – a result of the massification of higher education – has formed a new problem, that of “degree inflation” (Dore 1976).

Degree inflation, or the “diploma disease,” has contributed to inequality in education. It increased competition for degrees awarded by the most elitist and prestigious institutions of higher education, since academic degrees are ranked on an academic and social hierarchy according to the institutions that issue them. One’s range of opportunities is affected by one’s diploma, and the status of the diploma is directly affected by the status of the institution that awarded it. The most sought after and prestigious institutions do not offer equal access. Thus, the higher education system has not become a great equalizer; on the contrary, it occupies the role of doorkeeper, preventing free access.

Nevertheless, the massification of higher education was certainly intended to realize the “Knowledge Nation” policy, as known in Australia (Breen 2002, 18), defined elsewhere as the government’s commitment to provide anyone capable of benefiting from higher education with the opportunity to do so. Massification of higher education also contributed to expanding the opportunities of minority groups to attain higher education as one of their key challenges (SHEFC 1999).

The Expansion of Higher Education in Israel

Israel’s Higher Education Until the 1990s

Israel is an excellent case in point. Its system of higher education underwent a process of expansion and significant change beginning in the early 1990s, applying to both types of higher education massification.

The foundations of Israel’s higher education system were laid in the 1920s, when the Technion (which offers degrees in science, engineering, and related fields) and the Hebrew University opened in 1924 and 1925, respectively. When the State of Israel was established in 1948, these were the only two institutions of higher education in the country. The population increase and social and economic developments generated a significant demand for higher education, and as a result, five universities were established in the 1950s and 1960s: Bar-Ilan University, the

University of Tel Aviv, Haifa University, the Ben-Gurion University of the Negev, and the Weizmann Institute (CHE 2003).

From the mid-1970s another stage began in the development and diversity of Israel's higher education system. The Open University began to operate as the country's first distance-learning institution (admitting everyone irrespective of formal education) that offers academic degrees, and its activities rapidly spread to the entire country. Teachers' seminars, previously operating as advanced study institutions, were transformed into colleges of education, i.e., higher education institutions that awarded their graduates B.Ed. degrees and in time also M.Ed. degrees.

During the 1990s the system of higher education underwent another process of expansion, when the tenth amendment to the Higher Education Law allowed the establishment of various types of academic colleges: general colleges, technological colleges, and colleges specializing in a specific discipline. In 2002, Israel's system of higher education included 8 universities, 24 fully recognized academic colleges (colleges that offer bachelor degrees), 26 academic colleges for training teachers (colleges that specialize in education and offer bachelor degrees in education), and 12 academic programs in academic colleges affiliated with one of the universities (in these programs, students study on the campuses of the colleges, but their degree is awarded by the university that sponsors the program) (CHE 2003). As of 2015, Israel has 9 universities (including the Open University), 42 academic colleges, 25 academic colleges for education, and 4 CHE-recognized branches of foreign universities. This forms a total of 80 institutions of higher education.

When the State of Israel was founded in 1948, about 1,600 students were enrolled in the two existing academic institutions. By the end of Israel's first decade, the number of students had risen to approximately 9,000. The 1960s saw a significant increase (about 14% a year) in the number of students, and by 1970 it had reached 35,000. This rapid growth continued in the 1970s, and by 1980 the number of students reached 56,000. In the 1980s the increase continued at a rate of 2.5% a year, and in 1990 the higher education system encompassed 76,000 students (CHE 2003). In the 2013–2014 school year, the system included 263,428 students (CBS 2004).

The Preponderance of Undergraduate Students in the Colleges

The most important process this entailed was that since the 2002–2003 school year, more undergraduate students have been enrolled in colleges than in universities – although in that year the number of students at universities (76,581) exceeded that of students at colleges *excluding* branches of foreign universities whose activity in Israel was approved by the CHE (68,115) (CBS 2004). The total number of students at academic colleges in the 2013–2014 school year was 96,927 (CBS 2004, Table 8.59). This adequately reflects the greater accessibility of higher education for many students (Brodet 2003). The colleges facilitated a process that opened the gates of higher education to students who had previously been excluded from academic tertiary education. The most significant fact related to this process is that the number

of rejected requests for admission dropped from 30% to 34% in the 1990s to a mere 19% in 2000 (Kimmerling 2000). This was precisely the intention of the CHE when, in the early 1990s, it awarded a long list of colleges the authority to grant academic degrees. The decision of the CHE was accompanied by an explanation (Council for Higher Education 2014) whereby, from then on, the system of higher education would consist of two tiers or components. The first component included the universities. This tier was expected to focus on research and on awarding advanced degrees. The second component included the colleges. As mentioned, it was supposed to actively assist in the realization of social justice and social equality principles by increasing the registration of marginal social groups and categories to academic institutions. In this way, these institutions can be seen as a global counterpart as defined in this book.

Originally known as regional colleges, these institutions became known as academic colleges after being certified to offer academic degrees. Gradually, regional colleges have become accredited and are now academic colleges. As summed up by the Association of Regional Colleges (Council for Higher Education 2014), at the time the number of potential students rejected by the universities was 25,000. This impossible situation motivated colleges to invest additional resources in admitting another 15,000 students by the end of the decade and thus taking part in the national effort of solving the serious problem of insufficient slots for undergraduate students.

Israel's Higher Education as a Dichotomous or Binary System

Israel's higher education is defined as a dichotomous or binary system (Guri-Rosenblit 1999). The universities engage mainly in "autonomous functions" (Trow 1974), i.e., in imparting high culture, encouraging science through research, and awarding degrees to elite groups. The colleges engage mainly in "popular functions" (ibid.). These include the introduction of new sectors of the population to the contents of high culture, awarding degrees necessary to ensure a respectable job, and providing practical services to the community, based on knowledge and information.

This dichotomy has aroused fierce controversy. As mentioned above, some scholars believe that the binary system promotes equal opportunity in higher education (Guri-Rosenblit 1999). Others claim that there is currently no real equal opportunity in higher education. Those living in central areas of the country have a much greater chance of utilizing the new opportunities than residents of peripheral areas. Students raised in high-class families, from privileged ethnic groups, and graduates of academic high school tracks have a greater chance of attaining a tertiary education (Ayalon and Addi-Raccah 2003). Colleges offer students with lower education levels an alternative to the selective universities. Nonetheless, on these levels only the financially well-off classes can afford to send their children to study the most attractive fields (Shavit et al. 2003a). The private colleges that offer studies in these attractive fields are not subsidized by the government. Therefore, tuition is very high, and studies at the

colleges are too expensive for common people. Others claim that the degrees awarded by these colleges are lower-level degrees awarded to peripheral groups in Israeli society (Swirski and Swirski 1998; Davidovitch and Iram 2014).

The Effect of the Change on Israel's Weaker Population

In light of the controversy mentioned above, several questions are in order:

1. Has the recent change in higher education increased the chances of participating in this system?
2. Has it reduced the social selectivity of higher education?
3. Has the change resulted in real equal opportunity to register for the most attractive disciplines, or has such opportunity increased only in the less selective disciplines?
4. Finally, are the opportunities offered by the new colleges inferior to those offered by the more veteran universities?

Official data published by the CBS (2004) show that in 1989–1990, the number of undergraduate students studying at universities was five times higher than that of students at other institutions of higher education. In 1994–1995 the ratio was 3:4. In 2000–2001 it was 1:3. As mentioned, in 2002–2003 the number of undergraduate students at colleges was higher than those studying at universities (Brodet 2003), although as stated, when the number of students studying at branches of foreign universities is deducted, the number of undergraduate students at universities (76,581) was higher than at colleges (68,115) (CBS 2004). In the 2013–2014 school year, the number of college students was 96,927 (CBS 2004, Table 8.59). Finally, it should be recognized that in the 1960s and 1990s, the system of higher education changed dramatically. The number of students tripled, and the chance of entering the system increased by 50% (Shavit et al. 2003b). Notably, the long-standing universities were hardly affected by this change. They grew at a rate commensurate with the population increase. Most of the total increase in the number of students resulted from admissions to colleges, the second tier of the public and private education system. From 1989–1990 to 2000–2001, registration to undergraduate programs at colleges grew by 19.2% a year on average, while at the universities, annual growth was only 3.6% on average. As evident from Table 2, the rate of undergraduate

Table 2 Students enrolled in undergraduate programs by type of institution in the 1989–1990, 2000–2001, and 2014–2015 school years in Israel

Year	Number	% universities	% colleges	% Open University
1989–1990	253,68	8.68	1.12	1.19
2000–2001	980,165	6.44	4.34	9.20
2014–2015	95,593	42.9	48.8	NA

Source: Council for Higher Education (2014)

students at colleges almost tripled from 1991 to 2000. In three popular fields – business administration, law, and applied arts – the number of students was higher than in the universities. In other words, the growth rate of colleges was 5.3 times that of universities. By 1999–2000, there were colleges in 15 towns divided among 6 districts, compared to 9 towns in 3 districts in 1989–1990.

Differences Between the Cross Sections of Undergraduate Students in the Two Tiers

The critical question is whether there are differences between the cross section of undergraduate students in the two tiers. CBS (2004) data indicate that there are indeed differences. The first of these is students' age. The median age of college students is higher than that of university students (26 vs. 24, respectively). The most common age group among college students in 2000–2001 was 25–29. It encompassed 44% of all students. However, this same group encompassed only 25% of university students. Moreover, the proportion of relatively older students (30+ age group) in the colleges is almost double that of universities (14% vs. 7.5%). In contrast, with regard to the younger age group (ages 19–24), its relative weight at universities (67%) is much higher than at colleges (38%) (CBS 2002a).

Thus, it is possible to deduce once again that colleges offer what is known as a “second chance” to a significant number of students to acquire a higher education that they had missed out on previously. The relative weight of those who receive such a chance at universities is much lower since registration to colleges is much less selective than to universities and since colleges pursue older students and offer them special programs.

The second significant difference between college and university students is their ethnic origins. In many societies, ethnicity plays a major role in social stratification. Most Israeli sociologists see the ethnic rift as one of the country's main axes of stratification. In general, it is recognized that Jews of Western (Euro-American) origin manage to attain more desirable social positions than those occupied by Jews of Eastern (Afro-Asian) origin. The latter account for most of what is defined as the social margins (Yaish 2000). CBS (2004) data draw attention to several interesting points in this regard. First, there is no significant difference between the proportions of Israeli-born students at institutions in the two tiers. Second, the proportion of Eastern Jews studying at colleges is higher than that of Western Jews. For example, 32% of Eastern Jewish undergraduate students study at colleges versus 25% of Western students, i.e., one third versus one quarter (CBS 2002a). This means, once again, that colleges offer marginal groups easier access to higher education. It is obvious that this group has chosen to utilize this “window of opportunity” since graduation in these institutions is easier to attain than in the universities.

In a study held recently on the effect of higher education expansion on ethnic inequality as manifested in the rate of studies, the authors reached an interesting conclusion. They showed that the more the system expanded, the more all groups increased their rate of studies. However, the most significant increase was evident

among the privileged groups (Bolotin-Chachashvili et al. 2003). Nonetheless, as mentioned, CBS (2004) data reveal an important fact, namely, about two thirds of students registered at colleges study the highly desired subjects of engineering and architecture, law, and business administration. Some 64% of Eastern students attending colleges in 2001 studied these attractive subjects. Once again, it is possible to conclude that a high proportion of the marginalized groups received a chance to earn a degree in prestigious fields that had previously been unavailable to them.

The third difference is the students' geographical distribution. Israel has six districts (excluding the Judea and Samaria district in the West Bank). Geographically, the country has two peripheral districts – the northern district (encompassing 17% of the population in 2002; in 2013 it numbered 1,341,500 residents) and the southern district (encompassing 14% of the population in 2003; in 2013 it numbered 1,168,000 residents). Thus, 31% of the population can be defined as geographically part of the periphery. These two districts are also defined as peripheral from a socioeconomic point of view. The CBS (2004) has classified all local authorities as belonging to ten clusters based on their demographic-sociocultural cross section, as determined by an aggregate measure comprised of a list of variables. Cluster 10 includes the highest scoring authorities and cluster 1 the lowest scoring authorities (CBS 2002b).

The two peripheral districts appear to be the weakest. Over 65% of all authorities in the southern district are in the three lowest clusters. Only 13% of the authorities in this district are in the two highest clusters. Nearly 60% of local authorities in the northern district are in the three lowest clusters. Only some 10% of these authorities are in the two highest clusters. No other district comes even close to this sad state of affairs.

The question in order here is to what degree did the new colleges boost the peripheral districts by improving residents' chance of receiving access to higher education? The answer seems clear: the accelerated development of public colleges began in the early 1990s as part of the declared policy of transferring educational resources from the central districts to the periphery, i.e., to the southern and northern districts. The establishment of colleges in peripheral areas was intended in particular to allow peripheral groups to receive a higher education at the lowest possible cost. Gradually, students in the southern and northern districts came to constitute the majority of students at colleges, indicating that the availability of local colleges contributed significantly to increasing the accessibility of higher education. Taking note of the socioeconomic cross section of the population in these two districts, it may be assumed that local colleges enabled registration of students who otherwise would have missed out on their chance of a higher education, this despite the fact that they know they will be discriminated against.

The alert demand for undergraduate programs in the regional academic colleges caused a far-reaching change in the structure of the higher education system. Since the 1990s, the number of undergraduate students in the country tripled and peaked in 2014 with 710,192 students nationwide, indicating that growth of the higher education system is slowing down. However, growth of the regional colleges continued: The 2015 was the first year in more than two decades in which the number of undergraduate students declined. In 2009, for the first time, more than 50% of the

nation's undergraduate students were studying at regional colleges, and this percentage continued to increase until, in 2015, only 33.8% of all undergraduate students were attending universities.

Conclusion and Future Directions

Noting the extended opportunities for acquiring a higher education, and considering the increased achievements of higher education among the weaker groups (the working class and minorities), it is now necessary to examine the issue of reduced inequality. A hypothesis formulated recently under the designation maximum maintained inequality (MMI) was formed in the early 1990s (Raftery and Hout 1993). It strongly rejects the assumption that the expansion of educational systems per se reduces social gaps. In fact, the MMI hypothesis claims that new educational opportunities are first utilized by less talented students who belong to privileged groups and much less by students from peripheral groups. The former, who have more considerable financial resources (and probably also cultural and cognitive resources), are capable of better utilizing the new opportunities. Advantages stemming from social background factors help students from upper classes ensure themselves their own distinguished place. According to Raftery and Hout (1993), the central dominant groups retain their advantage for purposes of registration to higher education until their participation in this system reaches a saturation point. Only at this point does the expansion of education systems begin to contribute to reducing social inequality in registration. The MMI hypothesis was confirmed by various studies (e.g., Gerber 2000; Shavit and Blossfeld 1993). All these studies indicate that inequality in education tends to remain despite the expansion of education systems. The MMI hypothesis might be particularly relevant for higher education, due to the fact that students and parents from different social classes vary in their levels of familiarity with the system. Thus, members of privileged groups are better able to manipulate the system to answer their needs (McDonough 1997).

CBS (2004) data lead, in this context, to four important conclusions. First, the relative weight of the two lowest sociocultural clusters among Israeli college students is negligible. They comprised only 1.7% in 2000–2001. Second, the four highest clusters comprised a great majority of 60% in that year (CBS 2002a, 34). Third, the data indicate that the middle class dominated in the colleges. The four middle-class clusters, 5–8, comprised a majority of 69% in 2000–2001. Fourth, the sociocultural composition of college students changed over the years. The proportion of the lowest clusters (1–4) rose from 5.4% in 1995–1996 to 13% in 200–2001, an increase of 230% in 5 years. The proportion of the two highest clusters (9 and 10) diminished over the same period from 23% to 19%. The proportion of the middle class also diminished from 72% to 69%. In short, it seems that while the weight of the privileged groups among college students is decreasing, that of the weaker groups is growing.

However, as mentioned above, this is not the full picture. While colleges provide less educated groups with an alternative to selective universities, the upper classes have a much greater chance of utilizing this opportunity and studying the most

attractive fields. Since colleges that offer studies in these attractive fields (law, business administration, and behavioral sciences) are not subsidized by the state, tuition is very high, and members of the working class cannot afford to study there.

Unsurprisingly, the socioeconomic segmentation of students in private colleges, who constituted 40% of all college students in 2001–2002 (CBS 2002a), shows a preponderance of affluent students. The four highest socioeconomic clusters (7–10) comprised 67% of students in private colleges in 2000–2001. In public colleges, their weight was much smaller, only 52%. In contrast, the two lowest clusters (1 and 2) comprised a negligible 0.8% of all students at private colleges versus 1.5% of students at public colleges. The two highest clusters (9 and 10) comprised 23% of students at private colleges versus 15% at public colleges (CBS 2002a). In light of these data, it is no wonder that some concluded that the privatization of higher education, by establishing and expanding the private colleges, also served to enhance the existing inequality in the accessibility of higher education for different groups. This is compatible with the MMI hypothesis. Even more important, perhaps, is the increased inequality with regard to accessibility of the most attractive disciplines (Shavit et al. 2003b). In short, with regard to the effect of the colleges on social inequality, it is certainly necessary to appreciate all the different aspects of this issue very carefully before reaching conclusions.

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Second-Tier Higher Education Institutions and the Diversity Challenge: Structural Components Adopted Through a Germanic Lens

14

Martina Gaisch and Regina Aichinger

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Abstract

This contribution seeks to elaborate on second-tier higher education institutions (HEIs) in the context of Europe, and more precisely in the Germanic world, with the aim to identify differences and communalities to US-specific Community Colleges. By drawing on the specific example of the higher education system in Austria, an in-depth analysis of the historical development of the sector of universities of applied sciences (UAS) is provided. In addition, it is sought to outline the profile and mandate of this 23-year-old sector and to discuss why it seems particularly suitable for addressing issues such as lifelong

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learning, third mission, and the social dimension. Finally, a dynamic student lifecycle management is introduced that takes account of an increasing demand for a diversity-sensitive orientation of institutions of higher learning. It is argued that in view of the growing individualization and the rising heterogeneity of the student population, student lifecycle services have to allow for a variety of different paths to meet the needs of professionally qualified students, students with family commitments or differing demographic diversity challenges. In sum, second-tier institutions not only differ with regard to their selectivity, prestige, curriculum, and practical orientation, they are also believed to adopt different approaches towards diversity management. This is all the more relevant since they appear more likely to act as gate-openers for nontraditional students and allow for vertical expansion to previously excluded social groups. This, among others, is certainly a common denominator between community colleges and the European UAS sector.

Keywords

Second-tier higher education institutions · University of applied sciences · Diversity · Diversity management · Nontraditional students · HEAD wheel · Austria · Germany

Introduction

In view of societal, educational, organizational, and structural differences, a variety of labels have been used to describe educational institutions of higher learning that appear to have a number of objectives in common. For one, they were established as a counterbalance to traditional universities with both a different sociopolitical mission and educational mandate. As such they tend to be specifically geared towards the local industry with an eye on graduate employability and lifelong learning (LLL). Hence, curricula of second-tier HEI are frequently tailored in line with occupational needs with a strong commitment to keep pace with an ever-changing economic and social environment. Such a stance favors a multi-dimensional implementation of permeability procedures, so to say framework conditions that enable persons with vocational skills to take a degree at the tertiary level.

In view of changing demographics and a growing shortage of skilled workforce, second-tier HEIs have become increasingly aware of their responsibilities to act as an interface between professional and academic worlds. It is with this imperative in mind that second-tier HEIs appear to be more prepared to engage in what is called third mission activities that are performed by HEIs in relation to external environment (Glaser et al. 2014) with the aim to reach a sustainable regional and socio-economic development (Sam and van der Sijde 2014). What is more, in the Anglophone world, so-called community colleges are frequently a lower-cost pathway that provides an alternative to university overflow. Such transformative institutions then appear to more and more assume a moral responsibility for social

engagement which also translates in an increased intake of underserved students (Gaisch 2016).

Terminological Clarity

Due to the lack of a universally acknowledged umbrella term for all the institutional types that fall into the category of what Raby and Valeau (2014) call community colleges and their global counterparts, a European lens is adopted to shed some further light on their characteristics. In this contribution, these institutional types are referred to as second-tier higher education institutions for two reasons. First, due to the vagueness of the term community college and second in view of its being a rather North-American concept with distinct features such as being “an intricate institution offering pathways to credentials, degrees, and retaining opportunities for those with and without college credentials” (Mullin and Phillippe 2013, 4). It is certainly true that all those institutions have a unique mission, close ties to the local industry, and operate as engines for economic development. As such they appear to be a good alternative to traditional universities and – due to their regional focus and societal engagement – they attract more nontraditional students. Although community colleges offer an open admission policy with low tuition that is particularly suited for low-income and first-generation students, they are still fee-charging institutions, which is not the case in non-Anglophone Europe. While community colleges were already established in the 1960s, driven by postsecondary opportunities for a wide range of students within easy and geographic and financial reach (Baum et al. 2013, 31), not all of its European counterparts were founded around this time span. Although it is true that prior to 1960, most European higher education systems were university-dominated (Kyvik and Lepori 2010, 3), it was after all the UK that – most probably influenced by the USA – introduced the binary system in the mid-1960s.

At the same time, Germany and Austria started to open their higher education systems for previously underrepresented student populations. One rationale behind these reform plans was increasing awareness that higher and further education represents a relevant driver for the postwar economic growth and social welfare. It was hence in this spirit that traditional higher education has been gradually transformed from an elite-shaping phenomenon into a massification trend which should ensure the “transmission of skills and preparation for a broader range of technical and economic elite roles” (Trow 2007, 243). In this vein, HEIs (especially universities that have their roots in the Middle Ages) had to fundamentally overcome their pride of place and their exclusivity and excellence culture. Such a paradigm shift also caused a substantial transformation of the social function of higher education (Forest and Altbach 2007). In former times, traditional university education was predominantly focused on research and the discussion of major theories in basic subjects like theology, philosophy, law, and medicine. The recent phenomenon of massification of HE, however, challenged scholars to go beyond these fields and to also adopt “proper” didactical approaches to ensure adequate, enquired knowledge production

and transformation. The driving forces behind such reform policies concerned aspects which addressed “equality of opportunity and employment opportunities for graduates” (Guri-Rosenblit et al. 2007, 2). So, when dealing with application questions, teachers and students started to further focus on “useful” research for the vocational fields and the society (Shin 2014). At the beginning of the 1990s, the New Public Management (NPM) approach evoked yet another fundamental system transformation process for European HEIs: in line with this NPM wave of competitive incentivization and disaggregation, taken up first by the UK, national-state politics in Europe decided to decouple universities from public steering and funding.

Hence, in the early 1990s increased institutional autonomy was given high priority to further improve efficiency and effectiveness of study programs. In doing so, a specific focus was placed on graduate employability and the overall performance of teaching and research. Further, attention was paid to the implementation of governance instruments that facilitated societal responsibility and accountability. This led to a substantial paradigm shift for both academics and administrative units within HEIs (especially with regard to the European traditional universities), even more so as from then the institutions were no longer seen as “steering objectives” which functioned as “sealed systems.” Rather, they had to stress the needs and demands of their “environment,” and in consequence, had to reinvent their self-organization management and corresponding processes (Broucker et al. 2015; de Boer et al. 2007). With respect to globalization, massification, and the NPM phenomenon, Teichler and Shin (2014, 86) identified another remarkable development in the Germanic world which dominated regional HE reforms at the beginning of the twenty-first century. They claim that in the 2000s, the majority of advanced higher education systems entered the stage of postmassification, meaning that most college-age students have been enrolled in some form of higher education. In their view “students are less academically prepared, but the amount of knowledge available to teach in the classroom is exploding. As a result, the gaps between student preparation and classroom content are becoming wider in many higher education systems.” In reaction to these developments, the higher education systems in Europe face major challenges to further improve both quality management systems and study program portfolios.

A significant step in this direction was the establishment of polytechnics based on mergers of specialized colleges. Due to national-state developments in the 1990s, higher education systems in Europe were aligned to these structural and systemic changes. At that time, a higher education alternative to universities appeared to be the appropriate answer for growing socioeconomic challenges. And although each European country responded differently to the emerging modifications of tertiary education, they all opted for some form of vocational, career-oriented, technological, and specialist program at certificate, diploma, and/or bachelor level with the responsibility towards the region or the small and medium enterprise (SME) sector (Hazelkorn and Moynihan 2010, 177). In other words, it was considered vital to support the educational needs of the local industry and its innovation climate through ongoing technology transfer.

In contrast to some early adopters, the majority of European countries, especially in Eastern and Central Europe, started to create dual or binary systems predominantly during the 1990s. This was also the case for Germany (or at least the former

eastern part) and Austria that were confronted with a renewed wave of practice-oriented teaching. It was primarily local industry with their necessity for applied knowledge transfer that voiced the need for practice- and career-oriented institutions of higher learning.

When zooming out of Europe, it becomes apparent that a great variation in the types of second-tier higher education institutions exists across the globe. This variety translates in more than 50 different notions (e.g., universities of applied sciences, academic and vocational colleges, community colleges, polytechnics, technical colleges, colleges of further education or technical and further education, higher colleges of technology), all of which can also be referred to as the non-university sector. Whatever label applied, there are still a number of factors that distinguish one institution from another, be it in terms of academic level, type and length of study, curricular design, or admission and tuition policy. What second-tier HEI have in common, though, is that they are said to be the key to success in the twenty-first century (Ma and Baum 2015). One of those success factors may lie in their strength to serve a highly diverse range of students, be it in terms of age, gender, ethnicity, and socioeconomic background. In doing so, they open the gates of higher education to previously underserved social populations and contribute substantially to vertical expansion. The notion of “second-tier” HEI was therefore also created to demonstrate the degree of selectivity, academic versus practical orientation, and level of prestige (Shavit et al. 2004; Arum et al 2007). Arguably, institutions that allow for vertical expansion tend to be regarded less prestigious than selective and top-tier universities since they provide access to previously excluded social groups. What further adds to the complexity is the lack of a commonly accepted definition of this term which makes its classification rather dynamic. A common denominator, however, can be found in their vocational focus and professional orientation, their more localized research scope, and their contribution to a more diversified student body. What appears to be much more controversial are the degrees that such institutions are allowed to award. In some European countries with explicit binary systems (such as Austria and Germany, Switzerland) efforts are made to spur the political debate about the prestige of such institutions. This is further reinforced by various institutional attempts to become entitled to award doctoral degrees. As for the case of Austria, these discussions are linked with claims for an excellence status that translates in high-quality performance both in teaching and research.

A Historical Development of the Austrian Sector of Universities of Applied Sciences

To further zoom in on Austria, it needs to be stated here that the binary system of higher education is a rather new phenomenon in this part of the German-speaking world. First and second-tier institutions obviously differ with regard to their selectivity, and it seems that the latter are better adjusted to act as gate-openers for nontraditional students and allow for vertical expansion to previously excluded

social groups (Gaisch 2016). Hence, one of the reasons for setting up a new educational system was to guarantee enhanced graduate employability for a wider student population.

In line with these considerations, the 1990s marked a decisive change in the understanding of postsecondary or rather higher education in Austria. In secondary education, tier special school generally received an upgrade and were transformed into “non-university postsecondary education institutions” (Brünner and Königsberger 2013, 84). Based on an OECD study, the Austrian parliament decided to take a different path and to implement a completely new educational type, namely the Austrian universities of applied sciences (UAS) established in 1993. First, the UAS institutions were expected to serve as a role model for a governance system based on reduced state influence (19 of the 20 existing institutions are organized under private law). Second, they were considered to assume a pioneering role to integrate international accreditation and quality assurance standards in the Austrian tertiary sector (Pratt 2003, 127). In line with these challenging reform expectations, the UAS Studies Act (“FHStG”) was originally stipulated as a framework legislation with the aim to generate innovation in a new form of HE public-private-partnership governance system. Hence, the UAS sector was set up and expanded in cooperation with official top-down control (state, authority mandate) and private bottom-up initiatives. Furthermore, the Austrian UAS sector was created based on the idea of an intersectional competition – particularly with respect to quantitative growth (programs, funding) as compared to the traditional universities. Intentionally, the Austrian UAS institutions had much freedom and many possibilities for creating this “new” HE area. As a consequence, this legally conceded autonomy created a broad institutional diversity which resulted in many different internal governance structures, institutional profiles, quality management systems, and cofounder models. Despite this breadth, they were still geared under strict coherent regulations and standards of quality assurance and accreditation (Prisching 2013, 105).

In 1996, after 5 years of a highly dynamic development – the number of study programs tripled from 10 to 33 and the number of students increased with factor 5 to about 3,800. Due to the rapidly changing educational landscape, it became vital to bundle the interests of this newly emerging sector. This is why the Austrian UAS conference was established as an advocacy body for the previously stand-alone institutions. This step was seen as a significant consolidation with the aim of positioning the sector nationally and internationally with their new and intra-sectional competitive form. In the academic year 2015/16, the UAS sector comprises about 48,000 students enrolled in 251 Bachelor and 234 Master programs.

Like Austria and Germany, many other European countries have explicit binary higher education systems (such as Belgium, the Netherlands, Finland, and Switzerland) that seek to strengthen the vocational dimension in tertiary education. Consequently, a wider diversification of student population is enabled, accompanied by geographic proximity to home, or (in the event of the UK) low tuition fees and open access policies.

Second-Tier Higher Education Institutions and Their Educational Mandate

Over the years, second-tier HEIs have become an integral part of tertiary education and in view of their vocational and professional orientation their educational mandate appears to be much in line with the third mission. Sustainable collaboration with local industries, applied research with and for the surrounded region, and societal engagement allows them to fulfill the tasks of the third mission regarding regional knowledge transfer via heads (Jaeger and Kopper 2014, 95). Thus, second-tier HEIs are a vital ingredient for the creation of a knowledgeable society and the sustainability of democratic processes for all citizens. The co-creation of social, environmental, and technical transformations aimed at sustainable regional development needs to be coupled with outreach measures that also target nontraditional students with a sharp eye on the reduction of vertical and horizontal segregation. Such a stance obviously results in a broader variety of students and hence meets expectations held in relation to an increased expansion of student diversity (Ayalon and Yogev 2006).

Similar to the concept of second-tier HEIs, the notion of nontraditional students (NTS) is a rather fluid term with unclear definitions and a wide range of variations. In the Anglophone world, it mostly comprises age, multiple roles, modes of study, gap in studies, commuter status, admission pathways, and student biographies that are different from the norm (Chung et al. 2014). In other words, NTS refer to an underrepresented student body whose educational participation is constrained by a number of structural factors. In the German-speaking world, nontraditional students have predominantly been associated with professionally qualified students without a high school degree that enter university via the third educational pathway. This rather narrow definition seems to increasingly open up to incorporate a broader range of heterogeneous target groups. This change towards an open university (Hanft and Brinkmann 2013) has resulted in a paradigm shift for teaching and learning that needs to meet the emerging requirements of a non-traditional student population. In this context, it becomes clear that previously ingrained processes have become obsolete and a change in awareness has to take place across all levels; such a change then preferably goes hand in hand with accompanying measures, be they a diversification of student programs, a creation of flexible learning paths, or enhanced vertical and horizontal permeability possibilities. A wider access to university allows students to take on an academic career and to receive specialized vocational qualifications that are grounded in applied research. Additionally, second-tier HEIs have introduced special information and service systems to support individual biographies and career developments of the students and to intensify their willingness for mobility activities (e.g., internships or further studies abroad). These measures are in line with the Bologna process, which was conceived in order to harmonize the European Higher Education landscape, its systems and institutions and with regard on the so-called social dimension which was a certain strategic item of the Yerevan communiqué to “provide the competences and skills required for European citizenship, innovation and employment” (Yerevan Communiqué 2015, 2).

The Need for a Holistic Diversity Management

Arguably, a more diverse student population is most likely to require a different form of student lifecycle; one that is more dynamic and capable of addressing the challenges that come with stratification, massification, and diversification. In the following Fig. 1, a holistic diversity management instrument is introduced that operates under the name of Higher Education Awareness for Diversity (HEAD) Wheel (Gaisch and Aichinger 2016a).

Based on scientific findings, the HEAD Wheel (short for **H**igher **E**ducation Awareness for **D**iversity) was designed to serve as a frame of reference for a holistic diversity management that embraces five interconnected diversity segments (demographic, cognitive, disciplinary, functional, and institutional diversity). In framing this complex matter along the lines of a wheel, it is sought to visualize all diversity aspects that are relevant for higher education institutions (HEI) and, in doing so, shed

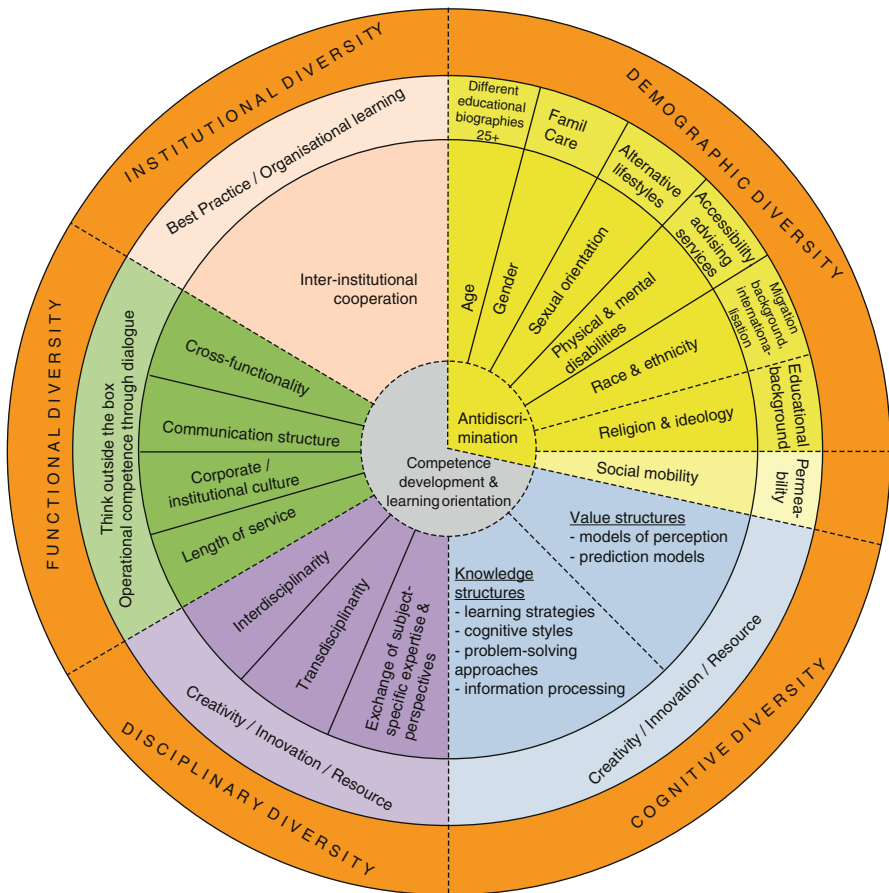


Fig. 1 HEAD wheel (Source: Gaisch and Aichinger 2016b)

a holistic light on diversity management and its incorporated measures. In other words, it operates as a comprehensive framework for a wide range of action that can be incorporated along the lines of a dynamic student lifecycle (Aichinger and Gaisch 2016). Exemplified by the UAS Upper Austria, measures are taken to attract nontraditional students which are regularly monitored through the composition of the student body. But it also was designed to strengthen students' ability to engage in self-regulated and self-reflected learning. Hence, the current monitoring of student success rates, employers' satisfaction surveys, and the analysis of graduate's career paths are important indicators for the suitability of the student lifecycle measures. In this sense, it seeks to combine specific tertiary service systems with a diversity-driven system logic. On these grounds, diversity management serves as a cross-sectional theme that is closely linked to quality management, human resources management, teaching, and learning, as well as the internationalization agenda. At the same time, it also involves issues such as organizational learning, systemic improvement, and the third mission. This strategic focus on regional economic and social development has been spurring the scholarly debate in Europe over recent years (Roessler et al. 2015; Pinheiro et al. 2015; Pausits 2015).

In the following, the five segments of the HEAD Wheel will be briefly outlined. In general, demographic diversity refers to mostly stable and group-forming categories such as age, gender, sexual orientation, physical and psychological disabilities, ethnicity and race, and religion and belief. In the spirit of a permeable university policy, one additional aspect, namely social mobility, was taken into account when conceiving this model. Consequently, major emphasis is placed on diversification and individualization of teaching and learning activities. Additionally, heightened awareness is given to issues such as accessibility, advising services, as well as differing educational biographies. Given that most of the social groups that fall into the segment of demographic diversity are legally protected against discrimination, it is to be expected that structural barriers and discriminatory mechanisms will get gradually removed and diversity and equal opportunities will make their way into the heart of HEI.

The second segment depicted in the HEAD Wheel is the one of cognitive diversity that is a diversity lens that looks at differences as a resource. From an economic point of view, this perspective is fruitful in view of its profit-oriented and results-driven approach that ensures access to previously underrepresented markets. Looking at it from a business case angle, differing knowledge and value structures shall be exploited to obtain better results and a higher level of innovation. When approaching cognitive diversity from a tertiary level, we feel it needs to be enriched by educational and ethical aspects where skills development and competence orientation take center stage. In the interests of promoting learning from and with one another, it is sought to achieve more creative and innovative solutions. Such a learning orientation then draws on differing cognitive styles, perceptual processes, and problem-solving strategies.

Disciplinary diversity as the third segment of the HEAD Wheel refers to targeted cooperation between different professional groups on the one hand, and to transdisciplinary border crossing on the other hand with the aim to generate heterogeneous knowledge through dialogical competence. Here again it is to be expected that the exchange of disciplinary expertise and perspectives results in

increased creativity and a higher degree of innovation. In the context of higher education, it may lead to more excellence through interdisciplinary and transdisciplinary research. It may also result in a higher degree of graduate employability, especially in view of the current scholarly debate about I- versus T-shaped knowledge bases (Chydenius and Gaisch 2016; Bajada and Trayler 2013). While I-shaped professionals are expected to have extensive expertise in one specific field, T-shaped graduates also cover a good breadth of generalist knowledge and interdisciplinary understanding. Undoubtedly, in an increasingly interconnected world it becomes more and more vital to “synthesise the seemingly divergent into a cohesive whole” (Gaisch 2014, 74) and to develop creative competencies beyond rigid disciplinary boundaries.

Functional diversity places a systemic-internal focus on organizational learning through a dialogic process of communicative competence. By this we mean the capacity to look at topics and tasks from a variety of different angles and to engage in fruitful mutual exchange that is valuable for both the individual and collective learning curve. Cross-functionalities, or differently put, the diversity based on functional backgrounds, become increasingly decisive when skills development and learning orientation of mixed teams are foregrounded and a higher level of efficiency is strived for. For the purpose of mutual exchange of experience and expertise, collective learning processes are stimulated and enhanced through cross-fertilization. In doing so, the shortcomings of a one-sided view and hardened perspective can be overcome and more transparent and participatory organizational processes have the potential to enhance both communication structures and the institutional culture. Functional diversity helps to avoid a tunnel vision and promotes think outside the box approaches.

Institutional diversity as the fifth diversity segment points to the advantage of interorganizational diversity that strives for a systemic externally oriented societal orientation. While companies are predominantly driven by an economic strategic approach when interacting with each other, universities may also be interested in promoting mutual exchanges of experience for the sake of a societal contribution. In this sense, collective learning together with increased effectivity of the targeted measures is a potential driver behind a commonly pursued social goal. Inherent to such cooperations may well be the exchange of good and bad practice examples and continuous enhancement of personal and collective knowledge.

In sum, the HEAD Wheel as a whole can be understood as a form of constructivist diversity mainstreaming that seeks to address all paradigms of diversity management – from fairness to access over the business case to learning and effectiveness. As such, it has the potential to promote social sustainability – as defined by the third mission mandate for sustainable transformation that institutions of higher learning should engage in. In addition, it may also serve as a reference for the development of a diversity management strategy since it allows for a SMART (Doran 1981) approach. The five criteria – **s**pecific, **m**easurable, **a**ssignable, **r**ealistic, and **t**ime-related – help to define clear objectives and together with the visualized complexity reduction of the HEAD Wheel, diversity management may become less abstract and easier to grasp.

The Need for a Dynamic Student Lifecycle and a More Diversified Student Population

In light of recent developments triggered by the EU Bologna process (especially by the last ministerial conference in Yerevan/Armenia in 2015) HEIs were encouraged to extend their quality improvement agenda and place a special focus on the so-called social dimension. In this line, it was decided to further enhance teaching and learning, especially by the creation of student-centered pedagogical innovations and digital technologies. Such a lens not only encourages HEIs to offer better balanced study programs which allow students to be (part-time) employed and/or to manage family business, it also points to the requirements of a more and more diversified population (be it in terms of ethnic, linguistic, or cultural diversity). With respect to these challenges, European HEIs have to further improve their quality and service orientation, their information/consulting structures, and they are also expected to design more customized study offers for a demographically and cognitively diversified student body.

When taking a closer look at study programs offered at Austrian universities of applied sciences, it becomes evident that, traditionally, they were conceived as practice-oriented, science-based, and time-limited (six semesters for the Bachelor degree, two to four semesters for the Master degree). In view of this focus, they represented a significant competition compared to the “traditional” university system. Not only were the courses attractive for students who had to earn their own living, they also increasingly attracted returners, interested in further higher education to facilitate career advancement to middle or top-management positions. A further strength of this education system can be found in the personalized administrative structure of study courses. Small team structures can offer personal/individual advice for students at almost any time. In such individualized settings, both administrative staff and teachers serve as mentors and/or coaches for the students. Such a service-oriented culture was possible due to a basically implemented, system-inherent customer relationship management.

Governance and Theoretical Aspects of Quality and Diversity Management

Although the Austrian university of applied sciences sector is nearly ten times smaller than the established university sector (Oravm 2013), individual institutions have reached a critical size to further professionalize their administrative and IT-supported processes. A professionalization has become crucial to allow for an effective handling of interfaces for the organization of studies and quality management systems alike. Since 2012, the latest amendment of the Austrian Studies Act (FHStG) and the organizational merger of all HE sectors in terms of quality management by the introduction of a new legislation, called HE Quality Assurance Law, the HEIs have become obliged to develop and perform an individual quality management system. With respect to the previously discussed aspects, modern

quality management systems need to be elaborated as holistic frameworks and include structural, procedural, and diversity-connoted dimensions. On the basis of these organizational conditions, some HEIs created IT-based student data systems (warehouses and clouds) as to manage individual needs and to operationalize input-output and outcome quality loop measurement (Miller 2007; Pircher and Pausits 2001) but also implemented certain IT-based learning systems (Broadbent and Poon 2015; Newman and Scurry 2015). In this vein, the University of Applied Sciences Upper Austria defined a student lifecycle management (SLM), which encompasses all knowledge management aspects (data, information, and learning/knowledge) and meets the demands of performance management in higher education (Dougherty and Natow 2015; Veiderpass and McKelvey 2016). Besides these “practical” dimensions, the SLM framework was also established based on organizational research, especially stakeholder and strategic management theories (Mitchell et al. 1997; Porter 1980), on reflections of process-structured organization systems and on the service and customer relationship function of HEIs (Donabedian 1980; Pausits 2006, 2007; Sursock 2011). This approach was chosen because these theories refer to in-depth forms of dialogue settings between HEIs and their stakeholders (predominantly students) and maintain the development of strategies and concrete measures to meet identified demands (Benneworth et al. 2015; Jongbloed et al. 2007). The constant work on relationship-building enables academics, administrative staff, and students to converge in terms of cognitive and disciplinary diversity, to develop a culture of mutual understanding, and to co-create an innovative and learning-oriented working and living atmosphere (Lester 2015; Lowe and Gayle 2007). These settings have a dynamic and fluent character – they aim at the development of a long-term relationship structure and at the creation of procedures as to identify change requirements: “By systemizing this relationship, transparency, clarity and understanding is gained, enabling the education provider to offer customer-oriented responses and services” (Pausits 2007, 31).

Against the backdrop of this managerial professionalization and HE service processing, a dynamic student lifecycle has the potential to structure the organization of studies into specific process steps and to define individualized support, information, and service activities for each stage. The SLM framework was also built on results of a British research study, which shows that professionalization of study organization management can be divided into five steps: (1) step one is called “raising aspirations” and addresses all action taken to stimulate public interest (e.g., children of all ages, persons that look for further education). At this stage, HEIs need to provide adequate offers for potential students and societal needs in general (give public lectures, provide open house days, target-specific information, and special workshops). All these activities should go hand in hand with a state-of-the-art marketing strategy. (2) The second phase is referred to as “better preparation” and encompasses comprehensive information for (future) students, “helping people make informed study choices [. . .]”; minimising barriers to attending university or college. Such measures may include the provision of financial aid, the design of flexible courses or the offer of online modules for professionally qualified students. This phase seeks to support students in ways so that they can achieve their full potential and obtain, or improve, the skills that

employers demand.” (3) The third stage of service level focuses on the sound integration of first-year students in the study organization by drawing on a well-conceived process that ensures a smooth entrance in the relevant degree program. Such regulatory measures need to take account of the special and individual needs of the students and may embrace remedial teaching, open courses, modular design of study sections and (online/e-/blended learning) or open courses. (4) A crucial student lifecycle management stage is the phase of “moving through” the study – which includes action to guide and support the students towards a successful graduation. To further facilitate this process, Hanft and Brinkmann (2013) defined a number of support measures which emphasize the modularization of study courses, the possibilities to structure the individual learning process and improved learner-teacher-relationship on the basis of appreciation. Consequently, HEIs have to think of fresh didactic concepts that place students in the center of interest with teachers as mentors, learning process supporters, and learning guides, who support the students to acquire adequate professional and social skills (see p. 114). A big challenge of this phase is the complexity and the size of HEIs – they need adequate resourcing and planning and a good organizational process management. (5) The last step of the SLM is the implementation of processes, which facilitate “student success” such as outcome-oriented examination methods or the provision of honest and constructive feedback (without the risk of sanctions). Finally, due to the demands of the Bologna process as to implement a permeable HE system, certain processes and standards for the recognition of former qualifications or study abroad academic achievements are required. In the event of a professional SLM system, Hanft (2014) therefore points to the need for the establishment of service providing units at HEIs, while at the same time highlighting the challenge of balancing individual expectations and organizational logics (p. 115).

Conclusion

This contribution sought to provide a clearer picture of the role of second-tier higher education institutions in Europe and how they have the potential to meet the challenges of an increasingly diverse student body. In doing so, they may be well positioned to fulfill the so-called third mission of the tertiary education, namely to act as co-creators for sustainable regional development.

Further, the need for a holistic diversity management along the lines of the HEAD Wheel was discussed. In framing the importance of taking a more differentiated look at diversity segments at the tertiary level it is hoped to further contribute to the scholarly debate.

On a more practical note, the University of Applied Sciences Upper Austria has sought to put these theoretical concepts into practice by combining a dynamic student lifecycle management with all five segments of the HEAD Wheel. As a result of this endeavor, enhanced cooperation and interdisciplinary and coherent interaction was activated between the organizational units of higher education research and development, quality management, diversity management, and human resources and their respective measures in organizational development. Cognitive, disciplinary,

and functional diversity allows for think outside-the-box approaches that create a structural, organizational, and individual interplay (governance-system) which could be described as a social and cultural safety net. Many different measures and initiatives were established along the five phases of the student lifecycle which were brought together in a corporate document (Fh-ooe 2016). It is therefore believed that this strategically responsible approach has the potential to result in a more interlaced and diversity-sensitive thinking and acting, be it in terms of study organization, research orientation, and underlying administrative processes. Moreover, these initiatives are also seen to be beneficial for stakeholders outside of the university system, since the societal obligations of higher education are fulfilled and diversity is understood as a valuable resource for teaching, learning, and research as well as social welfare. After 1 year of its implementation, the institutional reporting system will evaluate the outcomes and medium-term planning with regard to its impact measures.

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Analyzing the Media Narratives in South Africa's #FeesMustFall Movement

15

Kristin Bailey Wilson and Wouter Van Alebeek

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Abstract

Protests stemming from social media activism are becoming increasingly commonplace around the world, and each narrative has similar attributes, namely, (1) young adults, (2) the use of social media to organize protests, and (3) a desire to influence politics. Often, the dissatisfaction with the political leaders stems from economic disparities in income and opportunity,

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political corruption, authoritarian government rule, and a lack of educational opportunity. Notable examples include the Arab Spring that began in 2010 in Tunisia and spread throughout Arab countries and the Occupy Wall Street protest in 2011 in the United States that highlighted economic inequalities around the world. Can protests promulgated by social media and enacted by the young lead to democratic dialogue between political leaders and a country's youth? The chapter considers this question in the context of the #FeesMustFall protest movement in South Africa. Specifically, the chapter describes the competing narratives offered in the news reporting about the social media-facilitated protests beginning in mid-October 2015 culminating at the end of October when President Jacob Zuma agreed not to raise college fees and including the subsequent protests in reaction to President Zuma's announcement.

Keywords

#FeesMustFall protest movement · #OpenStellenbosch campaign · #RhodesMustFall movement · Arab Spring · Cape Peninsula University of Technology (CPUT) · Comprehensive universities · Daily Higher Education News (DHEN) · Department of Higher Education and Training (DHET) · Economic Freedom Fighters (EFF) · Higher education, South Africa · National Development Plan · National Qualifications Framework (NQF) · National Student Financial Aid Scheme (NSFAS) · Nelson Mandela Metropolitan University (NMMU) · Social media · South Africa · Statutes of the Republic of South Africa · Technical and Vocational Education and Training Colleges (TVEC) · Universities of technology · University of Port Elizabeth · University of the North (UN) · Zuma, J.

Social Media Protests, Political Climates, and Policy Change

Protests stemming from social media activism are becoming increasingly commonplace around the world, and each narrative has similar attributes, namely, (1) young adults, (2) the use of social media to organize protests, and (3) a desire to influence politics (Barbera et al. 2015; Scherman et al. 2015; Vraga et al. 2014). Often, the dissatisfaction with the political leaders stems from economic disparities in income and opportunity, political corruption, authoritarian government rule, and a lack of educational opportunity. Notable examples include the Arab Spring that began in 2010 in Tunisia and spread throughout Arab countries, the *Indignados* Movement in Spain in May 2011 protesting anti-austerity policies, the Occupy Wall Street protest in 2011 in the United States that highlighted economic inequalities around the world, the Umbrella Movement in China in 2014 with the umbrella serving as a symbolic protest against Hong Kong police and in favor of universal suffrage, and the Black Lives Matter movement that began in the United States in 2013 but has since expanded internationally to protest violence and systemic racism towards Black and Brown people around the world.

The young adults of the world are seeing protests, formed and organized through social media, as a democratic expression of their dissatisfaction with government policies and economic realities. In each of the examples above, political leaders have responded in various ways that seem positive, for example, upholding a commitment to universal suffrage in China starting with 2017 elections and the US Justice Department investigations into police shootings in Ferguson, Missouri, and Baltimore, Maryland, as well as other US cities. However, the Arab Spring did not usher in new measures to ensure peace and democracy in the Middle East. In fact, each of these protests included violent moments that resulted in the destruction of property and the injury and death of citizens.

This chapter considers the first wave of the #FeesMustFall protest movement in South Africa. Specifically, the chapter describes the competing narratives offered in the news reporting about the social media-facilitated protests beginning in mid-October 2015 culminating at the end of October when President Jacob Zuma agreed not to raise college fees and including the subsequent protests in reaction to President Zuma's announcement.

Methods

This chapter uses narrative policy analysis to name the competing policy stories from students, political leaders, and university leaders (Roe 1994). Clandinin and Connelly (2000) and Roe (1994) reason that any type of narrative inquiry has its origins in case study, meaning that narrative inquiries are bounded by time and place (see also Patton 2015). Our case is bounded by time, October 2015, because during this month, South African college students began to organize and protest nationwide. To us this suggested the beginning of a change in the way college students were advocating for their interests with the national government. Our case is bounded by place in that the news media is a type of space or place for communication.

Emery Roe (1994), in her book on narrative policy analysis, outlined a four-step process for working within this qualitative paradigm. Her work guided our decisions as we conducted the narrative inquiry presented in this chapter. Narrative policy analysis is used typically when the policy context is uncertain, complex, and polarized, as is the case in South Africa concerning increases in college fees (Roe 1994). First, researchers in this paradigm work to generate a *metanarrative* of the stories and counter-stories about a policy issue with the goal of stabilizing the assertions and assumptions (Roe 1994). Therefore, we worked to describe the dominant policy narrative underwriting the #FeesMustFall movement. Second, we turned to counter-narratives and nonstories. These narratives act as red herrings in the larger policy discussion making progress difficult. The dominant narrative and counter-narratives and/or nonstories amalgamate into the metanarrative presented in this chapter. The last step in narrative policy analysis is to consider how the metanarrative might reorganize the issues to be more conducive to policy-making. This step is considered in the conclusion section of the chapter.

Data collection started with a LISTSERV intended for higher education professionals called *Daily Higher Education News* (DHEN). The daily email is a collection of news articles concerning higher education in South Africa. We searched for articles and items concerning the #FeesMustFall movement between October 12 and October 31, 2015. October 12 is the date that President Zuma announced the proposed 10.5% fee hike; October 23 is the date he rescinded it; and in the days that followed, student reacted to the President's announcement. In total, 166 news articles and items were collected. The data is public and published; therefore, a listing of the sources is available upon request. Data were collected from news articles and social media posts using the NVivo capture tool. The data were coded to capture the competing narratives and to understand how students, politicians, and university leaders viewed the beginning, middle, and potential endings. The most convincing indication that the conflict has not been resolved is that protests continue even as this chapter goes to press. What narratives explain why students continued to protest? The effect of the chapter is to render the #FeesMustFall movement a metanarrative or an inclusive account of the #FeesMustFall movement during October 2015.

South African Context

Since the passage of the Higher Education Act 101 in 1997, South Africa's higher education leaders have worked to respond to the democratic transformation agenda by reducing racial inequities in the existent system and expanding educational opportunities to a broader swath of the population. To blur traditional racial lines, starting in 2002, public colleges that historically served Black, Colored, or White populations were merged from 36 to 23 (Council on Higher Education 2016). In 2013, two more institutions were formed taking the total number of public universities in South Africa to 25. In addition, 50 technical vocational and training (TVET) colleges are scattered throughout the country.

For example, Nelson Mandela Metropolitan University (NMMU) was created when Port Elizabeth Technikon (a Colored school), the University of Port Elizabeth (a White school), and the Port Elizabeth campus of Vista University (a Black school) were merged. The institutions were extremely different in terms of the quality of their facilities and the nature of the curriculum. The University of Port Elizabeth had a traditional university campus with high-rise buildings, dorms, and a quadrangle-type campus center; Port Elizabeth Technikon's campus was a series of 1970's-style, one-story, vocational buildings; and the Vista campus consisted of trailers used as classrooms. Since the merger, the Vista campus has been transformed into an African-style campus with permanent buildings arranged circularly. It includes space for student activities, healthcare, and faculty work, in addition to classrooms. The Technikon campus and the University campus are largely the same, but because they are located on opposite sides of the same street, students attending NMMU may well have classes on both sides of the new campus. All students in engineering majors attend their primary classes on the old Technikon campus.

While NMMU is located in an urban area, the University of Limpopo is an example of a merger in a rural area. UL began as the University of the North (UN) for the education of three ethnic groups: Sotho, Venda, and Tsonga. Only Black South Africans could attend UN. The apartheid government often showcased UN as an example of how separate ethnic facilities work. Initially, the Qwaqwa branch of UN was removed and merged with the University of the Free State, but UN retained its name. In 2005, UN was merged with the Medical School of South Africa, and the name was changed to the University of Limpopo. However, the two schools were not in close proximity, so leadership struggled to merge the faculty and staff into one cohesive school. Educational leaders argued that a stand-alone medical school would be able to train more healthcare professionals and conduct more healthcare research than was possible with the merged school, so in 2015, the schools were again separate.

The upheaval associated with merging and splitting of colleges and universities was significant. Three challenges occupied institutional leaders (Council on Higher Education 2016). First, the operational issues related to employment, satellite campuses, and funding were more complex than expected. Second, institutional cultures and practices did not combine seamlessly. Third, resistance from external stakeholders, staff members, and students was unexpected.

Several policy initiatives were developed and implemented by the Department of Higher Education and Training (DHET) to respond to these tensions. DHET is akin to the US Department of Education (DoE); however, it has more control over public colleges and universities than does DoE. In 2008 a National Qualifications Framework (NQF) was established that names student outcomes from preschool to the doctoral level. The NQF is governed by a series of accrediting bodies, similar to the regional accrediting bodies in the United States. Universities apply to accrediting boards based on the NQF to add programs and seek changes to degree offerings. In 2014, the DHET issued a policy framework that differentiates between university types. *Universities* were traditional teaching and research institutions offering 3-year bachelor's degrees to doctoral degrees. *Comprehensive universities* have much in common with both regional universities and community colleges in the United States. They offer degrees from higher certificates (2-year degrees) to doctoral level degrees and conduct research to a lesser degree than the traditional universities. These colleges bear a resemblance to Florida community colleges since the expansion of degree offerings to the community college baccalaureate and the many name changes removing "community" from the college name (e.g., Pensacola Community College became Pensacola State College). Comprehensive universities offer 2-year degrees in fields from education and journalism to engineering; however, these degrees do not stack onto the baccalaureate degrees easily. Transfer from one degree type to the next is problematic. For example, a student earning a 2-year degree in marketing at a comprehensive university might find that much of the coursework would not count toward a baccalaureate at that same comprehensive university in the same field. NMMU is a comprehensive university. *Universities of technology* offer degrees focused on industrial and technical fields and disciplines. These universities also have many similarities to US community colleges. Most are a result of mergers

between smaller Technikons (Colleges of Advanced Technical Education) that offer tertiary-level education in technical or practical fields, including education, business, and informatics. Degrees range from 2-year programs to doctoral degrees. At both comprehensive universities and universities of technology, many students commute from home to attend or live off campus. In addition, there are also 50 Technical and Vocational Education and Training Colleges (TVEC) in South Africa. These schools offer short training programs that are not considered tertiary in nature. Degree types and program offerings are approved by the Department of Higher Education and Training through the NQF.

While this enormous amount of regulatory and institutional structure change was occurring, the number of students enrolling in universities was increasing rapidly, straining the National Student Financial Aid Scheme (NSFAS) (Schwartzman 2015). For example, in the first decade of the twenty-first century, universities' head count enrollment increased by 71% (CHET 2012). South African universities are funded through government block grants and student fees. Student fees are set by the universities individually, while the NSFAS supports student attendance by offering grants and loans to students to pay the fees (Simkins 2016). Although NSFAS is similar to the US system of federal student aid, NSFAS is not fully funded, meaning that some eligible students receive partial or no funding (Presence 2015). Supplementing NSFAS, financial aid officials and individual colleges work with private organizations (both for-profit and nonprofit) to offer student bursaries. These are loans to the student to cover college fees. Typically, students who accept private bursaries must agree to work for the organization offering the loan for some period of time after graduation. If the student does not graduate, the bursary must be repaid.

In 2013, 83% of the nearly one million university students in South Africa were either Black, Colored, or Indian (Council on Higher Education 2016). While the number of Black, Colored, and Indian students has risen over time, the number of White students has fallen. The percentage of Black students studying at South African universities increased from around 25% in 1986 to 62% in 2005 (Wangenge-Ouma 2012). The 2013 report on Statistics on Post-school Education and Training in South Africa showed 68% of the students enrolled were Black (Department of Higher Education and Training 2015). Despite large increasing in the total number of enrolled students, the participation rate for Black students remains low at only 16% of the total population compared to White students at almost 55% (Council on Higher Education 2016; Menon 2015; Soudien 2010).

Even with equity targets and financial aid for disadvantaged students, students from low-income households are not able to access the housing, food, and fees necessary to enroll in college, calling into question the notion of equal access to tertiary education (Menon 2015). With 53.8% of the population under the poverty line in 2010 (World Bank 2016), funding becomes a major barrier for many students unless a third party will pay the university bills, loan money to students, or provide another system for financing higher education. Wangenge-Ouma (2012) discussed funding as "... a key determinant of higher education access in South Africa" (p. 6), and Letseka and Maile (2008) found that a lack of financial means contributes strongly to students dropping out of college.

From #RhodesMustFall to #FeesMustFall

South Africa's #FeesMustFall followed the successful #RhodesMustFall movement advocating for the removal of a statue of Cecil Rhodes at the University of Cape Town (Baloyi and Isaacs 2015; Brown 2015; Venter 2016). #RhodesMustFall came to emblemize larger ideologies concerning decolonization of South African universities, and students used the hashtag across the country for a variety of causes (e. g., outsourcing and language of instruction). While the protests started at the relatively elite University of Cape Town, they expanded to include the University of the Free State and the University of KwaZulu-Natal, for example. News reporting tended to focus on protests at larger institutions, and no systematic record of all protests was kept. Nonetheless, news reporting made clear that student protests were dotting the entire country.

When in mid-October 2015, university leaders proposed a 10.5% increase in college fees, and students engaged their leaders by organizing through social media the #FeesMustFall campaign. By the end of the first month, students had marched on the Union Buildings in Pretoria, the capital of South Africa. The protests became violent, and President Joseph Zuma eventually conceded to the students requests and stayed the fee hike. Since then, #FeesMustFall protests have shut down campuses across the country. Central to the protests is the belief that tertiary education should be free. Unlike the United States, South African students are required to attend a certain number of hours of lecture, among other requirements. Having attended the required hours, students are eligible to sit for exams at the end of each semester. If a student passes the exam, then s/he is awarded credit for the course. For example, a student might sign up for an introductory psychology class with lectures in the morning Monday through Thursday. At the end of the semester, that student would sit for the final exam with all students taking introductory psychology lectures regardless of the time or day. When protests shut down campuses, the lectures were cancelled. Students lamented that they were finding it difficult to log enough lecture hours to be eligible to sit for final exams. College leaders responded by both rescheduling and relocating final exams. For example, normally exams are finished by early December; however, at NMMU, repeated shutdowns from protests meant that the college had to reschedule and relocate final exams, and some students were offered free temporary housing to finish their work (Capa 2016). Some NMMU students will be taking their final exams as late as January 2017 to accommodate the disruptions in academic life caused by protests.

Findings

While the expectation that college should be free may seem unreasonable, for many South Africans that is the right promised to them in their constitution. The *Statutes of the Republic of South Africa* (2016) named education as a right, saying that through "reasonable measures" education should become "progressively available and accessible" (p. 1257). *The National Development Plan* (National Planning Commission

2016) highlights the government's vision of all students having access to full funding for their post-secondary education through bursaries. Yet, it is not clear that free is a "reasonable measure" or that the country can afford to fully fund a loan scheme.

As discussed previously, South Africa's college context is burgeoning with reorganizations, regulatory change, and new types of student enrollments. These changes have led to a college environment that is in constant flux. Roe (1994) suggests that in policy environments that are complex, polarized, and uncertain, policy narratives can help by stabilizing policy narratives and aid in decision-making. The fees issue is complex in that it is tangled with other issues, like improving roads, transportation, and housing. These improvements make it easier for South Africans to attend college, but funding them means taking funds away from or not increasing funding to the NSFAS or to colleges directly through block grants. The fees issue is polarizing in that the student protestors are insistent not just that fees must fall but that fees should not exist, while government officials and university leaders believe there must be student fees in order to fund operations. South Africa's college environment is uncertain in that there have been major reorganizations, regulations, and student attendance pattern changes since 1996–20 years. These changes have been ongoing and disrupting to college cultures and organizational goals. It is important to note though that disruptions are not necessarily negative and can lead to positive culture and regulatory changes. A nonracialized South Africa is a commendable goal and worthy of disruption.

While the protest movement started at traditional universities, they quickly spread to both the comprehensive and technical universities. Cape Peninsula University of Technology (a university of technology) and Nelson Mandela Metropolitan University (a comprehensive university) both have been sites of protests that resulted in campus closures. The mergers of South African universities have blurred the lines between what American scholars understand to be community college students and degrees and baccalaureate students and degrees. However, whether seeking a 2-year degree, a 3-year bachelor's degree, or a doctoral degree, students in South Africa have endured an underfunded student finance scheme and increases in fees. Protesting students appear to run the gamut from technical degree earners to graduate students.

The Student Story

Social media-organized protests by students are not new in the tertiary context in South Africa. Students at the University of Cape Town were able to successfully advocate for the removal of a statute of Cecil Rhodes from their campus, arguing that the statue symbolized colonial oppression that the new South Africa sought to displace. The campaign, known as #RhodesMustFall, moved to other campuses and received national press coverage. Less than a month after the first protest, the University of Cape Town senate voted to remove the statute. At Stellenbosch University, students organized an #OpenStellenbosch campaign that opposed exclusionary university policies like using the Afrikaans language for lectures. They were successful in getting language policy changed for the entire university. These two

examples, among others, provide for South African students a clear and effective pathway for advocating for policy change. The protests taught students that national leaders are paying attention to social media and organized protests.

The #FeesMustFall student story begins at the University of the Witwatersrand (Wits) on October 14, 2015, when university leaders announced a fee increase for the following academic year of 10.5%. College leaders reasoned that the increase in fees was needed to sustain the increase in enrollment and all the attendant infrastructure development (e.g., student housing). Student protests began immediately, and the complaint was the high cost of college attendance. News reporting highlighted student tweets like: "In barring the cars from coming in, we're showing how many students won't be able to come back next year #WitsFeesMustFall," and "When I started at Wits in 2007, the registration fee was about R5 000. It's now almost R10 000. #WitsFeesMustFall." Students exchanged stories about how the high price of fees affected them personally and their friends and family members. Anecdotally, students insisted that another increase in fees would mean that students would be forced to drop out of college.

It quickly became a criticism of the way universities are managed with tweets like "Universities are meant to be centres of learning but they are looking more and more like businesses #WitsFeesMustFall." One spray painted sign on Wits' campus read, "Stop Fee Increases Outsource Management." These two tweets highlight two intertwined issues: first, the priorities of college leaders seem to students to be proprietary, rather than educational, and, second, the practice of outsourcing college services to third-party vendors means lower pay and less job security for the employees working for the vendors, as opposed to working for the university. Many students viewed this workforce as representing their parents' struggle against apartheid and the outsourcing as a continuation of apartheid decision-making. Both narratives are examples of counter-narratives. While outsourcing is related to the question of fees, leaders view outsourcing as a solution to funding operating costs that enables them to keep fees low. Students offer the narrative as part of the continued oppression of Black and Colored students.

Along with the practice of outsourcing, students complained about the availability and condition of housing. In a tweet, Economic Freedom Fighters (EFF) spokesperson offered pictures of residences at the University of Venda with the word "squalor." The tweet read, "You hear of squalor in which students study at African universities, but to actually see it. . ." At the University of Fort Hare, in defending the choice to join the protest movement, the Student Representative Council (SRC) president called housing fees "unpredictable" because they are outsourced, and she said, "conditions at some residences were appalling." Although the hashtag, #FeesMustFall, appears to suggest a single issue, students were quick to attach other meanings to the movement, specifically outsourcing and housing.

Like all issues, students were not uniformly in favor of the #FeesMustFall protests, partly because the timing of the protests interrupted semester end exams and partly because the campus protests seemed counterproductive to the larger issues of access. One student tweeted, "We know we have exams to study for but what is the use if you won't afford returning to wits next year?? #ShutDownWits #WitsFees-MustFall." Another student told a reporter, "There are people who are writing tests.

I'm upset because I drove here from far away and classes are cancelled." While there were thousands of protesting students, the number of protestors represented a fraction of the total student bodies of any campus. Nonetheless, the collective voice of the #FeesMustFall tweets and posts, combined with the physical protests, proved to be a powerful voice in affecting policy change.

Violence

The movement came to an apogee when more than 10,000 students marched in Pretoria outside the Union Buildings (seat of the SA government) on October 23. The protestors asked repeatedly that President Jacob Zuma himself address their grievances personally. The presidential podium was erected twice outside the Union Buildings and then taken down both times. Eventually, President Zuma addressed the students from inside a media room within a government building. President Zuma agreed to stay fee increases for the upcoming year. It appeared the social media-organized protest movement had been effective again. What was unique this time, though, was that the President of South Africa had stepped in to ask university vice-chancellors to stay their planned fee increases. In other words, the national government sided with the protestors.

However, because President Zuma did not appear personally, some students reacted violently to his absence by damaging vehicles and throwing rocks at the police. The violence was recorded in the media and seemed to spark violent campus protests across the country. For many, the student win, staying the fee increase, should have marked a victory, but students remained dissatisfied with the underfunded NSAFS, outsourcing, and housing. President Zuma's announcement, rather than de-escalating protests, appeared to escalate them.

For example, 5 days after staying the fees, Wits University spokesperson said:

Two vehicles belonging to our contractors were set alight, security personnel managed to contain the fire. A tyre was also set alight outside the Student Centre, the glass at the bookshop within the Student Centre was shattered and books set alight.

At UKZN, the university spokesperson offered, "The students, bearing sticks, threatened students and staff whilst in the course of their duties. Some students discharged fire extinguishers in lecture theatres." At the University of Limpopo, students were arrested for looting and setting fire to food outlets. All over South Africa, university leaders were working to maintain calm on campus.

Campus Closures

Universities across South Africa found themselves in the uncomfortable position of needing to close campuses, postpone exams, and delay services. Among the campuses affected were the University of Witwatersrand (Wits), University of Cape

Town (UCT), University of Fort Hare (UFH), University of Limpopo (UL), Tshwane University of Technology (TUT), University of KwaZulu-Natal (UKZN), University of Pretoria, Nelson Mandela Metropolitan University (NMMU), Stellenbosch University, The Durban University of Technology, Mahikeng Campus of North West University (NWU), Rhodes University, and Cape Peninsula University of Technology (CPUT). Some closure announcements included accusatory language. For example, the website of the University of Limpopo read:

As a result of student protests and acts of intimidation; which disrupted all the morning session examinations scheduled for today (Wednesday, 21 October 2015), I hereby wish to inform you that the examinations for both this morning and afternoon sessions have now been formally postponed; and will be rescheduled shortly.

Parallel to this process, the University Management will engage with students and their leaders on their demands. We will keep you all informed of the developments in this regard.

The Cape Peninsula University of Technology announcement read:

All CPUT campuses will be closed on Monday 26 October because of continued threats of protest action. Classes and exams are postponed until further notice and staff must not report for duty on Monday.

Suspending services and closing campuses proved a powerful mechanism for making clear to national and university leaders that the status quo would not be tolerated. However, political and campus leaders seemed perplexed about what to do next.

Political Leaders

Dr. Blade Nzimande, the Minister of Higher Education and Training in South Africa, became a central figure in the political response to the protest movement. At an early protest, a student protest sign at an event in Cape Town read, “Blunt Blade Not Sharp Enough,” implying that the Minister had been unable to reduce spending at colleges to control the rise in fees. Nzimande responded with a joke about starting a “StudentsMustFall” hashtag. Students were not amused. Five days after the fees announcement at Wits, Nzimande responded to a media question about student protests with, “Yes, it is a challenge, but I wouldn’t call it a crisis because we have ways and means of discussing the matter.” He goes on to say that “students need to be brought on board for frank and honest discussions to ensure that there is stability in our institutions,” seemingly criticizing university leaders or specifically the vice-chancellor of Wits, Adam Habib, for not including students in university decisions.

In three more days, after a day-long meeting with university vice-chancellors, Nzimande offers students a compromise of a 6% fee hike. In an effort to entice students to accept the offer, he says, “In all conflict situations, there is always necessity to compromise so that no one party gets 100% of what it

wants. . .otherwise we will not resolve the challenges.” Students continue to tweet, post, and protest.

The Minister’s message shifts one more time when he tells the press that South Africa has enough money to fund free college education but that the private sector would need to contribute to that funding, meaning that the private sector should offer students more bursaries. Again, he shifts the blame from the national government.

Other political leaders tried to capitalize on student unrest, such as the Economic Freedom Fighters (EFF) spokesperson mentioned above who tweeted picture of residence halls at the University of Venda. The ANC secretary general indicted university leaders of deliberately trying to exclude poor students from college. Of the demand for no fees, his official party statement read: “This demand is reasonable and understandable in view of the high costs of tertiary education. These costs are prohibitive to both NSFAS and private bursary funded students.” He pointed to institutional autonomy to set fees as part of the problem.

For his part, the President of South Africa, Jacob Zuma, is quoted in the press as saying, “It is completely unacceptable in our democracy that disputes within a university should lead to physical clashes.” It was Zuma who called together the vice-chancellors on October 23 to discuss fees. At the same time, he appointed a task team to look at the broader issues of free education and institutional autonomy. In other words, he was interested in gaining regulatory control over fee increases such that universities would not be able to set their own fee schedules.

Finally, in an effort to calm protests, political leaders agreed to debate the funding situation in tertiary education at the National Assembly. The messages from national political leaders seemed to point to university leadership for increasing fees and not including students in decision-making conversations.

University Leadership

Because the protests began at Wits, Professor Adam Habib, the Wits vice-chancellor, became another central figure in responding to protesting students. He was quoted as saying of the protestors:

They misappropriate the words and intents of these activist intellectuals (referencing Frantz Fanon and Steve Biko) to justify violence in the post-colony. Profanity and threats on social media replace reasoned debate. Principled politics gets replaced by theatrics. Civil liberties are seen as a ‘bourgeois’ distraction.

Critical language like this and like the language in closure announcements did nothing to quell the tweets, posts, and protests. Students believed that the way to be heard was through social media-organized protest.

Nelson Mandela Metropolitan University’s vice-chancellor, Professor Derrick Swartz, tried a different tactic by complimenting students on their unexpected participation in politics. He wrote an opinion piece for one newspaper that read, “Many of us. . .can remember a time when we bemoaned what we perceived to be the

disinterest of so-called 'born frees' in politics on campuses." He goes on to say that the protest demonstrates that students are not disinterested but that they must be reasonable in their demands. Specifically, he argued that college cannot be free for all but can be free for the poor. Swartz also blamed the national government for not fully funding NSAFS.

Not alone in his criticism of the national government, UCT's vice-chancellor, Professor Max Price, acknowledged that there had been "diminishing investments by government in higher education over the past five years," and he called student protestors courageous and tenacious.

Metanarrative

In a country where nearly half of the population regularly struggles with extreme or moderate poverty, college is only accessible to many youth in a policy context of low fees and access to nationally funded grants and loans. The students tweeting, posting, and protesting using the hashtag #FeesMustFall are worried about their future and struggling to advance their education in real terms daily. Lack of campus housing and food services, as well as the outsourcing of services, suggests to these students that college is increasingly less assessable. Protests that turn violent suggest the high levels of frustration felt by a large number of students.

At the same time, political leaders are grappling with competing interests, like transportation and housing for the country as a whole, and have not been able to increase block grant funding to colleges or fully fund the student bursary scheme. National leaders seem to be looking to university leaders to reduce institutional costs, while increasing enrollments.

University leaders feeling the pressure to maintain academic standards, not only for the country but in keeping with international standards, are unable to continue to offer more classes for larger enrollments while funding and building a research infrastructure. Campus mergers and the changing demographics of students mean that leaders and faculty are working through a watershed change in culture on campuses.

Concluding Thoughts

As researchers from the Western world, we are cognizant that engaging in Roe's (1994) fourth step of policy analysis, suggesting new policy solutions, may have the ring of Western arrogance. As such, we offer no solutions of our own. Rather, we highlight solutions proposed by leaders in South Africa that seem to us to accomplish the fourth step of using the metanarrative to "make more amenable to... policymaking" the competing discourses. While no group, government officials, college leaders, or students will be able to see their vision fully realized, the status quo is unsustainable.

Protests under the hashtag #FeesMustFall continued in South Africa long after our data collection period and, at the writing of this chapter, were still occurring. In July 2016, student protestors shut down NMMU in reaction to finance policies that required students to pay old fees before registering for classes. In August 2016, at UKZN, protestors blocked campus entrances and university leaders closed the campus. Protestors were demonstrating against finance policies related to fees. By the end of August, college leaders wrote an open letter to President Jacob Zuma and the Minister of Higher Education, Blade Nzimande, asking them to address the funding issue in higher education (Govender 2016). The letter was signed by 1,200 academics. In September 2016, a commission established by the national government, dubbed Fees Commission, met to discuss university fee increases. UCT's vice-chancellor presented to the commission meeting; as he left, he was confronted and detained by a group of protesting students for a short period of time. Eventually, the protesting students were able to disrupt the commission meeting, and it ended.

The open letter mentioned above pointed to a "key strategy" of the post-apartheid government of investing in higher education as a way to reduce race inequality; however, the letter argues that the government has not funded this strategy adequately. Specifically, currently 0.6% of GDP is spent on universities in South Africa. Compared to 1.8% in Russia and 1.4% in India, the letter writers argue that South Africa is not keeping pace. The letter also argues that the percentage of operating budget provided by block grants has fallen to an average of 40%, and college leaders have been forced into austerity-type cutbacks (e.g., increasing administrative load, part-time faculty, and delayed infrastructure development). Menon (2015) and Wangenge-Ouma (2010) see the decreased commitment by the post-apartheid government as a failure to keep the basic promise of access to education for all. The college leaders and scholars mentioned clearly view increased national government investment in higher education as a solution to the problem.

Additionally, it is no surprise that the retention rates among African students, who are often the poorest students, are a problem, as was discussed by Soudien (2010) and Menon (2015). If fees are increasing every year, the amount of money invested by the government is decreasing, and additional fees have to be paid up front; the poorest students will not be able to afford higher education. These students will also be the ones that drop out, as mentioned by Letseka and Maile (2008). While the government might provide more financial aid for low-income students with strong academic records, students with mediocre records, or who have had a difficult time in the past, will not be able to obtain the finances required to apply or remain enrolled, and these students are vital to the future of South Africa as well. At the end of the 2016 academic year, on university, Cape Peninsula University of Technology (CPUT) partly addressed this problem by allowing students with outstanding fees to graduate (Tswana 2016). While the university made clear that this was not debt forgiveness, they reasoned that students with a degree were more likely to be able to gain employment and repay their debt.

While college leaders have been vocal in advocating for more funding from the national government, they have also formed partnerships with private development companies as a way to offer student services (e.g., housing) and to provide additional

revenue. For example, at the University of Witwatersrand, leaders are selling a 290 hectare tract of land (equivalent to 717 acres) for development (Kilian 2016). University leaders name student access and support as the reason the funds are needed.

While college leaders have taken steps to address student concerns (e.g., allowing indebted students to graduate or selling land to raise revenue), these steps are unlikely to solve the larger more pervasive problem. As the 2017 academic year begins, the national government has not increased funding, and some colleges have announced sizable fee increases (e.g., 8% at University of Cape Town, University of the Free State, and University of Witwatersrand). The national government responded by insisting universities not charge families making less than 600,000 rand a year (\$44,000/year) the fee increase, and asking universities to develop systems such that students who owe from previous years can continue to attend college (SA News 2016).

Students consider social media-organized protests an effective communication pathway to the powerful. It has proven to be in the past, and students clearly believe it will continue to be.

Can protests promulgated by social media and enacted by the young lead to democratic dialogue between political leaders and a country's youth? When talking about the removal of a statue or a change in the language of instruction policy, the youth have effected positive change. However, the polarized interests in the #FeesMustFall debate continue to challenge all constituencies.

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Further Education Colleges in the United Kingdom: Providing Education for Other People's Children

16

Kevin Orr

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Abstract

Further Education (FE) colleges have existed in towns and cities throughout the United Kingdom (UK) in some form for well over a century. They bear similarities with American Community Colleges and Australian TAFE colleges, but they are characterized by their diversity and by the breadth of their curriculum, which includes vocational, academic, and higher education courses. Their primary role has, however, always been the provision of work-related courses, mainly for young people. Despite their size and apparent significance, FE colleges are often poorly understood by policy makers who have had little if any experience of these institutions which cater mainly to the less privileged in society. This chapter

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provides an overview and an analysis of FE colleges in all four nations of the UK, but it focuses mainly on England. It examines the history of these colleges to explain their very local roots, and it finds continuity in what has determined how colleges have developed up to the present day. English FE colleges have been subject to frenetic policy initiatives since the 1990s, and despite their ostensible independence they have been more and more tightly managed by central government agencies. The present juncture is an important one for the sector as FE colleges in the UK are currently facing major challenges due to sweeping cuts in funding. Yet, even if they have little control over their own future, FE colleges have continually demonstrated an extraordinary capacity to adapt and survive, mainly by providing individual students with the courses they choose to follow.

Keywords

Curriculum for FE college · Design of FE colleges · Further Education (FE) · Further Education (FE) colleges · Teachers of FE colleges

Introduction

The Government should ensure that in every town and city there is an institution which is well established, focused on vocational education and training, and has a remit for social mobility. Fortunately for government, these institutions exist and they are called further education colleges.

These were the words of a witness presenting evidence to the British House of Lords Select Committee on Social Mobility that published its report in 2016. That the United Kingdom (UK) government might need to be reminded about these significant institutions, many of which have been around in some form since the middle of the nineteenth century, is indicative of further education (FE) colleges' persistent low visibility and low status in British society. These are characteristics of their relative position shared with similar institutions in other especially English-speaking countries, including Community Colleges in Canada and the USA as well as Training and Further Education (TAFE) colleges in Australia. The whole sector to which these FE colleges belong is, according to one prominent group of researchers, "fascinating, turbulent, insecure but desperately important" and yet these same researchers also contend that it "remains invisible to politicians, academics and commentators because, with very few exceptions, neither they nor their children have ever passed through it" (Coffield et al. 2008, p. 4). They and their children remain in schools, many of them private, until the age of 18 rather than at 16 attending an FE college, which caters mainly to the less privileged. For this same reason, Hodgson et al. (2015, p. 1), among many others, have described FE as "being for other people's children" in how it is perceived by the powerful. Despite this attitude, FE colleges are central to work-related education and training as well as to initiatives associated with social justice throughout the four nations of the United Kingdom: England, Scotland, Wales, and Northern Ireland. Britain's colleges

probably bear more resemblance to Australian TAFE colleges, but they are also similar to American Community Colleges in their student intake and in their social role. Their lower status differentiates them from institutions offering occupational courses in nations with strong vocational education and training systems such as Switzerland or Finland. FE colleges largely derive from Britain's particular industrial past and their persistent poor positioning within cultural attitudes reflects Britain's social and economic inequality. That inequality is expressed and reproduced through a hierarchical system of education which consistently has disadvantaged FE colleges.

The term FE is used throughout this chapter for the sector to which these colleges belong and it is the most commonly used term, but the sector has also been referred to as learning and skills, lifelong learning, and post-compulsory education and training. If the name of the sector is not fully resolved, its purpose is even more uncertain. Helena Kennedy, a senior lawyer who wrote a major report on the sector for the UK government that was published in 1997, contended that comprehensively defining FE "would be God's own challenge because it is such a large and fertile section of the education world" (1997, p. 1). Her own "throwaway definition" for FE was "...everything that does not happen in schools or universities," though even that is inaccurate as much of what happens in schools and universities also happens in FE colleges. Twenty-four thousand 14- and 15-year-olds, normal school age in the UK, were taught in English colleges in 2015 (Association of Colleges 2015, p. 14), and a little under 10% of all higher education in England is provided in colleges; in Scotland, colleges provide a much greater proportion. Nonetheless, defining colleges by what they are not is at least a start. What is beyond dispute is the size of the sector.

FE colleges across the UK have similar origins, though policy and funding have diverged significantly more recently. This chapter will focus mainly on England which has by far the largest population and the largest FE sector with 325 colleges that educate and train 2.9 million people. Within that total of 325 institutions, 90 are sixth-form colleges that provide mainly but not exclusively academic courses (known as A levels) for 16–19-year-olds; 14 are land-based colleges which usually focus on farming and the management of animals; 2 are art, design, and performing arts colleges; 10 colleges have other specialisms, for example, in the education of people with disabilities; and there are 209 General Further Education (GFE) colleges. These GFE colleges offer a very wide range of mainly work-related provision as well as academic courses from basic to advanced levels, often including higher education degrees. More young people aged 16–18 study in English colleges (744,000) than in schools (433,000), and an additional 75,000 young people undertake an apprenticeship through FE colleges. 1.9 million adults also study or train at FE colleges, mainly on part-time courses (figures from AoC 2016). Furthermore, around 250,000 people work in FE colleges (ETF 2016, p. 11). The FE sector is undeniably large but like vocational education and training in the UK more generally, the sector suffers from low standing in the educational hierarchy.

FE is the "neglected 'middle child'" of education, squeezed between schools and universities (Foster 2005, p. 58), both of which attract more attention and usually more funding and both of which have more clearly demarcated purposes. Indeed,

one study astutely concluded “that it is the very diversity of the FE curriculum offer that simplifies the life of school sixth forms and universities by enabling them to keep their more focused missions” (Stanton et al. 2015, p. 69). But it is not just diversity that distinguishes FE. Social class is crucial to understanding FE colleges and their role. The education system in Britain reflects and reproduces the inequality of British society, so while many from middle-class backgrounds do attend FE colleges (Thompson 2009), students in FE colleges are mainly working class (Avis 2009) and the sector generally has lower cultural status than other sectors of education, such as universities. Within that broad understanding, this chapter will examine what FE colleges are like and what they do. It will discuss their historical origins, their teachers, their curriculum, recent policy for FE in the four nations of the UK, and finally their future. I will argue that centralized planning has hitherto had little influence on colleges’ provision of teaching and training, which have consistently adapted not to the needs of the local or national economy but to the desires of potential students.

The Roots of FE Colleges

Bailey and Unwin (2014, p. 450) explain how “the work of colleges is a continuing manifestation of the voluntarist nature of education and training for both young people and adults beyond that which is deemed necessary for entry to certain professions.” Those certain professions include the very few in Britain with statutory requirements for qualifications, such as architecture or accountancy. Beyond those few occupations, education and training for work has traditionally been very weakly regulated in the UK where governments have historically been much less willing than their European counterparts to intervene in the provision of work-related education and training. As Bailey and Unwin suggest, that aversion to intervention is apparent in the development of the FE sector which was largely shaped by individuals’ voluntarism, not collective planning. This continued even after the major 1944 Education Act that required local authorities to provide “adequate facilities” for FE in their areas. Many FE colleges can trace back their antecedents and even their buildings, long before then, to the Mechanics’ Institutes that were founded in towns and cities throughout the UK starting with Glasgow in 1823. The orthodox view among historians is that these Institutes provided education almost exclusively for the emergent professional and middle classes that founded and ran them. Walker (2013, p. 154) differs, however, and has argued:

The opportunities that mechanics’ institutes presented would form the basis for a new educated and highly skilled strata within the working class, one which would in the following century assert itself across the whole of society and one which still continues today through the further education sectors.

Whatever the social setting for this pragmatic voluntarism, its more certain and lasting legacy throughout the UK was of provision for vocational education and

training that varied greatly from locality to locality, dependent on whether or not ordinary people, civic leaders, or employers had organized to create institutions in their area. This haphazard evolution of colleges in all four nations of the UK is, at least, partly explained by the government's central educational agencies overlooking vocational education and training. Nevertheless, by the beginning of the twentieth century what were to become GFE colleges were at least recognized as a part of the national education service (Hodgson et al. 2015, p. 8). In 1906, the term "further education" was first used officially in England and Wales by the National Board of Education in the title of its Regulations for Technical Schools, Schools of Art, and other Schools and Classes for Further Education (Bailey and Unwin 2014, p. 452). The technical nature of the education and training provided was reflected in the lasting vernacular name for the local college throughout the UK, "the Tech," but the availability of these institutions still varied according to local priorities and local political will even among the nation's largest cities. Leeds and Sheffield had no college at that time; Leicester and Manchester did. Intriguingly, the list of courses that by 1912 the then Board of Education would fund in these colleges is remarkably similar to what GFE colleges in England provide in 2016. Moreover, as in 2016, the courses in 1912 were available from basic or entry-level through to higher education leading to degrees. That list from over a century ago "reflects the organic way in which FE had developed responding to the needs of individuals seeking to improve their life chances and the availability of suitable teachers at the local level" (Bailey and Unwin 2014, p. 452). Very largely, that kind of organic development based on individuals' choices as well as the availability of teachers has characterized English FE colleges in the following century.

Colleges, Students, and Curriculum

A Typical FE College

In 2005, then British minister of state for Higher Education and Lifelong Learning, Bill Rammell stated (Learning and Skills Council 2005, p. 1) that "Further Education is the engine room for skills and social justice in this country." Those two elements, skills and social justice, have traditionally comprised the stated primary aims of FE colleges, with skills development being pre-eminent. The importance of those aims is not always reflected in funding, however. Using government data, the main FE teachers' trade union compared expenditure on higher education (HE) and on FE in 2012–2013 (UCU 2014) across the four nations. For every £1 spent on FE in England there was £1.25 spent on HE. In Scotland and Northern Ireland, the figures were much more divergent. For every £1 spent on FE, £3.45 and £2.90, respectively, were spent on HE. By contrast in Wales spending on FE was around 30% higher than on HE. Funding for all sectors of education has, though, been squeezed since the economic crash of 2008, only FE more so in most of the UK.

The Education and Training Foundation (ETF) is the body with current responsibility for FE colleges in England, and based on the incomplete data it collects, ETF

Table 1 Statistical overview

Expenditure of average FE college in 2012–13	£21 m
Number of students in the average FE college in 2012–13	5574 (Many part-time)
Proportion of college contracts for teachers in the average college in 2013–14	48.7%
Number of teachers in the average college in 2012–13	307 (Many part-time)
Median pay of teachers in 2014–15	£31,000 to £31,999
Proportion of women working in colleges in 2014–15	64%
Proportion of staff under the age of 40 in 2013–14	30%
Proportion of part time teaching staff in 2013–14	62.3%
Most common subjects in 2014–15 (offered by more than 90% of colleges)	Business administration; management and professional; English languages and communication; sports, leisure and travel; health, social care and public services; visual and performing arts and media
Average number of full-time equivalent teachers in visual and performing arts subjects per college in 2014–15	21
Average number of full-time equivalent teachers in hairdressing and beauty therapy per college in 2014–15	11
Average number of full-time equivalent teachers in construction per college in 2014–15	16
Average number of full-time equivalent mathematics teachers per college in 2014–15	6
Turnover of senior managers in 2014–15	17.1%
Net reduction in number of senior managers in 2014–15	10.2%
Turnover of teaching staff in GFE colleges in 2014–15	17.4%
Net reduction in number of teaching staff in 2014–15	3.5%

Adapted from General Further Education Colleges in England (ETF [2014](#), [2015](#), [2016](#); partly adapted from Orr [2016](#))

has cautiously provided a statistical overview of the sector and of a typical college, some of which is set out in the Table 1.

This national overview suggests the scale and diversity of colleges in England and the final cells indicate the contraction of employment in those colleges. It may, though, also mislead because no single college is typical, even among the GFE institutions. For example, The Manchester College in a major conurbation in the north-west of England has around 5,000 employees working at 20 different sites, and it provides education to 80,000 students. It is among the largest such organizations in

Europe. By contrast, Shipley College in Yorkshire, also in northern England, has a total of 293 staff and even the largest component of its intake, 16–18-year-olds, comprises only 635 full-time students. Local participation rates differ significantly, too. Although the national figure for young people attending FE colleges across England in 2014–2015 was 34% that rose to 43% in the North East but was only 24% in London for the same period. This heterogeneity in the composition and provision of FE is a recurring feature in accounts of the sector, but with the risk of overgeneralization it might be said the most common FE student is aged between 16 and 18, comes from a working-class background, and is pursuing a work-related course. In every part of the UK apart from Northern Ireland, these students are also more likely to be female. Many will go onto higher education rather than entering work directly from college. Younger students dominate FE colleges but for older students, colleges can be the provider of a second chance at education and training where previously missed or unavailable opportunities may be taken. Those opportunities may involve finding better employment, but they may also involve a more nebulous but no less worthwhile sense of personal fulfillment.

The FE College Curriculum

The curriculum offered by GFE colleges is much wider than for schools as the list of most common courses in the table demonstrates and which a glimpse at any college website will confirm. Eighty percent of colleges offer engineering, technology, and manufacturing courses and 40% offer land-based courses such as horticulture, but even GFEs may have particular specialisms within their curriculum. York College offers courses for stone masons and Burnley College offers courses in furniture design, for example. While the great majority of courses are aimed at 16–18-year-olds, FE colleges have offered higher education including degree courses, even up to master's level, for decades. While the number of young people in England accessing higher education (HE) has grown substantially since 1997, the proportion attending colleges rather than universities has remained surprisingly stable at or just below 10%. This is one area of the curriculum where there are, however, distinct national differences between the home nations. In Wales, the proportion of college-based HE students is only 1.4%; in Scotland and Northern Ireland it is 18%. Even within England, the less than 10% of HE provided in FE colleges (HE in FE) is not evenly distributed. In 2010–2011, 17,445 students started bachelor degree courses in all English FE colleges, but just three of those colleges accounted for more than 3000 of all starters, while most colleges had fewer than 100 starters (HEFCE 2014, p. 4). As always in FE, heterogeneity is characteristic but HE in FE students are more likely to be part-time and more likely to be over the age of 21 than students starting at universities and they are most often pursuing work-related courses. They also disproportionately come from disadvantaged backgrounds as denoted by official measures such as their eligibility to have received free school meals (Avis and Orr 2016), so college-based HE has successfully widened participation in higher level education. That does not necessarily imply social mobility, however, and the official

statistics for destinations and subsequent earnings of comparable full-time students indicate that college graduates do worse than university graduates. That, of course, does not account for the life-changing experience that HE in FE can provide well beyond any directly work-related or financial outcome. Nevertheless, HE in FE provides a microcosm of the sector as a whole that undermines claims that FE can systematically improve upward social mobility, however that may be defined. Inequality in the UK as a whole is more stubborn than that partly because it is reproduced through the education system.

Politicians have made persistent calls for colleges and local industry to work more closely together on the curriculum to meet demands for certain skills and more generally to improve vocational courses. Certainly, very many FE institutions do have solid links to local employers who send staff to colleges for training or who provide placements for college students or who sit on colleges' governing bodies. Some colleges have especially symbiotic relationships with local industries that provide equipment for students to learn on and where there is close collaboration between employers and FE teachers. For instance, Stephenson College in the English Midlands works with motor manufacturer Volvo to train their apprentices using Volvo technology. While this sort of close collaboration with local employers to create a bespoke course is far from exceptional, the similarity of provision between GFE colleges is striking despite the national autonomy of their leaderships. This is partly a consequence of the whole economy needing certain generic skills, such as business administration; more recent moves to form larger regional institutions that cater for a wider geographical area are likely to underpin that shared or generic curriculum. The similarity of the curriculum nationally is again, however, mainly symptomatic of colleges responding to the wishes of those applying who either pay for courses themselves or who are individually funded by the government. By and large, it is in the financial interests of colleges to provide what individual applicants want rather than specifically design curriculum around the needs of the local economy. As explored above, voluntarism not planning at either local or national level has historically shaped the English FE sector and it still does.

The Design of FE Colleges

FE college buildings reflect the sector's history as well as more recent national policy decisions. Some, such as Blackburn College in Lancashire, are still at least partly housed in original and ornate Victorian buildings that demonstrate the civic roots of many FE institutions and express "the sense of the value of education that was felt by their founders" (Grainger et al. 2015, p. 132). Many colleges, including Blackburn, also have much more recent buildings of glass, steel, and concrete, some of which have been erected in direct response to government initiatives (and funding) associated with, for example, promoting college-based higher education or the provision of basic numeracy and literacy classes to adults. Smith (2015, p. 91) has observed how many of these new-builds "look extremely similar from outside" and have more

than a passing resemblance to shopping malls with their “cavernous atrium” and “open-learning spaces,” which are common to so many of these modern additions. Grainger et al. (2015, p. 133) disagree, suggesting that these new constructions “represent the increasingly individual nature of colleges.” Though clearly opinions differ about the new designs, few mourn the loss of the many cheaply constructed post-war buildings which had been added piecemeal to FE colleges right around the UK and which previously characterized the neglect of the sector. In any case, to enter the lobby of an FE college building today is to experience an exhilarating vibration of young people who are moving between classes or drinking coffee or checking their phones or talking animatedly with each other. FE colleges hum with activity and they are often self-evidently at the heart of their communities that many have served for generations.

From “Benign Neglect” to “Cut-Throat Competition”

The national policy of “benign neglect” (Lucas 2004) towards the FE sector that enabled the organic but uneven expansion of the sector from its inception, as noted earlier, continued through most of the twentieth century but it ended finally in 1993 with the incorporation of colleges following the 1992 Further and Higher Education Act. This legislation transferred the requirement to provide FE from local authorities to a central national authority. Though colleges were and essentially remain public sector not private sector organizations, the 1992 Act transformed FE colleges into individually incorporated institutions with mandatory representation of local businesses on their governing bodies. The stated intention of incorporation, as the process was called, was to allow senior college managers more autonomy to grow their institutions to respond to local needs, but new national funding mechanisms meant colleges also came under much tighter scrutiny and control from the center. Incorporation is an important juncture in the history of the FE sector. Hillier (2006, p. 28) has described the consequences of incorporation as a “frenzy of activity” and “cutthroat competition” between colleges seeking to maximize their revenue even at the expense of other institutions. This strategy was “known throughout the sector as ‘getting bums on seats’” (Hillier 2006, p. 30); in other words, colleges responded to this form of market forces by recruiting as many students as possible and by any means to whatever courses those students wished to join. Once again, individuals’ voluntarism was shaping the sector not collective planning and this certainly saw the sector expand substantially. Over the 5 years following incorporation, student numbers in English FE colleges rose by 33%. At the same time, however, 20,000 full-time staff left the sector (Lucas 2004) and those staff who remained were very often transferred to less-attractive contracts of employment. For Gleeson et al. (2005, p. 447) incorporation “radically altered democratic accountability in favour of government, business and corporate interests.” They argue that managers became valorized over teachers in colleges (see also Ainley and Bailey 1997) and similarly Elliott (1996, p. 16) found that teachers in FE

felt that, for college managers, business methods had become an end in themselves, sustaining a 'control' ethos and a managerialist culture. A common complaint was that senior college managers seemed to have lost sight of the core business of student learning and achievement – they no longer saw students as students but as units of funding.

Such feelings persist among some FE teachers (see for example Maxted 2015). For others involved in the sector, and especially for many college principals, incorporation was a liberation from the constraints of local authority control and it opened up huge opportunities for the sector to expand and improve. Incorporation has had the lasting effect of increasing the autonomy of college leaders whose individual approach can shape how colleges are organized and run. Though each college has governors that have legal oversight, senior management teams are in practice independently powerful, albeit within the tight constraints of what funding colleges receive or can generate. For better or for worse, incorporation marked a significant break with the past for the whole of the FE sector. Certain features have, though, persisted. As identified before, courses offered by FE colleges still reflect student demand rather than systematic efforts to meet local demand for skills. Whatever national government's reforms have entailed for colleges, the voluntarism of individuals wishing to improve their own lives that initiated the sector has remained a prevalent factor in how colleges are organized and how the provision of courses has evolved.

Further Education Teachers

Just under half of the total workforces in the English FE sector are teachers. Terms for those with teaching or training roles in FE colleges differ and include lecturer, trainer, and teacher. In this section, the term teacher is used to refer to all of these roles. The archetypical FE teacher is involved in some form of craft courses such as plumbing or motor mechanics, though many teach on academic courses and even the most commonly available vocational subjects vary very widely, from beauty therapy to brickwork. On average, FE teachers tend to be paid less than school teachers. In FE colleges, 58% of teachers are female (compared with 74% in schools), which may reflect the FE curriculum comprising many occupational areas with disproportionately female workforces such as hairdressing and childcare. Subjects like construction and engineering continue to be dominated by male teachers. The teaching workforce is also disproportionately older than the rest of the working population with over half over the age of 45 (all figures from ETF 2016). This is a consequence of FE teaching being a second career for many in the sector. Some researchers have identified commonality in the experience of this heterogeneous FE teaching workforce. Colley et al. (2007, p. 186) suggest that the teaching workforce:

faces a triple jeopardy: teaching *per se* is of low status in the hierarchy of professions; FE is of low status in the hierarchy of education sectors; and many FE teachers are also positioned marginally by their 'accidental' entry into the profession, and continued identification with their former occupations.

FE teachers' previous occupational experience is not only the foundation for their professional credibility as vocational teachers but also for their teaching practice because that occupational experience may have more value or currency than pedagogical expertise in colleges. Moreover, many FE teachers continue to identify primarily with their former professional colleagues rather than as teachers. Gleeson et al. (2005, p. 449) recognized that the decision to become a teacher in a college "is, for many, less a career choice or pathway than an opportunity at a particular moment in time," which is also reflected in the high proportion of part-time teachers who can fit teaching around other responsibilities. In 2014–2015, 60% of FE teachers in England were part-time, compared with 26% of primary school teachers and 18% of secondary school teachers. All of this may explain why some have recognized a fragmented and undeveloped professional culture in English FE. For others, however, FE teachers aspire to a dual professionalism as both well-informed and qualified pedagogues and as experienced occupational specialists. This concept of dual professionalism resonates with the OECD's (2014, p. 60) findings that vocational teachers have responsibilities that are more challenging than those of academic teachers. They not only need to have knowledge and experience associated with particular occupations, they also need to know how to teach these. Whatever the shape of their professionalism or professional identity, the autonomy of FE teachers have become more circumscribed in many settings as a direct result of the national policies that were outlined above.

There is now a substantial literature on FE teachers which identifies shared aspects of their lived experience working in colleges and that is associated with what has been termed managerialism (see, for example, Gleeson et al. 2005). The concept of managerialism is related to teachers' loss of professional control over their practice to college managers, the intensification of their labor, increases in their administrative duties, the perceived marginalization of teaching itself, and the prominence of measurable performance indicators to control all aspects of colleges' provision (Avis and Orr 2014). This threat to FE teacher's autonomy has not gone unchallenged. Gleeson and Shain (1999, p. 460) identified what they refer to as "strategic compliance" to describe how FE teachers defend their own educational values through "a form of artful pragmatism." Strategic compliers do "not comply for the 'sake of their own skins'" (p. 460) but make decisions to conform or not with institutional decisions based upon the needs of their learners (Orr 2012). Daley et al. (2015) have also described forms of resistance to managerialism that have evolved from FE colleges including, for example, a highly successful national campaign to defend the provision of classes for learners of English in FE colleges. College teachers have neither resisted every reform nor have they succumbed to them. In response to reductive depictions, Bathmaker (2001) found that FE teachers are neither "devils" whose poor practice needs to be closely controlled nor are they "dupes" who have dropped their professional values by submitting to a regime of micro-management and tight control. Rather, FE teachers are as diverse as the whole sector.

Recent Policy for the English FE Sector

Political control over vocational education and training has been unsettled in England for some decades. As noted earlier, most politicians lack direct experience or knowledge of VET but that has not prevented them from tinkering with the sector and for that reason, Ewart Keep (2006, p. 47) has described policymaking for education and skills in Britain as “Playing with the Biggest Trainset in the World.” In the last three decades or so there have been 62 Secretaries of State who were responsible for skills policy. Between them they have produced 13 major Acts of Parliament and responsibility for skills policy has shifted between central government departments or been shared between departments on more than 10 occasions (City and Guilds 2014, p. 1). FE colleges are integral to skills policy in every part of the UK and they have been buffeted by this storm of political uncertainty. Calls to align FE provision more precisely with the needs of the economy have repeatedly been featured in national government policy and were a major motivation behind the incorporation of colleges in 1993. The New Labour government between 1997 and 2010 hastened the pace of interventions that affected every aspect of the English FE sector from how new teachers’ professional qualifications were to be assessed to which courses should be promoted in colleges. New Labour’s ideology was formed on the assumption that all social formations, and education in particular, must conform to the economic stringencies of globalization. Those stringencies require a highly skilled and flexible workforce to cope with constant technological development. Without this, the argument went, Britain would fall behind its competitors. At the same time, as being economically neoliberal in its reliance on market forces, in rhetoric at least, the New Labour government had social democratic aspirations of greater social mobility for all through improving educational outcomes. The FE sector was well placed to achieve both of their goals, and as a consequence, there were incremental increases in the central control over colleges in England. That control over what were by then ostensibly independent colleges was exerted through a set of policy levers that central government pulled to engineer the implementation of policies. These levers included the setting of specific targets for student numbers; nationally organized inspections of the quality of colleges’ provision as measured against centralized criteria; specific interventions around, for example, adult literacy; and, above all, funding based on the actual recruitment, retention, and success of students on courses stipulated by government agencies (Coffield et al. 2008, p. 39). These levers ensured independent colleges conformed with government initiatives, and colleges’ autonomy was tightly circumscribed.

Two factors have more recently challenged the centralized control of colleges. Firstly, the UK-wide election of 2010 brought in a new Coalition government which set a different course from New Labour to give employers, including colleges, greater freedom over employment practices. In FE this was marked by the removal of the statutory requirement for teachers in English colleges to hold a teaching qualification. Arguably of more lasting significance has been the second challenge to centralized control, which is the effect of cuts in government funding for FE colleges following the recession of 2007–2008. Funding for courses, which has been

the main lever for central control, is being dramatically reduced and as a result, according to Keep (2014, p. 3), “The old model of English/UK skills policy is rapidly fading away, and a new world is being born”. Spending per student on vocational courses in the sector was already well below that for students on 3-year HE courses in universities (Wolf 2015, p. 66) but even that spending is being significantly cut. Lack of funding in this emergent new world threatens the very existence of some FE colleges, which may be forced to merge with other institutions or to close altogether if they cannot find new sources of income. UK employers have, however, been unwilling to significantly invest in training but there is, perhaps, a new willingness from government to coerce employers. A striking example of this is the compulsory apprenticeship levy on employers with a payroll in excess of £3 million, which is to be introduced by the government in April 2017. The levy is expected to double the money that is available for apprenticeship training by 2020 and will help to achieve the government’s target of 3 million new apprenticeship starts. This levy will not necessarily find its way into colleges because many large employers will carry out any training associated with apprenticeships in-house. It may, though, provide a model to make employers pay for training more generally, though that seems unlikely. Whatever the future may hold, the regulation of public funding has been a very powerful lever to achieve the implementation of government policy and the diminishing power of that lever may reduce the control central government has over FE colleges. Colleges in England and possibly elsewhere in the UK may be financially worse off but freer from control, which may in turn lead to what Keep (2014, p. 10) has called “a more ‘distributed’ model of power” in the FE sector, which might entail more local decision-making for colleges.

Divergent FE Policy in the Four Nations of the United Kingdom

The United Kingdom is made up of four nations; England, Wales, Northern Ireland, and Scotland, together commonly called the home nations. Compared to England’s 209 GFE colleges, the FE sector is much smaller in the other home nations. In 2016, Northern Ireland had six regional colleges; Scotland had 20 colleges, and Wales had 14 FE institutions. Since 1997, more political powers have been devolved from London to national governments in Cardiff, Belfast, and Edinburgh, particularly powers over education, which has led to considerable divergence in policy for FE colleges. Each of the nations has, for instance, its own inspectorate to ensure the quality of provision in colleges and its own system for funding their respective FE sectors. Wales, Northern Ireland, and Scotland have much smaller populations than England, and their politicians have generally pursued broadly social-democratic rather than neoliberal social and economic policies and educational practitioners and academics have much greater influence over how the sector has developed (Hodgson et al. 2015, pp. 7–8). Based on this divergence, Hodgson et al. (2015) conclude that “England is increasingly becoming an outlier” in relation to the other home nations, though all of their systems do appear similar by comparison with those of much of the rest of Europe and especially those countries with strong vocational systems.

Regional and Local Control of Colleges

One area of convergence across the different FE systems in the UK is what has been called the regionalization of FE provision. As described above, colleges evolved in towns and cities as a result of the efforts of local people and then local authorities. Regionalization has entailed mergers across institutions to form larger colleges with a much larger geographical scope and intake. Northern Ireland blazed this trail with its six regional colleges and more recently Scotland has seen the number of colleges reduce from 37 in 2011–2012 to the present 20 through the merging of institutions. Numbers of students in the Scottish sector have as elsewhere grown slightly over this period. In 2016, England was just setting out on this path with each college taking part in a central government-led area review to decide how FE should be organized and distributed. Regionalization is primarily about reducing the cost to central government of providing FE by reducing the duplication of courses and college administrative or management functions. The policy also passes responsibility for funding, and for cuts in funding, to local politicians. It is controversial and not just because it is leading to redundancies and to increased workloads for those staffs who remain. Regionalization of colleges also threatens to separate them from the locality in which they have hitherto existed. Large regional colleges may not be as responsive to local needs, whether of employers or students. Just how responsive they have been to all of those needs in the past is questionable, however.

At the same time in England, as part of the government's policy of localization of decision-making, there are well-advanced policy initiatives to give greater political autonomy to city regions such as Greater Manchester. New regional leaders would have more control over the local provision of work-related education and training, which would almost certainly affect FE colleges. These new regional leaders will, however, almost certainly have less money than there is available now for that local provision, which again threatens colleges' existence at least in their current form.

Conclusion and Future Directions

As discussed in this chapter, the position of the FE sector in the UK is paradoxical. The sector is huge but often overlooked and though its curriculum is more complicated than that of secondary schools, it is usually less well funded than other educational sectors. FE colleges have been characterized as providing education for other people's children because while those with power and wherewithal make decisions affecting the sector, they would not normally send their children there. Fifty-six percent of 17-year-olds in FE colleges are from the bottom three socioeconomic groups, compared with 22% in equivalent school settings (AoC 2015). FE colleges have, moreover, been in a state of almost constant flux for the past two decades and especially since the incorporation of colleges in 1992–1993. Yet “the more the sector changes, the more it remains the same thing: a sector focused on vocational education and training” (Orr 2016). The FE sector also has an enduring

instinct for survival that reveals its strength and its weakness. What Keep (2016, p. 42) has written about the process of colleges making choices about their futures in the face of the policy of localization is perceptive.

For colleges, this process [of decision-making] demands thought about how they wish to perceive themselves – as players, victims or agenda setters. Colleges have been socialised into, and are extremely adept at, reacting to external stimuli in highly innovative and entrepreneurial ways, but may not be quite as proficient at carving out their own visions, priorities and establishing the means to deliver these – either on their own or in partnership with others.

Though this warning was written in relation to one particular policy initiative, the description of FE colleges as reactive resonates much more widely. Despite the turmoil of policy and the cuts in funding, FE colleges across all parts of the UK have shown a remarkable capacity to endure because, in Keep's words, they are "highly innovative and entrepreneurial." That innovation and entrepreneurialism reside at least significantly in FE colleges' historical and continued ability to adapt to the voluntaristic desires of potential students and to provide the courses they wish to pursue. Yet this astonishing capacity of colleges to adapt is the flipside of their weakness to determine or resist any change imposed on them. This passivity is even suggested by the long dominant metaphor for British FE (Petrie 2015), which is Cinderella: an ignored and abused sector waiting for a prince to arrive to make things better. This metaphor of docility has recently been challenged by Daley et al. (2015) who offer an alternative metaphor for the sector from another of the Brothers Grimm's fairytales that of FE teachers as the Twelve Dancing Princesses. In the fairytale, the princesses escape their locked room to dance unseen every night. "As a metaphor for teaching in FE, this tale suggests the possibility of subversion, of autonomy in teaching and learning, and a collective rather than individualist notion of professionalism, even within repressive contexts." This may be too optimistic given the pressures on FE colleges, but there can be no doubt that these institutions are as important in British society today as they ever have been in their long history because FE colleges can change lives.

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Part IV

Class, Race, and Gender Inequalities: Implications for Educational Opportunities



Academic Education of Israeli Arabs: Transitions from 2006 to 2016 and the Impact on Their Social Integration

17

Nitza Davidovitch, Dan Soen, and Yaacov Iram

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Abstract

This study (2016) compares Arab and Jewish students and continues a study conducted in 2006. The purpose of the current study is to examine the transitions in Israel's higher education over one decade, from five aspects: students' personal-family and academic characteristics, motivation for academic studies, perceived self-efficacy to succeed, perceived social academic climate, and views on the contribution of academic studies to their integration in the Israeli job market. One hundred twenty Arab students were sampled, in a case study of an Israeli university, Ariel University of Samaria, which was established in 1982 as a college and became a university in 2012. Ariel University reflects characteristic trends among academic institutions around the world, where higher education is becoming more accessible to different populations and which we define as a global counterpart. This case study represents the state of affairs on Israeli campuses. The study illuminates and invites discussion of the situation in other countries in Europe and the USA, following the Muslim immigration to these countries. In recent years, the campuses have been undergoing a process of Islamization and new groups are trying to find their place on the campuses.

Keywords

ANOVA tests · Employment rates · Israeli Arabs, academic education · Scheffe post hoc test, Self-efficacy

Theoretical Background: Introduction

The Participation of Arabs in Israel's System of Higher Education over the Years

Israeli Arabs are an ethnic and religious minority, and, as such, some researchers consider them a weakened population suffering from a continuous policy of discrimination. One aspect of discrimination is manifested in the accessibility of higher education for this population. Even following the increased accessibility of higher education at the end of the twentieth century, it is evident that although Arabs constitute a growing segment of all students, the disparity between their rates in the population and in academia has not been reduced. In the 2010/2011 school year, for instance, only 9% of Bachelor's degree graduates in Israel were Arabs. In that year, the number of Arabs graduating with a Bachelor's degree in Israel was less than half their proportion in Israel's general population and less than one quarter of their proportion in the population of the Galilee. In a more equal society, a correlation between the proportion of Arabs among Israeli academics and in the general population would have been expected (Zilberstein and Efron 2014, 336).

In recent decades, a significant and considerable growth has occurred in the entire Arab educational system (Okun and Friedlander 2005). An increase of 70% was evident in the Arab educational system in the 1990s, as well as a rise in the proportion of students taking the matriculation exams and of students eligible for a

matriculation certificate. Nonetheless, it is notable that as of the early 2000s – only 65% of Israeli Arab students took the matriculation exams in high school (vs. 75% in the Jewish sector) and only 34% were eligible for a matriculation certificate (vs. 52% in the Jewish sector).

As a result, and at the same time, it is evident that in recent years, there has been a significant rise in the rate of Arabs enrolled in academic studies in Israel – for example, in 2007 the proportion of Arabs enrolled in academic studies (universities and colleges – excluding the Open University of Israel) was 7.6%, while in 2015 it was 9.5% (CBS Annual 2008–2012). From 1990 to 2001, there was a rise of 220% in Arab participation in the academic educational system – versus a rise of 125% in the overall population. The rate of those continuing to academic studies of all high school graduates showed a real growth rate of 20.5% from 1991 to 1994, versus a real growth rate of 9.4% among the Jewish population (Davidovitch et al. 2006, 27).

According to the Central Bureau of Statistics (CBS) data, Arab undergraduate students constitute 12.1% of all university students, 9.4% of all students at the Open University, 8.7% of all students at academic colleges, and 24.7% of all students at teacher training colleges. The particularly high number of Arab students studying education, in addition to the concentration of Arab teachers in a separate government Arab school system, has in recent years created an excessive number of Arab university graduates who received training as teachers and severe unemployment.

The rate of Arab graduate students has risen considerably from 2005 to 2015, as a result of the rise in the number of undergraduate students from this sector in the previous 10 years. Namely, the rate of Arab students studying for a Master's degree was 10.1% of all students, versus 3.9% in the 1990s and 8.8% in 2015. The number of doctoral students also rose, from 3.5% in the beginning of the decade to 5.7% in 2015 (Council for Higher Education 2015, 13). Moreover, a rise is evident in the number of Arab women in academic schools – from 40% of all Arab students in the 1990s to 66% of all Arab students in 2015 (Council for Higher Education 2015, 13).

It is possible to conclude that in recent decades, there has been a rise in the number of Arab students at Israel's institutions of higher education – among undergraduate students, Master's degree students, and PhD students, for both Arab men and women. Indeed, there are still discrepancies between those who begin their studies, are admitted to academic schools, and graduate, when comparing the Arab sector to Israel's overall population, but these are diminishing.

Motivation to Choose Study Disciplines Among Israeli Arabs

Further to the findings in the previous section, the question is how the situation at the universities and the sense of inequality on the campuses affects the current occupational state of Arab graduates. Does all this affect the selection of study disciplines by Arab students? The choices of Arab students appear to be affected by these

circumstances: Arab students were found to study disciplines that enabled them to more easily acquire professional training and become integrated in the labor market – in contrast to other trends among all Israeli students, such as choosing academic studies based on personal interest or inclinations, unrelated to future jobs. The most desirable study topics among Arab students are education and teaching, medicine, and paramedical fields. For example, Arabs constitute approximately 20% of the national population yet 42% of all pharmaceutical students, 36% of nursing students, and 31% of optometry students. Moreover, there is a tendency to choose a multi-disciplinary degree – with a specialization in the humanities or social studies. According to these findings, there are several fields from which Arab students are almost completely absent – the natural sciences, engineering and architecture, business administration, and psychology – due to the strict admission terms. For this reason, Arab students are more inclined to study at colleges (that are global counterparts to community colleges) and teaching colleges, which have more lenient admission terms.

Furthermore, it appears that in the Arab sector and among women, in particular, a career in teaching is a common choice. In recent years, there has been a rise in the rate of women in teaching in general and in management roles in particular. There is evidence that the main motives for choosing teaching as a career are internal motivation, intellectual development, creativity, sense of enjoyment, satisfaction, and social commitment. According to Iliyan et al. (2007), the profile of teaching students includes those who perceive the teaching profession as a means of self-realization, a manifestation of their development, a stimulus for learning, and a renewal that lets them serve as agents of change within Arab society.

Motivation or its absence is evident in different ways at each stage of the integration of Arab students in an academic institution. The first stage indicating personal motivation includes the choice of a study discipline and school. The second stage, one that also shows personal motivation, is during the period of adjustment to studies, in which students in general and Arab students in particular must adapt to the challenges involved in becoming integrated. Perceptions of personal success are not uniform, and several essential personal qualities facilitate a desire to succeed, readiness to contend with challenges, self-efforts, determination, and hard work.

The difficulty to find the necessary resources to handle self-motivation was found to affect one's ability to succeed and one's ability to successfully complete the course of study. One of the features that affects this process is degree of independence, i.e., to what extent the individual is dependent on others, since the choice of discipline and of the study institution is a junction affected by one's degree of independence. In addition, one's degree of self-confidence is also significant for coping within an academic institution, as is the individual's self-efficacy. Students' coping with challenges is reflected in success at school and further success in the job market (Hendin 2011, 34–38).

Moreover, some claim that perceptions of future difficulties in finding a job affect motivation. These data might explain the tendency of Arab men to drop out of academic studies at a higher rate than that of Jewish students, due to despair of the possibility of earning a good living after graduation.

Integration of Israeli Arabs in the Social Academic Climate

Much research has been conducted on the social adaptation and adjustment of Arab students to the university as a social environment (Eshel et al. 2007), namely, on how Arab students as a minority group adjust to university: social or psychological adjustment, in the context of social adaptation, and the choice of an acculturation strategy that supports integration in majority groups.

Davidovitch et al. (2006) defined the interrelations between Arab and Jewish students in the context of the social academic climate, as composed of four different spheres: equality and consideration, special predicaments of Arab students, social relationship on the campus, and concerns based on unique features of the minority group. With regard to equality and consideration, Arab students were found to experience discrimination and a sense of inequality in considerably higher rates than Jewish students – both from the college management and faculty and in social relationships with Jewish students. In this regard, it is notable that the integration of Arab students in Israeli society is a two-directional process, and it would also be interesting to explore how the majority group accepts the minority group – i.e., how the Jewish environment accepts the Arab students (Eshel et al. 2007). For example, the attitudes of Jewish Israeli students toward their Arab colleagues in the various workplaces were found to be reserved, with no commitment to the democratic principle of equality. Furthermore, an association was found between religiosity and this reserved attitude – more extensive rates of reservation were found among more religious population groups (Soen 2010).

With regard to unique difficulties of Arab students in their academic studies, higher education carried out within the norms of Jewish society was found to enhance Arab students' sense of estrangement and cultural marginalization. Additionally, in contrast to the Arab hierarchic culture characteristic of the Arab school system, in higher education in the Jewish environment, they encounter a demand for autonomy and critical thinking – leading to a certain level of culture shock (Davidovitch et al. 2006). In addition to integration in the social climate, the study also explores the integration of Arab students in the university as an academic environment. Academic predicaments were found to challenge the academic integration of Arab students in institutions of higher education, due to the disparity between the Arab and Jewish school systems, and the extent of preparation received by students in the Arab school system for university (Soen et al. 2007).

Concerning the fabric of social relations on campus, Arab students were not found to display a tendency to segregate – they are interested in breaching the boundaries of nationality and ethnicity and getting to know Jewish students. A high rate of academic collaboration was found in the colleges, as well as joint work on group projects. Nonetheless, evidence was found of animosity and lack of communication between certain groups of Jewish students (such as religious settlers) and Arab students (Davidovitch et al. 2006). Evidence also found negative attitudes toward Arab students by Jewish students (Kaplan et al. 2001).

With regard to the concerns of Arab students as members of a minority group, Arab students were found to be more concerned than Jewish students about speaking

up in class or expressing their opinion, particularly regarding the Israeli-Palestinian conflict (Davidovitch et al. 2006). Moreover, in the context of successful integration in society, another aspect worthy of exploration was found to be the Israeli identity of Arab students. This refers to satisfaction with being a citizen of the state, identification with values of national identity, and so on. Soen et al. (2007) found that Arab students indeed have significantly low measures of Israeli identity – as measured by agreement with statements such as “I am satisfied with my life in Israel,” “Most Israelis are racists and exploiters,” and so on. Nonetheless, higher measures of Israeli identity were found than in similar surveys held in the past. Moreover, according to Totry (2009), most students encounter several problems that make it hard for them to adjust to academic society, in addition to having financial difficulties that hinder the adjustment process. The first year of studies is perceived as the most difficult for integration in the social academic climate, due to language difficulties and problems with social integration, as Arab students are considered a closed social sphere. She found that most students report a desire and interest in getting to know Jewish students, although most of them feel that Jewish students are not interested in socializing and in developing relationships (Totry 2009, 40–45).

These difficulties are evident mainly in students’ first years but continue throughout their years of study. Notably, Arab students also cope with initial hardships that include admission to the academic institution, the socioeconomic status of their parents, and their sense of social estrangement.

Schooling and Personal Ability to Succeed

In addition to the benefit of schooling for becoming integrated in Israeli society on an employment basis, schooling was found to be a vehicle for empowerment and social mobility in general. Schooling is perceived as a means used by the hegemony to transcribe its values, and it constitutes a type of entrance ticket to the social hegemony (Bourdieu, in Zilberstein and Efron 2014). Moreover, schooling contributes to one’s sense of self-worth, and it serves as a vehicle for self-empowerment on the individual level – a way of structuring identity, knowledge, and skills that serve as a tool for realizing the student’s social and intellectual potential. It also facilitates the improvement of one’s social status and grants tools for breaking through the glass ceiling that the hegemony places in the way of weaker classes and groups (Zilberstein and Efron 2014).

Employment Rates Among Israeli Arabs

Schooling has a strong association with employment. In a developed Western economy, such as Israel’s, the great majority of jobs with professional status and adequate pay, in all branches of the economy, require academic studies – a Bachelor’s degree at minimum (Davidovitch et al. 2006, 27).

At the same time, it has been found that despite the continuous rise in the number of educated Arabs in Israeli society, this trend does not necessarily improve the occupational status of the Arab sector (Abu-Sa'ad 2006). From an occupational perspective, the average monthly wage of people with an academic education is indeed higher than that of people with a secondary or elementary education by NIS 2,300, but the employment rates of Arab academics are lower than those of Arabs with a secondary or elementary education. This is an unsettling fact, indicating that in the case of the Arab population, education does not necessarily ensure employment. Moreover, the salary disparities between Arabs and Jews were found to widen with the level of education – i.e., while there is almost no disparity between Arab and Jewish workers with an elementary education (they all earn about NIS 5,000), the discrepancy between Jewish and Arab workers with an academic education is about NIS 3,500. Thus, the situation in Israel is disturbing, as the higher the education level of Arab citizens, the lower their chance of finding suitable employment (Davidovitch et al. 2006, 27). Thus, for instance, in a survey conducted in 1995 among 641 senior officials in governmental companies, only three Arabs were found (Israel Democracy Institute, no date, in Davidovitch et al. 2006). Similar rates were found for employment in the various government offices in 2000 as well – the 180 employees of the Ministry of Communications included no Arabs, the 150 workers of the Ministry of Interior Security included only 1 Arab, the 2,700 employees of the Ministry of Education included only 118 Arabs, and so on. In academia, as well, the numbers are similar, 50 faculty members of a total of 5,999, as well as among judges – 19 Arabs of 445 (Israel Democracy Institute, in Davidovitch et al. 2006). According to Soen et al. (2007), there are several unsettling facts that form a picture of real adversity in the employment of Arabs with academic degrees: of all Arabs with an academic degree, only 76% are employed, versus 88% of Jewish academics. The rate of academics who despair of finding a job is eight times higher than among Jewish academics – about 24%, versus 3% among Jewish academics (Soen et al. 2007). The situation is particularly severe in the exact sciences – where of 650 Arabs who complete their studies, only 300 find employment in their field (Report of the Sikkuy Association, in Soen et al. 2007). The average monthly salary of an Arab university graduate is about one third lower than that of Jewish counterparts: NIS 6,400 versus NIS 9,500, respectively (Soen et al. 2007).

Notably, despite the continuous rise in the rate of Arab academics in recent decades, graduates still encounter severe employment hardships – salary discrimination, difficulties finding suitable jobs, higher rates of candidates who despair of finding employment, and so on.

As evident, one of the dimensions in which Israeli Arabs suffer from discrimination is the accessibility of higher education. Nonetheless, this trend is undergoing a dominant and substantial improvement, and the disparities between the Jewish and Arab populations are gradually diminishing. However, this rise in the proportion of academics does not necessarily ensure improvements in the employment status of academic Arabs when searching for a job and their self-efficacy as well does not ensure their success. How can this be explained? One of the explanations proposed is the racial views of employers, another is cultural incompatibility, and yet another is

the low self-efficacy of Arab university graduates. The current study examined these variables and their influence in a case study of Ariel University that we define as a community college global counterpart. In addition, the integration of Arab students within academic society and their subjective feelings will also be explored, and these trends and transitions will be compared with means found in the early 2000s.

Methods

Research Method

The study is based on statistical analysis of answers to closed-ended questionnaires, as detailed below.

Research Population

The research population consisted of 120 students from the Arab sector studying at Ariel University of Samaria, which we view as a global counterpart of community colleges, as it allows access to nontraditional regional populations and provides practical degrees. The sample included 64 men (53.3%) and 56 women (46.7%). The respondents were undergraduate students, the same proportion in Israel in general (Council for Higher Education 2015, 13). Background information and personal characteristics were compared to the study conducted by Davidovitch et al. (2006), which examined 85 students from the Arab sector at Ariel University in Samaria, with the purpose of focusing on the transitions that occurred over the decade. Notably, during the 2006 study, Ariel was a college, and it is now a university. The differences were explored in light of this transformation.

Research Procedure

The respondents were sampled on a voluntary basis on the university's various campuses, and each respondent was asked to recommend others. Other participants were located by contacting Arab culture coordinators at the student unions. The respondents received a short explanation of the purpose of the study and on how to complete the questionnaires and were then requested to do so. The questionnaires were chosen according to the research questions.

Research Questions

1. Are changes evident in the motivation of Arab students in Israel to participate in academic studies, and to what extent?
2. Does the social academic climate affect the study process, and to what extent?

3. Do Arab students perceive their self-efficacy to succeed and to what extent?
4. Do their academic studies assist their integration in the Israeli job market, and to what extent?

Research Tools

Four research tools were utilized. The demographic questionnaire was taken from Davidovitch et al. (2006) and adapted to fit the specific research questions and the purpose of the study. For example, questions about IDF service, intended for Jewish students, were removed. The questionnaire on motivation for studies was taken from Davidovitch et al. (2006) and adapted to fit the specific research questions and the purpose of the study. The questionnaire on social academic climate was taken from Davidovitch et al. (2006), adapted to fit the specific research question and the purpose of the study. Administration of the questionnaires began in February, at the beginning of second semester of the 2015/2016 school year, and Hebrew language questionnaires were distributed throughout the campuses, with an attempt to operate in quiet areas in order to avoid distracting the respondents. Once the 120 questionnaires were completed, the weighted results (using SPSS statistical tests) were compared with the means for 2006. The respondents replied to the questionnaire, following the written instruction: "The following questionnaire includes statements describing a department in an academic institution. Please decide which of these fit your department and which do not. Please circle your reply."

Perceived self-efficacy. The questionnaire on general self-efficacy, developed by Chen and Gully (1997) and adapted by Chen, Gully, and Eden (2001), was translated into Hebrew by Granat-Flomin (1998). The respondents replied to the questionnaire, following the written instruction: "The following questionnaire includes statements that people can use to describe themselves. Think about yourself as you have known yourself throughout your lifetime and mark beside each statement to what degree it is true of you. Please circle the most suitable reply."

Employment options. A questionnaire composed by the Ministry of Industry, Trade, and Employment – Research and Economics Administration – was designed for the purpose of examining the employment status of Arab academics in Israel in 2010.

Research Results

The Research Goal

This study deals with transitions in higher education among the Israeli Arab population, and their effect on the integration of this group in society, from several aspects:

- (a) Are changes evident in the motivation of Arab students in Israel to participate in academic studies, and to what extent?

- (b) Does the social academic climate affect the study process, and to what extent?
- (c) Do Arab students perceive their personal ability to succeed and to what extent?
- (d) Do their academic studies assist their integration in the Israeli job market, and to what extent?

This analysis was performed with consideration of personal-family and academic characteristics, with regard to students' attitudes to their motivation to participate in academic studies and their perceived self-efficacy to succeed, perceptions of students' social academic climate, the contribution of academic studies to integration in the Israeli job market, and their own desire to become integrated. The current research data were examined versus data from Davidovitch et al. (2006), with the purpose of pinpointing changes over the past decade. Moreover, these changes were analyzed with reference to the transformation of the academic institution from a college to a university. It must be noted that although there was a transformation into a university, Ariel University maintains the characteristics found in community college global counterparts.

Furthermore, the study examined new parameters that might further illuminate the attitudes, feelings, and expectations of Arab students at Ariel University. The main dimension of this study is the interpersonal relationship between the two student sectors, Arabs and Jews, and the feelings of Arab students at the academic institution with regard to the atmosphere and institutional climate. The research population consisted of 120 students from the Arab sector studying at Ariel University, of whom 64 were men and 56 women. The respondents were in the 20–30 age range and were undergraduate students. Background information and personal characteristics were compared to a study conducted in 2006, which examined 85 students from the Arab sector studying at Ariel University, with the purpose of focusing on the transitions that occurred over the past decade.

Statistical Analyses

In order to examine background information and personal characteristics, in a comparison between the two studies, a frequency test of the items was conducted, and the changes over time were analyzed. Means were examined, as well as standard deviations and the distribution of each item or variable, using a frequency function. In addition, to examine differences in the various questions based on background information and research characteristics, t-tests for independent samples and two-way analyses of variance were conducted. Where correlations were found between different variables, a Scheffe post hoc test was utilized to inspect their source. This method uses the error variance from the variance analysis and takes into account the number of comparisons made. The results reported to be significant are on a significance level of $P < 0.05$.

Examination of Table 1 shows a change in several means in the course of the decade. The first is the proportion of men and women, which differs between the two studies and between the colleges examined in 2006. Examination of the data shows

Table 1 Sociodemographic table

	Arab students		2006		2016	
			N	%	N	%
Sociodemographic	Sex	Male	51	68.9	64	54.3
		Female	23	31.1	56	46.7
	Place of residence	Rural			68	56.7
		City			50	41.7
		Town			2	1.7
	Schooling	Father	33	43.4	32	26.7
		Mother	24	31.2	43	35.8
	Average income	Under-average	81		17	14.2
		Average			37	30.8
		Above average			49	40.8
	Religion	Not religious	54		24	20.0
		Traditional	62		37	30.8
		Religious	20		44	36.7
	Study department	General			15	12.5
		Practical engineer			64	53.3
	Choice of department	Yes	45	84.9	97	80.8
		No	8	15.1	23	19.2
	Student union	Yes			18	15
		No			102	85
	Employment	Employed	11	21.6	71	59.2
Not employed		40	78.4	49	40.8	

that, over the years, women have come to constitute an increasing proportion of undergraduate students, although most students are still men. Examination of the students' employment status shows that in 2006, most students were not employed, and today, in 2016, most students who participated in the study are employed (59%). On the variable of religion, in 2006, more students reported being not religious than religious, and today, in 2016, the situation is reversed, where more students reported being religious than not religious. Examination of the family's average income shows that the average income in 2006 was between under-average and average, while today in 2016, 40.8% of the students answered that their parents' average income is above the average, and 30.8% reported an average income.

Other findings not examined in 2006 but revealed in the current study are membership of Arab students in the student union. We see that 85% of the students answered "no" and only 15% answered yes. Examination of the students' place of residence showed that 56.7% of students live in rural areas and 41.7% in a city. In addition, choice of the study department was examined, where 53.3% were found to be studying for a practical engineering diploma and 12.5% for a general degree, the same proportion in Israel in general (Council for Higher Education 2015, 13).

With regard to findings that are not presented in the table and were examined, it seems that there was no difference over time. For example, the students' country

of birth was the same: in the previous study and in the current study, most were born in Israel. Furthermore, the origins of the students' mothers and fathers also did not change and most of the students' parents were born in Israel. Another finding that showed no change was students' marital status, where most are single since they are undergraduate students. Both in the 2006 study and in the current study, the average number of persons in the parental household was similar (5.73). With regard to distribution of the choice of department, in 2006 and 2016, the findings seem to be identical, and most of the students study at departments of their choice.

With regard to the background variables, the following statements were examined as well: "I live in the dorms" – upon examination of the respondents, it is apparent that 70% live in the dorms, probably due to problems of accessibility and distance. An additional statement examined for students who live in the dorms is: "My relationship with the Jewish/Arab students at the dorms is good." These statements generated almost identical data; concerning the relationship with Jews in the dorms, 65.8% answered that there is a good relationship, and concerning the relationship with Arabs in the dorms, 67.5% answered that there is a good relationship. This shows that the atmosphere between Jews and Arabs in the dorms is good and that most of them said that their relationship with their Arab friends is identical to their relationship with their Jewish friends.

First research question: Are changes evident in the motivation of Arab students in Israel to participate in academic studies, and to what extent? As part of this research question, many parameters were examined with the purpose of inspecting the reasons that cause Arab students to join the academic world. Presented are (a) motivations for enrollment, examined in this study versus the 2006 study, (b) comparison of the attitude of neighbors from the Arab sector to enrollment versus the 2006 study, and (c) the attitude of the family to academic studies in the Arab sector.

As part of the student surveys, five motives for enrollment in academic studies were examined. The items are instrumental, explorative, personal expressive, social expressive, and social. The respondent was asked to rank each of the items on a scale from lowest – (not at all) to highest (extremely strong). Based on a frequency table, among 51.7%, the instrumental and personal expressive motives were found to have an "extremely strong" effect, while among 42.5%, the social motive was found to have an "extremely strong" effect. Moreover, the two other motives, explorative and social expressive, were not found to be motives of the first order. Compared to the study conducted by Davidovitch et al. (2006) to examine this, they found that the motivation of 38.6% of the Arab respondents was the value of the academic degree – an instrumental motive that attests to their desire to study in order to acquire a profession or status. A rise in the instrumental motive is evident, compared to the previous study in 2006. Moreover, the social motive also appears to have a great deal of significance among the Arab sectors.

Compared to the distribution of neighbors' attitude to academic studies, the 2006 study found that among 48.9% of the students, the attitude of neighbors was "extremely encouraging," among 28.3% "very encouraging," and among 24.8% "slightly encouraging" and "very slight." In the comparative examination, one

decade later, the current study shows that among 52.5%, it is “extremely encouraging,” among 17.5% “very encouraging,” and among 25% “slightly encouraging” and “very slightly” encouraging. Based on the comparative findings, it may be said that the Arab students’ environment displays no objection or hostility toward their studies. This in light of the findings showing that most of those in their surroundings are extremely supportive. At the same time, the issue of dissension regarding views concerning enrolling for academic studies did not change and even increased, and this should not be disregarded. It is evident that the “very encouraging” measure dropped significantly and the “slightly encouraging” and “very slightly encouraging” measures rose.

Table 2 summarizes findings in the current study from students who were asked about the attitude of their surroundings to academic studies. These data show that the highest support for academic studies appeared under the parameter of “attitude of family, mother,” while the lowest support was found under the parameter of “attitude of family, maternal grandparents.” However, high support for studies is evident among the close and extensive families in this sector.

Second research question: Does the social academic climate affect the study process, and to what extent? In answer to this research question, students’ evaluation of the social academic climate at their academic institution was examined. Three statements describing the academic institution were provided, and respondents were requested to decide which of them suits their department, on a scale ranging from not at all to extremely strongly. The conspicuous statements in the current study are noted, as are differences in perceived climate by sociodemographic information and religiosity, compared to the statements in 2006.

In the statement “I feel equal,” the 2006 study shows that 62.98% of the responding students ($N = 85$) felt this way, while in the current study, only 9.2% reported that they feel this “extremely strongly” and 35% feel so “to a certain degree.” It is evident that there was a significant drop in the sense of equality versus the Jews over the years.

In the statement “In our department there are Jewish and Arab students who work together on school subjects,” the 2006 study shows that 81.44% of the responding students ($N = 85$) felt this way, while in the current study, only 19.2% reported feeling this “extremely strongly,” 27.5% “strongly,” and 30% “to a certain degree.” A sharp drop is evident between the results of the two studies, as well as an academic distance between the two sectors.

The questionnaire includes two statements that describe the university’s consideration for the religious feelings of Jewish and Arab students: (a) “Our university is more considerate of the religious sentiments of Jewish students (e.g., on Tisha B’Av and fast days)” and (b) “Our university shows consideration for the religious sentiments of Arab students (e.g., on Ramadan).” The students were found to feel that there is more consideration for the Jewish sector, and this is evident as 37% replied “extremely strongly” to statement a, while only 11% replied “extremely strongly” to statement b. Hence, there is no sense of equality in attitudes to the two faiths and the Jewish faith receives preference.

On the statement "To what degree have you become acclimatized at the university?" 11.7% were found to have successfully acclimatized "extremely strongly." This finding as well is low and supports the trend indicated by the other statements.

The questionnaire includes two statements that describe students' desire to share their difficulties with their peers, (a) "To what degree do you share your difficulties with your Jewish peers?" and (b) "To what degree do you share your difficulties with your Arab peers?". Examination of the findings regarding replies to these statements shows that in response to statement a, 7.5% of respondents would like to share their difficulties with their Jewish peers "extremely strongly," while in response to statement b, 23.3% of respondents replied that they would like to share their difficulties with their Arab peers "extremely strongly." Hence, students find it easier to share their difficulties with members of their own sector.

To the statement "In our department the Arab students are not interested in meeting Jewish students," 50.8% answered "not at all." Hence, the students are interested in meeting Jewish students. On the statement "At our university a great deal of attention is devoted to the Arab-Israeli conflict," examination of the replies to this statement showed that only 3.3% confirm such attention "extremely strongly." Hence, the university does not take a stand with regard to the conflict. On the statement "At our university Arab students are active in the student union," examination of the replies to this statement showed that only 5% of the students answered "I very strongly agree." These findings are compatible with students' replies to the question whether "I am a member of the student union" in the personal questionnaire. Eighty-five percent are not members of the student union. Hence, they are not involved in the union's activities.

ANOVA tests were held to examine differences on the different questions in the student survey between the three statements by the background data and characteristics of the respondents. In order to examine differences in the perceived social academic climate at the academic institution by religiosity, a one-way analysis of variance was held, and a significant difference was found on the statement: "At our university there is consideration for the religious sentiments of Jewish students" ($F(4,115) = 7.106, P < 0.05$). Post hoc tests (Scheffe) show that the perceived social academic climate of traditional students ($M = 3.97, SD = 0.957$) is significantly higher than the perceived social academic climate of nonreligious students ($M = 2.67, SD = 1.551$). This finding shows that traditional students are more aware of the university's unequal attitude to the two faiths.

Third research question: Do Arab students perceive their self-efficacy to succeed and to what extent? As part of the current research question, (a) Arab students' perceived self-efficacy to succeed was examined, as well as (b) their self-perception, by sociodemographic information on religiosity and place of residence.

The student surveys examined a list of 14 statements that represent a self-report of self-efficacy. Statements were ranked by agreement by respondent on a scale of "not at all" to "extremely strongly." On some of the statements, most respondents (50% and more) were found to have a high sense of self-efficacy. Among 59.2%, the statement "I believe that I can be efficient in various roles" was ranked "extremely strongly," as was the statement "Everything is possible if I really make an effort"

among 61.7%, the statement "When I encounter difficult tasks, I am sure that I can perform them" among 50%, the statement "In general, I think that I can achieve that which I hold important" among 54.2%, and the statement "I can cope with any task when I am determined" among 51.7%. It may be said that the self-efficacy of students from the Arab sector is not yet complete, and only five statements were ranked high, possibly indicating their feelings as a minority versus the majority in many areas that affect their self-concept.

ANOVA tests were used to examine differences on various items of the student survey between the 15 statements by the background information and characteristics of the research participants. In order to test for differences in self-efficacy according to the student's religiosity, a one-way analysis of variance was held, and a significant difference by religiosity was found for the statement "In general, I think that I can achieve that which I hold important" ($F(4,115) = 4.33, P < 0.05$). Post hoc tests (Scheffe) show that the self-efficacy of nonreligious students ($M = 4.72, SD = 0.532$) is significantly higher than that of slightly traditional students ($M = 3.62, SD = 1.044$). These findings indicate that the more religious the student, the higher the student's dependence on religion, which has an effect on self-efficacy.

In order to test for differences in self-efficacy by the student's place of residence, a one-way analysis of variance was held, finding a significant difference by the various places of residence on the statement "I believe that I can be efficient in various roles" ($F(2, 117) = 6.92, P < 0.05$). Post hoc tests (Scheffe) show that the self-efficacy of students who live in rural areas ($M = 4.60, SD = 0.65$) is significantly higher than the self-efficacy of students who live in a town ($M = 3, SD = 0.0$). Assumedly, the desire of those living in rural areas to succeed is higher due to their more complicated home circumstances and area of residence versus those who live in a town.

Fourth research question: Do their academic studies assist their integration in the Israeli job market, and to what extent? As part of the current research question, students were asked several questions in order to check for a sense of belonging and integration in the Israeli labor market.

Analysis of the question "Did you ever feel discriminated against when applying for a job?" showed that 30.8% of the respondents were not discriminated against and 43.3% were. Of all respondents, 25.9% chose not to answer this question, and this fact should not be disregarded. Based on this information, it appears that the Arab public experiences discrimination in Israeli society.

Analysis of the question "Do Jews and Arabs work together in your current/previous workplace?" shows that 65.8% answered both Jews and Arabs, and 1.7% answered that they work/worked with Arabs only. An interesting finding seems to indicate the desire of the Arab population in Israel to become integrated in the Israeli job market and to work together.

In analysis of the question "State 3 main barriers that make it difficult for Arab academics to become integrated in the Jewish job market, in your opinion," the respondents were presented with 14 statements that designate 5 major categories: work, discrimination/racism, skills, security, and accessibility. According to the findings, the major barrier of Arab students seems to concern discrimination/racism,

as attested by 89.2% of respondents. Further to the barrier question, t-tests for independent samples were held to check differences in the various categories according to background information and characteristics of research participants. In order to check for differences in the mean score for perceptions of the five categories between men and women, a t-test for independent samples was held, showing that the mean score of men ($M = 0.53$, $SD = 0.503$) who perceived “accessibility” to be a major barrier was significantly higher than the mean score for women ($M = 0.29$, $SD = 0.456$) who perceived “accessibility” to be a major barrier ($t(2.786) = 117.845$, $p < 0.05$). Analysis of the question “In which job market would you prefer to work” shows that 47.5% answered that they would prefer the joint job market, and only 5.8% answered that they would prefer the Arab job market. Analysis of the question “Are there salary differences between Arab and Jewish workers at your current/former workplace?” shows that 36.7% gave a negative answer and 25% a positive answer. Notably, 38.3% did not answer this question.

Discussion and Conclusions

This study is a comparative study that continues that conducted by Davidovitch et al. (2006). It appears that some trends persevered and some changed over the past decade. Structurally, Ariel College has become Ariel University, although admissions and curriculum remain similar. On the first research question, dealing with the aspect of “motivation for academic studies,” it is possible to conclude that the “personal” motive and the “social” motive have high significance and that there has been a rise over the years. In addition, the students’ environment seems to support their studies.

On the second research question, dealing with the aspect of “Student evaluation of the social academic climate of the academic institution” – Ariel University of Samaria and its effect on the study process – at first a comparison was made with the 2006 study, and a sharp drop was found in relations between Arabs and Jews, evident in the sense of equality and joint work. In addition, an overall comparison of the social academic climate at the university found a trend whereby Arab students tend to remain segregated from the Jewish population, and this is divided into distinct segments: external social dependence and internal religious dependence. Since the majority of Israel’s citizens are Jewish, in order to succeed, Arab students must become integrated in the collective; however, due to religious differences with regard to identification with religious festivals and private life, the students prefer to maintain their own character and share with members of their own faith who are closer to them, and therefore we see a low level of social acclimation in the academic institution. Nonetheless, there is another axis and this is internal religious dependence. The findings show that the more religious one is, the more one perceives inequality in the social academic climate of the institution.

In the third research question, dealing with the aspect of “The student’s perceived self-efficacy,” perceived self-efficacy appears to be low, and one’s distance from religion and place of residence were found to have a strong influence.

In the fourth research question, dealing with the aspect of “choosing to attend academic studies as contributing to become integrated in the Israeli job market,” students were found to be involved in joint work and interested in preserving it. Nonetheless, it appeared that the population still feels discriminated against in the job market, and this is evident in the choice of this major barrier as the main factor influencing their inability to become integrated in the Israeli job market, as well as in salary differences. Notably, based on the data distribution on the issue of salaries, the question seems to have been intrusive, as evident by the high percentage of nonresponders.

Analysis of the questionnaires indicates that the cross-section of students in both sectors is very different, not only on a national and religious basis as well as socioeconomically, rather also in other variables related to the academic institution, as schools of higher education are an initial point of encounter between the two different populations. A sense of affinity is also evident between Jewish and Arab students, particularly as manifested in their university studies, but Arab students still do not enjoy a full sense of equality and security.

Research Limitations

The study was conducted in a complex period from a security point of view – a time of “individually initiated terrorist attacks,” in which the different sectors became even more divided. The great proximity of the incidents, both geographically and temporally, increased the sense of fear in both populations of the old-new method of terror attacks beyond the Green Line, all the more so due to the location of the university – situated as it is in a place that arouses ideological dissension. At the time the study was carried out, it was not possible to neutralize the possibility of interfering variables related to the security political situation.

This case study represents the state of affairs on Israeli campuses. The study illuminates and invites discussion of the situation in other countries in Europe and the USA, following the Muslim immigration to these countries. In recent years, the campuses have been undergoing a process of Islamization, and new groups are trying to find their place on campus. The study is limited to the Israeli case, and there is room to explore this issue from a comparative perspective in other countries as well.

Recommended Applications

The academic institution is an initial basic place of encounter between populations that allegedly supplies a shared and equal “starting point.” Hence, the academic institution must integrate and act to achieve joint work in all areas, beginning from mixed rather than separate residences (e.g., the Arab population has a specially designated building in the dorms), assimilation of students in the student union (i.e., in the social academic atmosphere), and equal consideration by the institution for festivals and holidays that represent the religious character of the population.

Conclusion

The research findings indicate a sense of affinity between Jews and Arabs, and particularly one that is evident in academic studies, but Arab students still have no sense of full equality and security. Those students according to the research findings convene among themselves and with a similar religious population in private events, but for general social issues, they must become integrated with the Jewish majority despite the personal religious dependence they advocate. The research findings also indicate the willingness of those Arab students, who are usually interested in working in combined job settings and in the Jewish job market, to understand that they aim to become integrated in society and to succeed and realize that they have greater chances of succeeding in the Jewish job market.

It is evident that after 10 years, there are changes in the feelings and expectations of the Arab population with regard to their relationship with the Jews, the social climate, their integration in the Jewish job market, and equality between the populations in academic institutions. Nonetheless, these changes are insufficient. In order to bring about an essential transformation, it is necessary to take action, to act, and to advance a sense of belonging and equality. It is necessary to define joint goals for the integration of both parties and to create harmony at academic institutions, and these will constitute a basis for continued joint work in society and in the job market.

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Challenges and Opportunities – Community College Development in Afghanistan: Serving Students and Gender Equity **18**

David J. Roof

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Abstract

Community college development in Afghanistan is explored, along with a 2-year institute in Kabul that is developed as a model for community college education, specifically. The government of Afghanistan is promoting the establishment and expansion of technical, vocational, and 2-year tertiary education as no such form of education existed prior to 2006. Some of the challenges and areas of need for community college development are examined. Results show significant needs in the area of faculty development, technology, curriculum, and pedagogy and gender parity in education. Some of the significant challenges facing community college development in Afghanistan are limited funding, lack of infrastructure, insufficient resources, and the absence of an established quality assurance system. In addition, there are more mundane challenges such as the lack of standards and

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processes that would allow for the transfer of credits among institutions. Solving these challenges is vital to the long-term stability and economic redevelopment of the war-torn country.

Keywords

Afghanistan · Higher education · Community college · Gender parity · Accreditation · Governance · Funding · Culture · Partnerships · Career advancement · Economic development

Introduction

This chapter focuses on some of the structural components of community college development in Afghanistan and connects these structural components to aspects of “serving” the communities in which the community colleges are situated. This will include consideration of some relevant issues, such as gender parity, faculty, quality assurance, and curricula in postsecondary tertiary education in the country. The case of Afghanistan dramatically illustrates the significance of accessible higher education and adds an interesting context to the study of development of community college education. No form of 2-year tertiary education existed in Afghanistan prior to 2006. Over the previous 10 years, however, Afghanistan has worked to develop a network of community colleges under the auspices of the World Bank. The primary purpose of these schools is to provide graduates with immediate, important skills that ensure employability in the workforce (Roof et al. 2016). As part of this initiative, the government is trying to promote the establishment and expansion of technical, vocational, and 2-year tertiary education.

Whereas most universities in the country are overseen by the Ministry of Higher Education, the Ministry of Education (MoE) oversees Technical and Vocational Education and Training, abbreviated as TVET, in Afghanistan. The World Bank, UNESCO, and other world aid agencies are promoting TVET schools in the country. TVET is not necessarily synonymous with vocational schooling in the country; rather it’s more a strategy to align education with the labor market and economic growth and development. TVET is primarily associated with 2-year tertiary education but as a strategy has a wide-ranging focus that includes secondary and postsecondary education as well. The model for TVET is equivalent to what in the United States is referred to as Career and Technical Education (CTE). The term “community college” is used by the World Bank and UNESCO representative but is not yet a common terminology used by government officials, faculty, parents, and students. In fact, the idea of 2-year postsecondary education is not a widely accepted concept in Afghanistan, thus marking a clear need for the creation of institutions in this sector.

In 2001, around 1,500 male students were attending 38 semi-functioning TVET schools. Today, 20,524 students (reportedly 15% female) are attending 61 TVET schools and similar institutes. In 2009, the government reported that 61 vocational schools were also active in 30 provinces. A new curriculum is being developed. TVET institutions, however, currently absorb only 2% of general school grade nine

graduates. Female enrollment is low, there are no TVET schools at the district level, and a lack of facilities and resources persists. Due to the importance of 2-year tertiary education for the country, the Technical and Vocational Education Department has been upgraded to the level of Deputy Minister in the new Tashkeel, a government office (Wardak 2011).

In Afghanistan, the Ministry of Higher Education is responsible for 4-year postsecondary tertiary education, whereas the Ministry of Education (MoE) oversees 2-year postsecondary tertiary education which creates some conflict and confusion regarding quality assurance and oversight. Furthermore, private sector-run schools, vocational colleges, and universities are also beginning to emerge as key partners, sharing the burden of delivery with more than 360 entities already registered with the Ministry of Education. This has important implications for education policy, particularly in the areas of equity, cross subsidization, and curriculum development (Wardak 2011).

Achieving an effective balance of basic education for all citizens and timely expansion of an educated middle class will be crucial for long-term stability and sustainable economic growth. The middle class in Afghanistan is a small portion of the population that developed gradually in the decade after the fall of the Taliban. This group generally enjoys access to electricity, the Internet, health care, schools, and sometimes universities. The middle class is essential to development as a stable tax base is needed to fund the basic infrastructure as international aid recedes.

The current model for community college education, a model based on the TVET strategy, reflects the need for a core policy stewardship by the government for fiscal and administrative arrangements, while allowing for service delivery options by government, NGOs, and the private sector, accommodating Islamic values, community, and vocational education systems (Wardak 2011).

Research on higher education in Afghanistan has been extremely limited over the previous 10 years due to ongoing conflicts and security concerns. The aim of this chapter is a contribution to the newly emerging literature on higher education development in the country.

I spent over three nonconsecutive months in Afghanistan from 2013 to 2015. The time spent there allowed me to chronicle some of the challenges and advancements in community college development. My research was granted IRB approval in the spring of 2014. In the corresponding summer, I conducted the interviews in Kabul. All of the interviews were conducted in person, in English, and in Afghanistan. All five participants consented to the interview with an understanding that their identity would remain anonymous. I conducted one-to-one interviews with semi-structured open-ended questions where the same questions were asked of all interviewees; this approach allowed me to facilitate multiple interviews to produce data that could be analyzed and compared. To facilitate this research, qualitative data was also collected through focus groups and interviews over multiple years, during my time working in Afghanistan on the development of a model school for 2-year tertiary education. I interviewed key individuals responsible for higher education development in the country, including the Head of the Ministry of Higher Education, the Senior Education Specialist for the World Bank, the Chancellor of Kabul University, and others.

A Model for Community College Development

Tertiary education is an extremely important part of a country's future. In a world of rapid societal changes, knowledge-driven economies, and increasing global integration, higher education can make the difference between a dynamic economy and a marginalized one (Salmi 2003). Community colleges are known more generally for providing widespread access and welcome "students of all ages and ethnicities, students with disabilities, students with different learning objectives, and students with a wide difference in level of preparedness and prior educational experience" (Prihoda 2011, p.7). This form of education is new to Afghanistan and has yet to achieve this ethos.

Since 2006, Afghanistan has developed a network of community colleges across the country (Aturupane 2013). Although the term "community college" is not prevalent among the populace, it's the term used by policy makers and international aid agencies. The hope is that these institutions will accelerate the economic development of the country (Samady 2007). The formal and nonformal programs at these institutions, as well as specialized institutes, are currently a major component of the vision for improvement of higher education in Afghanistan. One such institute, under the TVET structure, is the National Institute of Management and Administration (NIMA) which is located in Kabul. The National Institute of Management and Administration (NIMA) was established in 2008 under the Afghanistan Skills Development Program (ASDP). Junior faculty at the Institute are required to have a master's degree in relevant fields, though a PhD is preferred. Teachers are required to have at least 5 years of teaching experience in a relevant field and fluency in the English language. Faculty are also expected to have experience and basic abilities utilizing basic project management tools and software applications such as MS office. The faculty are recruited from around the world. Instability and security concerns, however, have severely limited the number of faculty from Western countries. Most of the faculty at NIMA came from Pakistan with a smaller number having come from India. As one might imagine this has occasionally caused tension among faculty and perceived bias.

I worked in Afghanistan on the World Bank project to enhance community college development. In August 2013, I began this along with the Afghanistan Ministry of Education to help make NIMA a model for community colleges across the country. The initial aims of the project included strengthening academic programs, providing quality assurance, certifying students as completing an academic program that meets international standards, and obtaining accreditation. The primary goals were carried out through a partnership with the Afghan Ministry of Education and the World Bank.

Institutions like NIMA are a significant part of the vision of higher education in Afghanistan. In 2001, around 1,500 male students were attending 38 semi-functioning 2-year postsecondary schools. Today, roughly 20,524 male and female students are attending these schools and institutes. NIMA diplomas are comparable to level 5 of the European Qualification Framework (EQF), the Higher National Diploma (HND) in the United Kingdom, or the associate's degree granted by Junior Colleges

and Technical Institutes in the United States (Roof et al. 2016). This is what makes NIMA a global counterpart, specifically these connections to other countries and community college development internationally. The World Bank and other organizations are seeking to model community college development in Afghanistan according to standards and practices from Western countries. NIMA was established as a model for community college education, as no such form of education existed in Afghanistan prior to 2006.

The primary purpose of these schools is to provide graduates with immediate and important skills to enhance employability for the workforce. In order to strengthen the academic programs, our project emphasized moving from teacher-centered to student-centered instruction and developing more recent curricula. This expectation was driven by the notion that dramatic change is needed in the education system in order for Afghanistan to catch up with international norms and to become a more fully developed nation (Baha and Diakoumi 2010). The consulting project with the Afghanistan Ministry of Education emphasized quality assurance so that community college diplomas there would be comparable to international standards.

NIMA is a 2-year institute providing diplomas in three areas: Accounting, Information and Communications Technologies (ICT), and Management. The aim of the institute was to “strengthen the three academic programs, provide quality assurance, certify students as completing an academic program that meets international standards and assist NIMA in obtaining accreditation from the Accreditation Council for Business Schools and Programs” (NIMA: National Institute of Management and Administration 2015). This was carried out through a partnership with the Deputy Minister of Technical and Vocational Education and Training (DMTVET) of the Ministry of Education and the World Bank. An expectation of the partners emphasized moving from teacher-centered to student-centered instruction and teaching technology in order to strengthen the academic programs.

The World Bank is promoting community college education with the belief – as seen in the United States – that it is tied to the economic prosperity of the country (Boggs 2011). Policy makers believe that community college growth is a key factor in accelerating economic development in Afghanistan (Samady 2007, p. 63). While there have been significant advancements, there are many challenges to community college development.

Challenges

There are many logistical challenges, some minor and others more complex. Afghanistan, for example, has a very high illiteracy rates (reportedly 48% among men and 85% among women) and still has a weak infrastructure damaged by decades of war. According to UNESCO Afghanistan has one of the lowest observed national literacy rates (Huebler and Lu 2012). On a positive note, literacy rates, for the population aged 15–24 years, are generally higher than adult literacy rates, reflecting increasing access to schooling for younger students (Huebler and Lu 2012).

Many schools, including community colleges and universities in Afghanistan lack air-conditioning and heating. This makes the environment very challenging in the colder parts of winter and in the warmer parts of summer. I observed classes on multiple occasions that classes were not conducted due to overwhelmingly hot conditions in the summer or cold weather in the winter.

Through observation, I found that in Afghanistan community colleges, most instruction is commonly teacher centered and lecture oriented though instructors are attempting to integrate new approaches to teaching and learning in their classrooms. One example is the integration of case studies in business and accounting.

As community colleges present a new approach to education, country development is needed to create a system for transfer credits. Officials are working to develop standards and processes that would allow for the transfer of credits among institutions. This is not uncommon in developing countries. In Kenya, for example, there is also a need for a standard framework for the recognition and transfer of credits (Nyangau 2014, p. 18).

There are also more significant issues. For example, student enrollment is vastly outpacing higher education funding. Subsequently, there is a lack of infrastructure (buildings, books, technology, and so forth) (Roof 2015, p. 70). As seen more globally, student mobility and migration are factors impacting community colleges in Afghanistan (Bhandari and Blumenthal 2010). Perhaps, most problematic, community colleges in Afghanistan are failing to sufficiently address social and political issues that might ultimately undermine the country's economic development. Economic development in the country is contingent on democracy and social cohesion, as political and social instability are two of the greatest threats facing Afghanistan. Tertiary education can directly contribute toward reconstruction in a country that still struggles with protracted conflict (Morlang and Stolte 2008). However, it's not clear if 2-year institutions have adequately addressed the importance of social stability in their curricula. Community colleges around the world have struggled with issues of equity, ethics, and social development. In the United States, for example, one of the most unique and compelling elements of community colleges has been the emphasis on expanding access to higher education (Beebe 2015). While institutions in the United States have expanded access, they still grapple with how to support the success of students and what their mission should be. This is an issue in Afghanistan, where current community college development has an economic orientation and the role of civics, politics, religion and other factors are unclear.

Afghanistan has a critical shortage of professionals such as engineers, technicians, administrators, accountants, agriculturists, and business leaders, to meet the needs of reconstruction, growth, and poverty reduction. Subsequently, employment and economic issues dominate the discourse on community college development in the country. There are also other significant challenges that impede meaningful discussions about equity, access, and social cohesion. Afghanistan faces significant problems such as low levels of education, poor technology infrastructures, and a lack of sufficient disposable income among even a few (Riphenburg 2006). All public higher education institutions in Afghanistan have little to no autonomy and are

subject to rigid administrative regulations and rules. Over the last 10 years in Afghanistan, the demand for education, and higher education in particular, has far exceeded the supply (Morlang and Stolte 2008).

Technology

Part of the emphasis in developing a model for community college education in Afghanistan involves a central focus on technology, which can contribute significantly to dramatic change. Researchers have found through social media tracking in Afghanistan that information and communication technology can be utilized to respond to conflict-stressed environments and to address the peculiarities of peace building (Best 2013). In Afghanistan, however, years of war decimated an already underdeveloped technology infrastructure (Baha and Diakoumi 2010).

One area, where nongovernmental organizations (NGOs) and the government are seeking to overcome the digital divide, is within the country's universities and 2-year institutions. The government and NGOs have stated that information technology literacy as a key competency for university graduates. The World Bank, for example, declared that learning about modern technology is essential for graduates of higher education (Aturupane 2013).

Communications technology and Internet net access is currently relatively low in Afghanistan. However, there is optimism among policy makers that this will change in time. Higher education policy makers are being urged by the World Bank to quickly increase human capital and expenditures in universities to improve computer access and infrastructure, including wireless networks and Internet access (Aturupane 2013). While the government tends to support information technology publicly, there is significant resistance to open Internet access. As with many predominantly Muslim countries, much of the Internet deemed to be inappropriate is blocked. Furthermore, the governments tend to limit Internet accessibility out of a fear that the Internet will facilitate communication among subversive social organizations and individuals (Rippenburg 2006). Even when universities have computer labs, there is no consistent power or Internet available to run these computer stations. At Kabul University, NATO's "Virtual Silk Highway" project has provided Kabul University with affordable high-speed Internet access to staff and students through campus-wide wiring with fiber-optic net, and NATO provide satellite access to the Internet (Wentz et al. 2008). As of 2010, roughly 50% of provincial education offices reportedly had access to the Internet (Minister of Higher Education 2010). However, the country's community colleges and 2-year institutions still have limited access to the Internet and technology.

Based on my observations in Afghanistan, 2-year institutions have under-resourced computer labs and outdated unlicensed software. The unlicensed and outdated software makes it difficult for students to be adequately prepared to properly use the software. In addition, it was common to observe computer lab sessions where multiple computers were not working. Students often have to work together in large groups on one single computer. I have also observed expired license on software that

restricted practice among students. Universities in Afghanistan are working on redeveloping their computer labs and technology resources for students. Community colleges are working to secure facilities, computers, software, generators, and other resources.

Women and Education in Afghanistan

The 1948 Universal Declaration of Human Rights in the promotion of human dignity and well-being stated that “everyone has the right to education.” In the 1998 celebration of the 50th Anniversary of the Universal Declaration of Human Rights, the President and fellows of Harvard College stated, “Taliban policies of systematic discrimination against women, including restrictions on education, undermine the physical, psychological and social well-being of Afghan women. Such discrimination and the suffering it causes constitute an affront to the dignity and worth of Afghan women, and humanity as a whole” (Iacopino and Rasekh 1998, p. 98). The declaration of human rights declared that “education is not only a right, but also an essential condition for the health and wellbeing of individuals” (Iacopino and Rasekh 1998, p. 98).

Research has confirmed that education is essential for health and helps individuals make informed decisions. Still today gender disparities exist across all sectors, but they are most evident in education and health services where few service providers and beneficiaries are female.

In Afghanistan, there remain significant disparities in educational opportunity. In 2009, researchers reported that more than 90% of women in Afghanistan are illiterate (Crane and Rerras 2009). Women who are employed often resign after marriage due to pressure (Crane and Rerras 2009). Women in Afghanistan are often traded like animals, and child marriage remains an ongoing problem in the country (Crane and Rerras 2009). More than 50% of girls in Afghanistan are married by the age of 15 (Riphenburg 2004). Furthermore, researchers have reported that girls as young as 10 have been sold as brides for a 220-pound bag of flour (Riphenburg 2004). Women in Afghanistan are vulnerable to physical violence and sexual abuse (Riphenburg 2004).

There is a growing consensus among economists that female education and empowerment are directly connected to economic stability and overcoming poverty. Gender parity in education is a key factor in the social and economic advancement of Afghanistan and consequently essential in the vision for higher education redevelopment. Gender parity, however, is a complex issue. Community colleges, in particular, struggle to provide the resources necessary to support female students and faculty. For example, NIMA has struggled to provide adequate living arrangements (a hostel or dormitory) for the female students. It’s unsafe for female students to travel unaccompanied by a male relative. Obstacles to education for girls and women also include the distance of schools from residences, lack of transportation, restrictions on girls’ mobility, a shortage of schools for girls, poverty, male preference, and lack of security (Wardak 2011, p. 47). Since it’s generally unfeasible and unsafe in Afghanistan for women to travel, hostels (dormitories or housing) are needed even at community college for girls to attend regularly.

In one interview with a female undergraduate student at a community college, she noted that women in Afghanistan need better facilities, such as buildings, bathrooms, and so forth. According to her, girls there also need more “experience, knowledge, and better qualifications to help the people of Afghanistan” (Roof 2014, Personal Communication).

Gender is an organizing principle in Afghan society (Chaudhry and Rahman 2009). Generally speaking, men and women occupy two different realms, the public and private sphere. Culturally males occupy the public sphere, and women are expected to occupy the private sphere. In addition, the social structure and dowry system encourage parents to save for a girl’s marriage as opposed to her education (Latif 2009). Women are still trained in domestic skills and to be good mothers and wives. Girls often marry when they hit puberty, so the parents are relieved of the burden of supporting them (Latif 2009).

The impact of limited assistance for Afghan students is especially serious for the female population (Walton 2016). Significant disparities in educational opportunity exist among men and women, and this gender disparity is exaggerated between rural and urban areas among the provinces. Afghanistan is focused on raising the enrollment of women in higher education to 30%. Today, the persistent conservatism of Afghan society limits the education available to girls, with many parents unwilling to let adolescent girls attend secondary education or higher education. McDaniel notes that worldwide, “women’s share of higher education (i.e., the number of women enrolled as a percentage of all students) varies from a low of 17% in the Republic of Congo to a high of 64% in Latvia, yet a pattern of female advantage is evident” (McDaniel 2014, p. 1). What McDaniel means by a pattern of female advantage is an increasing number of women enrolling in postsecondary education. This increase has occurred primarily in Western countries, and gender disparities persist in certain regions and in certain fields (such as in STEM fields).

Afghanistan remains close to the lowest percentage of female enrollment, at roughly 19% as determined by the World Bank (Aturupane 2013). The primary reasons for the disparity in education are distance to an institution of higher education, lack of security, inadequate facilities, and cultural norms and constraints (Aturupane 2013, pp. 20–21). Improving access for women to quality education is paramount to improving higher education enrollment.

Those women who make it to the university often overcome multiple obstacles. Most women interviewed reported that their families objected to their participation in higher education. The objections family members had often stemmed from concerns about safety. It’s well known that women in the region are often assaulted and periodically killed for pursuing education. This was mentioned repeatedly in the interviews I conducted (Roof 2014, Personal Communication). Nonetheless many women there are extremely brave and determined. Women may delay marriage or forgo childbearing in order to pursue education.

Numerous studies have shown that high levels of female education improve human development outcomes. In addition, a low rate of female education is shown to negatively impact economic growth. Among the world’s primary development agencies, gender inequality is considered essential for the analysis and alleviation of

poverty. Poverty contributes to gender inequality in education, and gender inequality in educational opportunity directly correlates to poverty (Klasen 2002). This is particularly true for Afghan women participating in higher education, within a culture that remains resistant to women's education. My interviews documented the views and attitudes of Afghan women who have sought to access higher education, within a context where only 5% of the Afghan population attends university and less than 20% of university students are female (Burrige et al. 2016). More generally, the issue of female participation in higher education is related to access and matriculation into secondary education. Of the estimated 42% of Afghanistan's school-aged population who do not have access to basic education, the majority (approximately 70%) are girls.

Educational gender disparities are even greater in the poorest, less secure, and remote areas. The issues of access, relevance, and quality also extend to higher education where opportunities for enrollment are severely constrained and formal educational offerings are few.

Not surprisingly, universities are unable to provide the quality or quantity of professionals needed for the labor market, particularly in the management and technical fields where demands are critical. Finally, the energy, ideas, initiatives, and market savvy of the private sector remain largely untapped in the development of labor-driven human resources, which, in part, contributes to the wide skills gap and the high unemployment rate (HRDC, July 2010: quoted in Wardak 2011). Women are a necessary ingredient needed to resolve this issue.

Curricula and Pedagogy

Afghanistan has developed a network of community colleges across the country with the hope "that research and development will accelerate economic development of Afghanistan" (Samady 2007, p. 63). The primary purpose of NIMA as a model for community colleges in the country is to provide graduates with important, immediately employable skills for the workforce. There remains a significant challenge in the skill gap between labor supply and market demands. One of the Ministry of Higher Education Senior Officials I interviewed said, "One of the main components of our education policy is providing opportunity to students, so that those students who graduate can get the job in the market" (Roof 2014, Personal Communication). This focus on economic development is complex in Afghanistan because this requires trying to prepare students for an economy that is slowly emerging under great strain. Despite a range of initiatives including formal and informal education, literacy programs, and technical and vocational skill-building programs, neither recent graduates nor the labor force currently meets the skill demands of the market. According to recent estimates, roughly 35% of Afghans are not employed. This has perpetuated a continued reliance on international aid and dependency on foreign labor.

Various researchers have stressed the interplay among main components of learning environments, which mainly include content, pedagogy, and technology in Afghanistan (Mishra and Koehler 2006).

The country has been inspired to change their pedagogical approach by successes of other dominantly Muslim countries such as Turkey. This includes the incorporation of non-Islamic subjects. The current service delivery model adopted by the Ministry of Education (MoE) reflects the need to provide a liberal education as well as technical and vocational training and community literacy programs.

The *Independent High Commission of Education for Afghanistan* was developed by President Karzai and the Transitional Government to develop a strategic vision for educational revival and development in Afghanistan. The Commission's Report advocated consistency between general and vocational curriculum development and advocated for the teaching of science and technology:

The general education curriculum should reflect national history and culture, values, and traditions. It should also be based on international scientific principles, norms and standards. The teaching of science and technology is essential for modern education, and for a better quality of life and economic development. The content and methods of formal education should be adapted to the needs of children and their environment. [. . .] They should be developed in co-operation with communities, enterprises, businesses and industry. (Georgescu 2007, p. 439)

NIMA as with most TVET schools in the country does not have the necessary equipment, which makes the implementation of curriculum challenging for teachers.

During focus groups conducted at NIMA in 2014, the most-often mentioned suggestion was providing reading materials. Students also requested individual student practice time as well as small group (two to three learners) practice.

I have observed classes where the instructor's lesson plan indicated that most of the lesson would be "student centered" but the instructor lectured throughout the entire class time. My time in Afghanistan revealed that many instructors have difficulty understanding the concept of student-centered learning and how to properly design student-centered learning activities. It is common for instructors to use quizzes and exams as their primary forms of assessment. Instructors in Afghanistan often underused questioning techniques and/or brainstorming activities. Instructors do not use group work very often, as well. Furthermore, like India, vocational education in Afghanistan is currently seen as detached from higher education providing little opportunity for upward mobility (Wadhwa 2012). Community colleges in Afghanistan are attempting to address these issues. One approach to addressing these issues is through international partnerships, but these partnerships are limited in capacity and sustainability. Afghanistan also needs to address the issues noted here internally. One of the challenges to accomplishing this internal development is the lack of qualified faculty.

Faculty

Afghanistan faces an acute lack of qualified faculty and managerial personnel (Morlang and Stolte 2008). Limited access to higher education makes it difficult to cultivate qualified faculty, and the lack of qualified faculty makes it difficult to

provide access to higher education. Part of quality enhancement involves improving the quality of faculty members as well as the credentialing of faculty members in the form of master's and PhDs. The Vice Chancellor of Kabul University noted, for example, that most of the faculty at his institution only hold a bachelor's degree and suggested that faculty need to leave Afghanistan temporarily to obtain a higher degree overseas (Roof 2015). The World Bank estimates roughly 500 faculty members are currently pursuing master's degrees overseas. A much smaller number are pursuing PhD degrees (Aturupane 2013, p. 26). NIMA sought to overcome lack of qualified faculty by recruiting from surrounding countries. It makes sense for students to study in countries that are close to their countries of origin – both in geographical and cultural terms as it makes returning home more likely (Morlang and Stolte 2008). Both the United Kingdom and Germany have a long tradition of serving as host countries to students from around the world. However, in Germany, the growth in international students has been tremendous over the past 20 years due to geopolitical events and to a proactive political decision to globally market (Wadhwa 2012). Many students from Afghanistan have received advanced degrees from foreign countries, many from German institutions. The number of Afghan students with advanced degrees must increase to meet the need for higher education. Afghan students seeking advanced degrees have limited opportunities, although a number of countries have provided opportunities to Afghan students. The countries “that are most effective in internationalizing are characterized by flexibility and a willingness to adapt to new realities in the complex world of higher education” (Bhandari and Blumenthal 2010, p. 8). This is true for those that might contribute to the rebuilding and stabilization of Afghanistan.

In addition to the challenge of preparing faculty is retaining them in higher education institutions. Brain drain and retaining qualified faculty in higher education are challenging for underfunded institutions. Making matters more difficult, the higher education system of Afghanistan is plagued by corruption (Centner 2012). One of the prevalent forms of corruption is faculty holding a position at an institution, receiving a paycheck, but not showing up for work. Furthermore, a senior official in the Ministry of Higher Education told me that, “the candidates are not hired on the basis of their qualifications, rather mainly on a recommendation basis. Like you will see a lecturer from the university and he will be appointed administration director. How could a lecturer come in and become a director?” (Roof 2014, Personal Communication). This is consistent with my experience working in the country, as well, where unqualified individuals are placed in administrative positions.

One reason for corruption in higher education is low pay for teachers. There is a need to address this corruption as faculty often hold jobs at multiple institutions and do not show up to teach their scheduled course. This was a problem at NIMA where Afghan faculty members received a paycheck but had never shown up to teach an assigned course. Ultimately, it's the students who are cheated out of an education. The MoE has begun the process of addressing corruption among faculty by increasing salaries from \$100 per month to a range of \$120 to \$428 per month, and it is critical that this pay raise continues (Centner 2012).

Conclusion

In Afghanistan, as elsewhere, access to higher education is highly relevant for social cohesion and must remain linked to long-term development (Centner 2012). The community colleges in Afghanistan need to develop the ethos of community involvement in education (Centner 2012). As with other countries around the world, Afghanistan presents opportunities for new modes of mobility such as branch campuses, distance learning, joint- and dual-degree programs, as well as “sandwich” programs (Wadhwa 2012). These approaches have the potential to offer opportunity for increasing access to quality education and student mobility (Salmi 2003).

The research presented here is limited. Additional in-depth research on community college development in Afghanistan should be undertaken. This research should include more widespread assessment of stakeholders and ideally would be longitudinal or measure progress over time. This type of research is currently limited because of the security situation and various logistical constraints. For example, Internet access is intermittent, and most universities in Afghanistan currently lack e-mail systems making research through electronic surveys nearly impossible. However, schools are currently working on developing these systems, and as they develop, e-mail distribution of more surveys should be administered. Secondary sources are often slightly dated, due to the gap in research conducted during the Taliban control of the country. It is incumbent upon researchers to rebuild this knowledge base. Future research might also compare Afghanistan with other countries, especially those that have dealt with 2-year tertiary education and taken successful measures to address the associated challenges.

Tertiary education investments generate major external benefits to society – including long-term returns from basic research, technology applications, and greater social cohesion – that are crucial for economic development (Salmi 2003). In Afghanistan, as with other developing countries, policy makers need to resolve “mix of old and new challenges that block the path to improved tertiary education” (Salmi 2003, p. 65). A number of researchers have noted that organizations like the World Bank tend to influence higher education policies so that they become more similar regardless of contextual differences (Shahjahan and Madden 2015). As research has shown, understanding the aims of aid organizations like the World Bank is essential to understand the social, cultural, political, and ideological context of higher education (Tate 2012). World Bank support should be tailored to the specific circumstances of Afghanistan, based on strategic planning at national and institutional levels, guided by a concern for institutional autonomy and accountability, and focused sharply on building institutional capacities. Particular consideration for transition economies is required for Afghan community college development (Salmi 2003).

Because their attention has shifted to the local level, reformers routinely find themselves confronted with a wide range of difficult questions concerning the nature of local demands. Clarifying the nature of local interests in the context of community college education in Afghanistan is essential for its long-term success.

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Why the TVET System of French-Speaking African Countries is Not Able to Produce a Highly Qualified and Operational Man Power? A Comparison with Canadian Community Colleges

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Efia R. Assignon

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Abstract

Most of the French-speaking African countries gained political independence in the 1960s. Since then, the Technical and Vocational Education and Training (TVET) system inherited from France has not allowed them to develop their economies. Moreover, in these countries, there are many new building projects that need highly qualified workers, and due to the problems with the TVET system, they cannot hire the needed workers locally. This chapter analyzes why for over 50 years, these countries are unable to provide their economies with effective manpower with professional and operational abilities that can function to attract investors and why the system produces so many unemployed graduates. To answer these questions, this chapter will first analyze the TVET system in West African Economic and Monetary Union (WAEMU) countries, Benin, Burkina Faso, Guinea-Bissau, Ivory Coast, Mali, Niger, Senegal, and Togo to then compare it with Canadian Community Colleges. The comparison is made because there are strong similarities between the Francophone African economies and the Canadian economy, both of which are based essentially on small and medium enterprises.

Keywords

Burkina Faso education system · Canadian Community Colleges · Francophone Africa · Technical and Vocational Education and Training (TVET) · TVET system

Introduction

The author would like at the outset to indicate that this is not a criticism of the Technical and Vocational Education and Training (TVET) system in Francophone Africa but a comparative analysis with the Canadian Community Colleges system. This chapter explores the strengths and weaknesses of both systems. This comparison could help experts to better target weaknesses to correct and to perhaps arrive one day at a purely local inspiration system, a system adapted to the local realities of each country or each regional economy and culture, but based on best practices in the world. The comparison aims to identify the characteristics of the systems in place in these countries and see different challenges they face.

Economic development requires each country to have professionals, technicians and a manpower that can help enterprises to do their jobs and to attract investment. Those who work in high-paid jobs are trained in universities. Those employed in middle and lower-level jobs are often trained by the TVET system. In Canada, this system became effective and efficient after the Second World War. In Francophone Africa, the system was put in place during the colonial period. While this system allows the Canadian economy to grow, that is not the case in Francophone Africa.

After independences, almost all African countries kept the education system of the colonizer in place. Over time, some made reforms to refresh the supply of training and organization of the educational system. But most African countries did not adapt the

TVET system to the needs of their local economies. The result is that the TVET system has not fully played the role it is supposed to play in national economies, which is to provide them with effective manpower for their development, especially in Francophone African countries. Moreover, the TVET system in Francophone Africa is out of step with today's realities, inadequate, outdated and highly inefficient.

In Francophone African countries, the education system is more or less a copy of France's system. Most new educational reforms initiated in France are also reflected in these countries. This situation is understandable because the French system of education has served as a starting point for education systems in Francophone Africa after independence and is still the dominant model for historical reasons due to the privileged exchanges between elites of both the French and the Francophone Africa. But Francophone Africa appears congealed in the imitation of their former colonial power, even if the particularity of their national economies needs reforms that would take into account their national or regional realities and would apply best practices coming from around the world. With the new generation of young people gradually taking over strategic positions within national policy makers, there is more and more a pressing need to change the education system and especially education related to manpower training. The new generation is more open to try new systems.

From this point of view, it should be noted that for several years, in-depth reflection on educational system reforms has been occurring in all African countries and has been supported by regional organizations like the African Development Bank (AfDB), the WAMEU, the Association for the Development of Education in Africa (ADEA), and the African Union (AU). The rise of youth graduates unemployed and the metaphorical "bomb" with delayed action which it constitutes are one of the determining factors which dictates the requirement of a reform of the educational system. In general, it remains critical that the TVET system help these youths to acquire necessary competences for employment. The Arab Spring is one of the consequences of the explosion of this "bomb" in North Africa and the Middle East. Some countries are fairly advanced in the process and have initiated reforms affecting even the administration of educational institutions and ministry department. Senegal is one of those countries.

Due to the inefficiency of the TVET system, AfDB (2014) says: "While TVET programs could reduce skills mismatch, they are less attractive. Africa lacks an abundance of TVET centers that are well equipped and able to provide young workers with high-quality and in-demand skills" (p. 10). Given this situation and the general situation of education in Africa, the AfDB is adopting a tailored approach through a New Education Model in Africa (NEMA) to create a new framework for education that focuses on innovation and entrepreneurship:

To improve the quality and efficiency of its education systems, African countries need to rethink the foundation of their education systems taking into account the new opportunities arising with technology and such challenges as rapid urbanization and existing inequality gaps (gender and socio-economic). Together with Regional Member Countries, the Bank and many of its partners promote a New Education Model in Africa (NEMA) in order to address these challenges and to capitalize on the best practices in Regional Members Countries. (AfDB 2014, p. 10)

In this paper, some characteristics of the TVET system in the WAEMU countries will be compared to those of Canadian Community Colleges.

Limits of the Study

It is important to clarify that this study, although focused on the Francophone African countries TVET system, does not take into account the peculiarities of the different systems that exist within each individual country. It is mainly centered on the realities of the Member States of the WAEMU. In recent years, the Francophone African countries have been in a process of reforming their TVET system. These reforms are at different levels from one country to another. This study focuses on features that are common to almost all countries concerned. A few specific examples that concern individual countries of the subregion are given. It should also be noted that some statistics are difficult to access or simply not available. This explains why in the text there are no statistics to support some remarks. Finally, the text length is limited and the comparison will affect only the most obvious aspects that characterize the success or failure of both systems.

Francophone Africa Background

Political Background

The 19 Francophone African countries are strongly affected by France's influences due to their colonial past or their status as being under French tutelage country. Political stability has not always been easy in most of these countries marked by numerous military coups. Even though Canada was colonized by Great Britain, it has never experienced a military coup and has known political stability lacking in Francophone Africa.

Demography

From a demographic standpoint, the population of Francophone African countries is very young compared to that of Canada. According to Statistics Canada, in 2015, 35.7% of the population is under 30 years old, while in WAEMU member countries, this percentage is 78% for youth 0–34 years (ODESEF 2016) (calculation based on data from <https://www.odsef.fss.ulaval.ca/cd>, Table F01). As such, the WAEMU member countries have different demographic pressures from that of Canada affecting one way or another on their education system.

Economic Environment

One of the first criticism that undergoes before comparing the education systems of Francophone African countries with other countries is that the economic and social

contexts are not the same. That is true. However, whatever the economic context in which it is located, a TVET system should receive attention from the public authorities to be at the service of the national economy. This is not always the case in Francophone African countries. TVET is ranked last in the education system. This explains the real situation in which the system is today. TVET must train the workers the economy needs for its development. In this context, the argument on economic context is unfounded. If a country is using computers in offices and technical and vocational schools continue to train their students on typewriters, it is clear that their graduates will be unemployed. This has nothing to do with the economy. Moreover, these schools should also train entrepreneurs to strengthen the national economy. For these reasons, I will not dwell on the economic environments since for an economy to grow, it also needs workers, technicians, and senior technicians to ensure the technical supervision of the workers. Training of these personnel is provided by the TVET system.

The Educational System and the Place of TVET

Generally, in Francophone African countries, education is divided into three levels. Note that the naming of different types of institutions and degrees awarded in this system varies slightly from country to country. The first level includes kindergarten and primary education (about 8 years) and is sanctioned by the Certificate of Primary Education – CEP (a nationwide exam).

The second level, the general secondary education, is divided into two cycles: the first, lasting 4 years, prepares to Brevet d'études du premier cycle, BEPC (national exam), and the second, lasting 3 years, prepares to baccalauréat – BAC (the last national exam before entering university). TVET education in Francophone Africa is provided at a level equivalent to secondary school in the Canadian educational system. It is sanctioned by (a) the Certificate of Professional Competence (CAP in French), last 2–4 years after the CEP; (b) the vocational studies diploma (BEP in French), last 2 years after the CAP or the BEPC; (c) the technological baccalauréat (BAC tn in French), last 3 years after the BEPC; and (d) the professional baccalauréat (BAC Pro in French), last 2 years after the BEP. It should be noted that there are also trainings offered in the nonschool setting that are sanctioned by professional degrees (certificate, certificate of completion of training (CFA), professional qualification certificate (CQP), etc.).

The third level includes higher education. TVET at this level is provided by the University Institutes of Technology (IUT), universities, engineering schools, and various other institutions. The courses prepare for:

- University Technology Diploma (DUT or BAC + 2)
- Brevet de technicien supérieur (BTS or BAC + 2), the professional license (BAC + 3), or ingénieur des travaux (BAC + 3) sanctioning the first undergraduate cycle
- Engineering Technologist diploma or design engineer (BAC + 4) or the professional masters degree (BAC + 5) sanctioning the second university cycle
- PhD (BAC + 8) sanctioning the third university cycle

Another feature of education in Francophone Africa is that the failure of public institutions and the shortfall of public offer in the three levels of education have as consequence proliferation of private institutions (for example in Ivory Coast, (Kima 2016)). Private education is not well managed by public authorities and constitutes another factor of growth of unemployed graduates. In TVET, private education is confined to teachings in courses that require little or no equipment. So it is almost not present in industrial sectors. The complexity of the system is illustrated below by three examples (Figs. 1, 2, and 3) from Togo, Burkina Faso, and Cameroon.

Comparison to Community College

To justify the choice of the concept of comparison of Francophone Africa TVET with Canadian Community Colleges, it is important to note that in TVET in Francophone Africa, college is a secondary school. The definition is not at all the same. The concept of the Community College in Canada refers to public technical and technological institutions at the postsecondary level that makes available to its students a diverse range of training programs, applied research activities and community activities. It offers services tailored to the needs of its students and the standards of labor market skills. The training is recognized by employers and official accreditation agencies in their respective fields; they participate in the conception of college's programs. Canadian Community College graduates are immediately operational and usually have a job within 6 months to 1 year after they have graduated; more than 80% to 95% have a job.

Canadian Community Colleges include a technical and vocational education system that is of short duration and high level that produce middle managers but also workers and executives in some cases. Courses can last from several months to 4 years. The choice of the term of a Community College programs is a provincial political choice in Canada. To ensure students have adequate preparation for jobs that require higher education or workforce training, community colleges work with employers to develop flexible, affordable, and relevant training programs that meet local or regional economic needs.

The partnership between businesses and Community Colleges is the key for the right workforce development strategies, job training programs, and ultimately job placement. Community Colleges offer a distinct learning environment and are recognized for smaller class sizes, more individualized attention, and a supportive atmosphere. They are hybrid institutions, if they are considered from the standpoint of the Francophone Africa educational system. According to this organization and provision of programs, Community Colleges may as well include a technical college, vocational school, technical lycée, professional lycée (vocational high school), an University Institutes of Technology (IUT in French), and an undergraduate (even a graduate school in some cases in Canada) school.

The college is "community" because it operates in close ties with the community (neighborhood, city, region, and province or state) where it is located. Its mission is

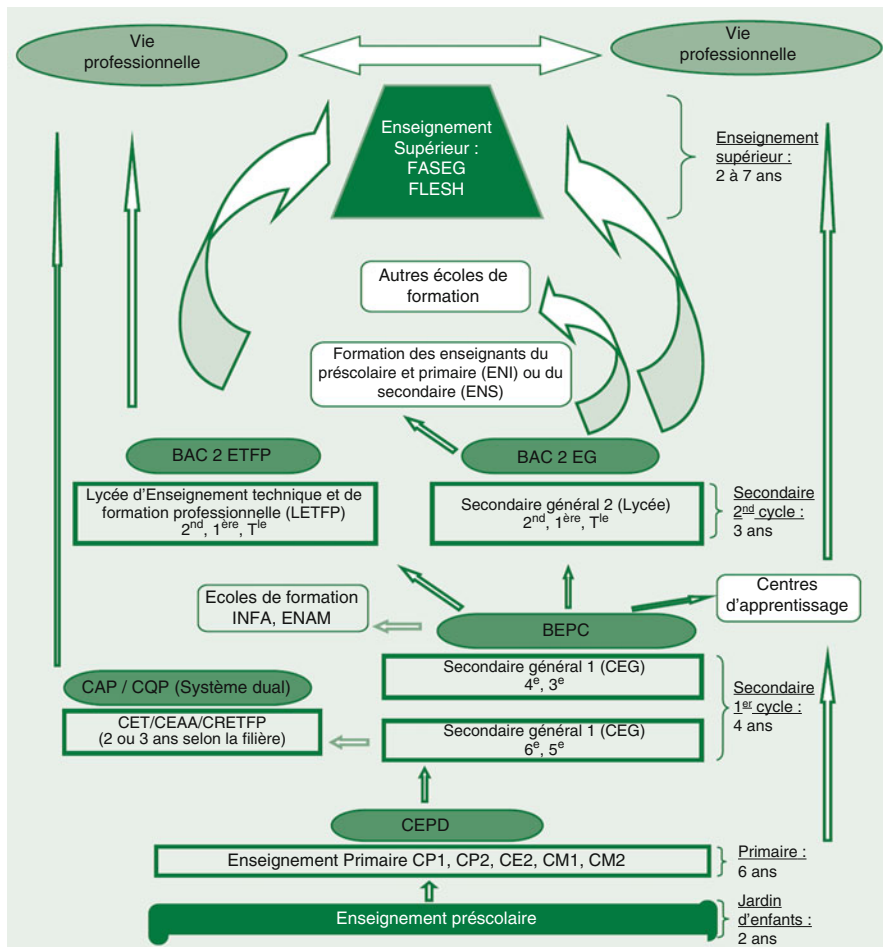


Fig. 1 Togolese formal education system

to serve its community by training human resources necessary for its economic development. It is actively engaged as an economic development tool. In this perspective, a Community College offers flexible programs tailored primarily to the needs of its community and directly related to its economic development needs. The college is “community” because it is at the service of its community, maintaining trust with the community by offering services that meet its needs.

Figure 4 highlights the differences between the Canadian Community College system and the TVET system in Francophone countries. It appears that the normal level of college entrance is French BAC, but unlike the Francophone countries system, even university graduates among others can register to acquire skills they lack.

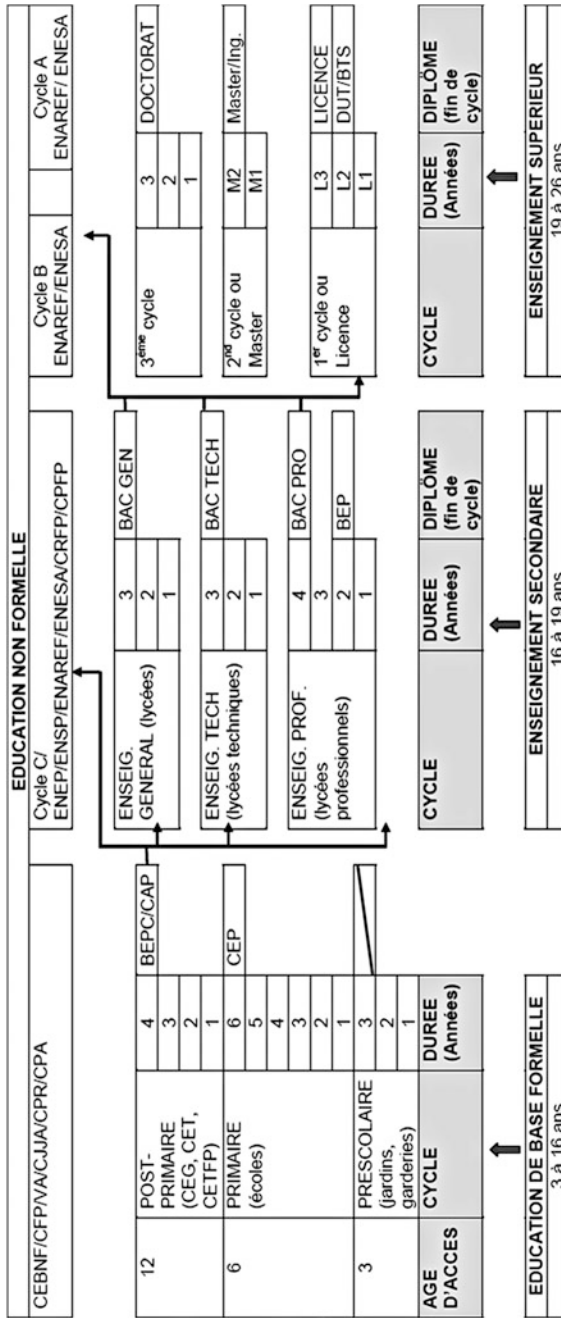


Fig. 2 Burkina Faso education system structure (Source: Burkina Faso, DGESTP/MESS (2012))

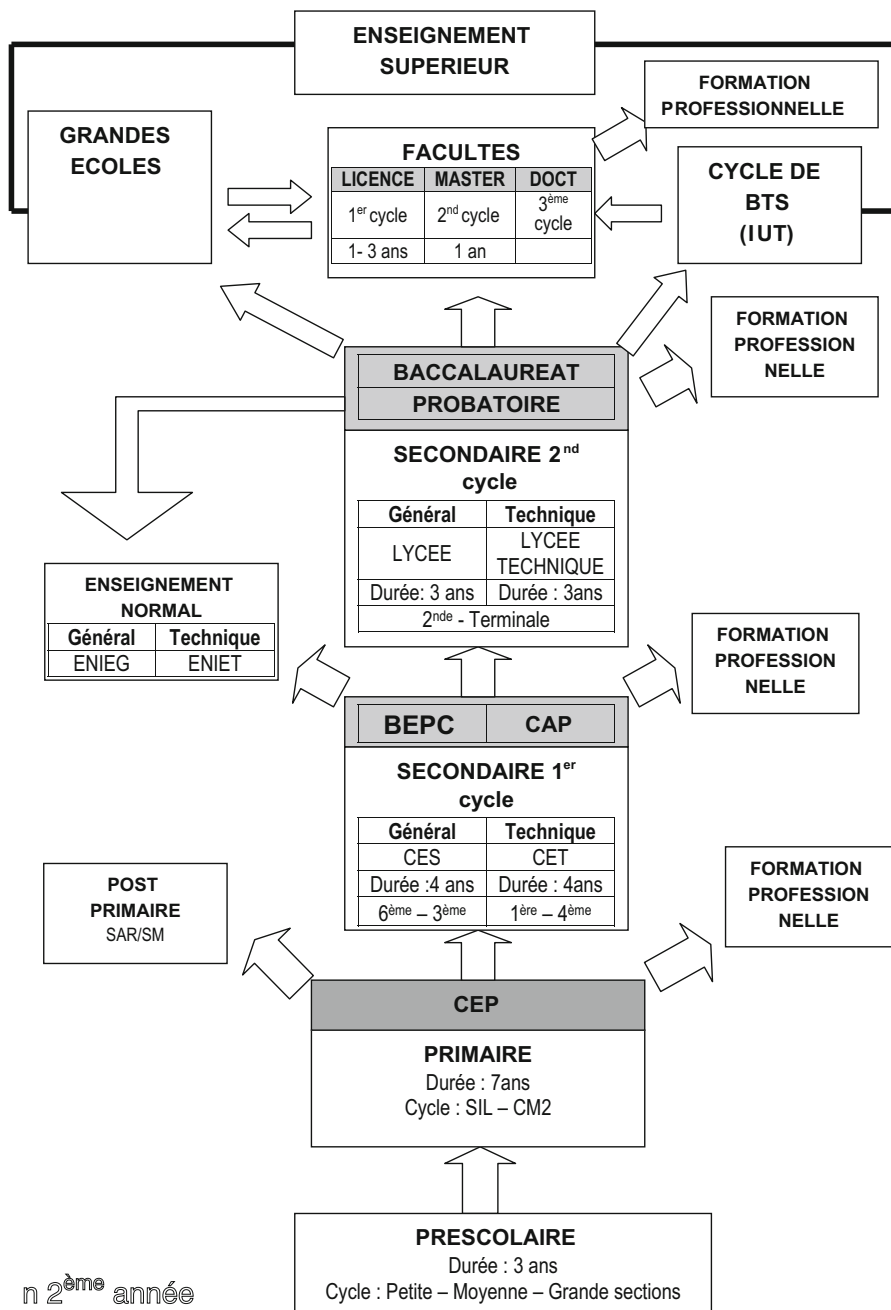


Fig. 3 Structure of the Cameroon educational system (Source: MINESEC – Cameroun)

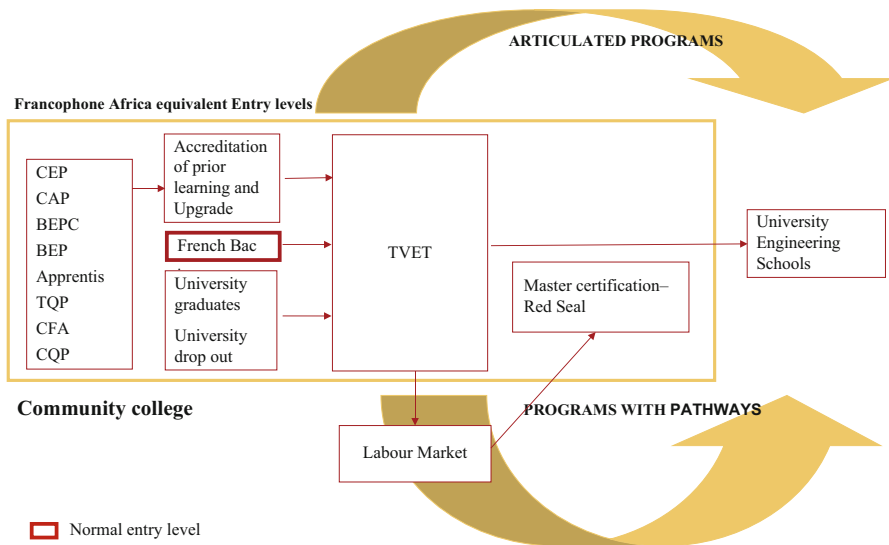


Fig. 4 Schematization of entry to graduation of a community college

Characteristics of the TVET System

Multiplicity of Government Actors

The TVET system in Francophone Africa is very complex and multiple. It includes technical colleges, technical schools, vocational schools, vocational training centers, vocational schools for training to access public employment or organized professions, learning centers, and technical lycées. A range of ministries oversee a TVET program, but also within the same department, there may be several programs with similar objectives which are aimed at different target audiences. This situation does not favor the establishment of a true national TVET policy nor a consistent management of the entire system. For example, in Burkina Faso, TVET is provided through at least eight ministry departments as shown in the Table 1 without forgetting the decentralized authorities (municipalities and regions), the private sector, and education partners (social partners and financial and technical partners). The main concern here is that there is no government coordination framework to encourage consistency between these different actors whose vocation is not education and the ministry in charge of TVET.

However, it should be noted that the situation has evolved in some Francophone African countries. On some level, at least, they are beginning to become aware of the problems caused by this multiplicity of actors on the ground. Several solutions are underway in the subregion through the creation of a National Council for Vocational and Technical Training. In Benin, for example, industrial, commercial, and agricultural trainings are now managed within the ministry in charge of TVET. In other

Table 1 Burkina Faso – missions of some departments in TVET field

Department	Article	Training missions
Ministry of Agriculture and hydraulic development (MAAH)	2	Direction, coordination, and control of the activities of agricultural schools and training centers Vocational training for farmers Practical and professional training of young farmers in the public and private training centers
Ministry of Health (MS)	3	In matter of health, training, and further training of health personnel
Ministry of Public Service, labour and social protection (MFPTPS)	9	In terms of public service, training, and further training of public servants
Ministry of Commerce, industry and handicrafts (MCIA)	13	In terms of craft, organization, training, and supervision of craftsmen in connection with the Ministry for Employment
Ministry of Higher Education, scientific research and innovation (MESRSI)	16	In matter of technical and vocational education: Development and implementation of the policy on education and technical and vocational training Creation and management of public technical and vocational schools Monitoring and control of the administrative and educational management of public and private education systems Management of certification system, awarding of diplomas, and validation of professional experience
Ministry of Education and literacy (MEENA)	17	In matter of literacy and nonformal education, creation, and management of nonformal basic education centers (CEBNF)
Ministry of Youth, training and professional integration (MJFIP)	21	In matter of youth and employment: Vocational training and apprenticeships Creation of professional qualification certificates Training and animation of the youth outside of school frame
Ministry of Women, the national solidarity and family (MFSNF)	22	In matter of social action and solidarity: Training and development of social work staffs, preschool staffs, and special education staffs

WAEMU countries, efforts are underway to facilitate the coordination of actions, including certification in the different departments involved in TVET.

In the Canadian Community College system by contrast, almost everything related to TVET is under one roof. Masons, mechanics, and carpenters, as well as laboratory technicians, civil engineering technologists, practical nurses, hairdressers, bookkeepers' assistants, computer scientists, biotechnology technologists, or social

workers, in short the staff that conventional universities do not form, are trained in Community Colleges. This allows to pool all available resources. Training at a Canadian Community College can range from learning to applied bachelor (even more). Each department concerned with one aspect of a program offered by the college decides the rules and competencies to acquire. The college is obliged to follow them. It is the same for professional associations and colleges of pairs whose mission is to regulate the practice of the profession and ensure that their members receive the skills they need to effectively do their jobs. They constantly monitor through visits and periodic audits how training is given in their field. These audits cover programs, facilities, teachers' qualifications, and skills acquired by students. While colleges give exams to students before issuing their diplomas, professional associations have their own professional examination to ensure that all the necessary skills have been acquired before giving final authorization to practice. This is so, for example, for graduates in the areas of health and some engineering programs.

The difference between the two systems covers several areas including, among others, (1) the consistency of the teaching in all areas of TVET, (2) the financing of the system, (3) the grants received by colleges for all programs offered therein, and (4) governance issues of TVET. Another important advantage of the Canadian Community Colleges system compared to the Francophone African countries system is that under one roof, students have more choices, more training opportunities, and more resources.

Political, Legislative, and Administrative Framework

In general, TVET systems are based on legislative and regulatory foundations common to all levels of education. However, they are subject to institutional instability in Francophone African countries (in contrast to general education). In some cases, the systems have not evolved in the context of an autonomous government department. In other cases, departmental autonomy existed at certain times but was never permanent. Some current developments nevertheless tend to institutional consolidation of TVET systems in these countries (Zobila 2010).

For example, in the Ivory Coast, "[t]he history of the TVET System reveals that the Department has experienced several disappearances by dilution in extensive educational sets. Indeed, from 1983 to 2003, in 20 years, and under the effect of the economic crisis and Structural Adjustment Programs, the Department will undergo several eclipses: it even disappeared during 7 years; it was attached to other ministries three (3) times for 4 years. Over this period, it has existed in its true identity during 8 years before being reborn since March 2003. These iterative changes have not allowed the development of a coherent policy for the TVET system" (Zobila 2010, p. 52).

The situation was not so different in Senegal (Diompy et al. 2011, p. 10) and in Benin where since 1975, the administration of the TVET system previously led by the Ministry of Education, Culture, Youth and Sports has undergone several changes in its name, missions, functions, structures, and several other changes.

This instability of governance and identity shows that the TVET system does not seem to be recognized as a driver of economic development in these countries, even though it is reserved for those who are not able to follow a classical education leading to university. This vision is the one that prevailed during and immediately after the colonial period when it came time to preparing the succession of settlers who would return home after independence. Unfortunately, in the twenty-first century, such a vision of TVET continues to prevail while we are in a world where everything moves very fast and in which the university is no longer the only way that allows training of the national workforce. In contrast, economies that evolve are those in which there is an effective TVET system.

In Canada, there is no federal department of education. Education is a provincial and territorial jurisdiction. The TVET has also experienced a similar evolution before arriving to Community Colleges today. According to Paul Brennan (2014):

Not long ago in Canada, the provision of advanced skills and education for employment, or technical and vocational education and training (TVET), was viewed as a second-class system created to train people who were not bright enough to make it into university and who worked with their hands in menial and dirty jobs. I remember the poster in the guidance counselor's office at my secondary school. It read "Work Smart, not Hard." A white-shirted office worker stood in front of a computer on the left, and a blue-collared assembly line worker stood on the right. The advice from the counselor was that university was the only route to advancement and a fulfilled life. . . . Now, however, Canadians speak of a system that provides advanced skills for employment and applied education, meeting the needs of highly skilled professionals in all job categories. (para 1)

There are a certain similarities between the two systems in the perception initially attached to TVET. But in Canada, they quickly moved to something else especially after the Second World War when it was necessary to occupy demobilized fighters returning from Europe.

Administrative Framework

In Francophone Africa, the administration of TVET is centralized in ministry departments so that managers in charge of these institutions have almost no leeway and must regularly refer to the ministry for any decision. It is true that in recent time a decentralization process that allows to give them some autonomy is on the way. But this autonomy is limited.

Even if the Canadian system was developed based on the particularities of each province and territory, all share a system of planning and resource allocation in order to ensure the growth and strategic development while allocating to colleges and institutes the opportunity to develop independently to meet specific needs in their home community. This system is characterized by a decentralized and responsive governance where institutions are run by a board of directors or a board of governors (the name of the board varies from one province to another, but its function is essentially the same) rather than by a department, where the socioeconomic nature of

membership communities is reflected in the board and in institutional programs, and where employers are part of the governance and are involved in the development of curricula, courses, employment, etc., to ensure the performance of the services offered to the community.

Student Recruitment

Usually after the official exams (CEP, BEPC, and BAC), students are assigned to different educational institutions in the country. For example, in Burkina Faso after the CEP, some students may be affected in technical colleges (CET) to prepare the Certificate of Professional Competence (CAP) in certain trades. Only students who have not been allocated by the ministry try to apply by their own means in public or private establishments that would like to accept them.

In Canadian Community Colleges, it's quite the opposite. Each college makes its own recruitment according to its own criteria. Applicants are accepted into the program they seek, if they meet specific criteria based on the requirements of the requested program. For example, the candidate must pass such level of mathematics courses, biology, physics, etc.

Program Development

Normally, programs are developed at the Department and sent to TVET institutions in Francophone Africa. In recent years in some countries, as part of the ongoing reforms, since everyone swears by the skills-based approach (SBA), professionals are associates in the development of curricula. It is the case among others in Senegal, Burkina Faso, and Benin.

In Canadian Community Colleges, programs are developed by teams of college in collaboration with a group of employers in the field who validates the guidance of the program and its objectives (or skills); in the case of professional associations, they establish the skills to acquire. After a year of administration of the program, it is evaluated to determine whether it effectively meets the needs of the profession.

Teachers' Profile

In Francophone Africa, overall, there are three teachers' profiles in TVET system. They are recruited and assigned to the institutions by the ministry in charge of TVET. Some teachers are part of a direct recruitment process. They are recruited on the basis of their diploma related to the field of TVET in which they will teach. They can be young newly graduates out of college. They usually receive no teaching adult education or any other teacher training. Most are pure theoreticians without practical experience in their profession or knowledge of the labor market in the field. Others are recruited from a Teacher's Training College as a "certified teacher." Those

recruited by the state on the basis of their degree receive an academic training, teachers' training, and adult education among others. It remains they are theorists with no probative practical experience. Finally, there are temporary teachers who supplement for the lack of direct or certified teachers in educational institutions of all levels, and they can be recruited directly by each TVET institution. They hold French BAC, baccalaureate, or masters degree. They are in the great majority without adult education or teacher training, so they are plain and harsh theorists.

In comparison, in Canadian Community Colleges, the ministry does not appoint teachers. They are directly recruited by colleges according to their needs. The basic criteria that guide this recruitment are above all the practical experiences accumulated by the candidate. At the CCNB, for example, they must have at least 3-year work experience in a company. In the first year, the teacher is framed by his/her colleagues and counselors to teaching and learning. They give them workshops before the start of classes. After this first year of immersion, they enrolled at the university to receive an adult education training. After this training, they are free to pursue their studies until Ph.D. if desired.

Evaluation of Performance

Generally, in the Francophone Africa system, the evaluation of the performance of an educational institution is based on the success rate of students in national examinations. The more an institution displays year by year in terms of a good success rate, the more it is deemed effective. Certainly, it is a good indicator, except that when it comes to TVET, the first objective should be the quality of education provided and the effective skills acquired by graduates. What is the use to put on the market graduates whose skills are not recognized by employers or are not useful to potential employers? This is why this evaluation system is problematic. It encourages all kinds of bad behavior of operators of private TVET institutions. They must display better success rate in examinations no matter what. They are prepared for it.

At the Canadian Community College, the first criterion that determines excellence is the graduate placement rate (its external efficiency). How many graduates have found employment 6 months or a year after graduation? How many have a job in their field of training? What is the employer satisfaction rate with them? What is their own level of satisfaction? Where the courses taken appropriate (see MQO (2016) for an example of that survey)? At the CCNB, for example, the level of the budget allocation of the provincial government depends on this evaluation, which is made by a private firm hired by the department by tender.

Supervision of Students

This culture lacks in the educational system in general in Francophone African countries. The plethora of students per class is the first obstacle to the installation

of these services which are very expensive. Furthermore, the system itself is based on the filtering. It is an elimination and elitist system. For example, in the 1970s, in the technical high school in Lomé, Togo, the general average score was set at 12 out of 20. Any student who at the end of the second quarter do less than 12 out of 20 was excluded from the lycée. Those who had an average of 11 out of 20 at the end of the first quarter received a warning.

Student services are integral attributes of Canadian Community Colleges. These activities and other resources aim to make student life more rewarding and enjoyable on the campus. They also include support services for academic success. Student services staff oversees those who feel the need by giving them access to various aid programs for college success. These programs include peer tutoring, orientation to the curriculum, time management workshops, and advanced listening skills. Everything is done for each student enrolled in a college program for graduate. Everything is done to encourage success. Failure is an exception.

Research and Development

Increasingly, Canadian Community Colleges recognize that applied research in colleges represents an essential complement to their mission through its major impact on the quality of teaching. This will give students and teachers the opportunity to participate in research and industrial service activities. This approach enhances significantly the training of students by offering an authentic experience that leads to advanced skills, which are also highly sought after by employers. Moreover, innovation activities that teachers realize, in collaboration with companies, enabling them to stay current in their field of expertise and know the training needs deemed necessary and relevant by industry.

This approach is unknown in Francophone Africa TVET system because of the level of teachers and the infrastructure at their disposition.

Infrastructure and Equipment

In terms of infrastructure and equipment, there is a gap between the two systems due to the fact that Francophone African countries do not pay attention to the need for TVET as a tool of economic development. Many monographs and inventory of the TVET systems conclude that despite successive efforts to improve infrastructure hosting TVET in WAEMU member countries, it is generally accepted that there was a lot of chess at all levels: aging infrastructure and obsolete or nonexistent facilities (Zobila 2010).

The role of the Canadian Community College is to serve the community. Even if some of their facilities are old, they are well maintained. In many Community Colleges, the equipment and some of the facilities are often at the cutting edge of technology (sometimes ahead of companies) which enables graduates to be immediately operational.

Financing

The financing of TVET in Francophone Africa comes predominantly from the national budget and from international cooperation projects. Part of the funds also comes from parents and in some cases from self-financing. A small part of funds comes from the private sector such as the apprenticeship tax (whose objective is to finance TVET and learning). This tax, which over time has simply become an indirect reel tax, is not paid back by the state in the TVET budget in almost all countries.

Public funding is generally allocated on a base of budget allocation formula based on the number of students enrolled in each level of education. However, the number of students enrolled in TVET is still the lowest in the entire educational system of different countries. Therefore, TVET receives only crumbs in such a system. Therefore, Zobila suggests in his study for WAEMU the need to:

Review the allocation of budgets; this distribution key is insufficient to accommodate the requirements of TVET whose quality largely depends on equipment and teaching materials dear to the acquisition and maintenance... TVET is thus more “expensive” than general education. However, assessment should not be limited only to apparent costs. There is a need to take into account the impact on the economy... It is undeniable that TVET has a shorter period of return on investment. Whole national economy wins. This justifies to improve the budgetary allocation keys for TVET. A weighting factor could be the ratio of standardized construction and equipment costs for two institutions of the same size, one of TVET and the other from the general secondary education. (2010, p. 86)

Moreover, according to UNESCO – BREDA (2011) – normally, the government allocates its public resources to the education sector according to the needs of the country and the level of priority given to the development of education. If the TVET system is given so little funding in these countries, the conclusion can be that it is not considered a priority for their economic development. Therefore, it is common knowledge that the education sub-sector is largely underfunded in almost all Francophone African countries covered by this study. For example, according to Zobila (2010), in Niger, the TVET received 1.95% of the resources devoted to the education system in 2009 and 3% in 2010 forecasts. In Togo, public resources allocated to the TVET system were in 2008, 0.3% of GDP, 1.05% of state’s general budget, and 7.7% of the resources to the whole education sector. In Senegal, the budget share of the TVET provided in the 10-Year Plan for Education and Training (PDEF) in 2007 was 7.68% of expenditure on education and 8% in 2008. The shares effectively allocated to the TVET were 3.37% and 7.07%, respectively (Seck 2010).

Considering the importance of the financial resources needed to create an efficient TVET system in some Francophone African countries which are almost completely lacking and modernize those that have them, the multiplication of TVET through several ministries and state agencies helps to dilute and disperse the limited funding available. Each dismemberment of this system needs its own infrastructure, its equipment, its teachers, its administration, etc. Grouping them under fewer roofs can allow to gain synergy and economies of scale. The budgets would be put together to form a critical mass that from year to year will modernize the sector,

Table 2 Sources of funding of three Francophone community colleges in Canada

Funding sources	CCNB		La CITE		BOREAL	
	2012–2013	2011–2012	2012–2013	2011–2012	2012–2013	2011–2012
Total revenue (en 000\$)	58,735	58,320	88,693	86,515	69,224	70,088
Subsidies (%)	0.82	0.63	0.55	0.56	0.76	0.77
Tuition fees (%)	0.09	0.09	0.17	0.16	0.10	0.10
Training contracts (%)	0.03	0.12	0.08	0.07	0.01	0.02
Others (%)	0.06	0.17	0.20	0.21	0.13	0.11

Source: Calculated from the annual reports

harmonize the educational system, and make it more effective. True, there are enormous political and administrative problems for this. But the current system is not in place due to some political will?

Canadian Community Colleges are under provincial jurisdiction; funding is not uniform. Table 2 below gives an idea of funding three Francophone community colleges for the years 2012–2013 and 2011–2012. As it appears in Table 2, the provincial and federal governments and other donors make a substantial contribution that ranges between 55% and 82% of their total budget. This funding is supplemented by tuition fees (between 9% and 16%), continuing education contracts (between 1% and 12%), and the rest from various sources. Certainly, colleges have some economic activities that generate some income. But, whatever the circumstances, these activities cannot compete with those of private sector. The colleges train their graduates as far as possible to become entrepreneurs. Therefore, they cannot compete with them.

Some staff of TVET institutions in Francophone Africa ask for autonomy to their institutions to create more contracts in order to mitigate the recurrent problem of financing. Certainly, it is a good idea, but when a public educational institution becomes a production company, its primary function is to train students to acquire skills and abilities that will enable them to serve the national economy; it is possible that quality will suffer at the expense of the profit. On the other hand, is it the role of a public educational institution to compete with the private sector? Such a complaint should be well analyzed to be profitable for all. The ability of colleges to access various financial resources is related to their autonomy. When they depend directly on their ministry, they do not have that latitude, and better yet, they do not have the right to generate additional resources. If that happens, the supplement is returned to the ministry budget at the end of the fiscal year as in any good public service. So, the main difference between the two systems lies in the administrative and financial autonomy Canadian Community Colleges enjoy.

Traditional Informal Learning and the Formal System

The formal TVET system is often doubled in size in Africa by the informal apprenticeship system. Informal learning is an important training system in

African states' informal economies. It is based on a training agreement between an apprentice and a master craftsman. Under the agreement, which can be written or not, the master craftsman is committed to training apprentices to every skill required by his job and this, over a relatively long period, usually takes 1–4 years. The apprentice undertakes in turn to contribute productively to the work of the enterprise. Training is integrated into the production process, and apprentices gain skills by working alongside experienced master craftsman. This system is quite well structured in the Francophone countries of West Africa and is based on traditional ceremonies. According to the International Labor Organization (ILO) (2012), it is estimated that informal learning assumes the majority of skill development in Ghana and represents nearly 90% of the trade training in Benin, Senegal, and Cameroon. In other words, traditional apprenticeship is based on the concept of competency-based approach (SBA) that inspires almost all Francophone African countries today. For a long time, this traditional learning has been kept out of the formal system. There was no proximity between the two. Today, some countries have begun, on the advice of foreign donors, to bring both systems together.

In contrast, in the TVET system in Canada, apprenticeship is also a provincial matter as the formal system. In New Brunswick, for example, learning is post-secondary education leading to certification as a journeyman in a skilled profession. It is the only path for learning where you are paid to learn a trade. It offers 52 apprenticeship trades. It takes 2 to 4 years to complete most of the learning programs, and they combine for about 80% of paid job in working place with 20% of technical training at the community colleges. So, they acquire the skills to work almost anywhere in Canada. It therefore appears that the concept of learning is very different in the two systems first by the level to which it then lies and how it is practiced.

Economic Impact

In Francophone Africa, if the concept of Community Colleges can be adapted to local realities (not a copy-pasted), the economic impact would be the same as in Canada. It will provide their economies with effective manpower and professional and operational abilities that will attract investors. The rate of unemployed will decrease because the system will be able to provide young workers with high-quality and in-demand skills.

A Community College plays a key role in the Canadian economy. It contributes to increase the employability of its graduates. It helps businesses to have in their area skilled workers. That help to expand local economy and improve quality of life and to create new businesses as shown in Table 3 below. This table shows percentage of graduates from CCNB's programs who have a job in the interval of 1 year after graduation. Between them, 3% in 2015 and 2011 are self-employed. Several studies describe the economic impact of community colleges.

Table 3 CCNB graduate – employment status

	Permanent (%)	Temporary (%)	Self-employed (%)
2015 Regular	67	31	3
2014 Regular	62	38	0
2013 Regular	66	33	2
2012 Regular	60	39	1
2011 Regular	65	32	3

Source: Extract from: 2015 Survey of 2014 Graduates of the CCNB, Table 13

Conclusion

In light of the above analysis, it is clear that there is a difference between the two systems. But, the Canadian Community College system has done and continues to prove itself wherever it is used around the world. In the Philippines, for example, it is this system that allows the country to be a net exporter of high-level technical and professional workforce on important projects in Africa. In India, which has a TVET system that is the envy of some African countries, there is discussion to convert 200 of its polytechnics into Community Colleges to better serve economic needs. In Vietnam, conversion of TVET into Community Colleges was done a few decades ago and has helped the country to support the changing economy in which Vietnam is fast becoming the factory of China, which itself is the factory of the world. Chinese and Colleges and Institutes Canada (CICan) have been collaborating since 1984 with benefits to an enhanced workforce (Brennan 2014). These few examples demonstrate that a Community Colleges system has something special that makes it successful.

The education system in general in Francophone Africa is struggling to break away from that of France even if the realities are different. Furthermore, most of the reforms that were made there seem to follow fashions, in particular these last years, the SBA, the Korean model, and the German dual model. If the system continues to cling to fashion trends, it will not change in the desired direction with an orientation and a clear vision that will enable it to develop a purely local or regional model as desired by the AfDB. Each time there is a new fashion, it leads to a new reform (regardless of size); they go so without clear policy, from reform to reform, and they do not take the time to thoroughly evaluate the passage of the latest fashion.

A TVET reform could have as a basis, the concept of Community Colleges, not the model because there exists not one but several models with the same base. This concept can be adapted to the local context of Francophone African countries coupled with what is the best in the top TVET models in the world. It is also possible at the same time to integrate the German and Korean models as they are already present on the continent. This will create a purely national or subregional model that will serve as a test-bed for reaching a TVET system for the emergence of economies of these countries. It is important to have a vision for a TVET system that will provide Francophone Africa with a high-level technical and professional

workforce, that will be efficient and immediately operational. The handicap dragged by TVET in Francophone Africa could be overcome if the new system is proven. The word TVET today is perhaps not attractive. The new institutions thus created could, for example, be named, institutes of applied arts and technology to erase the old image of TVET ineffective and sliding.

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Technical Education in Colombia Between Expansion and Legitimacy: A Neo-Institutional Perspective

20

Pedro Pineda and Jorge Celis

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Abstract

Technical education is a fascinating field to study the processes of expansion and convergence that sociologists of education (Benavot, *Sociol Educ* 56(2):63, 1983; Meyer et al. *Sociol Educ* 50:242–258, 1977; Schofer and Meyer, *Am Sociol Rev* 898–920, 2005) have analyzed in other educational areas. However, few studies in Latin America and in Colombia have identified these growth dynamics and the

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factors that may explain the organization of this sector. In this chapter, national databases on enrollment and funding are used to examine growth patterns in Technical Education from 2000 to 2013. The analysis of these indicators highlight: (a) the puzzling recent expansion of a sector that has multiplied by more than four times its number of students since year 2000; (b) the decline of proportional funds from the government; and (c) new isomorphic trends at the governmental and organizational level such as government's decision to move technical education as part of the system of "higher education," and as a result, since 2002, explore newly created research groups, accreditation processes, and self-funding bodies in technical institutions. These findings support the thesis that Technical Education is marked by both a process of massification and a lack of legitimacy due to the preference of policy makers to focalize national efforts in higher education and, more specifically, universities. Other strategies such as maintaining smaller sizes of the technical sector and differentiating it from higher education have been automatically disregarded by the national governments in the last 15 years. The Colombian case allows outlining how a neo-institutional framework may be pivotal in explaining the modern organization of Technical Education.

Keywords

Technical education · Community college · Massification · Educational inequality

Introduction

Has technical education in Colombia expanded in the same way of basic and higher education? The answer to this question in different contexts is central to make a comparative examination of community colleges and other global counterparts. A functionalist explanation on the institutionalization of this kind of education follows the argument that its establishment allows upper-secondary graduates (especially to those who do not have the interest or financial possibilities to access a university) to further train themselves for specialized jobs required by modern economies, and for some of them to further enroll into universities (Jephcote and Raby 2012; Raby and Valeau 2009). In this view, the institutionalization of technical education in different countries around the world occurs because it responds to policy actors' decisions to provide these possibilities.

A neo-institutional perspective, in turn, may follow a line of argumentation that highlights the contradictions and disorganization that may result from educational expansion. It explains that educational massification and organization is influenced by broader ideas coming from broader contexts that since the second part of the 1960s favor economic advancement in industrialized economies, and not necessarily because it is the best proven solution for economic growth, societal progress, and reduction of social inequality. Research from this perspective has explained the worldwide trend of educational expansion of educational areas, such as the basic

education (Meyer 1977; Meyer et al. 1977) and the university sector (Meyer et al. 2006) in terms of practices that are adopted because of its social legitimacy – and not because it secures economic growth and enhancement of social opportunities. In the case of vocational education, Aaron Benavot (1983) had already insightfully followed a neo-institutional argument that answered the question through highlighting the worldwide decline of the relative share of Postsecondary Vocational Education. Through this, he came to the conclusion that some forms of technical education do not always expand. There is, however, small amount of research that has continued to identify the growth trend of technical education in the last two decades in different regions of the world.

The notable lack of academic inquiry on the current expanding or declining trends occurring in technical education is especially critical in Latin America, particularly in the case of Colombia. In this context, relevant inquiry questions: Is technical education expanding or contracting within this nation state? What are the factors that may explain the structure of this sector? The present chapter aims to answer these questions through analyzing national databases (Servicio Nacional de Aprendizaje 2016; SNIES 2016; SPADIES 2016) on enrolment, funding patterns, and salaries in technical education from 2000 to a present moment.

In Colombia, Technical Education is divided by technical and technological programs provided by Technical Institutions (*Instituciones Técnicas*), Technological Institutions (*Instituciones Tecnológicas*), and University Institutions (*Instituciones Universitarias*) that notwithstanding their different names have similar social functions of specific training and bridging access to Universities. These institutions have similar functions to Community Colleges in the United States or the German Vocational Schools (Beufsschulen). Therefore, research on this kind of educational provision may allow viewing parallel developments to the ones tracked on the present handbook.

The findings of this chapter support the main thesis that technical education stagnated had a reemergence in the 2000s. This recent expansion is explained because politicians legally classified it as “higher education,” a sector that would allow inexpensively expanding “higher education” indicators of coverage and seek legitimacy towards local voters and global agencies, attempting to show that Colombia is paving the way to a modern state that secures the rights to its citizens. These political priorities may not be necessarily seen as the only rational strategy for fostering national development but in a certain way was at a point of time a strategy to obtain legitimacy given the comparative low numbers that Colombia had in universalizing higher education in the early 2000s. It is therefore interesting to note that other choices such as maintaining smaller sizes of the technical sector and differentiating it from higher education have been automatically disregarded by the national governments in the last 15 years.

The first section of the chapter historically locates Colombia’s Technical Education sector among other global counterparts such as Community Colleges. This development is conceptualized in three periods: a first period of institutionalization starting in 1957, followed by a second period of stagnation that is tracked by a third moment of massification. The second and third sections of the chapter show the contemporary

trends in the provision in the public and private sectors, respectively. A fourth section focuses on isomorphism at this educational level. The last section of the chapter discusses possible theoretical approaches to explain the different patterns of technical education in Colombia in relation to other postsecondary education sectors.

The Institutionalization of Technical Education

Current research in the sociology of education has stressed the need to further broaden explanations of educational change through analyzing broader institutional frameworks (Meyer and Ramirez 2013; Ramirez 2012). Following this line of reasoning, the next historical account in three stages of Colombian technical education analyzes it *in relation* to broader regional and world changes where models of education and society emerge and influence local contexts. The analysis considers how different conceptions about the importance of this kind of education have changed over time.

The Foundation of Technical Education (1957–1992)

Technical education has had since its origins in European countries a strong linkage to industrialization and to artisans. Its institutionalization has also been linked to labor unions and its claim for suitable education for different sectors, as is the notable case of the creation of the German Committee for technical school system (*Deutscher Ausschuss für das technische Schulwesen-DATSCH*), in 1908 (Schriewer 2001), and the general strong position of technical professions (*Beruf*). The exact essence of technical education has always been a matter of debate, and countries may differ in the influence on behalf of groups of technicians and artisans. The French *culture technique*, on the other hand, has other emphasis on the individual enterprise of a differentiated group of specialized workers. This form of institutionalization is closer to its organization in the *Polytechniques* and has had singular emphasis in the globalized world due to its linkage to modern scientific and engineering *Zeitgeist* of modern Europe. In any of these cases, technical education had had a different kind of knowledge and function in society compared with the universalistic and scientific social mission of the research university (Clark 1993; Meyer and Ramirez 2013).

This kind of education has an old history in Europe, but its coverage to a big proportion of the population in countries that were not industrialized such as Colombia is a relatively new phenomenon. The first modern expansion of technical education was pushed by the foundation of the SENA (*Servicio Nacional de Aprendizaje* translated as National Learning Service), in 1957. This institution would oversee governmental provision of technical education and those courses that would correspond to vocational education as in Scandinavia, Germany, and Austria. In Latin America, governmental technical education institutions were founded in countries with dissimilar economic development such as Brazil (founded

in 1942) and Peru, where they acquired equivalent names such as SENAI and SENAC the former, and SENATI the latter (Martínez 2003). These countries had adopted technical education models from Europe, among which the German dual system was worldwide influential (Lewis 2007). By the 1970s, almost all Latin American governments had created a public technical education institution.

In Colombia, technical education had also evolved since its beginnings as a modern nation state. The differentiated crafts training was already established by the first national educational law, in 1826, and different schools of arts and crafts (*Escuelas de Artes y Oficios*) had existed during the nineteenth century (Gómez 2015). However, the foundation of the first major institution in charge of technical education seems to have gained momentum after Second World War due to the support of international institutions such as the Catholic Church and the International Labor Organization (ILO) that viewed technical education as an efficient way for states beginning to industrialize their economies (Gómez 1995). The World Bank and ILO were at this time influential in shaping national policies for technical education in countries throughout the world (Gordon 2014).

Interestingly, the labor market at this time seems to show a relative importance of technical education if the salaries of graduates are taken into consideration. In 1979, a study by Puryear disclosed the different return rates between SENA and university programs. Puryear's article titled, "Vocational Training and Earnings in Colombia: Does a SENA Effect Exist?" provides evidence of higher earnings among SENA graduates, who also tend to be hired by larger firms that paid better. The study is cautious, though, in mentioning that SENA could have had a particular advantage by enrolling better qualified students. Although this evidence may weaken the statistical validity of the results, for the purpose of the historical account it is interesting to highlight the relatively exclusive status for a student to be enrolled at the SENA during the decade covered by the study when technical education had not expanded exponentially yet as shown in Fig. 1.

Since the 1970s, the institutional frameworks that created the conditions for a *lower* (and not different) status of Technical Education in comparison to University Education were strengthened. The name given to technical education at that time as a kind of postsecondary education with a different level is exemplified to the names given to these studies (Gómez 2015): short careers, intermediate professional formation, and technological education (*Carreras Cortas*, *Formación Intermedia Profesional*, and *Educación Tecnológica*). It seems that graduates from SENA with these titles were having better jobs and higher salaries.

New regulations in the 1980s further conceptualized technical education as a form of higher education. This approach is not shared by other Latin American countries that conceptualized it as a different kind of education but not necessarily at the bottom part of higher education. Decree No. 80 of 1980 allowed universities to offer both technical and professional degrees. In that decade, universities started offering many technological studies (*estudios tecnológicos*) along with their professional undergraduate (*pregrado*) degrees. According to Gómez (2015), by 1989 out of the total number of postsecondary students, 28.5% were enrolled in Universities, 32.7% in university-like institutions (*Instituciones Universitarias*),

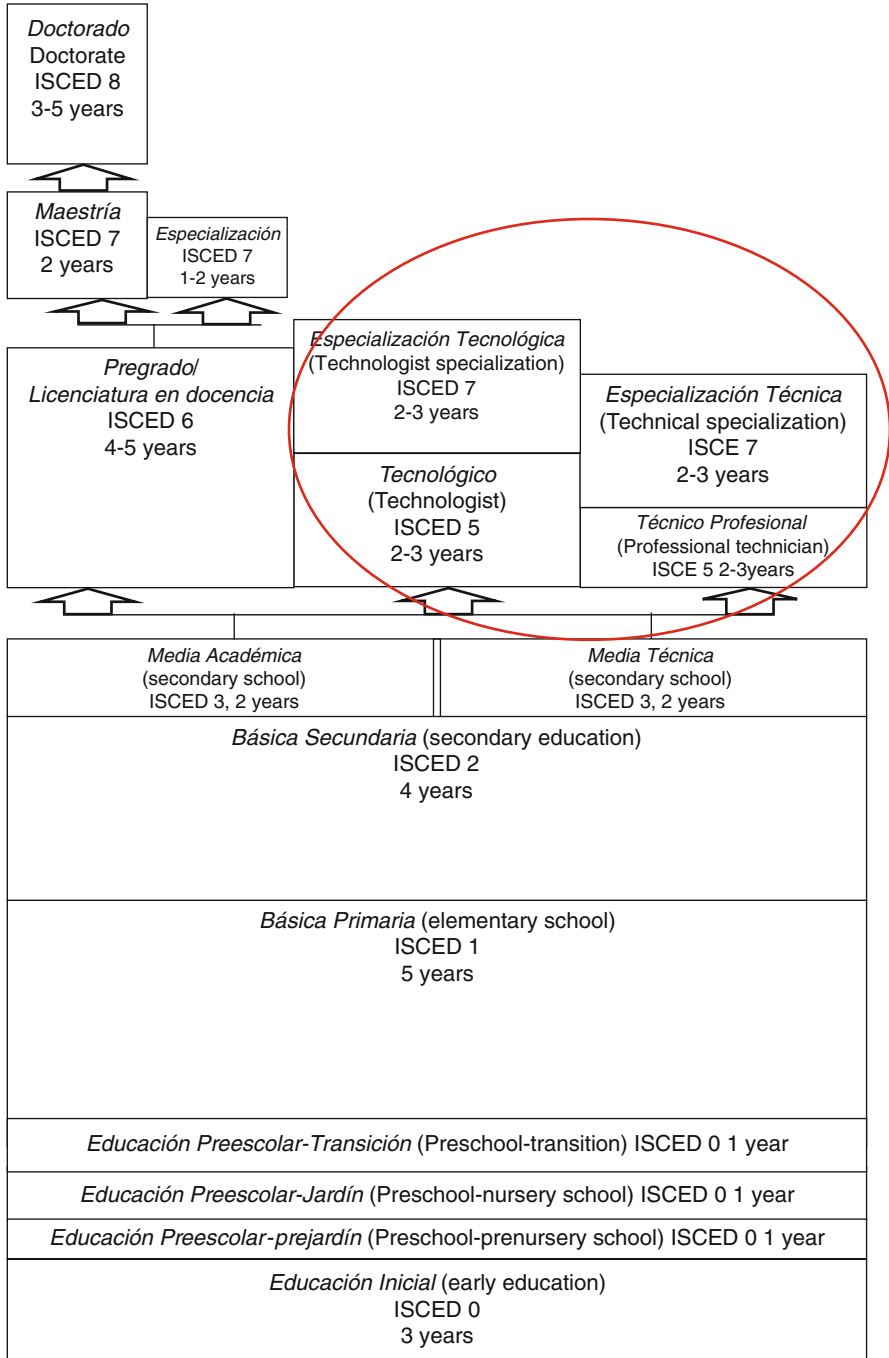


Fig. 1 Position of technical education in the structure of Colombian education system

and the remaining 38.6% in Technological Institutions whose local tradition of training as a higher-skilled technician will be explained in the next section.

At the end of the 1990s, new legislation approved stable funding for the SENA. Law No. 89 of 1989 established that 0.5% and 2% of all salary earnings of all types of employees from public and private organizations, respectively, should be directed to this institution. The SENA still remains under direct supervision of the Ministry of Labor and is independent regarding program creation and evaluation (World Bank 2003). Since 2002, however, notwithstanding its special status, the quality of SENA programs is monitored by the Ministry of Education.

In summary, this first stage of formalization of technical programs after the second half of the twentieth century shows the establishment of a main public institution in charge of expanding the provision of technical education, along with a provision of this education by universities. Technical education in Colombia, however, institutionalized differently from other countries of the world. First, it only occurred temporarily until the second half of the twentieth century and not at the beginning of the nineteenth century in connection to occupations that were already socially recognized and rooted to a societal organization that could be traced to the Middle Ages. Second, its institutionalization was not the result of an organized institution around groups of craftsmen who wanted to organize the education of new people with the interest of entering this social and economic sector. Rather it could be described as the result of external forces with an interest in promoting the foundation of this kind of education to provide labor force for the economy and studying opportunities for people who could not enter the university because they were unable to pay for university programs. Given this origin and legal category as a shortened type of university degree, technical education should be less buffered and its legitimacy could further suffer in the upcoming decades with the dramatic expansion of professional programs and the increasing importance given to universities' imaginary stronger role in promoting research and equity in national progress.

Stagnation (1992–2001)

In 1992, Law No. 30 regulated higher education and further intensified a stratified (not a differentiated) organization of education as regards higher education and technical education. The Law defined four kinds of higher education institutions in Colombia: (a) universities, in charge of providing undergraduate and graduate courses, including master's and doctorates (although some exceptionally offer technological programs); (b) University Institutions (*Instituciones Universitarias*), which could offer up to graduate specializations, a Colombian low-level graduate degree covering two or three semesters; (c) Technological Institutions such as SENA, which may offer programs at the technologist (*tecnólogo*) and professional technician (*técnico profesional*); (d) Technical Professional Institutions (*Instituciones Técnicas Profesionales*), which only may offer a title of professional technician (*técnico profesional*) with a duration of four semesters. Later, Law No. 749 of 2002 introduced an articulated curriculum structure (*currículo por ciclos*) that

allows Universities to offer technologist (*tecnólogo*) programs and the possibility for graduates to extend their education into professional programs.

If the types of academic programs offered by university institutions, technological institutions, and technical professional institutions are compared to international education standards, technical education in Colombia would correspond to UNESCO's International Standard Classification of Education (ISCED) 5 level. Colombian government categorizes levels 5–8 as higher education. Programs for professional technician and technologist typically cover 2–3 years, respectively (see Fig. 1).

The puzzling differentiation between the technologist and the technician is difficult to explain, most probably because the unclear legal differentiation referring to a scientific foundation of the first rather seem to resemble a mixture of the different traditions imported to Colombia and explained in the beginning of this section. French (1986) explains that the term technologist may have two different skill levels. While in the United Kingdom, it is historically seen as a university level, in other countries such as the United States, Canada, and Brazil, it refers to a more skilled technician. The Colombian tradition takes this second category, and conceived it initially as a semi-skilled helper of an engineer whose graduate rates did not notably increase during the 1990s (see Table 1). This foreign type of degree was imported and, as frequently occurs with transferred educational ideas, was later locally developed. Currently, it is possible to find technologist programs in different areas, such as so-called technologist in preschool education (*educación preescolar*), physical education, (*educación física*) and touristic processes (*procesos turísticos*).

In this way, both the technical institutions and technological institutions and have de facto – but not de jure – similar social functions as Community Colleges around the world whose main social functions are summarized by Jephcote and Raby (2012): the institutional connection to local environment, development of skills for the labor market, and nontraditional student access. Besides, since the categorization of technical education into higher education by Law No. 749 of 2002, the function of opening opportunities for continuing and higher education has been regulated. If

Table 1 Variations in SENA expenditures 2009–2017

	Expenditure current COP	Expenditure constant COP	Variation Δ last year (%)
2009	3.006.109.607.386 COP	3.891.709.497.722 COP	
2010	3.812.294.710.702 COP	4.859.150.838.261 COP	52
2011	3.941.848.901.600 COP	4.899.323.999.799 COP	–11
2012	4.134.405.600.910 COP	4.984.439.392.457 COP	–2
2013	4.580.945.080.000 COP	5.411.012.328.496 COP	20
2014	5.318.907.200.000 COP	6.179.506.384.960 COP	27
2015	5.746.217.320.000 COP	6.465.643.728.464 COP	21
2016	6.549.088.194.000 COP	6.549.088.194.000 COP	68
2017	6.612.046.704.934 COP	6.612.046.704.934 COP	7
			182

Source: Servicio Nacional de Aprendizaje 2016

viewed in relation to other institutions through the world, technical education in a broad sense is covered by teaching centers that are closely related. Although, in reality, they embody social functions distant from the generation of research and innovation.

Therefore, it would not be accurate to present any of technical institutions, technological institutions, and university institutions that offer either technologist or professional technician titles as global counterparts to other universities closely related to technological development, as the label technological could suggest. Other kinds of technological institutions in the world specially focused in engineering, science, and technology such as English Polytechnics, German *Technische Universität*, and French Polytechnic School (*école polytechnique*) or technological universities or its models adapted to the United States since 1861 such as the Massachusetts Institute of Technology (MIT) have funds for research and innovation, solid laboratories and infrastructure, and offer graduate degrees. Neither the *Technical Institutions* nor the University Institution (*Institución Universitaria*) has these characteristics, although Law No. 749 of 2002 issued a technical further study called technical specialization. There are no available data about enrollments in this kind of studies, and the number of students of this kind of programs may be very limited.

Summing up, the period of stagnation in Colombia's technical education during the 1990s is interesting to analyze because it allows reflecting how the technical education institutional frameworks, influenced by broader imaginaries of the world culture, may be pivotal in explaining its expanding trends. The inclusion of technical and technological education in the category of higher education seems to have created conditions for further massification of the technical education system. If both kinds of degrees are comparable, then governments may be tempted to expand the university sector and to a lesser extent the technical education sector to show how elected officials comply with the goals of a modern nation state in providing the highest possible degree to a large amount of its population. In the analysis of next period it is shown how this risk would become true after 2002, when an expansion of enrollments would transform technical education in Colombia in an unprecedented way.

Recent Massification and Loss of Legitimacy (2002–)

After 2002, technical education in Colombia expanded exponentially mainly due to the increase of the public sector (see Fig. 2 below). Once the technical sector was conceived as part of higher education since Law No. 115 of 1994, the government, especially after 2002, added new programs to the ones that were already established. The main rationale behind these unprecedented massification of technical education was to expand so-called higher education through technological programs whose number of students grew exponentially (see Fig. 2 below). Previous ideas about the need to expand technical education for supporting economic development had already existed since the late 1950s. However, a new rhetoric behind this expansion was the government's ideal to increase the enrollment of higher education for lower

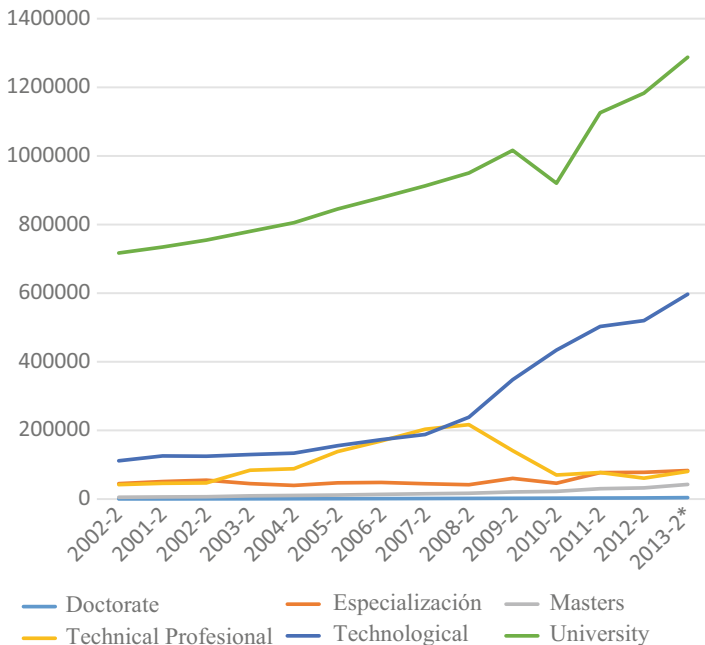


Fig. 2 Student enrolled in tertiary education 2000–2013 (Source: SNIES 2016)

social classes and in different regions of the country to at least 50% of young people. The new politics around expansion was often justified by the idea of progress and economic growth to the different regions, including those who were under severe public order problems derived from the low-level and long-lasting internal conflict in the country. These programs were also expected to expand without additional funding but under criteria of efficiency and rationalization of resources.

International organizations influenced this policy swiftly. For example, the World Bank’s (2003) report on Colombia basically recommended the expansion and organization of tertiary education as a source for the production and commercialization of knowledge. Graduate and doctoral programs cover a greater part of the documents. As for technical education, it is considered as a “less resource-demanding tertiary education . . . which could be promoted by tying a proportion of financial aid to students attending these institutions.” The aim and methods for this expansion are also clearly presented: “As funds for the loan program grow, coverage can become universal” (World Bank 2003, p. 61). Consistently with this rhetoric, the government established the goal to attain 50% of coverage by 2016. The reasons to expand technical education, though, are slightly different to the ones found in previous documents and studies. No major external funding for technical education is found during this same period, at least not to a similar extent to the ones found in the early 1960s when the main institution in charge of technical education was founded. Policy analysis undertaken by the Organisation for Economic Co-operation and Development

(OECD), in turn, although present technical education as the “poor relative” of the university sector, dedicate a comparative greater amount of its pages in other educational sectors than in analyzing and sharing policy recommendations for solving its structural problems. A short review of the trends in policy documents on education would preliminarily show how the technical sector has become over the decades the one receiving less attention.

Figure 2 shows the expansion of technical education in relation to university students. In 2000 the number of students in technical professional and technological programs was 40,299 and 111,353, respectively. By 2013 the similar proportion of students of both kinds of programs had changed from 153,452 in 2000 to 677,406 in 2013. Most of these changes are due to the increasing number of students at the SENA, whose number of students changed from 48,123, in 2003, to 397,299 in 2013. The private technical sector has also increased its size, though, from 87,541 to 157,112, covering 23% of the total provision. The increase of the private sector was favored by the deregulation in the norms to approve new programs after the Law No. 30 of 1992, although the expansion of private programs and the presence of market forces was much stronger in the university sector (Pineda 2015).

The Fig. 2 also points out a lower rate of expansion of student numbers from professional technician programs. Although this sub-sector almost doubled in 13 years, this increase rate is overshadowed by the steep increase in numbers of technological programs by more than five times, from 111,353 to 597,027. The rise and fall in the figures representing technician programs could allow inferring that part of the increase of these enrollments is due to the transformation of technical programs into technological programs. In this respect, educational sociologist Victor Manuel Gómez (2015) describes how the intention of the government policy was to classify technical education into higher education to prove to the public how the coverage rate of the nation per international standards. Taken together, by 2013 students of technical and technologist programs represented 32% of the number of students reported to be in higher education (SNIES 2016).

Governmental funds, however, were not proportional to increasing student enrolments. SENA still maintained the same proportion of budget, although not only calculated as shown in Table 1, from a percentage of salaries, but on a new taxation mode labeled the income tax for equity (Impuesto sobre la Renta para la Equidad) (Organization for Economic Cooperation and Development 2016). Some new funds provided to the new government institutions were distributed to the Regional Higher Education Centers (*Centros Regionales de Educación Superior*). These institutions were created in 2003. These should work in cooperation with the private industry and local education institutions. Many of these programs of study are offered online, a strategy that has also been supported by the national government to increase enrollment in the global figures of higher education.

In regard of the income of technical education graduates, national labor market databases show that there are salary differences between university undergraduates, professional technicians, and technologists. Each earned in average

COL\$1,293,323, COL\$1,307,831, and COL\$2,237,912 in 2014 (Observatorio Laboral 2016). These salary variations are relatively constant in different knowledge areas and there is no field in which a university student earns less than a person graduated from the technical program. This shows a different tendency to the one mentioned by Puryear (1979), in late 1980s, when he provided evidence suggesting that a “*SENA Effect*” existed, meaning that graduates from public higher education earned higher salaries than many other Colombians. How has the social legitimacy of technical studies changed in the last decades? Even though there is no evidence that allows giving definite answers about these matters, salary differences can certainly give an idea about the relative recognition of a certain sector of the education system.

Furthermore, the comparison of dropout rates between university, technical, and technology students could also be thought as a proxy indicator of the quality and the social recognition of studies. Numbers are much higher in professional technicians and technologists in comparison to university graduates, even though they are shorter programs, which by the third semester correspond to 45%, 41%, and 31%, respectively (SPADIES 2016). These very high levels of attrition raise questions on the study conditions of students.

With the new landmark of the country facing a post-conflict scenario that results from the peace treaty between the government and the FARC guerrilla in 2016, it is possible that these recent expansions (perhaps affecting the quality and reputation of technical education) may continue in the forthcoming years. Colombian governments may continue to seek to increase its legitimacy through increasing the number of “higher education” graduates through the comparatively lesser expansive increase of public and private technical education but not a greater proportion of public university education. The need of showing Colombian States’ legitimacy in the regions that were stroked by violence in the past decades may lead to the further provision of postsecondary institutions, although professional technician and technologist programs increased to a lesser extent in comparison to university provision.

The previous historical review shows how the global and national policy discourses on the relevance of technical education influences the legitimacy of the studies at these education levels and the quantity and quality of its provision. The case of the massification of technical education in Colombia suggests that the emphasis on expansion is related to the need of governments to institutionalize technical and technological institutions as a means to develop suitable labor force for the economy, in the first stage. The recent massification has occurred in a parallel way to the need of policy makers to gain legitimacy through classifying technical education into the higher education sector. This strategic move would serve policy makers to claim how they have met the imagined national needs to provide higher education to its citizens. This expansion is tension with quality problems in private and public institutions. Administrators of these institutions may now feel pressed to compete with professional education through developing characteristics in their institutions that allow them to adapt to an institutional environment that does not secure their social legitimacy. The next two sections analyze the way institutions

from the public and private sectors are addressing competition from other kinds of institutions without the guidance of the public sector.

Current Underfunding of Public Technical Education

In the Colombian context, the mandate to increase the numbers of students in technical education together with a fixed rate of funds tied to a proportion of national salaries or companies' incomes has challenged public institutions in the last 15 years. Most of students and administrators report that this pressure has challenged the social legitimacy of technical education in the country. Contrary to the university sector, the private one often does not offer strong competition to the offer of studies because this kind of education is taken by students unable to pay high tuition fees to enter this educational level. Inside this sector, actors often report that lack of proportional governmental funding per student challenges the quality of the public offer. The increase in student enrolment, therefore, may be related to a more efficient use of resources, but also presumably in the increase of classroom sizes and, to a lesser extent, in the new provision of distance programs. Colombian public provision in technical education had 26,761 students in distance programs, representing 4.3% of the total number of 52,294 students. In the private sector, the percentage of distance programs rises to 17% (26,844 out of 157,112 students).

Calculating current funds on technical education is an enormous challenge. The available information shows, however, that the variations in the funding scheme do not seem to correspond to the increase of public provision. Jaime-Ramirez (2005) offers some calculations during the period 1997–2004 which show an increase from COL\$398,225 yearly incomes in 1997 to COL\$896.958 in 2004. This increase of 225% may appear like an important boost in governmental funds, but clearly it only reflects the increase given the total inflation of the time, which in the same period near 300% (Banco de la República 2016). In this same line, the analysis of expenditures of SENA in the period 2009–2017 shows another increase of 219%, which in constant COP means a total variation of 182% in this period.

Figures would allow to infer that the increase in numbers does not seem to represent a real increase in the budget but corresponds to the expansion occurring in the 2000s. Given that the funding scheme remains the same, it may be feasible to expect further increase not in the last years, nor in the upcoming years. Consequently, given the rise of numbers it is possible to support the argument on the erosion of legitimacy given the massification of the sector in the last years.

In the last years, the only important change in the funding mechanisms of the government has been the introduction of market-funding mechanisms, more specifically focused in the demand and not in the offer. Since the 1990s, the country has established new educational loans as the main form to promote the accessibility to higher education to students who could not afford higher education (Pineda 2015). Such a form of relationship between the government and postsecondary education has been strengthened through a new governmental program of student scholarships,

which since 2015 has favored especially private universities and to a lesser extent public ones. Thus, the governmental rhetoric and actions focus on universities with high prestige that students want to enter, but not on extending public infrastructure, and far less technical education programs. Taken together, public expenditures in higher education in Colombia is 0.9% of the GDP, below OECD countries who have an average of 1.5% (UNESCO 2016).

Private Technical Education and Entrepreneurial Institutions

As mentioned previously, the more flexible parameters of Colombian government have allowed private technical institutions to flourish since the decade of the 1990s. There are no available studies on this kind of this sector. Now, private technical education in Colombia is probably a very varied sector. It is possible to find private actors in charge of foundations or churches that have strong reputation in their respective regions. For example, graduates from university foundations or technological institutions have salaries that triple the minimal salary wage. The information on salaries regarding other counterparts do not show that studying a technological study may be linked to higher wages (Observatorio Laboral 2016), since governmental databases show that they still earn even the minimal wage. Cases from graduates of institutions who do not seem to obtain higher salaries after their studies are located mostly in regions with weak economies, precisely those where the conditions have been related to greater indexes of violence and social conflict.

The quality of the educational offer or such teaching centers may be varied, of course, with strong difficulties given that the government does not offer direct or indirect assistance to their activities. The last OECD report education in Colombia (Organization for Economic Cooperation and Development 2016) shows how many of the students of such institutions and even the administrators aim to enter the university sector, given the institutional framework where the difference between technical education and the much higher university status consists in the cases of some programs covering the same areas, such as accounting or industrial engineering, only in a matter of time of 1 or 2 years. Since the introduction of the Bologna structure, many private universities in Colombia have shortened university studies from 5 to 4 years. The recent proposal from the *Universidad de los Andes*, one of the most prestigious private universities in the country, to keep on shortening studies through introducing trimesters instead of semesters, an initiative which would enable students to finish university after three and a half years, may continue to indirectly promote the erosion of boundaries between universities and the technical education sector which used to have at one time a different location in society.

Other institutions, on the other hand, may present themselves as serving the national policy of expanding education and providing opportunities for students who may have other aims or failed to access university education. It is questionable whether all of them are non-profit organization as established by the national law. To be sure, at least a part of them often involves the extraction of funds for private purposes, a practice that has been documented at the university level (Pineda 2015).

Probably many of them have a greater proportion of distance education programs, which as mentioned previously already represent 17% of the technical private sector's offer (SNIES 2016). The involvement of private institutions will continue as the government regulations empower them to obtain resources under the social legitimacy of their higher education status. A potential student with a limited budget that does not allow him to enroll in a university and without enough information to know about the quality of the program will continue to spend his or her scarce savings with the hope of entering higher education and, if possible, using the credits to further study and obtain the socially recognizable professional degree.

Isomorphism in Technical Education

The notion about the social mission of technical education institutions in Colombia has been affected by ideological changes expressed in the regulatory frameworks previously explained. The mode of organization of technical education institutions has changed in the last decades, and many technical programs seem to try to compensate their lack of prestige through structural and discursive changes that bring them closer to the university sector. This isomorphic move of both public and private institutions towards the university sector is problematic since, as new policy makers come, they seem to base their reform in the modes of organization that are more prestigious without a historical understanding of the structural problems of the system. This section examines how accreditation processes governed by patterns of research universities and the integration of research into technical institutions reflects efforts in adapting to an increasing globalized environment where some reduced models of reality define organization and rhetoric around some institutions across different educational levels.

New Research Missions

One of the most evident isomorphic trends of technical education in Colombia can be viewed in the adoption of research missions by Technical and Technological Institutions. Since 2012, the research mission as part of the new activities of the SENA is reported to have been rediscovered, although it had never really existed. A research vocation and the supposed link of teaching through research activities is presented as an effort to maximize the research capacities of teacher centers in Colombia Servicio Nacional de Aprendizaje, 2014 But, this kind of isomorphism seems to occur in the public and the private sector. For example, other private technological schools such as the *Escuela Tecnológica Instituto Técnico Central La Salle* have started to self-affirm their research vocation in its internet website. Indeed these is an approach that is seen recently in other countries of the world, as can be viewed by Kyvik and Lepori's book (2010) on the research vocation of nonuniversity reaching centers. This is presented as a good idea in a country where research activities are less buffered as in other countries of the region and the world.

Within this environment where technical education is legally and politically viewed as a lower kind of university degree, structural changes push technical institutions to compete with low-quality universities, among others, through engaging in research activities. Normal people and politicians do not see the differences between the nature of technical education and university provision, and administrators see the positive side of publishing and granting patterns. Institutions at the technical sector show themselves as being part of a global competition especially as technological universities such as Caltech and Massachusetts Institute of Technology are starting to dethrone Harvard as the model to pursue at the top of the Higher Education Ranking (Times Higher Education 2017).

In Colombia, research outputs are measured in terms of the number of research groups and research seedbeds (*grupos de investigación y semilleros de investigación*). This untraditional form of institutionalizing research is linked to a particularity of research policy in Colombia that measures scientific production in terms of the number of groups and not directly the quality of its research products. Following this rationale, the SENA has published the institutional commitment of gathering groups of teachers and students for showing that it integrates the prestige related to be engaged in scientific inquiry. This ritualistic commitment to research activities is more ceremonial around the idea of undertaking research, in the sense that it allows to a certain extent a social control around the real research activities that are being undertaken (Pineda 2015). Only until recently are governmental regulations prone to demand publications in higher levels of databases such as the Science Citation Index and Scopus for a research group's categories, but in the meantime universities and now some other institutions share their propaganda (either registered or not or with research outputs or not) through invisible measures that cannot be accountable for. It may be the case that these new research initiatives may not achieve to change the research dynamics (are loosely coupled), but again it is the commitment to these ideas on behalf of technical institutions what would suffice until stricter levels of measurement are institutionalized and shows the loose coupling between such reforms and actual scientific outputs.

The Isomorphic Effects of Accreditation Systems

A second interesting phenomenon related to the institutionalization of technical education in Colombia is related to the increasing global role played by accreditation systems. Program and later institutional accreditation were introduced in Colombian higher education starting in 1995 (Gómez and Celis 2009). The accreditation process has a very particular feature, since it refers to studying programs but can move further to a global institutional accreditation once a given proportion of programs has been obtained. Regardless of the real effects of this system in improving educational quality, the point here is to show how this new trend extended to technical education as well. Accreditation is now a common procedure both for universities and technical institutions (not of schools), strengthening the isomorphic view according to which both are part of a similar system. Both private and public universities and

more recently technical institutions seek the needed accreditation that enables them to increase tuition fees and obtain new resources.

The most important criteria – regardless the type of institutions – outscores research and the local measure of research groups, publications, and in some cases patents and licenses (Gómez and Celis 2009). The Ministry of Education has made recent efforts though to promote other learning indicators to promote quality assurance in technical education. But given that the system was primarily designed and governed by actors that are academics and part of the most recognized universities in the country, who ignore the dynamics of technical institutions where they have never worked or studied, no other mechanisms have been systematically applied to make accountable the social contribution of technical institutions.

The process appears so ritualistic and repetitive as it is interesting. Once the great mission, often with reference to research and professional training, is formulated, then technical institutions aim to emulate universities or organizations from the private sector to rationalize their strategies. Consequently, members from the national accreditation system want to find evidence about how such activities are taking place in a given period of time. Therefore, the outcomes in the introduction of new activities in technical institutions is an isomorphic process. Fernández (2007) notes that a similar process occurs in nonresearch-oriented teaching institutions in Chile, where probably other indicators are not part of the system, but the accountability process leads institutions to make accountable copied missions and visions which they have formulated themselves, in turn following a global rhetoric.

The accreditation process constitutes, this way, a major force of isomorphism in technical education that pushes further technical and technological institutions in the direction of universities. Many public and private technical institutions have followed this track. The current report of the national accreditation system (Consejo Nacional de Acreditación 2015) shows that technological institutions have already obtained accreditation for 17 programs, and only 3 technical institutions have achieved the goal of obtaining the certificate. In turn, universities and technological institutions have obtained accreditation for 665 and 134 programs, respectively. The difference between the granted accreditations may be interpreted as a measure of the abovementioned isomorphic pressures, also as a relative lesser quality of technical education or even a share of both. All in all, probably the majority of the institutions in Colombia will start to apply for accreditation processes in the upcoming years.

External Fundraising

Funding strategies of technical institutions are not universal but may vary according to their particular niche. Some private institutions have opted to increase tuition fees through investing in their legitimacy and showing an internationalization face. Given the changes in the institutional frameworks it is no longer enough to show a social mobility function and the quality of the education offered, but these centers are showing themselves as having modern facilities and large budgets to attend the educational demand. The case of the *Politécnico Internacional*, in Bogotá, is emblematic in

showing a dimension of efficiency that was not necessary in previous stages of higher education in Colombia. Its mode of organization follows the entrepreneurial vision of its owners, including one of the banking families of the country. In its webpage it publicizes its relationship with Spanish technical centers for catering or the Mexican *Tecnológico de Monterrey*, and the strategic guidance of a group of Alumni of Harvard and MIT. It also highlights the results of their fundraising campaigns to obtain scholarships for its students from national and international companies.

It is difficult for the representative of Colombian technical institutions to reflect the quality of their educational provision to society. Thus, what some of these teaching centers have opted to do is show proficiency of resources and organization. This accountability trend occurs in a similar way to some global changes occurring in universities (Krücken and Meier 2006; Meyer and Ramirez 2013). Further research could show the extent to which trends are part of the technical education landscape in Colombia. As has been noted, however, these new discourses evidence a different trend regarding the previously legitimized positive effects of technical education in terms of opening studying opportunities to students that cannot access education and want to have a different way of study. New external fundraising may show how more discourse emphasizes the way both technical institutions and the university sector are linked together for achieving the greatness of an invisible higher education system. In the view of both policy makers and some administrators of technical institutions, the more linked the university to research and to self-funding opportunities, the better. They may be exposed and understood as aspects that are difficult to be accounted for but bring, however, higher prestige both for individual institutions as for governments in charge of showing that higher education is reaching international standards. These new features at the organizational level would not have existed in the first period of institutionalization of technical education in Colombia and if so would have been seen as weird.

Conclusion and Future Directions

The description of technical education in Colombia allows advancing in answering the two important questions raised in this chapter: Is technical education expanding or contracting? What are the factors that may explain the organization of this sector? Technical Education in Colombia survived and expanded in such an exponential way that it has very few parallels in the modern world. An educational sector that multiplied itself by more than four times in a short time period of 13 years is an unusual behavior specially if taking into account that it only occurred until the beginning of the 2000s. Technical Education in Colombia, though, would awake from its sleep in the 1990s and metamorphosed into a massive system with educational quality questioned by society. It was deemed, however, to no longer have the importance it had as a means for training specialized work labor in a way that could not be achieved by any other social or educational institution.

Technical Education is still valued as a pivotal component of education; University enrolment grows nowadays and also does technical enrolment. However, it was

shown how international and national policy makers tend to pay nowadays an inequivalent amount of attention to this sector in relation to the main rhetoric on university development as a means to achieve potential social equality and improve research outputs. Universities may provide all these functions, whereas Technical Education seems to be less controllable for these purposes. Technical's Education importance is de-emphasized but it still expands in a sort of self-generated process that may not be fully explained by functionalists and conflict-theory's accounts that view educational reforms as following social composition and economic structure of the country.

As for the second question, the review on the dynamics of Technical Education shows that the organization of modern Technical Education in Colombia does not occur solely as national decision-making or pressures by some actors but due to global ideological shifts that are locally translated into norms and regulations that ultimately explain the way Technical Education has institutionalized. In particular, the Colombian case exemplifies how new ideals of equity and research for development could be one way to overcompete older ideals on Technical Education for a stratified labor market suitable for the economic development of growing industrialized economies. Global and local politics, thus, locally favor the focus on higher education because it is seen as guaranteeing social mobility to all kinds of young people, as well as fostering research and innovation. This preliminary answer outlines how a neo-institutional explanation may be pivotal in broadening both functionalist and conflict theory's explanations which both fail to explain the particular aspects of expansion and isomorphism present in the current historical development of education in Colombia, as evidenced in the decline of attention in technical institutions and the more undifferentiated characteristics of many of its institutions in relation to the university sector.

New research directions on Technical Education may follow the theoretical and methodological ideas advanced in this chapter. Further analysis may take into account countries not as separate scenarios of struggle but as national entities where common reforms occur. Such analysis may help to understand how Technical Education is changing in a new world where new discourses impact the different educational sectors. An important point to notice is how technical institutions locate in a world where research and innovation in the knowledge society seems to join previous discourses on the social mobility and differentiated world labor needed for the economy. This chapter aimed to contribute to the way Colombian Technical Education can be understood in relation to other global counterparts and also how they are all interconnected by worldwide discourses that seem to affect their trends of isomorphic organization.

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Volume 2

**Structural Components:
The Challenges of Change**



Structural Components: The Challenges of Change: Volume Introduction

21

Rosalind Latiner Raby and Edward J. Valeau

Abstract

This is the introduction to the second volume. The chapters in the second volume examine structural components that are found in Community Colleges and Global Counterparts and how these components support educational change. This volume is divided into four subsections: (a) Curriculum, Program Assessment, and Quality Assurance; (b) Internationalization: Designing Curricular, Mobility, and Partnership Opportunities; (c) Innovation: Adaptation to the Educational Needs of the Learner; and (d) Pathways Post-Completion: Career Advancement, University Transfer, and Baccalaureate Degrees.

Keywords

Curriculum · Program assessment · Quality assurance · Mobility · Partnerships · Career · University transfer · Baccalaureate degrees · United States · Israel · Japan · Thailand · China · Portugal · Brazil · Canada · Vietnam · Grenada · Italy · Malaysia · Kuwait · Curacao · Namibia · Philippines · MENA

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The second volume examines structural components that are found in Community Colleges and Global Counterparts and how these components support educational change. This volume includes four subsections: (a) Curriculum, Program Assessment, and Quality Assurance; (b) Internationalization: Designing Curricular, Mobility, and Partnership Opportunities; (c) Innovation: Adaptation to the Educational Needs of the Learner; and (d) Pathways Post-Completion: Career Advancement, University Transfer, and Baccalaureate Degrees.

Chapters in the first section of volume II examine curriculum, program assessment, and quality assurance. Arthur Cohen and Carrie Kisker examine the United States Community College primary functions, organization, management, faculty population, student population and student support services, finances and financing, curricular emphasis, and transfer education to frame a discussion on the current climate of accountability linked to tracking student progress and outcomes. Racheli Nissanholtz-Ganot and Nitza Davidovitch use a case study of the Health Management Systems program at Ariel University in Israel to examine learning outcomes that compare personal variables (gender, age, country of birth, year of immigration), family variables (marital status, number of children), and occupational variables (job in the healthcare system, numbers of years on the job, and extent of position) with student satisfaction with the skills they acquired. Jacqueline Copeland examines United States Community College stakeholder rationale for the role of leadership and governance needed to support international education. Pattanida Punthumasen and Takayoshi Maki detail institutional changes that occurred since the passing of the Thai Institute of Community College Act (ICCA) B.E.2558 (A.D.2015) in terms of quality assurance, budget compilation, curriculum formation, teaching force appointment, and the opening of the Urban Community College Bangkok. Keiichi Yoshimoto examines how National Qualifications frameworks that exists in countries and regions throughout the world follow similar characteristics that begin with the upgrading and academic drift in the VET sector and that create qualifications and certifications for both vocational and academic tracks, vertically and horizontally. Qing Hui Wang examines the upgrading of China's Higher Vocational Colleges in nonprovincial capital cities at the prefectural level and discusses challenges accompanying the quality assurance of these institutions in funding, quality and quantity of staffing, teaching practices, research, and community service.

In the second section, the chapters illustrate that internationalization in terms of curricular changes, student, and faculty mobility, and partnership opportunities is a component of many Community Colleges and Global Counterparts. Anabela Mesquita and Olimpio Castilho use a case study of the international student mobility program in the School of Accounting and Administration (ISCAP) of the Polytechnic of Porto to show how contacts were initiated to build a mobility network. Marcelo Henrique Carneiro Camilo and David Shallenberger also use a case study of the Federal Institute of Rio Grande do Norte, a Brazil's Federal Institute of Education, Science and Technology, to show how senior administrators and faculty use an internationalized curriculum grounded in local needs, to respond to a changing world. Jonathan Friedman compares international students at United States and at Canadian Community Colleges to define a transnational dimension of how differential student academic and social experiences effect future pathways through and beyond these institutions. Kayla Whitney, Lisa Reid,

and Bernhard Streitwieser examine how adoption of the United States Community College model by Vietnam was designed to improve access for Vietnamese students and at the same time internationalized these institutions through partnerships and mobility opportunities with Community Colleges in Western nations. Pierre-Luc Gagnon and John Telesford use a case study of two Canadian Colleges and a Caribbean Community College to demonstrate how partnership development for a program in Environmental Sustainability Practices widened from a traditional student exchange model to a longer-term institutional collaboration including curriculum building and capacity development and the challenges that surfaced during the partnership's implementation.

In the third section, chapters examine how institutional change results from innovations introduced to respond to the educational needs of the learner. Luisa Daniele, Claudio Franzosi, and Domenico Nobili show how a Community College style institution could fill the gap in the Italian Vocational and Education Training system for adults who need to be (re)skilled. Olivier Bégin-Caouette examines Quebec General and Vocational Colleges (Collèges d'Enseignement General et Professionnel – CEGEPs) to explore how the mission of being supported by local and provincial contexts actually allows these colleges to respond to global challenges and how this process helps them to preserve their singularity in the global era by offering dual degrees with local universities. Wan Nalza Wan Jaafar and Takayoshi Maki explain Malaysian Community College entrepreneurship programs that are supporting socio-economic development programs of local communities. Carol Ross uses a case study of Kuwait Community College to show how a unique institution was created as a response to serving the educational needs of a changing economic system. Rosita Tormala-Nita shows how sponsored projects for Vocational Education in Curacao serves as a strategic tool to impact economic development and a political tool that helps political parties gain and maintain power. Sarala Krishnamurthy and Charl Wolhuter examine the changing postsecondary education niche in Namibia in which the Namibia University of Science and Technology (NUST) was transformed from the Polytechnic of Namibia to a Technical University to provide more opportunities to students for higher educational access and to raise its status to better compete in the academic global marketplace.

In the last section, the chapters examine different pathways to and postcompletion in terms of career advancement, university transfer, and baccalaureate degrees. Common to these chapters is the mission that links education to a skilled workforce to enhance economic opportunities as well as one to continuing education towards a Baccalaureate degree. Kiran Budhrani, Jose Lloyd Espiritu, and Mark D'Amico examine the Philippines accreditation agencies for Technical and Vocational Education and Training (TVET) nondegree programs and the postcompletion job attainment in the technical middle-level skills sector. Asami Shimoda and Takayoshi Maki examine the Japanese Colleges of Technology (KOSEN) that create a curriculum for professional engineers by responding to industry demands, provide higher education access to lower socio-economic students and to students who live in remote areas, and enhance job opportunities as a result of international networking with an expanding international student program. Shahrzad Kkamyab uses a case study of Tunisia to examine how adopting features of the US Community College in the Middle East and North Africa (MENA) countries could alleviate the overwhelming youth unemployment crisis. Ralf St. Clair, Joanne Heslop,

and Nicole Greengoe use a case study of Community Colleges in British Columbia, Canada, to explore the integrated system that allows high mobility between post-secondary systems in order to more fully understand political and structural decisions in the transfer context. Michael Skolnik compares attainment of Baccalaureate degrees offered by a collaboration between Canadian Community Colleges and Universities and by Community Colleges that offer their own Baccalaureate degrees in Career and Technical Education and shows that colleges that offer baccalaureate degrees have the most rapidly increasing rates of attainment.

The concluding chapter by Valeau and Raby examines the trajectories in which institutional reform has occurred in the Community College and Global Counterpart sector. Institutional changes and new designs impacted by (a) the need to expand massification, (b) the urgency to serve changing needs of industry that demand different knowledges, (c) the desire to counter societal inequities, (d) the response to global developments associated with population growth and understanding of the power of education, and (e) a response to global academic competition for world academic recognition and status. The battle of changing name, focus, funding, and policy development associated with these institutions is the battle for recognition as the student population remains non-traditional, economically at risk, and geographically marginalized, the less that equity exists.

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Part V

Curriculum, Program Assessment, and Quality Assurance



Functions, Organization, and Contemporary Challenges of the American Community College

22

Arthur M. Cohen and Carrie B. Kisker

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Abstract

In the United States, the community colleges are the primary vehicle for ensuring access to higher education for all students, including those not yet prepared for college-level work, those hoping to transfer to a university, and those seeking training for an occupation. This chapter provides an overview of the primary functions, organization, and contemporary challenges of the American Community College. It begins by describing the students who attend these institutions, as well as the faculty who teach in them. It then provides an overview of the organization and management of community colleges, the provision of student support services, and the major issues involving finances and financing. The chapter turns then to the major curricular functions, discussing in turn how US Community Colleges engage in liberal arts and transfer education, occupational training, developmental education, and community and lifelong learning. Finally, the chapter presents a discussion of the current climate of accountability and describes the ways in which US community colleges track and report student progress and outcomes. Within each of these sections, the authors note the major challenges community colleges face, as well as possible directions for the future.

Keywords

American community college · Curricular functions · Organization and management · Faculty · Finances · Student progress and outcomes assessment · Student support services · Tuition and fees

Introduction

The need to educate the populace, train workers for evolving industries, and allow for social mobility is common to all nations, and nearly every country's formal education system includes institutions that serve students between the years of compulsory schooling and entry to the workforce. However, in most parts of the world there is a divide between universities that focus on educating students for more advanced careers (law, medicine, academia, business) and vocational or technical institutes that prepare students for the workforce. Although universities and technical schools exist in the United States as well, it is one of the only countries (Canada being the other) where both functions also exist within the *same* institutional type. Community colleges in the USA are comprehensive in nature: they award university-transferrable credits *and* provide workforce training.

This dual focus serves two purposes. First, it allows for an individual to keep his or her career options open for a much longer period of time, perhaps learning a trade but also completing the lower-division requirements necessary for transfer to a university, should the student desire to do so at a later date. Second, it provides individuals with an avenue for social mobility while also enabling the universities to serve a smaller and more academically prepared segment of the college-going

population. In other words, in the USA, community colleges are the primary vehicle for ensuring access to higher education for all. And while critics may make legitimate arguments about how *well* the colleges perform this democratizing function (e.g., Dowd 2003; Brint and Karabel 1989; Clark 1960), there can be no doubt that the community college is integral to realizing the quintessentially American belief that one can rise above their parents' station and become whom- or whatever they want to be.

America's community colleges have nearly always been comprehensive in nature. The first colleges (then called junior colleges) were founded in the early 1900s to accommodate the rising number of high school graduates seeking further years of schooling (and the desire of universities to emphasize doctoral studies and research and de-emphasize freshman and sophomore enrollments). These new community colleges offered not only liberal arts courses similar to those presented in the lower division of senior institutions but also courses not usually found in universities: occupational programs preparing students for employment in various trades, such as appliance repair and construction, and sub-professional fields that did not require bachelor's degrees at that time, for example, nursing and school teaching. People of any age could also find short courses in everything from flower arranging to small-business management.

Coupled with their minimal admissions requirements and relatively minuscule tuition, this variety of offerings fostered a phenomenal growth rate: from 74 colleges in 1915 to 325 colleges 10 years later, more than 500 a decade after that, and over 650 in the 1950s. The greatest expansion took place in the 1960s, when 50 colleges opened every year. It leveled off in the early 1970s, reaching a saturation point when over 1,100 community colleges were functioning, putting one within reasonable commuting distance of practically the entire population of the United States. As the number of junior colleges grew exponentially, so did the notion of community education, the sense that these new institutions could be a hub of activity and lifelong learning for an entire community, from recent immigrants looking to learn English, to new mothers desiring parenting skills, to older adults in need of cognitive and social stimulation. For this reason, by the 1960s the term *community colleges* had become the preferred nomenclature.

In this chapter, we provide an overview of the primary functions, organization, and contemporary challenges of the American community college. We begin by describing the students who attend these institutions, as well as the faculty who teach in them. We then provide an overview of the organization and management of US community colleges, the provision of student support services, and the major issues involving finances and financing. We turn then to the primary curricular functions, discussing in turn how US community colleges engage in liberal arts and transfer education, occupational training, developmental education, and community and lifelong learning. Finally, we discuss the current climate of accountability and describe the ways in which community colleges track and report student progress and outcomes. Within each of these sections we note the major challenges community colleges face, as well as possible directions for the future. Unless otherwise indicated, all facts and figures cited are from Cohen et al. (2014).

Students

As Cohen et al. (2014) write, “Two words sum up the students [at community colleges]: number and variety” (p. 45). In 2014, community colleges served nearly 6.4 million students or 37% of all first-time enrollees in postsecondary institutions (up from 20% in 1960). Indeed, the spectacular growth in number of students has been an impressive feature of American community colleges. Enrollments increased from one-half million in 1960 to four million in 1980, to a high of seven million in 2010, before dropping slightly to current levels (US Department of Education 2016). Much of the increase has been a result of the expanded number of 18- to 24-year-olds in the population, as well as a greater proportion of high school graduates entering higher education within 1 year, which has reached 70%. Hardly any of the community colleges have residence halls; their students commute, most residing within ten miles of the campus.

Along with the increase in numbers of community college students has come far greater diversity in the student body. From a racial standpoint, the percentages of African Americans, Latinos, Native Americans, and other groups traditionally underserved in American higher education are now *overrepresented* at community colleges in comparison to their share of the overall population (this likely results from a combination of inadequate preparation in high schools serving these populations, failures by more selective institutions to recruit and enroll them, and a desire among students from these groups to attend college close to home). As well, the number of students over age 25 attending community colleges has steadily increased over time, especially during periods of economic downturn when fewer jobs are available and unemployed adults require additional training to reenter the workforce. At the same time, the number of students enrolled in dual high school and college courses has also increased substantially. Dual enrollment has thus become a staple at most community colleges across the nation. Thus, while the modal age of community college students in the United States is 19, the mean age is 29.

Community colleges also play a role in educating students from other countries, enrolling 14% of the 750,000 international students in US higher education. In addition to these, the community colleges also enroll most of the postsecondary students residing in the country illegally, primarily because they cost less than other institutional types. (Although several states allow undocumented students to pay in-state tuition at public colleges and universities, in most states these students are ineligible for federal and state financial aid.)

In addition to diversity, “work is a defining characteristic of community college students” (Levin et al. 2010, p. 46). The vast majority (80%) of community college students work while in college; 41% work full-time (Horn and Neville 2006). Students being claimed as dependents by their parents or guardians average 24 h of work per week; independent students average 35 (Perna et al. 2007). Perhaps most strikingly, more than 1/3 of community college students view themselves primarily as workers who attend college, rather than students who work (Phillippe and Sullivan 2005).

A need to support themselves and their families while enrolled is one reason why 62% of all community college students attend part time, fitting required courses, tutoring, and other educational activities into schedules constrained by part- or full-time jobs, long commutes, child-rearing responsibilities, or other obligations. Furthermore, many students attend multiple community colleges concurrently, taking classes at the times and places that fit most conveniently into their schedules. And while part-time attendance is not in itself problematic (indeed, it is the only option for many community college students), it does constrain students' abilities to meet with professors, remain on campus for study sessions, or engage in extra-curricular activities, all of which have been shown to increase student engagement and persistence and graduation rates (Astin 1993). Part-time attendance and frequent stop and drop-outs also put downward pressure on student persistence and graduation rates, although one might argue that not all students who exit before completing a degree are failures (they might, for example, have dropped out to take a good job).

Contemporary Challenges

Due to their open-access mission, US Community Colleges arguably serve the most economically and educationally disadvantaged students in America's higher education system. According to the US Department of Education (2012), 45% of Community College students have children and almost half of these are single parents, 12% claim a disability, 28% of dependent students come from the lowest income quartile, and 20% report an income at or below the poverty level. Add to these statistics the facts that 45% are first in their families to attend college and 12% speak a primary language other than English, and you have a student body that must surmount numerous obstacles just to enroll in college, let alone complete a degree or certificate. A major challenge for American Community Colleges in the twenty-first century, then, is to let go of the decades-old mentality that the purpose of education is to sort students into those who can succeed in college and those who cannot, and instead embrace a commitment to helping all students – perhaps especially those most likely to fail – achieve their education or training goals.

Faculty

Nearly 400,000 people teach in American community colleges. Most hold a master's degree or have equivalent experience in the occupations they teach; the Ph.D. has never been considered the most desirable degree in institutions primarily focused on teaching rather than research and publication, although the more practical Ed.D. is increasingly common among administrators. On a full-time basis faculty conduct four or five courses each term, but 70% are part-time employees, teaching only one or two classes at a time. The main reason for the preponderance of part-time faculty in community colleges is that they cost less and can be employed, dismissed, and reemployed as attendance swells and contracts. While college leaders are often

criticized for over-reliance on the less-expensive part-timers, doing so may be increasingly necessary as state support for community colleges is reduced and tuition kept to a minimum.

Pay scales at American community colleges vary greatly. The 9-month salary for full-time faculty is between \$70,000 and \$110,000 including fringe benefits, or between \$8,000 and \$11,000 per course taught, which makes most community college professors middle- to upper-income earners. Part-timers, on the other hand, earn roughly \$2,000–\$3,000 per course (more or less starvation wages), which goes a long way toward explaining why some 40% of part-timers would prefer a full-time position. The part-timers are less likely to be professionally involved with institutional committees, students, or extracurriculars, but numerous studies have found that students learn as much in their classes. The most positive aspects of part-timers are seen when business or professional people teach the latest developments in their field based on their current involvement with it. Less than ideal features of their use are when the college brings in two or more part-timers to teach similar courses as a way of avoiding employing a full-time professor, or when they are overrepresented in classes that the full-timers prefer not to teach.

As at 4-year colleges and universities, full-time faculty in US community colleges earn tenure, but the procedure of awarding tenure more closely mirrors that in secondary schools than in the senior institutions: some community colleges award tenure after a single year and others after a probation of 2–5 years, but the practice rarely approximates the 7-year standard common in universities. However, roughly 42% of full-time community college instructors (and 28% of part-timers) are covered under collective bargaining units (most frequently the National Education Association and the American Federation of Teachers), which negotiate everything from personnel policies to grievance procedures, class sizes, economic benefits, and working conditions. The vast majority of faculties covered by collective bargaining contracts are located in five states: California, Illinois, Washington, New York, and Michigan. Over time, collective bargaining has had a marked effect on American community colleges, influencing everything from the size of multi-college districts to the autonomy of individual campuses and administrators.

Contemporary Challenges

Many of the current issues related to community college faculty and teaching have been swirling around the institution for decades and have to do with the perceived professionalism of a workforce that is fractured by employment status (full-time vs. part-time), academic credentials (the doctorate, master's degree, or simply on-the-job experience), governance and management systems (collective bargaining units versus academic senates focused almost solely on curricular and pedagogical matters), and various academic or occupational emphases. Other decades-old challenges remain as well, including how faculty work with administrators and governing boards and how well colleges utilize part-time faculty to ensure workforce flexibility and cost-savings without damaging the morale and ability of the full-time

faculty to teach, advise, and work with students outside of class. The past few years have ushered in a few new challenges as well, including how community college faculty can maintain control of their own curriculum while working closely with their counterparts at 4-year institutions to ensure that students' credits transfer and apply to academic majors at the senior institutions and while conforming to expectations held by business and industry.

Organization and Management

Most American community colleges are organized within single districts. A board of trustees, either elected locally or appointed by a governmental agency, establishes policy for the institution and employs the chief executive officer. Vice-presidents manage business affairs, student services, and academic instruction. A college with over 20,000 students may have more than 50 administrators plus another 40 managers of various units, such as campus police, custodial operations, and international studies. A college with fewer than 2,000 students will still have a president and vice presidents for instruction and student services, in addition to more than 20 managers. Within the colleges academic departments construct class schedules, assign instructors, and act as miniature governmental units.

Leadership at US community colleges is thus diffused among faculty groups, trustees, state agencies, and college presidents and their surrogates. Yet based on the amount of literature devoted to the college presidency, its challenges, and its role in effective college management, it is clear that leadership is a major issue, and perhaps one that enables some colleges to be more successful than others in effecting student learning, sustaining staff morale, managing growth and entrepreneurship opportunities, raising funds, and securing consistent support from state legislatures. Although arguably the power of the presidency has diminished over time as bargaining groups have asserted their demands, state and federal regulations have constrained individual college actions, and philanthropic organizations well-connected to public policymakers have influenced priorities, college leadership still matters a great deal. Indeed, the literature is replete with examinations of the successful traits of community college leaders, models and theories of community college leadership, ideas for successful leadership training, and descriptions of the various ways that community colleges are responding to the impending retirement of many of their long-time leaders. Certainly, community college leadership will remain an important issue in the years to come, for even as some challenges are overcome, others will invariably pop up to take their place.

In addition to college-level leadership, all 50 US states exhibit some form of state level coordination among community colleges, universities, and/or school districts. In some states, control rests with a state board of education; in others, it resides within statewide coordinating or governing boards. Centralized bargaining and budgeting is typical, although some autonomy in curriculum planning resides within individual colleges. Regardless of organizational form, nearly all college presidents visit the state legislature regularly to advocate for their institutions. The

federal role in community college management and governance is minimal, however, existing only in the awarding of financial aid and in restrictions tied to funding for certain (most often occupational) programs; guidelines that minorities, women, and the disabled be provided with equal access to education; and affirmative action rulings that govern certain employment practices. Unlike in many other countries, quality and minimum-standard controls are maintained not by ministries of education but through external peer-review of community college campuses and programs through a process called accreditation. Typically, the accrediting body sets certain standards and periodically the institution seeking accreditation conducts a self-study that examines college performance in light of those standards. Then, a team of faculty and administrators from other colleges, selected by the accrediting agency, visits the institution and reports back, which leads to accreditation being awarded or steps being taken to remedy certain situations or performance outcomes at the college.

Contemporary Challenges

As with challenges related to teaching in community colleges, many of the major issues related to organization, governance, and administration have existed for decades, flaring up from time to time, often in concert with similar debates outside education. For example: which elements of institutional control are better maintained by state agencies, and which should be reserved for local governing bodies? How much coordination is desirable? Does the accreditation process lead to better student outcomes, or does it merely ensure minimal standards? Coupled with these issues are those related to the age and impending retirement of community college presidents and other senior leaders (the American Association of Community Colleges noted in 2012 that 75% of college presidents planned to retire by the end of the decade), as well as heightened pressure on college leaders to demonstrate a return on the public's investment in terms of higher persistence and graduation rates among students.

Finances

Combined, US community college budgets total well over \$50 billion annually, although the amount of revenue received is nearly always viewed as "not enough." With relatively low tuition (justified as necessary to preserving the open access mission) and a minuscule amount from gifts and grants, the colleges depend on federal, state, and local governmental appropriations for around 70% of their funds. The proportion coming from local agencies – primarily through property taxes – has diminished steadily over the past 100 years, replaced by state money as institutional control has moved to the state capitals. But the vagaries of political climate and ideology dictate who gets what and how much. For example, between 1990 and 2013, state and local government spending on prisons increased by 89%, while in the latter year 46 states reduced spending on higher education. Furthermore, concerned

parents with children in the K-12 school system and the powerful teacher's unions within those schools are often more effective at lobbying for increased appropriations from the state than are community college constituents, which can translate into lower levels of support for these colleges. And while most community colleges have ramped-up their fundraising activities in the past several decades, most donations are paltry in comparison to those received by universities with strong (and more wealthy) alumni networks and graduates working in the state legislatures where appropriations are made. This, combined with the fact that per-student appropriations to community colleges are substantially lower than those awarded to universities, ensures that community colleges remain the chronically underfunded stepchildren of the American higher education system.

Although revenue woes are common to all American community colleges, expenditures can vary greatly due to the mix of programs that a college offers (occupational programs cost more than academic ones); the percentage of full-time and tenured instructors, as well as the number of faculty with doctoral degrees (all of which lead to higher instructional costs); whether or not faculty are represented by collective bargaining units; and the cost of operating in the college's locale. Across the entire system, however, roughly 35% of community college revenues are devoted to instruction, 19% to administration, 19% to student services, 9% to plant operation and maintenance, 12% to scholarships, and the remainder to auxiliary enterprises, depreciation, and other expenses. Per-capita costs also vary from institution to institution and are typically determined by dividing total operational expenditures in a given year by the number of full-time-student-equivalents (FTSEs; depending upon an institution's mix of full- and part-time students, one FTSE can represent between 1 and 4 students). In constant dollars, the colleges spent just over \$8,000 per FTSE per year in the 1970s, an amount that grew to \$12,000 by 2010 but has remained flat ever since.

Tuition and Student Aid

Tuition and fees in US community colleges have historically been quite low, especially in comparison with public 4-year colleges and universities. Indeed, in the mid-twentieth century many states had no-tuition policies, as they felt that community colleges were natural extensions of the free public schools. However, as contributions from local agencies have decreased as a percentage of revenue over time, and as states have cut back on appropriations to community colleges in recent years, tuition and fees have risen, sometimes rapidly. In 2014–2015, the average cost of attending a community college was \$2,882, although that varied widely among the states, from a low of \$1,233 in California to a high of \$7,230 in New Hampshire. Despite rising student charges, community colleges remain much more affordable than public or private 4-year institutions, whose average costs in 2014–2015 were \$18,632 and \$37,990, respectively (US Department of Education 2016).

As tuition and fees have risen, so too has federal and state aid to students, which has become a cornerstone of community college funding. In 2011–2012, two-thirds

of community college students received some sort of financial aid; just over 50% received federal Pell grants, more than 25% received state aid, and 18% received institutional and/or other financial assistance (US Department of Education 2016). These figures total to over \$2 billion in Pell grants and over half a billion in state aid each year; an even greater amount is awarded to students in the form of loans.

Contemporary Challenges

If state support for community colleges continues to decline as it has in recent years, college leaders will be forced to cut expenditures and/or raise additional dollars from property taxes, tuition and fees, or entrepreneurial partnerships with private industry (or some combination of the above). This balancing act has been happening for decades but will become even more difficult as tuition levels approach maximum Pell grants and as rising property tax levies draw the ire of local business groups and anti-tax activists. Shifts in the proportion of revenue from various sources will need to be undertaken slowly, over substantial periods of time, so as not to provide a shock to the overall system and the individuals within it.

As community colleges experience shifts in revenues from various sources – and especially as they engage in entrepreneurial behavior – college leaders and budget officers may consider re-thinking how budgeting and strategic planning occur on campus. Most American community colleges begin with a pretty good forecast of revenues for the forthcoming 3 or 5 years and allocate expenditures based on those amounts. However, as colleges become more entrepreneurial, and as they expand workforce preparation programs, they will have opportunities to identify future service-area needs (numbers of trained workers, transfer students, etc.), estimate the instructional and infrastructure costs of meeting those needs, and seek revenues and allocate expenditures based on that information. This constitutes an entirely new and more forward-thinking approach to budgeting that was not possible when the colleges were predominately dependent upon the state for funding. And while it promises additional flexibility and responsiveness, as well as an improved ability to meet service-area needs (also the needs of students), this approach is a radical departure from the past and will necessitate buy-in from all constituents, especially governing board members.

Curricular Functions

Curricular functions in US community colleges include liberal arts or academic preparation for transfer to a 4-year college or university; occupational training; developmental education, which focuses on bringing incoming students to a level deemed sufficient to enroll in college-level courses; and community education. To these major categories, we add upper-division coursework leading to an applied bachelor's degree, which occurs at some community colleges, primarily those far away from a transfer institution offering similar coursework.

Regardless of curricular focus, the community college curriculum is presented through numerous instructional forms. Although traditional, in-person classes are still the norm, reproducible technologies have been prevalent almost since the

colleges' inception, starting with courses by radio and newspaper, and progressing through television and computer-assisted modules, and finally to hybrid in-person and online courses. Other techniques in general use include: supplemental instruction where students work with tutors outside class; mastery learning, or competency-based instruction in which traditional grade-mark based evaluations are eschewed in favor of specific learning objectives that all students are expected to meet, and writing across the curriculum, a procedure whereby students' self-expression is not confined solely to English classes. Class sizes vary: on average, introductory courses in psychology and history are the largest, fine and performing arts the smallest, with most occupational courses falling in between.

Liberal Arts, Transfer, and General Education

The transfer function encompasses two concepts: student flow and the liberal arts curriculum. The first refers to providing education at the thirteenth- and fourteenth-grade levels in the American educational system that reaches from kindergarten through graduate school. The second concept, the liberal arts curriculum, includes education founded on the humanities, sciences, social sciences, mathematics, and English and accounts for over half of community college course enrollment. The universities largely dominate the content and form of these courses by determining those that they will accept for credit by students transferring and seeking the baccalaureate, and although class sizes may be smaller at community colleges, courses in these subjects are typically very similar to those offered at the senior institutions. Most liberal arts or transfer programs culminate in the associate degree.

Often falling within the liberal arts banner is what Cohen et al. (2014) call *integrative education* or "the process of developing a framework on which to place knowledge stemming from various sources, of learning to think critically, develop values, understand traditions, respect diverse cultures and opinions, and, most important, put that knowledge to use" (p. 289). Similar at its core to the concepts of liberal or general education, integrative learning seeks to get at "that which everyone should know" (p. 293), although it focuses less on asking students to enroll in classes from many different disciplines and more on creating cross- or multi-disciplinary courses that emphasize critical thinking, civic learning or democratic engagement, sustainability, and so forth. Although there is some traction toward this approach, the idea remains a distant possibility for many colleges, as developing a truly integrative educational experience would require substantial program redesign and renegotiation of course articulation agreements with the universities accepting most of that college's transfer students.

Occupational Training

From their earliest years, the US community colleges have offered instruction in areas connected to specific employment opportunities. These cover a wide range:

construction and transport trades, health and legal professional support, high-skill jobs in emerging industries such as solar installation, and anything for which employment opportunities in local industries might be found. The larger colleges, those with enrollments in excess of 15,000 students, often present as many as 200 such courses and programs leading to associate degrees and workforce certificates. They are limited only by professional accreditation (for example, nursing or dental hygiene programs that require certain numbers of laboratory and work stations, as well as particular ratios of staff to students). Space and funding are also limitation for equipment-heavy programs such as those in automotive repair or welding. The most popular programs are those leading to the greatest variety of career options: health and business rank behind only the liberal arts in terms of associate degrees awarded. In recent decades, however, pre-professional training programs for nurses, police, firefighters, solar installers, and the like have been joined by workforce preparation or contract training courses that are developed with or by local businesses and that primarily train students for employment in specific organizations or industries.

Extramural support for occupational education comes from federal and state sources – college leaders know they can receive fiscal support from legislatures by contending that occupational education relieves unemployment and lures businesses and industry to the locality – as well as from the industries for which they prepare workers. The latter is often called *entrepreneurial funding*, as colleges may act in a business-like manner to design programs or courses related to a specific industry in exchange for monetary or in-kind contributions. Spurred by federal grant requirements as well as recommendations from local workforce advisory committees, managers of occupational programs frequently investigate model course and programs, conduct follow-up studies of graduates, assess employment trends, establish guidelines for implementing new curricula, and develop criteria for weeding out the obsolescent and weak courses or for upgrading others to conform to new job specifications. As such, community college occupational programs are often seen as more responsive to community needs than academic programs in the liberal arts.

Applied Baccalaureate Degrees

Although the terms *community colleges* and *public 2-year colleges* have historically been used interchangeably, the latter term has become somewhat obsolete in recent years as more than 300 community colleges now offer baccalaureate degrees – typically in occupational or applied fields – in addition to the associate degree and workforce certificates. Community colleges that offer applied baccalaureate degrees vary considerably; some offer programs located on the community college campus with degrees awarded by a senior institution, some confer their own bachelor's degrees, and others present their programs on a local university campus. Still others have formed University Centers, often located close to or at the community college but with several institutions participating.

Although the first community colleges to collaborate with universities to offer bachelor's degrees or confer their own did so in the late 1980s and early 1990s, the

trend intensified after the Community College Baccalaureate Association held its first annual conference in 2001, and in 2005 the Carnegie Classification of Institutions of Higher Education created a new category: Baccalaureate/Associates Colleges, into which it placed associate degree-granting institutions where bachelor's degrees represent between 10% and 50% of all undergraduate awards. In 2005, 57 institutions were so designated (Townsend 2005), but evolution has been occurring rapidly; by 2010, community colleges in 18 states were approved to offer the baccalaureate. The authorizing legislation typically allowed "workforce-oriented" degrees in "high-need" fields, which essentially means bachelor's degrees in occupational areas for which jobs are available and where no 4-year college or university within a certain radius offers a similar program. Although Florida was not the first state to authorize the Community College Baccalaureate, it has become a leader in the movement, and by 2013, 20 of the state's 28 colleges had opened baccalaureate programs.

The emergence of the Community College Baccalaureate has not transpired without controversy. Proponents argue that these programs expand access to the bachelor's degree for a greater number of students and that they do so at a lower cost. Opponents, however, critique these moves as mission creep; decry what they claim will inevitably lead to lower standards; and argue that they will lead to program duplication, higher costs for students and states, accreditation obstacles, and a need to recruit faculty with higher degrees who demand more pay and may be less focused on teaching.

Developmental Education

As greater and greater percentages of the population have entered college – currently, 68% of high school completers do so (US Department of Education 2016) – and as secondary schools have struggled to bring all students to college-readiness, American institutions of higher education, and community colleges in particular, have added numerous courses designed to bring incoming students up to a level deemed necessary to succeed in college-level courses. Nationwide, 44% of first-time community college students enroll in between one and three developmental courses (also known as remedial, compensatory, or basic skills instruction), and 14% enroll in more than three; only 42% require no remediation (Attewell et al. 2006).

As responsibility for remediating the underprepared has become a primary function of the community colleges, assessment and placement of incoming students have become integral. Students whose results in English, mathematics, and reading tests fall below designated "cut scores" are either advised or placed into developmental programs where instruction in those areas is typically combined with counseling, tutoring, study skills seminars, and a variety of special interventions, such as early alert systems and monitoring of students' attendance and progress. Although developmental education is certainly aligned with the community colleges' open-access mission (the courses themselves ensuring access to the college-level curriculum for those who might otherwise not have entrée to postsecondary education), and numerous studies show that remedial programs are "at least modestly

effective in helping students overcome deficiencies in their pre-collegiate academic preparation and associated disadvantages” (Pascarella and Terenzini 2005, p. 398), it is not a panacea to the problem of chronic under-preparedness among incoming college students. For example, Levin and Calcagno (2008) cited studies showing that “about 70% of students pass the reading and writing remedial courses they enroll in, but only 30% pass all their remedial math courses” (p. 4).

Furthermore, the more remedial courses a student must take, the less likely they will be to progress on to college-level classes and/or to earn a credential. Even among students who complete all remedial sequences, one-third fails to enroll in or complete college-level classes (Bailey et al. 2010). Given these success rates, educators are continually testing and promoting new approaches to developmental education – including various assessment and placement policies, pedagogical approaches, and short-term, open-entry, and skills refresher courses – in the hopes that the new methods might more effectively improve student persistence to and success in college-level courses.

Community Education

Since the second half of the twentieth century, community education has combined elements of the liberal arts, occupational, and developmental curricular functions, but for a broader constituency. It also embraces activities that are not part of traditional college programs. Most of its offerings do not carry college credit; its nearest parallel is the university extension programs. Colleges in some states serve as many as 15% of their total enrollment in this area.

Community education includes lifelong learning (intermittent education for adults who have either completed or interrupted their formal studies); classes for special groups, including caregivers, single parents, and those seeking education for citizenship; adult basic education and instruction in English as a Second Language; and education leading to high school equivalency. It can also include basic skills, occupational and life-style education for prison inmates, as well as community-based education centers or programs developed cooperatively with local agencies; these latter programs may incorporate cultural events, health care services, and/or literacy development for the region. The various categories make enrollments difficult to count. The American Association of Community Colleges announced close to five million participants in 1985, but then stopped reporting such data because of the imprecision of the figures. But surveys since repeatedly find a high demand for non-degree-related activities, especially in work-related and personal interest courses.

Periodically, critics of the community college raise questions about the validity of community education, arguing that the institution’s energy and funds could be better put to use in credit-bearing academic and occupational programs. However, many community education programs are fee-based and self-sustaining, and others are able to tap into state and local funding sources for which traditional collegiate instruction would not be eligible. Furthermore, advocates contend that by serving the entire populace, the egalitarian impulses that gave rise to the colleges are

fulfilled. Any activity that brings people together, be it a health fair, a hobby course offered in a convalescent home, or an English as a Second Language class, serves to foster community uplift.

Contemporary Challenges

Over the past decade – and especially since President Obama’s explicit focus on community colleges in the American Graduation Initiative and subsequent grants through the American Recovery and Reinvestment Act of 2009 – America’s community colleges have been viewed as prime vehicles for worker retraining and workforce preparation. This shift toward vocationalism as the colleges’ primary mission and purpose (as opposed to one of several curricular functions) is relatively new and has far-reaching impacts on everything from the type and relative import of credentials (degrees vs. certificates, associate vs. applied bachelor’s degrees) to who should be responsible for the costs of education (the students who receive training or the state and county who benefit from higher wages), to the type of faculty employed to teach courses (full-time instructors or part-time professionals borrowed from industry). Navigating the competing pressures to both strengthen their occupational programs and maintain the quality and rigor of the liberal arts education offered via traditional transfer preparation will be a defining leadership challenge in the coming decade.

Student Support Services

The community college curriculum is complemented by a range of ancillary activities known as student services. These services are typically organized within a separate administrative unit headed by a vice-president of student affairs, and they have grown to be near equal to instruction in their importance to student persistence and completion. Student support services encompass admissions and registration, financial aid, orientation, counseling and advising, student activities, study abroad, career planning, child-care, and coordinating services for students with disabilities and other special needs.

In addition to managing the above services, student affairs staff often partner with faculty to develop activities designed to assist students in making the transition from high school to college. Student success courses, taught cooperatively, combine counseling with orientation and instruction in basic studies. They have proven salutary in reducing dropout, probably because they treat many dimensions of student life, often providing tuition reimbursement, transit passes, and, most important, tutoring and supplemental instruction.

Counseling and advising, however, are at the core of student services. Counseling takes a variety of forms, including academic and educational planning; personal counseling for mental health and other concerns that may impede students’ academic progress; transfer and career counseling; mentoring, group sessions, and peer advising; direct academic support through study skills courses, seminars, workshops, and tutoring; and online services. The most effective approaches to student advising utilize an “intrusive” approach, often in combination with an early-alert system, in

which students may be contacted if they begin to show signs of academic struggle. While counseling and advising is often crucial to students' academic progress and success, its effective provision is hamstrung by an extreme imbalance in the counselor to FTSE ratio: 1 to 1,000, nationwide, and as high as 1 to 1,700 in states such as California (MDRC 2010).

Contemporary Challenges

Offered as a solution to low student persistence and attainment rates, as well as inefficient course-taking patterns among community college students, researchers at Columbia University's Teachers College (Bailey et al. 2015) have recently called for widespread implementation of a guided pathways model in which curricular programs and student services are heavily coordinated and students encouraged to select a course of study early on and stick with it. The guided pathways model has been hailed by many as an answer to low persistence and attainment rates among community college students but has also been critiqued for its lack of attention to the myriad challenges and life circumstances that force so many community college students to attend part-time, simultaneously take courses from multiple institutions, and start- and stop-out frequently. Furthermore, a guided pathways approach may be infeasible unless the counselor to student ratio can be substantially lowered. If community college leaders choose to embark upon a guided pathways model, identifying new or redeploying existing funds to double or triple the number of counselors will be an essential first step, but they will also need to engage faculty and staff in a substantial redesign of curricular programming, intake processes, student support structures, and instructional approaches. And finally, they may need to think critically about how to provide the same services to students for whom a heavily-structured pathway may be less possible or ideal.

Assessing Student Progress and Outcomes

Toward the end of the twentieth century, the accrediting associations began insisting that community colleges define and document student and institutional outcomes, and soon after the state legislatures also began making demands for evidence, not only of student attainment but also of college contributions to the broader community. Then came the involvement of the US Department of Education and major philanthropic organizations, whose push to document the public's return on investment has become known as the Completion Agenda. Today, student progress and outcomes assessment is a serious consideration on every campus and institutions are judged not just on the numbers and types of students they let through their doors, but on whether those students graduate, move on to a university, and are prepared to succeed in the field in which they were trained. As Kisker (2015) writes, "Community colleges – long hailed as the access point to higher education for the underprepared, the disadvantaged, the place-bound, and the late-bloomers – are now expected

to demonstrate a return on the public's investment and produce completion rates that are more palatable to policymakers and the populace at large" (p. 310).

Not surprisingly, the first (and still most widely used) measures of student progress and success were borrowed from the universities and focused on the percentages of students an institution can retain from year to year and, ultimately, graduate. Yet not surprisingly, by these measures community colleges appear far less successful than their 4-year counterparts, where even minimal entrance standards all but guarantee higher persistence and attainment rates. Thus, in recent years, many community colleges, regional consortia, and advocacy groups have worked to develop broader measures of student progress and success, including those that they argue are more appropriate for the diversity of educational goals and familial and financial constraints of community college students. These include:

- Short-term measures such as enrollment of underserved populations, course success rates, meetings with a counselor or adviser, and number of credits attempted and completed in a semester
- Intermediate measures, which may include the percentage of students passing developmental sequences, completing gateway or first college-level courses, attaining credit thresholds (often between 42 and 48 credits within 2 years for full-time students and half that for part-timers), and persisting from term to term or year to year
- Long-term measures such as graduation rates, transfer rates, and aggregate outcomes measures that define a successful outcome as earning a degree or certificate, transferring to another 2- or 4-year college, or continued enrollment
- Follow-up measures, which often include the percentage of transfer students who earn a bachelor's degree within a certain amount of time (usually 4 years), the percent of occupational learners earning an industry-recognized credential, and wage growth among occupational completers

Contemporary Challenges

Although efforts to assess student progress and outcomes at community colleges have been guided in recent years by national efforts, including the American Association of Community College's Voluntary Framework of Accountability, the vast majority of assessments have been conducted on college campuses, by institutional researchers or consultants, ostensibly in order to improve success rates for students and for the institution overall. Yet as Cohen et al. (2014, p. 422) illustrate with the following fictitious exchange, the overarching problem of assessment is that most decision-making is based on other variables:

INSTITUTIONAL RESEARCHER: We need to set up an automated process- and outcomes-tracking data system.

PRESIDENT: Would the tables and graphs be useful?

INSTITUTIONAL RESEARCHER: Of course. You can refer to them with confidence when you present the decisions you have already made based on institutional politics.

All jokes aside, there are myriad reasons why institutional decision-making relies only partially on assessment findings, including imprecision in measurement, the open-ended goals of education (one can always do better), the fact that negative assessments may jeopardize support, and so forth. Furthermore, community college faculty and administrators frequently suffer from *initiative fatigue* or a frustration that the metrics and accountability processes they are expected to follow change every few years as new philanthropic money or legislative mandates are introduced. Nonetheless, assessment of student progress and outcomes is not likely to diminish in importance, and community colleges will work ever harder to demonstrate positive outcomes or to explain why such outcomes are not possible given the educationally and financially disadvantaged populations they serve.

Conclusion

As this chapter notes, American community colleges face numerous challenges in the coming years that may affect the functions, organization, and daily operations of the institutions. In particular, the combination of heightened expectations for workforce preparation and diminishing investments from state governments (at least as a proportion of overall revenues) may add up to a perfect storm of external pressure that finally forces the colleges to examine their multiple missions and ability to serve all who walk through their doors, regardless of prior educational preparation, ability, interests, or education and training goals. However, community colleges in America are a diverse lot; some may move in one direction while others go the opposite (We see this already, with some colleges branding themselves as transfer institutions and others as little more than workforce training centers; some extending down into high schools and others conferring applied baccalaureate degrees.).

And yet, even as the colleges evolve, they are unlikely to abandon their historic mission within the American educational system. They cannot turn away the under-prepared – where else would they go? – and federal and state financial aid will keep tuition and fees within the financial reach of most families. Similarly, even if the colleges emphasize occupational training to a greater degree, transfer preparation will remain a central function; tenured community college faculty in the liberal arts and other transfer programs need a place to teach and students need a path to the bachelor's degree. Furthermore, the universities that rely on community colleges to provide lower-division training to those whom they would rather not admit as freshmen themselves would also revolt. Thus, what began as a quintessentially American experiment in the early twentieth century is likely to endure well into the twenty-first, both on its merits as an idea and because the size of the system (both in terms of the number of colleges and the crucial role it plays in American postsecondary education) makes overcoming inertia nearly impossible.

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Evaluation of Teaching and Learning Outcomes in Health Systems Management Studies, the Case of Israel: Ideal Versus Actual

23

Rachel Nissanholtz-Gannot and Nitza Davidovitch

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Abstract

The focus of this chapter is the evaluation of a Health Management Systems program, stressing the paradigmatic difference between the teaching-centered approach and the learning-centered approach, with an emphasis on the formulation of learning outcomes. In the current study, we examine the contribution of

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various academic domains and learning skills to the preparation of undergraduate research papers (final paper and seminar) that reflect the contents and skills acquired by students throughout their undergraduate studies. In addition, we examined the relationship between personal variables (gender, age, country of birth, year of immigration), family variables (marital status, number of children), and occupational variables (job in the healthcare system, numbers of years on the job, and extent of position) – and students' satisfaction with the contents and skills they acquired. The research population consisted of 113 students of health systems management at Ariel University, who completed their undergraduate studies in 2016.

We found significant differences between critical thinking skills and taking responsibility; significant differences were also found between research capabilities and visual and verbal presentation, as well as skills of taking responsibility and learning. Furthermore, the respondents displayed relatively high satisfaction with their academic studies. Methodology and health courses were found to have a unique and significant contribution to explaining general satisfaction. The most significant finding is the high satisfaction found, as well as the high congruence between the primary domains in the curriculum and the contribution of studies to preparation of the final paper and seminar. The skills that the curriculum's policymakers intended to develop indeed assisted the students in practice. The research results are important due to the unsettling data indicating a considerable drop in university registrations in Israel and elsewhere, with the younger generation attributing increasingly less importance to the role of universities in shaping their personal and professional future.

This case study of Ariel University, which was established in 1982 as a college and became a university in 2012, emphasizes characteristic trends among academic institutions around the world, where higher education is becoming more accessible to different populations. Ariel University is attentive to contemporary “voices” calling for more learning-centered teaching. The trend of learning-centered teaching is receiving increasing attention in the USA as well, a focus called for specifically by STEM disciplines. In the current case study, this approach to teaching is implemented in fields that have not previously done so, such as healthcare studies, which are more multidisciplinary by nature.

Keywords

Evaluation · Learning outcomes · Health · Higher education

Introduction

Clear well-formulated policy on higher education will help to reduce the unrestrained detrimental domination of this system by free market forces. In the 1990s, Israel established Regional Colleges, that then were renamed Academic Colleges to address the serious problem of insufficient slots for the registration of marginal social groups. In this way, these institutions can be seen as a global counterpart as defined in this book. Many of the Academic Colleges have been renamed, such as Ariel University.

The focus of this case study is on the health systems management program at Ariel University, which was initiated in 1999, and has turned out about 200 graduates a year for the past 16 years. To date, more than two thousand graduates have been trained to work in the healthcare system, making it possible to explore the program's learning outcomes retrospectively. Health systems management programs were founded with the goal of improving service quality by means of adequate high standard management, and they include domains such as management and economics, health, law and ethics, and methodological courses (statistics, scientific writing, and critical reading). Many programs in this field are offered throughout the world.

The curriculum was constructed based on the learning-centered approach, which has a particularly unique role in the information era, when knowledge channels are increasing and technology is advancing (Davidovitch 2013). We present a case study focusing on the learning outcomes of academic instruction, in contrast to frontal teaching where information constitutes the goal and the essence.

In the learning-centered approach, the need to plan a holistic curriculum in general and holistic courses in particular derives from the social, cultural, and technological changes in the current era with its information highway, and from the status of knowledge as belonging to everyone (Davidovitch and Levy 2016). The paradigmatic transformation in which we are now involved requires us to confront classroom teaching and learning as an intellectual, ethical, and emotional contemporary experience (Davidovitch and Shiller 2016).

The chapter also presents the significance of evaluating learning outcomes and the benefits and challenges expressed by the phrasing of learning goals. The research results have special significance also in light of the concerning data regarding a considerable drop in university registrations, in Israel and elsewhere, with the current younger generation attributing less importance to universities as shaping their personal and professional future.

Health Systems Management Curricula: The Research Orientation and the Practical Professional Orientation

Health systems management studies train people for management and administration positions on all levels of the healthcare system. At present, promotion in the public healthcare system requires an academic degree. Acquiring the tools imparted in academic studies allows one to participate in tenders and receive promotion to senior management roles.

Studies at the Department of Health Systems Management combine the acquisition of knowledge in various administrative domains with practical professional knowledge related to the needs of the healthcare system. The program aims to impart a wide knowledge base encompassing management domains in the fields of business administration and behavioral sciences, while also learning about components of the healthcare and medical system. Based on these tools, students learn and practice application of the management tools in issues that are unique to Israel's healthcare field.

In the field of healthcare systems management, graduates require management skills, understanding, evaluation, and skills in the art of interpersonal communications, ethical attention to the moral standards of the profession, and the ability to work as part of a multidisciplinary team. The academization of the profession is relatively new. It evolved in recent years, with the increasing demand for evidence-based practice (EBP) (Bridges et al. 2007). The academization of the profession has led to an enhanced approach, by conducting studies in the field, constructing an extensive and thorough interdisciplinary instructional infrastructure, and awarding the profession and its students a high academic status.

Systems of higher education in Israel and around the world must prove the efficacy of their teaching programs. The authorities, parents, and students wish to ensure that students receive the promised education. Those responsible for accreditation require that the various departments integrate outcome measures to ensure that students have been given the opportunity to achieve the academic goals set and to reach a high level of proficiency in the field of their choice. In Israel, similar to other Western countries, a quality assessment system of institutions of higher education is operated by the Council for Higher Education. The Council for Higher Education is a public and professional institution that funds and supervises over the academic institutions in Israel. Its goal is to make sure that the academic institutions will have academic freedom. In addition, it works to maintain and develop academic quality. The head of the Council for Higher Education is the minister of 51.1.52 education; however, most of its members are from academia. Nonetheless, in order to maintain regular control processes, the initiative should come not only from the government but also from within the academic departments.

The purpose of the current study is to explore the contribution of various academic domains and learning skills to preparing research papers (final paper and seminar) that express the contents and skills learned by the end of the student's undergraduate studies. In addition, the relationship between personal variables such as gender, age, country of birth, and year of immigration; family variables such as marital status and number of children; and occupational variables such as employment in the healthcare system, years on the job, and extent of position; and students' satisfaction with the contents and skills they received during their studies was also examined. Further assessed was the compatibility between the purpose of the health systems management program, as expressed in the final research project, and the courses studied, as perceived by students in their senior year: methodological courses, courses in economics and management, courses in health, courses in ethics and law, and courses in English.

On the Teaching-Centered Paradigm and the Learning-Centered Paradigm in Health Systems Management Studies

The vision of the global village is implemented through innovative interactive technologies that make it possible to transfer varied information rapidly and to perform many operations in the virtual space (Barak and King 2004). Academia, responsible as it is for

the production of new knowledge in modern society, has also undergone a series of changes following the technological transformations and ethical transformations in society. The invention of the personal computer (Kulik et al. 1980), development of the World Wide Web (BrckaLorenz et al. 2013; Jones 2002), transition to distance learning (Phipps and Merisotis 1999), and the sharp rise in the number of students are some of the factors that produced these changes. Despite the transformations in the world of higher education, there have been only few changes in academic learning strategies and teaching methods (Reynolds 2000), despite the adoption of new technologies and their utilization (McKeachie 1990). Notwithstanding the great change in the status and accessibility of information – particularly among students of higher education who make frequent use of technology in their studies (BrckaLorenz et al. 2013) – teaching methods have remained as they were and still center on transmitting knowledge (Eberly et al. 2001). This fact is quite problematic, as it means that extensive use of technology as part of higher studies does not necessarily contribute to learning or teaching (Kazley et al. 2013). Namely, the higher education environment changed as a result of technology, but most current day teaching methods (aside from computer-facilitated effects) have remained as they were.

This often leads to questions about the value of the academic degree and the quality of learning that occurs in higher education classes, where teaching usually remains focused on transmitting knowledge (Stage et al. 1998). These questions are legitimate today more than ever, and they are a challenge to the traditional paradigm of academic teaching, called “teaching-centered learning.” The traditional approach perceives the course as a space for teaching by means of the curriculum (Barr and Tagg 1995). In other words, teaching is structured and conveyed according to the number of lessons allocated (lecture time during the semester and credits). Its purpose is to complete the course material, and at its end, students must perform a final assignment that serves as a means of evaluation (Reynolds 2000). In the traditional teaching method “the lecturer decides independently and externally what is required of the student – he determines the features of teaching, the curriculum, the manner of evaluation and how the course is managed, with the purpose of achieving the desired learning results” (Wagner and McCombs 1995, p. 32).

As a result of the learner’s passivity as structured by the traditional teaching approach, students do not take responsibility, and are not active partners in their learning process. They sit in their place, take themselves from course to course, play with their Smartphones, occasionally make a comment, access Facebook, open their laptops, and close their laptops. Eventually they reach the end of the course with some knowledge, but they themselves are no different in essence, than when they began the course. Students studying in the traditional approach do not really acquire independent learning skills, and in this context it has been said that “obtaining a Bachelor’s degree is an empty achievement if in the process one has not acquired skills and capabilities appropriate for the twenty first century” (Kuh et al. 2010, p. ix). The current chapter presents a different approach to teaching, while imparting applied tools for the transition from a “teaching-centered learning” approach to a “learning-centered teaching” approach, in general and in health systems management in particular.

Learning-Centered Teaching

Learning-centered teaching is a new-old educational paradigm (Seel 2003), rooted in the late nineteenth-century USA, with the rise of the Progressive Education Movement. The basis of this approach is that knowledge cannot be transferred to learners in a complete form; rather it is necessary to bring the learner to independent discovery or acquisition of the knowledge (Rogoff 1994). This is a shift from the traditional approach, which sees learning as a process of passive knowledge absorption from an expert, to the learning-centered approach, which sees learning as an active process in which the learner undergoes a process of change (Gehart 2011). While in the traditional approach, the emphasis is on the quantity and quality of the study material, in the learning-centered approach the emphasis is on the quality of the process the learner undergoes. According to this outlook, learning encompasses a variety of activities and programs that challenge students and give them opportunities for growth (King and Anderson 2004). Growth occurs when students go through a series of transformations toward more complex behavior that enable them to cope with changing life challenges (Kuh et al. 1991). This approach is based on the premise that what students do is more important than what they learn during their undergraduate studies (Kuh et al. 2010, p. 8). The learning-centered approach is implemented during the preparation of the course, as well as during the teaching process and in the students' feedback.

The research literature indicates that this approach indeed promotes better learning by students. For example, a study that examined the effect of learning-centered teaching compared to that of guidance-centered teaching on the views and knowledge of statistics students (Harpe et al. 2012) found that students who studied in the learning-centered approach showed more proficiency in the material and had more positive views of the learning environment. These students had more opportunities to use their knowledge, and they had a stronger sense of control over their grades in the course. Nonetheless, despite the data supporting the learning-centered approach, most institutions of higher education continue to treat knowledge transmission as the ultimate goal of teaching. Eberly et al. (2001) analyzed 145 syllabi of 100 different general undergraduate courses. Using a thematic analysis, the researchers found that 50% of the syllabus themes dealt with administrative issues (course format, course contents, and use of technology), and that in 75% of the themes the emphasis was on development of the course (basic information about the course, reading requirements, course contents, methods of evaluation, and use of technology). Only one theme in all syllabi examined dealt with the interpersonal domain (responsibility for learning). The researchers concluded that the main emphasis in courses is on knowledge transmission, while the issue of developing skills or views within the learning process receives almost no emphasis. They claimed that the syllabus, as a meaningful tool in the learning process, must reflect and articulate the goals of the academic degree as well as the goals of the course.

We shall now present the learning paradigm versus the teaching paradigm (Davidovitch 2013; Barr and Tagg 1995) in the health systems management curriculum.

Multidisciplinary in the Ariel Department of Health Systems Management

In order to provide managers with the widest possible tool chest, a wide variety of topics are studied at the Ariel University Department of Health Systems Management. For instance:

Management and economics. Health economics, computer applications for managers, management basics, pricing, budgeting, as well as control, logistics, and operations in healthcare systems.

Health. Introduction to health sciences, Israel's healthcare system, healthcare systems in the world, epidemiology and public health.

Law and medical ethics. Law and justice, ethical dilemmas in medicine, labor law, business law.

Research methods. Scientific writing, critical reading, statistics, and research methods.

English. All students at the Department of Health Systems Management must prepare two research papers during their undergraduate studies. One is a "seminar" and the other a "final paper." Overall, students devote 10 annual hours of their undergraduate studies to these papers. To prepare the research papers, students choose a research topic and, guided by the instructor, investigate this topic. They choose a research question, perform a literature review on the subject, compose a questionnaire, collect and analyze data, and write the paper. In these research papers, students apply several tools and skills they have acquired in the process of their studies.

Research and statistical tools. Critical reading of articles (mainly in the English language) and their summary, as well as analysis of data.

Ethical tools. Students meet ethical standards for conducting research. The questionnaire is tested and approved before distribution.

Writing and presentation skills. Students present the paper to their classmates and write a paper that is then submitted to the instructor.

Learning Products, Learning Output, and Learning Outcomes

The year 1999 saw the beginning of the Bologna Process, which laid the foundations for interstate collaboration and creation of a European Higher Education Area – EHEA. The agreement stressed that "mobility must become the identifying mark of the European Higher Education Area" (Van der Hijden 2012).

The purpose of the Bologna Process is to facilitate academic mobility and to create uniform standards within the system of higher education. This led to the accreditation process, meaning a transition to the European Credit Transfer and Accumulation System (ECTS), in which each student can accumulate credits for a degree at any academic institution chosen. The credits are transferred to the student's primary school and are recognized as part of the degree awarded by that school. This

system of accumulation lets students move between schools, experience learning in other places, and become familiar with diverse learning environments (Yemini and Ben-Artzi 2013).

The Bologna Process offers several courses of action that help reach the goals set. Use of learning products, course descriptions, and curricula have a major place in this process. For example, in 2003 in Berlin, European schools of higher education were required to describe their qualifications in terms of learning products.

In this way, the learning product based approach became increasingly popular throughout the world and in quality assessment processes of schools of higher education, including those in Israel, who wants to be part of Bologna Process and be a member of the global academic world, and, in addition, take part in exchange programs of students and lecturers. Notably, learning products are the declarations of the instructors/group of instructors, listing what the students will know or will be capable of doing as a result of the learning activity. Products are usually articulated in the form of knowledge, skills, or views, and they are declarations of what students are expected to know, understand, and/or be capable of demonstrating by the end of the learning process (Botzer and Barzilai 2011).

The Advantages of Teaching Based on Learning Products

Ariel University has adopted the “Council for Higher Educations” policy and implemented the “teaching based on learning products” model. This agenda has several advantages, for example:

Learning products help instructors. Clearly define expectations of students; plan materials more efficiently by serving as a format; choose suitable teaching strategies; plan a curriculum by analyzing where courses overlap; comprehensively and accurately define what students will be capable of achieving upon completion of their studies.

Learning products help students. Learn more efficiently and collaboratively. Students know where they are, they become partners in the leaning process and involved in its application, such that the curriculum becomes more accessible and friendly for them. Learning products help students choose courses.

Help external agencies. Provide information for academic elements, employers, and schools of higher education regarding the essence of the course and student achievements; contribute to student mobility by facilitating recognition and evaluation.

Evaluation of achievements. A teaching strategy based on evaluation of student performance on assignments for academic courses based on the SWOT model (Davidovitch and Shiller 2016).

The goal. Instructors (as well as students) strive to *improve* student performance of assignments and to *evaluate* performance in a way that will enhance student learning.

The method. Use of a teaching strategy based on *providing students with feedback for performing an assignment during the course. The feedback will be provided by peers, by the instructor, and through class discussion.* This type of teaching is based on the *SWOT* model (Strength, Weaknesses, Opportunities, and Threats).

When? The teaching strategy is applicable in any course for which students are required to submit some product as an assignment (*model, product, and project*).

Adopting the Model as a Method of Evaluation in Academic Courses

The **SWOT** model refers to the requirements of academic courses and includes:

Strengths – Identifying and diagnosing strengths, abilities, and positive situations involving the assignment presented, with the aim of helping students realize goal achievement.

Weaknesses – Identifying and diagnosing deficits and situations that might prevent students from achieving their desired goals.

Opportunities – Identifying and diagnosing factors and situations that might help students achieve their goals but have not yet been utilized for the presented product.

Threat – Presenting operative proposals for the necessary improvement of the weaknesses and/or opportunities not utilized by students.

The current study examines both the encounter between the study domains and tools provided to students of health systems management during their studies and their application in the research project performed as part of their undergraduate studies, and the contribution of the various types of courses taught at the department to their ability to carry out research for the final paper and seminar.

We examined the relationship between the program's goals and several variables:

Personal variables (gender, age, country of birth, year of immigration)

Family variables (marital status, number of children)

Professional variables (works in the healthcare system – yes or not, if yes – number of years on the job and extent of position)

Contribution of domains studied in the program (management), health, law and ethics, methodological courses, and English, to students' satisfaction with these courses

The Contribution of Learning Skills Manifested in the Program

Critical thinking skills: Ability to pose relevant, clear, and precise questions to use abstract concepts to interpret information, to consider different perspectives, to reach justified conclusions, and to examine them based on suitable customary criteria and standards.

Research capabilities. Ability to collect, evaluate, document, and apply relevant research information in the paper.

Learning to function in a team. Teamwork is essential.

Being able to communicate and to present visually and verbally. Communication tasks must be given and carried out.

Learning how to learn and to take responsibility for their learning. Students must be given appropriate assignments for self-study and for solving problems in the process of their studies.

Understanding and applying ethical, social, and professional issues. Appropriate examples must be included for purposes of illustration and discussion.

Students that Attend the Program

Table 1 depicts a sample of 117 undergraduate students who attended the health systems management at Ariel University who were scheduled to graduate in June 2016. The distribution was 83% women and 17% men. The age range was 22–62, with the mean age 37.38. This sample is compatible with the general population of all students in the department. As of 2016, 81% of the students are women and 19% are men. The age range is 17–62, and the mean age is 33.

Most of the students in this program were Israeli born (67.3%), some from the former Soviet Union and Eastern Europe (23%), Ethiopia (4.4%), and the rest from Western Europe and the USA (5.3%). Those not born in Israel immigrated to the country from 1973 to 2009. In comparison, in 2016, current students are 65% Israeli born, 34% from the former Soviet Union and Eastern Europe, and 5.6% from Ethiopia. With regard to marital status, most of the students (66.4%) were married, 19.5% were single, and the rest divorced, single parent, or widowed. Nearly 30% had no children, about one third (31.9%) had one or two children, and another third (34.5%) had 3–4 children. The rest had 5 or more children. In 2016, the marital status of current students is slightly different with 50% of students as single, 44% as married, and the rest are divorced, widowed, or single parents. 40% of students have children. We have no information on their number of children. The large majority of the students reported being employees of the healthcare system (78%). For example, over one quarter of the respondents (28.3%) were nurses, and over one third (37.5%) had administrative jobs. The rest had various caring professions, such as paramedics, dental hygienists, etc., or professions related to medical technologies, such as x-ray technicians and instrument engineers. The department has no information on students' jobs.

Student' years on the job range from several months to 38 years, most being in their positions for 15 years. The extent of their positions varies, with 22.5% not working in the healthcare system, 3.6% occupying half a position at most, 9% occupying between half and three quarters of a position, and 65% occupying more than three quarters of a full position.

Table 1 Distribution of the sample characteristics

Variable	Proportion of the sample (%)
Gender	
Female	83
Male	17
Age	
0–33	26
34–44	38
45+	36
Country of birth	
Israel	67.3
Eastern Europe	23
Western Europe and US	5.3
Ethiopia	4.4
Marital status	
Married	66.4
Single	19.5
Divorced/widowed/single parent	14.1
Number of children	
None	29
1–2 children	31.9
3–4 children	34.5
5 or more children	4.6
Employed in the healthcare system	
Nurse	28.3
Career (paramedic, dental hygienist, etc.)	12.2
Administrative	37.5
Not employed in the healthcare system	22
Years on the job	
0–10 years	35.5
11–19 years	35.5
20+ years	29
Extent of job*	
Half time max.	3.6
Half time to 75%	9
More than 75%	65

Research Tools

A structured questionnaire consisted of questions about demographics, professional background, and contribution of various professional domains studied in the undergraduate program in health systems management. Each domain included several relevant courses. For example, the management domain included courses such as health economics, foundations of management, and computer applications for

managers; the health domain included courses such as epidemiology and public health, Israel's healthcare system, and the healthcare system in the world. A reliability test measuring alpha Cronbach found high reliability ($\alpha=0.803$). These items had a 6-point Likert type response scale ranging from one (did not contribute) to six (contributed significantly).

The questionnaire also included six questions examining to what degree the skills learned during undergraduate studies, for example, "critical thinking skills," "team-work skills," were manifested in performance of the final paper and the seminar paper, which are undergraduate research projects. A reliability test measuring alpha Cronbach found high reliability ($\alpha=0.930$). These items had a 6-point Likert type response scale ranging from one (not at all) to six (very much). In addition, we asked about general satisfaction with undergraduate studies. Here too, there was a 6-point Likert type response scale ranging from one (not satisfied at all) to six (extremely satisfied).

Contribution of Academic Domains to Academic Learning

Respondents were asked a series of questions examining the contribution of various academic domains to preparing their undergraduate research papers (final paper and seminar). The domains presented to respondents were:

1. Management – including courses on health economics, foundations of management, computer applications for managers, and others.
2. Health – including courses in epidemiology, public health, Israel's healthcare system, and others.
3. Law and ethics – including courses in medicine and law, ethical dilemmas, and others.
4. Methodological courses – including research and statistics, scientific writing, and critical writing.
5. English

The questions examining the contribution of various academic domains to preparing the undergraduate research paper are shown in Table 2.

Responses ranged from one (no contribution) to six (very high contribution). The most appreciation appears to have been elicited by the domains of management and law and ethics, although the relatively high standard deviations indicate a lack of uniformity in this regard. Examination of the significance of differences using a

Table 2 Means and standard deviations of the various domains and their contribution to preparing research papers

Study domains	Management	Health	Law and ethics	Methodology	English
Mean	4.79	4.68	4.77	4.43	3.99
Standard deviation	1.32	1.29	1.28	1.39	1.70

repeated measures one-way analysis of variance found significant differences in the perceived contribution of the various domains ($F_{(2.95, 330.10)}=11.62, p<0.001$). A Bonferroni test showed that the source of the differences was the comparisons between the perceived contribution of English and that of all other domains.

Another series of questions addressed the extent to which various skills learned throughout undergraduate studies were utilized in preparing the research papers. These skills included:

1. Critical thinking
2. Research capabilities
3. Learning how to work in a team
4. The capacity to communicate and to perform visual and verbal presentations
5. The ability to learn and to take responsibility for learning
6. The ability to understand and implement ethical, social, and professional issues

On these questions, Table 3 shows the results.

The response scale ranged from one (not utilized) to six (very strongly utilized). The most appreciation was elicited by learning skills and taking responsibility and visual and verbal presentation and communication skills (4.99 and 4.98, respectively). The significance of the differences as reflecting the various skills was examined using a repeated measurements one-way analysis of variance. A Bonferroni test showed that the source of the differences was significant differences ($F_{(3.35, 374.93)} = 6.20, p<0.001$) in comparisons between:

- Critical thinking skills and skills involving learning and taking responsibility
- Research capabilities and visual and verbal presentation and communication skills, as well as skills involving learning and taking responsibility

In addition, respondents were asked about their general satisfaction with their studies. The mean of satisfaction (on a scale of 1–6) was 4.74, with a standard deviation of 1.02. The respondents appeared to express relatively high satisfaction with their undergraduate studies. To explore general satisfaction with studies as explained by the contribution of the various study domains, we conducted a stepwise multiple regression. Courses in methodology and health appear to have a unique and

Table 3 Means and standard deviations of skills utilized for preparing undergraduate research papers

Skills	Critical thinking	Research capabilities	Team work	Visual and verbal presentation and communication	Learning and taking responsibility	Understanding ethical, social, professional issues
Mean	4.70	4.57	4.85	4.98	4.99	4.87
Standard deviation	1.30	1.44	1.27	1.13	1.21	1.23

Table 4 Explaining the variance in satisfaction based on the various knowledge domains

Variables	<i>B</i>	<i>SE B</i>	β
Courses in methodology	0.157	0.07	0.215*
Courses in health	0.158	0.08	0.200*

significant contribution to explaining general satisfaction ($F_{(2,110)} = 7.90, p < 0.01$). Together Table 4 shows close to 13% of the variance in satisfaction.

Differences Between Students Who Work in the Healthcare System and Those Who Do Not

Differences were found in the contribution of courses in management ($p < 0.05$) and in law and ethics ($p < 0.05$).

- Management – Students working in the healthcare system ($M = 4.92, SD = 1.31$) have more appreciation for the contribution of management studies to preparing undergraduate research papers than students who do not work in the healthcare system ($M = 4.32, SD = 1.25$).
- Law and ethics – Students working in the healthcare system ($M = 4.93, SD = 1.22$) have more appreciation for the contribution of law and ethics studies to preparing undergraduate research papers than students who do not work in the healthcare system ($M = 4.20, SD = 1.29$).
- In a one-tailed hypothesis, students who work in the healthcare system were found to have more appreciation ($M = 4.15, SD = 1.69$) for the contribution of English studies than others ($M = 3.44, SD = 1.66$).

The significance of the differences as a manifestation of the various skills was examined with a repeated measures one-way analysis of variance. Investigation of the source of the differences using the Bonferroni test found significant differences ($F_{(3.35, 374.93)} = 6.20, p < 0.001$) when comparing:

- Critical thinking skills and skills of learning and taking responsibility
- Research capabilities and visual and verbal presentation and communication skills, as well as skills of learning and taking responsibility

In addition, the respondents were asked about their general satisfaction with their studies. The mean for satisfaction (on a scale of 1–6) was 4.74, with a standard deviation of 1.02. The respondents appeared to express relatively high satisfaction with their undergraduate studies. To examine the explanation of general satisfaction with studies by the contribution of the various study domains, we conducted a stepwise multiple regression. Courses in methodology and health were found to have a unique and significant contribution to explaining general satisfaction ($F_{(2,110)} = 7.90, p < 0.01$). Together they explained close to 13% of the variance in satisfaction as shown in Table 4.

Discussion and Conclusion

This chapter deals with the evaluation of a program in health systems management, following the paradigmatic difference between the teaching-centered approach and the learning-centered approach, with an emphasis on the phrasing of learning outcomes. The purpose of the current study was to examine to what degree various academic domains and learning skills contributed to preparing undergraduate research papers (final paper and seminar) that express the contents and skills that students have acquired by the end of their undergraduate studies. In addition, we examined the relationship between personal variables, family variables, and occupational variables – and students’ satisfaction with the contents and skills they acquired throughout their studies (Table 5).

Significant differences were found in comparisons between critical thinking skills and skills of learning and taking responsibility, also between research capabilities

Table 5 Survey among third year students

Gender: 1. Male 2. Female
 Year of birth: _____
 Country of birth: _____
 Year of immigration _____
 Marital status: 1. Married 2. Single 3. Divorced 4. Other
 Number of children: 1. None 2. 1-2 3. 3-4 4. More than 5 children
 Works in the healthcare system: 1. No 2. Yes. Job: _____
 Number of years on the job: _____
 Extent of position: 1. Up to 25% 2. 25-50% 3. 50-75% 4. 75-100%

What was the contribution of each of the following domains that you studied for the degree in health systems management to preparing your final paper and seminar?	Extremely significant	Very significant	Moderate	Slight	Very slight	None
Management (health economics; foundations of management; computer applications for managers)	6	5	4	3	2	1
Health (epidemiology and public health; Israel’s healthcare system)	6	5	4	3	2	1
Law and ethics (ethical dilemmas; medicine and law)	6	5	4	3	2	1
Methodology – research and statistics (statistics; scientific writing; critical reading)	6	5	4	3	2	1

(continued)

Table 5 (continued)

English	6	5	4	3	2	1
How satisfied were you with your studies in general	6	5	4	3	2	1
To what degree were the following skills manifested during your studies and in preparing the final paper and seminar:						
Courses	Very significantly	Significantly	Moderately	Slightly	Very slightly	Not at all
Critical thinking skills	6	5	4	3	2	1
Research capabilities	6	5	4	3	2	1
Learning to function in a team	6	5	4	3	2	1
Being capable of communicating and presenting visually and verbally	6	5	4	3	2	1
Learning how to learn and to take responsibility for learning	6	5	4	3	2	1
Understanding and applying ethical, social, and professional issues	6	5	4	3	2	1

and skills of visual and verbal presentation and communication, as well as skills of learning and taking responsibility. In addition, the respondents expressed relatively high satisfaction with their studies. Courses in methodology and health were found to have a unique and significant contribution to explaining general satisfaction. The most significant finding is the high satisfaction and very high compatibility between the major domains studied and contribution of the studied domains to carrying out the final undergraduate research papers: final paper and seminar. The skills manifested in the intentions of the program's policymakers indeed helped students in practice. The research results are particularly significant also in light of the concerning data indicating a significant drop in registration to universities in Israel and elsewhere, with the younger generation finding increasingly less use for universities in shaping their personal and professional future. The uniqueness of the teaching program we have presented is in beginning by identifying the course's learning goals and the contents and skills that constitute the learning outcomes are set according to these goals. Thus, in order to identify the goals, curriculum designers must ask what students should know and be able to do by the end of the program. The optimal teaching method for the relevant students, both with regard to the material to be included in the course and with regard to the learning skills, will be chosen according to the goals defined. If the curricula will continue to be planned in a content-centered approach, many of them will probably become irrelevant for the

students, and students will increasingly find less use for universities in shaping their personal and professional future.

The greater the accessibility of knowledge, the more students seek added value in their studies. This is not an easy requirement, as it means that policymakers and curricula planners must think “outside the box” and relinquish set teaching patterns. Planning curricula in this method requires thorough thinking, much time, and effort, compared to the planning of curricula in the traditional method. Learning must become a cognitive, emotional, and ethical experience. Much effort is needed, but this effort makes it possible for instructors to face students with a real honest answer to questions such as “How will this help me in life?” or “Why should I come to class?”

In an academic environment where an instructor’s output equals his or her number of scientific publications (research output), the instructor has no incentive to make an effort and develop his or her teaching. The Council for Higher Education (CHE) recognizes the significance of incentives for producing teaching outputs. However, according to the council’s budgeting model, teaching output refers to the number of graduates and the level of the degree, calculated by an efficiency coefficient (Council for Higher Education 2012). Despite the change in the CHE’s budgeting model, from its initiation to the new model introduced in 2011 (ibid., 20–33), this is probably not enough to undermine the supremacy of the research component and to motivate the faculty to see efficient teaching as a type of output worthy of appreciation and significant academic recognition. For this purpose, there is need for a model that will recognize the efforts of academic faculty to promote learning-centered teaching and will acknowledge these efforts in a manner that will motivate instructors to devote time and energy to enhancing and improving their teaching by developing these aspects of their work. This is also in the existential interests of schools of higher education, as organizations responsible among other things for training future generations, in an era when traditional teaching methods are no longer satisfactory, are unattractive, and do not meet the needs and wishes of potential students for shaping their personal and professional future, in light of paradigmatic changes in the acquisition of knowledge in the “global village.”

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Linking Internationalization to Student Success: Voices from Stakeholders

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Jacqueline M. Copeland

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Abstract

This chapter describes and discusses the results of an exploratory study that compared US public Community College settings in relation to how stakeholders define, rationalize, respond to, govern, strategize, organize, and engage in internationalization. A spectrum of viewpoints was studied that included varying institutional sizes (e.g., small, medium, large, and very large), settings (e.g., urban, suburban, and rural), and stakeholder roles (e.g., student, faculty, staff, administrator, or community partner), resulting in 29 interviews collected from

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15 US public Community Colleges that offer degrees no higher than an associate's level. Grounded theory analyses were employed to decompose the interview data and reassemble it into delineated definitions and a theory of public Community College internationalization. For this chapter, analytical results are explored as they relate to leadership, governance, community involvement, and stakeholder roles. Conclusions that highlight dissimilarities and parallels among and across stakeholder roles and perceptions are considered in the context of how these insights may inform and guide Community College leaders in the governance and organization of their respective institutions. Key findings that distinguish public Community Colleges are described and re-contextualized against worldwide shifting demographics, geopolitical changes, and rapidly changing technology. Finally, future directions related to leadership tasks, organizational strategies, and plans that embed internationalization processes into the overarching institutional mission, structure, and culture will be explored.

Keywords

Community college internationalization · Defining internationalization · Theory of community college internationalization

Introduction

During the academic year of 2012–2013, US attainment statistics exhibit that approximately 1.9 million students earned a degree or certificate no greater than an associate's level (National Center for Education Statistics 2014). These graduates will help fill the critical shortage of skilled twenty-first-century US workers concurrent to the Obama administration's Community College initiative of five million *additional* graduates from community colleges by 2020 (The Whitehouse 2013). Consequently, not only are Community Colleges serving growing numbers of students, but these institutions face the reality of rapidly changing technology, interconnected global markets, and shifting demographic and political changes worldwide.

These global changes impact leadership, governance, and budgeting strategies in higher educational settings. In fact, the most recent estimate indicated that 21% of Community Colleges have developed institutional internationalization plans compared to 55% of universities (ACE 2012). If preparing future workers with millennial skills is a national priority, then a disparity clearly exists between Community Colleges' roles and current capacities. At the same time, current US federal, state, and local higher education budgets continue to dwindle, and accountability for evidenced-based outcomes has increased (Berdahl et al. 2011). These trends and organizational realities suggest that Community College structure, governance, and leadership may be in need of re-contextualization. In response, consideration of how Community College stakeholders nationwide respond to internationalization can inform Community College leaders as they navigate, strategize, plan, and govern in relation to emerging challenges of US Community College education in the twenty-first century.

Literature Overview

Much of the existing literature related to the identification and development of an overarching theory of the internationalization of US higher education is contextualized in university settings (de Wit 2013; Altbach and Knight 2007; Townsend and Dougherty 2007). US Community Colleges are distinct in several respects that do not allow for a direct application of existing university theories. First, US Community Colleges have an open-door admission policy which often results in many first-time-in-college or first-generation students, returning students with job and family duties, military/veterans students, remedial students, or students who come from underrepresented groups (Raby and Valeau 2007; Valeau and Raby 2007). Second, funding models in US Community Colleges tend to link institutional mission and funding to the local community with high levels of local- and state-level accountability, often with access to few, if any, international or cross-border partnering interests. Third, the ability to draw upon alumni funds may be constrained because alumni who have attained an associate's degree or certificate may have limited earning capacities with respect to degree attainment (Berdahl et al. 2011). These unique Community College characteristics affect *what*, *who*, and *how* internationalization processes occur in Community College settings and how these processes influence Community College organizational structures, leadership, and governance.

There is a small but dated body of literature in relation to US Community College internationalization. However, current Community College internationalization components are not entirely known or defined. Moreover, studies that have addressed an across-the-board identification of Community College components are outdated, with some reaching back to data collection administered around the time of the events of September 11, 2001. Thus, the purpose of this study was to re-contextualize US Community College internationalization in relation to the increased demand for present-day Community College education. The results of the study were interpreted in relation to informing governance and leadership policies, practices, and strategies related to internationalization in these institutions.

US Community College Constructs

In relation to Community College internationalization components, while literature in Community College settings provides several resources, these tend to focus on singular stakeholder group components rather than those related to overarching institutional components. While these may be helpful for programmatic development or unit-based planning, they perhaps do not provide enough information to guide organizational leadership and governance practices. Examples include how global events have impacted Community College planning (Frost 2009), perceptions of foreign-born Community College faculty job satisfaction (Mamiseishvili 2011), and Community College student study abroad participation (Twombly et al. 2013; Zhang 2011).

An exception to these mentioned above has been developed by the American Council on Education (ACE), who created a mapping tool that considers institutional-wide indicators to internationalization in all levels of US higher education (ACE 2012). The tool has been administered in 2001, 2006, and most recently in 2011 with data collection anticipated for 2016. ACE mapping tools have implications for Community College leadership stakeholders. Specifically, institutional leaders can determine current levels of internationalization, as compared to other Community College institutions, and more clearly delineate an overarching internationalization strategy. Although the ACE mapping tool is revealing, there has been no discussion of the types of Community Colleges represented nor has the fact that the respondents are from executive leadership. Thus, perhaps the viewpoints expressed are skewed toward larger urban institutions or reflective of desired rather than achieved outcomes.

A variation of the ACE mapping tools is a Community College in Hawaii, Kapiolani Community College (KCC) matrix, which assesses the level of internationalization across an institution by way of a checklist. There are unique points about how the KCC matrix was developed that may temper its usage in other Community College settings. Specifically, KCC hosts a number of international students who transfer to the local university because of its offshore location. Also, KCC hired external consultants to develop the matrix. These characteristics are unique to KCC and not readily exhibited by most Community Colleges, which may prohibit its generalizability. Moreover, if the assumption is made that the KCC rubric *could* be adopted for other US Community College settings, this implies that these represent a prescribed set of standards or best practices. Hudzik (2013) has argued that the term “best practice” assumes that there is, in fact, an ideal approach. Furthermore, Hudzik posits that effective models in a specific setting *may* be transferable to similar settings, but are not *the* decisive approach.

A Need for Current Data

As noted earlier, existing literature that addresses US Community College internationalization is dated. For example, the specially developed ACE mapping tool, “Measuring Internationalization at Community Colleges” (Green and Siaya 2005), is aimed at US Community Colleges and stands as a seminal work. However, the survey data utilized in the tool’s construction was collected prior to the impact of September 11, 2001. In addition, the literature review that guided tool development employed a 1990s body of work, set in university contexts. Clearly, both the data and literature review upon which the study was based represent viewpoints that may have been substantially altered based on global events during the past 15 years.

Moreover, respondents to ACE mapping tool surveys have represented leadership perspectives exclusively, with no voice given to non-leadership stakeholders such as mid-level administrators, faculty, students, student services staff, or community partners. In the current millennial landscape of global perspective-taking, it is relevant to hear voices from immigrant and veteran students, foreign-born faculty or staff,

curricular and programmatic developers, funding providers, and external partners. Each of these stakeholders may provide a voice in that allows for greater depth of insight that could potentially guide and direct institutional leadership and governance practices. Thus, while the study is seminal and vital in the development of US Community College assessment, current studies that reflect a broader and more diverse set of Community College stakeholder perspectives will serve to update the body of literature as it relates to US Community College internationalization.

Participants

Corbin and Strauss (2008) have proposed that individual experiences contextualized in a broader phenomenon can illuminate processes and linkages. Thus, to best investigate the spectrum of perspectives by which a theory could be delineated, a wide range of institutional sizes, community types, geographic settings, and individual stakeholders were selected (Creswell 2013, 2014; Creswell and Clark 2011). Institutional and individual participant criteria were applied to obtain a rich sample of institutional types and stakeholder perspectives (Copeland 2015; Carnegie Foundation 2013). Fifteen institutions were accessed with one to ten individuals from each site for a total of 29 individuals, which provided sufficiently saturated data to posit a theory of internationalization in public community colleges (Creswell 2014).

Participating institutions were located in Arizona, California, Florida, Maryland, Michigan, North Carolina, New York, Ohio, Pennsylvania, Texas, Virginia, Washington, and Wisconsin. The following institutional sizes were included as measured by FTE (full-time enrollments): small (10%), $500 \leq \text{FTE} \leq 1999$; medium (11%), $2000 \leq \text{FTE} \leq 4999$; large (62%), $5000 \leq \text{FTE} \leq 9999$; and very large (17%), $\text{FTE} \geq 10,000$ (Carnegie Foundation 2013). Geographical locations included rural (41%), suburban (49%), and urban (10%).

Individual stakeholder profiles were faculty (13), students (93), student services (1), workforce development and continuing education (2), community partner (1), campus ministry (1), athletics (1), and mid-, senior-, and executive-level administrators and leaders (7).

Faculty represented the largest group of interviewees, and members' departments included social sciences, mathematics, natural science, business, nursing, English as a Second Language (ESL), and technical education programs. Student perspectives represented included immigrant, American-born, and veteran. Administrators' roles included chairs, deans, associate vice-presidents, vice-president, or directors. Departments represented by these leaders included workforce development and continuing education, foundation or institutional advancement, mathematics and sciences, humanities, student services, athletics, and campus ministry. For purposes of this study, workforce development (WFD) refers to educational programs that meet a community's need for current and future business and economic growth so that the community and its stakeholders can remain competitive locally and globally.

Community College Internationalization Strategies

Arising from the data interview and analyses, the description of public Community Colleges' internationalization begins with the open-door mission. The central aim is to successfully identify and respond to community needs in relation to job skill training and general education. Students are admitted at their current level of academic preparedness and advance along the job- or college-readiness continuum. Local communities have taken on global characteristics, often making the distinction between local and global more obscure and resulting in changing job and educational needs. There is an increasing demand for technologically skilled workers in most communities. Employers expect workers to have computer and digital literacies, particularly in vocations such as automotive repair, fire safety, and nursing programs. Local companies may have international business relationships because they have become a subsidiary of a global firm or partner to export goods to other nations. In some communities, the arrival of immigrant or refugee populations has necessitated educational offerings and community outreach to prepare these individuals for local jobs. Essentially, it was found that open door missions in the twenty-first century are, for the most part, contemporary versions of the traditional model which arose from the need for education for veteran's returning from World War II (Thelin 2011).

Institutional structure is hierarchical, with leadership stakeholders in the uppermost levels while student services or faculty serving the organization in departmental capacities downward. Units tend to operate independently of one another, but departments and stakeholders function parallel to one another in relation to the open-door mission. Internal staff, faculty, and leaders collaborate in relation to decision-making and accountability for improving the quality of programs and services offered to students. Aside from this shared governance, internal stakeholders are more or less engaged in institutional initiatives relative to their roles. For example, faculty are more inclined toward completion rate projects, while administrators lean toward budget planning and accreditation priorities. In relation to internationalization, limited scope and minimal redundancy across departments is typical, while fragmented efforts are common. Internationalization is present but unobtrusive and uneven across the institution. It is cloaked beneath the central objective of student success.

Students enter the institution with an educational objective: to earn a degree, certificate, and training or to obtain continuing education. Their backgrounds, academic preparation, ages, experiences, and exposure to other cultures are highly varied. Students may be enrolling in college for the first time or may be among the first generation of their family to attend college, while others are returning to college after previous degree attainment. Student demographics tend to be wide-ranging in most but not all communities. Some students have had exposure to internationalization through military service, as an immigrant or refugee, family influences or friends, travel, work, language studies, or missionary involvement. Nearly all students are keenly aware of global issues as a result of social media and online world news resources. Some but not all students have direct contact with specific internationalization services, programs, stakeholders, or events within the institution. However, after the admission process, each student comes into contact with at least one faculty

member. Through these educators and curriculum, many students gain exposure to internationalization knowledge or opportunities. Students eventually exit the institution, in most cases after having achieved their intended educational objective and, in many cases, having gained exposure to global knowledge.

Typologies and Component of US Community College Internationalization

Two typologies resulted from qualitative data analyses. The first, referred to as *recognition*, reflected how stakeholders acknowledge internationalization. Specifically, how internationalization is defined, rationalized, or assessed in relation to stakeholder roles. The second typology, *integration*, encompassed how stakeholders incorporate internationalization processes. In particular, how the institution and community engage in exchanges, how curriculum decisions are made, how faculty practices are determined, how stakeholder roles influence internationalization, how institutional formation affects internationalization, and how students are developed in relation to internationalization.

Components related to institutional internationalization arising from analyses included definition or rationales, assessment, obstacles, community exchanges, curriculum, faculty practices, institutional formation, and student development. To answer the research question, *What are public Community College administrators' perceptions regarding the process of internationalizing their respective institutions?*, an overarching definition and the main eight components that embody the phenomenon of public Community College internationalization are found in Table 1.

Stakeholder Viewpoints

To inform leadership decision-making and governance practices, similarities and dissimilarities in how stakeholders perceived and approached internationalization were addressed. Both general and specific approaches were revealed in the results of the analyses. Moreover, unique perspectives shared by participants illuminated how different stakeholders often experience different elements of internationalization. These strategies and sentiments are summarized in Table 2 with the implication that they may influence leadership planning, organizational strategies, or governance processes in relation to broad-based responsiveness to stakeholder needs related to community college internationalization efforts.

Unique Perspectives

During the interview process, many unique perspectives were shared by participants that underscored the local context in which US Community Colleges operate. For example, in one medium-sized suburban college that serves primarily students who

Table 1 Definition and operationalized components of community college internationalization

Definition of public associate college internationalization	
The recognition of worldwide cultural changes and the progression of integrating community need for multicultural dimensions into the offerings of public associate college programs and student services	
Component	Operationalization
Rationales	Reasons that public community colleges fund, plan, or strategize for internationalization. In particular, perceived demand for globally prepared graduates, acknowledgement of changing worldwide and community cultural demographic shifts, and student program success and completion
Assessment	What, who, and how institutions measure their internationalization progression over prescribed time intervals either within or across institutional units or stakeholders
Obstacles	Challenges encountered by public associate college stakeholders during the process of internationalization; particularly related to leadership and organizational strategies, geographic location, and campus infrastructure and resources
Community exchange	Institutional response to local training and educational needs as a result of economic change or development and shifting demographics
Curriculum	Educational and training offerings to increase students' access to global or multicultural perspectives, skills, or credentials
Faculty practices	Roles faculty assume or activities in which they engage as they sustain or expand institutional internationalization processes
Institutional formation	Leadership roles, strategizing, and planning that embed internationalization processes into the overarching institutional mission and culture
Student development	Roles students assume, or are expected to assume, and services accessed by students as they seek to benefit from the level of internationalization throughout the institutional units

transfer to the local 4-year institution, the president initially rejected the invitation to participate in the study. This leader perceived that the institution was deficient in its internationalization efforts and wished to address it internally. However, permission was eventually granted and numerous internationalized efforts were discovered. The senior leaders compared their college to the local 4-year university and contextualized internationalization efforts along that perspective. However, they realized that when viewed from the lens of the community college mission, their own institution was much more internationalized by virtue of serving many immigrant students and service learning collaborations within the local community.

In a different example, a small urban-serving institution in the Midwest offered a firefighter certification program that was highly sought after by residents in other countries. Because this particular institution had a small dormitory, it was able to host international students. The particular local community served by this institution has a homogenous population, reflective in the student body. However, by serving international students in this program, the local community became more internationalized in terms of cultural diversity. This occurrence was not immediately perceived as an internationalized effort by leadership because it didn't fit their stereotype, which was "foreign student exchange agreements." Rather, students in

Table 2 Stakeholder group perceptions related to community college internationalization

Stakeholder group		Leader	Student services	Workforce development	Faculty	Students
Components of community college internationalization	Reasons for internationalizing	Student success and engagement Multiculturalism Globally prepared graduates	Globally prepared graduates Multiculturalism Changing community needs	Economic development Multiculturalism Changing community needs	Multiculturalism Globally prepared graduates Community development	Multiculturalism Globally prepared graduates
	Assessment Levels of internationalization	Curricular Institutional Special programs	Special programs Curricular Institutional	Student competencies Special programs	Student competencies Curricular Special programs	Curricular
Obstacles to internationalization	Faculty and staff time	Conflicting or insufficient leadership	Conflicting or insufficient leadership	Insufficient resources	Conflicting or insufficient leadership	No obstacles
	Local community support	Local community support	Local community support	Commuter students	Time Local community support	
Engagement in internationalization	Partner with local nonprofit groups or service agencies to identify and respond to immigrant and refugee educational and training needs	Partner with local nonprofit groups or service agencies to identify and respond to immigrant and refugee educational and training needs Collaborate with local museums, libraries, or businesses	I and training needs Workforce development and continuing education programs	Provide collaborative educational opportunities between local and foreign-born student classroom settings	No experience with this	
Curriculum toward internationalization	Required competency for graduation Programs with credentialing	Recruitment international students Cocurricular efforts	Programs with credentialing	Programs with credentialing Cocurricular efforts	Programs with credentialing	

(continued)

Table 2 (continued)

Stakeholder group						
Components of community college internationalization						
Faculty practices toward internationalization	Leader	Student services	Workforce development	Faculty	Students	
Institutional formation practices that augment Internationalization	Professional development Communication Embed in institutional culture Provide funding or faculty reassignments Support committees	Professional development Grant opportunities Collaborate with faculty Support and maintain faculty and leadership efforts Seek partnership and exchange opportunities	Professional development Engage the local community Seek partnership opportunities Maintain faculty and leadership efforts Community outreach	Initiate and lead student programs Committee service Seek Be a role model to students Embed in institutional culture Seek funding Seek reassignment Plan, administer, expand, and lead efforts Seek partnership opportunities	Faculty serve as bridges and proliferators to internationalization Participate in programs or events Utilize classroom collaborative opportunities to learn about other students' cultures	
Student development	Provide study abroad and extracurricular programs Attend committee meetings	Provide opportunities for local and foreign-born students to teach one another Provide study abroad and extracurricular programs	Provide opportunities for local and foreign-born students to teach one another Provide study abroad and extracurricular programs Utilize social media and technology to encourage greater global awareness in the external community	Provide opportunities for local and foreign-born students to teach one another Provide study abroad and extracurricular programs Utilize social media and technology to encourage greater global awareness in the external community	Collaborate with students who have experiences in other cultures in classrooms, projects, or clubs Participate in extracurricular programs	

the fire science program were generally older and in need of specialized training to supplement their current profession, which was available in very few schools across the world.

A most surprising source of faculty development funding was revealed at a small rural college in the southeast. A local businessman recognized that the world had become much more globalized, but the poverty and remote location of the community inhibited student travel and, for the most part, foreign-born residents, which would bring the world into the local context. Yet, this businessman recognized the need for students to understand the global context in which they each would live and work. In response, this businessman established a trust that provided travel money for up to three faculty members per year to travel to institutions outside the US by which to develop curriculum. The idea was that one faculty member could impact hundreds of students through curricular efforts.

In one instance, a textile faculty member visited a South American institution, during which the home faculty member encountered an unknown (to him) tree species and related manufacturing processes not present back home. Upon return, the faculty member worked with the department to modify the existing home curriculum to include these insights. In another instance, a nursing instructor visited several institutions in China. This faculty member experienced nursing techniques that differed from those taught in the US due to cultural differences, Chinese overpopulation and reduced medical services, and political impact of the delivery of medical services in China. Ultimately, this faculty member modified existing curriculum to enhance students' future employment prospects by integrating the insights gleaned in China.

Other insights were readily shared by faculty members. At a very large urban-serving institution in the northeast, a faculty member described how study abroad programs have become an enterprise more than simply travel opportunities for select students. She discussed how this particular student demographic, which is characterized by urban minority students from depressed socioeconomic groups, rarely has funding opportunities to participate in study abroad. Instead, faculty focus on hosting small study abroad groups annually, followed by growing the students' gains when they return in terms of wide-scale programmatic offerings and extracurricular events as a result of these trips. One group of students had a short study trip to Cambodia. Upon return, students who participated on the trip did a presentation which was attended by more than 200+ students. Moreover, many faculty members decided to bring their students. The six student presenters displayed their slides and talked about going to an orphanage and learning about what economic disparity between the rich and the poor really looks like in Cambodia and then lead discussion groups for other students. For this student demographic, the global experience through the eyes of peers who had experienced it made it rich and alive for those students who were unable to travel.

In summarizing how the discussions above relate to the purpose of the study, it is clear that internationalization processes are identified and prioritized differently across and among differing stakeholder groups. Moreover, unique approaches to internationalization have emerged relative to community need and stakeholder

resources. These revelations impact what constructs are most prevalent and perhaps most dynamic. Thus, although a general model and definition of internationalization are possible as a result of the study, specific context may alter the lens through which community college leaders will address these findings.

Key Findings in Relation to Research Questions

Re-contextualizing US Community College internationalization practices in current data revealed several key findings. First, it is possible to define and operationalize essential components related to US Community College internationalization efforts. Second, planning is often in response to local community needs irrespective of stakeholder roles. Third, student success plays a major role in how stakeholders perceive and engage in internationalization. Each of these findings is discussed here.

Defining Internationalization

Qualitative Data analyses culminated into a theory in relation to the overarching question, *What are public Community College administrators' perceptions regarding the process of internationalizing their respective institutions?* To answer this question, findings were summarized into a guiding definition and operationalized components of Community College internationalization. Although findings that contributed to these definitions arose from all stakeholder perspectives, the results were contextualized from the perspective of institutional leaders because ultimately these stakeholders generally plan on behalf of their institutional stakeholders. (As noted above, Table 1 displays these findings.)

Planning Internationalization: Localized

The second qualitative question posed, *How do internationalization plans develop in public Community College settings?* Results of qualitative analyses that suggested internationalization plans developed as corollaries to student success efforts. These strategies were often sheathed beneath essential institutional functions and generally disjointed, but internationalization plans emerged because stakeholders perceived particular student needs related to globalization and internationalization, and stakeholders sought to respond to these needs in a manner that optimized student success. While analyses often pointed to planning efforts aligned with existing student success pedagogy such as learning communities, experiential and service learning, and tutoring, other discoveries underscored unique and organic efforts across all of the 15 institutions. From a leadership perspective, these efforts could be harnessed and scaled upward as a means of establishing or shaping internationalization initiatives.

Internationalization Engagement: Student Success

The third qualitative research question posited, *How are dissimilar stakeholders engaged in internationalization processes in public Community College settings?* The answer to this question is that stakeholders engaged in internationalization processes because they perceived their efforts would augment student success, enhance students' employability, or increase students' global competency. Moreover, engagement occurred in relation to an individual stakeholder's role. For example, if a faculty member perceived that there were immigrant or international students present in their classroom along with locally born students, the faculty member often responded by involving students with each other collaboratively so that both local and foreign-born students could gain communication skills and team building dynamics. This occurred in humanities courses as well as mathematics and science courses. In a different instance, a stakeholder in a leadership position noted that faculty were often under-resourced as they attempt to bring perspectives that are more global into their classroom discussions. This particular stakeholder mediated an exchange between local service agencies and faculty members so that refugee and immigrant guest speakers visit appropriate classroom settings, such as sociology and religion courses, to provide first-person perspectives to students. A quote from a student-support interviewee at yet another institution best summarizes the overall sentiment expressed by participants: "Our main goal is to support student success. So, if students were to state that they needed some sort of more internationalized or global training at our institution I think the institution would be most likely to respond to that."

Discussion in Relation to Institutional Initiatives and Challenges

Overall, these results suggest that US Community College stakeholders tend to incorporate internationalization as a facet of student success. In relation to mission, internationalization efforts tend to be more remotely related to the open-door mission and often motivated by providing pathways to student success and may be a component of a broader set of initiatives rather than *the* initiative. Implications for leadership and governance stakeholders are that many existing student success and open-door mission structures, initiatives, and funding could be viewed through a wider lens. In fact, as demographics change in US communities as a result of shifting global populations, leaders and governance stakeholders may need to recognize that student success and open doors may directly serve increasing numbers of foreign-born students, resulting in unintended or unplanned internationalization.

In revisiting the theory of public Community College internationalization processes developed during this study, internationalization processes may be characterized as a *mechanism* to student success. This finding indicates that participants recognized internationalization as a set of methods by which to advance student success, organize the institution, evaluate the institution, and strengthen efforts.

Conclusions and Future Directions

This chapter reported on the re-contextualization of US Community College internationalization, informed from multiple stakeholder views both internally and externally to the institution. These results can both inform policy and direct future planning, particularly as they relate to governance, leadership, and community college organizational structure.

First, the results of the study underscore the synergy that arises from bottom-up efforts related to Community College internationalization and reflective of student success and engagement practices that are vital to the Community College open-door mission. As such, leadership and governance policies that harness and align internationalization efforts with those related to the open-door mission potentially strengthen the institution and its place in the local community. Moreover, internationalization efforts may be contextualized as supplementary to existing structures, resources, planning, and strategic efforts pledged to student success and engagement efforts. By pairing internationalization and student success efforts, structure, alignment, and articulated strategy can be given to existing fragmented internationalization efforts and stakeholders.

Second, the results of the current study provide a framework by which an internationalization dialogue can occur in relation to strategic planning efforts. In particular, cross-functional leadership teams can begin with the definitions delineated in this study as they seek to internationalize their campuses and stakeholders. Moreover, the definitions from this study could be a mechanism by which to engage a variety of institutional voices and may serve as a general framework from which stakeholder may contribute to the development of greater dimensionality in relation to institutional-wide internationalization planning.

Third, the results of this study may be considered comparatively between institutions that employ similar internationalization efforts but achieve different outcomes or serve dissimilar local communities. Evaluating how and why results of internationalization efforts differ in situations where no differences were believed to exist may elucidate governance or leadership parallels or dissimilarities that could inform leadership decision-making and governance structures.

The findings of this study provide recent insights as they relate to US public Community College internationalization processes, governance, and leadership the increased role these institutions play in educating millions of millennial workers. This study emphasized that a rich pathway for increasing internationalization efforts on US Community College campuses exists by way of aligning shared governance practices with organic bottom-up strategies related to student success efforts to internationalize. Moreover, these local stakeholder efforts can be ignited, organized, aligned, and lead in a manner that would remove fragmented efforts and funding. The results of this study serve to inform Community College internationalization leadership strategies, organizational planning initiatives, and shared governance efforts.

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Evolution of Community Colleges in Thailand: From Formal Establishment to the Present Time

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Pattanida Punthumasen and Takayoshi Maki

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Abstract

The purpose of this chapter is to update the transformation of Community Colleges in Thailand by clarifying two changes and development since the inception of the sector. First is the passing of the Institute of Community College Act (ICCA) B.E.2558 (A.D.2015) that replaced the previous regulations of the Ministry of Education on higher education management at lower than degree level: Community College model B.E.2545 (A.D.2002). The establishment of the Institute of Community College at the central level is a major change because it now has more authority in the administration of internal and external education, including budget compilation, teaching force appointment, curriculum formation as well as maintenance and updating facilities. Previously, all of these components needed approval first by the Office of Higher Education Commission (OHEC), Ministry of Education. An analysis of the process of Community College internal and external evaluation indicates several areas of success or strength and failure or weakness and indicates future directions.

The second development is the establishment of the Urban Community College Bangkok in 2010 that serves as a prototype for future institutions. Contrary to the original spirit of Community College in Thai history is the new Urban Community College in Bangkok, which is an independent component of the Navamindrahiraj University, the ninth monarch university. The Urban Community College in Bangkok is in the Dusit district, the capital of Thailand, and in 2010 was founded under the Bangkok Metropolitan Administration with the “Acquiring wisdom is the best of all” philosophy and aims to be a higher education institute where sharing the knowledge and research for urban development to promote well-being of city residents.

Keywords

Thailand · Community Colleges · Institute of Community College Act (ICCA) B. E.2558 (A.D.2015) · Office for National Educational Standard and Quality Assessment (ONESQA) · Navamindrahiraj University · Urban Community College Bangkok (UCCB)

Community College Development: Overview

The Community College in Thailand is known as “Witthayalai Chumchon” in Thai language. The concepts and development of the Community College in Thailand have been discussed over the last 46 years. Thailand has put much serious effort to establish Community Colleges in our country. This chapter employs literary analysis of relevant documents and interviews with stakeholders to shed additional light on the process and intent. The literature review data was derived from previous research, Thai Community College websites, books, journals, including agency documents of the Institution of Community College (ICC), selected Community Colleges at the local level, Office of Higher Education Commission (OHEC), Office of the Education Council, etc. We also conducted interviews with officials

concerned with Community Colleges, such as the deputy director of ICC, the director of Urban Community College Bangkok (UCCB), and the director of Community Colleges at local levels. We start this chapter by overviewing the development trajectory of Community Colleges in Thailand by referring to the research report of OHEC (2003). We will share the emergence, evolution, and future direction of Community Colleges in Thailand. The next section organizes the development of the Thai Community College into three phases, namely: (1) sowing seeds of thought (1970–1976), (2) roots cannot grow (1977–2001), and (3) starting of a strong tree (2001–2014) (Sangthong 2013).

Sowing Seeds of Thought (1970–1976)

As the authors described in a previous publication (Punthumasen and Maki 2009), since the late 1950s, educational development in Thailand has been linked to national development. In particular, education has been recognized as a strong weapon to develop nation states (Watson 1980). This seems consonant with the human capital theory or manpower theory which was the world trend at that time (Watson 1980). The Thai government planned to increase the opportunity for more members of the population to be able to access higher education. Consequently, there was a rush to establish higher education institutions as the center for development of each region in Thailand. In 1964, Chiang Mai University in north and Khonkaen University in northeast were established. In 1967, Prince of Songkhla University in south was established (Punthumasen and Maki 2009). In addition to those centers, regional educational institutions were developed including two open admission and distance learning type of universities that were modeled on Open University of the United Kingdom. These two institutions were Ramkhamhaeng University opened in 1971 and Sukhothai Thammathirat Open University opened in 1978. The goal of these institutions was to absorb the peoples who needed a diploma or higher learning, but who could not attend a traditional University (Watson 1989).

During this era, there was also an expansion of secondary education as defined by the Rongrian Khayai-Okat (Opportunity Extended School) policy. This policy allowed primary schools to provide lower secondary education program that resulted in more people completing lower secondary education curriculum and enabling them to continue study at upper secondary education, and at the higher education level. However, not every province had enough higher education institutions to accommodate the new students. Even though the higher education gross enrollment rate across the country increased 41% in the academic year 2004 (Punthumasen and Maki 2009), most of working age population between 15 and 59 years old could not develop their occupational and living skills due to the lack of higher educational institutions in the rural areas. As such, the government target of 50% of higher education gross enrollment rate was not achieved. Therefore, the idea of establishing the Community College in Thailand was seen as an ability to extend the opportunity for the rural people for higher learning while at the same time, responding to the demands of workforce development of the particular area as well as a whole nation.

During this phase, the academics of some government agencies conducted research on Community College management in other countries, for instance, Canada, Japan, Republic of Korea, and the United States of America in order to find the appropriate models of lower than degree education. However, the study found only some of these thoughts or concepts were applicable in Thailand. As a result, Thai educators used many of the international concepts to inform a variation that was then stated in a national education plan that develop a unique form of Community College in the country.

Roots Cannot Grow (1977–2001)

The Third National Education Plan (1968–1976) (The Office of the National Education Commission or the Office of the Education Council at present 1968) stipulated that the pilot project on the establishment of Community College shall be operated in some higher education institutions, instead of standalone institutions. In 1977, the first Community College was set up as one of the faculties in Prince of Songkla University in Phuket province. This institution was later expanded with a branch at Surat Thani province in 1990. The purpose of opening the Community College was to solve the problems related to lack of professional courses which met the needs of the local community. For example, tourism and hotel management courses were opened because Phuket is one of the popular tourist attractions in Thailand, while Samuri Island of Surat Thani province is very attractive to tourists as well. Students took 2 years to complete their study from the Community College and to receive a certificate. During the first ten years, these two Community Colleges were successful due to its response of the local needs. Phuket Community College was closed in 1997 in order to offer bachelor degrees that were deemed to better meet the needs of students. Likewise, Surat Thani Community College was closed in 1998 for the same reason (Prince of Songkhla University 2017).

Two national policies supported the development of Community Colleges in this period. First was the National Educational Act 1999 that defined the principles on decentralization of authority to educational institutions and local administration organizations as well as partnerships with communities and community organizations. This allowed new institutional partnerships to emerge. Second was the Eighth National Economic and Social Development Plan (1997–2001) that stated that an educational system may set up a Community College as a branch of university with the purpose of providing a professional certificate level and associate degree level and short-term courses to help meet the needs of local community.

Following these policies, in 1984, four Teacher Colleges (Rajabhat University) set up a Community College in their institution. The four Teacher Colleges included the northeastern provinces of Ubon Ratchathani and Nakhon Ratchasima, the central province of Lop Buri and the southern province of Nakhon Si Thammarat. A primary reason to open a Community College in a Teacher College was that the Ministry of Education needed to reduce the number of teacher production and did so by expanding various courses apart from teacher training. However, the Community

Colleges in these four Teacher Colleges were not operated on a continuous basis due to the Teacher Colleges Act at that time. This act raised the status of Teacher College from an associated-degree level to a bachelor degree level. This project limited the impact on the development of Community Colleges.

In 1994, the Education Ministry made another effort to set up Community Colleges in 77 institutions. Each Community College had a specific purpose, for instance, agricultural college, college of physical education, college of dramatic arts, and arts college. However, all the newly established Community Colleges could not be operated on a continuous basis due to the changes of national policies as well as other political reasons. All Community Colleges were closed in 1996 (Sangthong 2013).

Starting of a Strong Tree (2001–Present)

Emergence of the New Community College in the Twenty-First Century

Based on article 81 of the constitution revised in 1997, the first systematic and fundamental law for education in Thailand, the National Education Act (NEA) was promulgated in 1999. The NEA contained a considerable shift from the quantitative expansion pursued since 1950s to a definitive new focus on the improvement of quality of education that ushered in a new era of national development (Punthumasen and Maki 2009, p. 137). NEA aimed to accomplish the goal that “Education shall aim at the full development of the Thai people in all aspects: physical and mental health; intellect; knowledge; morality; integrity; and desirable way of life so as to be able to live in harmony with other people” as stipulated in Article 6 of the NEA. In terms of compulsory education, it stipulated that all individuals shall have equal rights and opportunities to receive basic education provided by the State for the duration of at least 12 years and its years shall be extended from 6 to 9 years (Office of the Education Council 2004). As a result, synergy of Rongrian Khayai-Okat (Opportunity Extended School) policy, the number of students who completed both lower and senior secondary education increased dramatically. However, some were not able to access higher education level because there was no higher education institution in their province and they could not afford higher education in other provinces.

Due to the lack of students entering into higher education, the Government established the first ten Community Colleges in 2001 with distinct principles and concepts. There are noted differences between these ten Community Colleges and the earlier visions, such as Phuket Community College. Phuket Community College was one of the faculties of Prince of Songkhla University, while the 2001 Community Colleges were set up as standalone educational institution themselves in the provinces with no link to an established higher education institution. The ten Community Colleges all emphasized the lifelong learning principle in the 1999 National Education Act to develop a curriculum that served local communities.

Key was the collaboration of all segments of the society to promote the education provision to foster stability and sustainability. Since the emergence of these ten Community Colleges in 2002, the Community College sector in Thailand gradually developed unique missions and focus. In subsequent year, an additional 10 Community Colleges were opened in 10 provinces. By 2007, there were 20 Community Colleges under the OHEC of Thailand's Ministry of Education.

Flowers Blossom (2015–Present)

After the passing of the Institute of Community College Act (ICCA) B.E.2558 (A.D.2015), several remarkable changes occurred in both qualitative, administration system, working process and in quantitative, number of Community Colleges as well as students. The following section elaborates on these changes before and after the enforcement of the Act.

Remarkable Changes of Community College after 2015: Promulgation of the Institute of Community College Act B.E. 2558 (A.D.2015)

After the establishment of the first ten Community Colleges in 2002, the latest and most important development was the 2015 announcement of the Institute of Community College Act (ICCA) B.E.2558 (A.D.2015) in the Royal Gazette on April 10, 2015. Prior to ICCA, Community Colleges, at both the central and local levels, worked in accordance with the ministerial regulations and orders approved by the Thai cabinet. The ICCA is the first law concerning the Community Colleges in Thailand in which all offices, officials, teachers, and other educational personnel need to follow. Even more critical is that this act heightens the confidence the public and educators have in the stability of their status and work at the Community College.

The passing of ICCA created notable changes between the former structure of the Community Colleges and the new one, seen as follows (The Institute of Community College Act 2015):

1. Name changes at the central and the local levels. At central level, the community college was renamed as the Institute of Community College (ICC), the Bureau of Community College Administration was renamed as the Institute of Community College Bureau (ICCB), and the Community College Commission was changed to the Institute of Community College Council (ICCC).
2. Supervision. The first ten community colleges that were established in 2002 were overseen at the central level by the Ministry of Education (MOE). Later, the Ministry was restructured and based on the announcement of the ministerial regulation on the management of lower than degree of higher education level by using the community college model B.E.2546 (2003 A.D.), and the community

colleges were placed under the supervision of the Office of Higher Education Commission (OHEC) (Office of Higher Education Commission 2003). According to the ICCA 2015, the Institute of Community College (ICC) became a juristic entity and a Government service which remained under the supervision of the OHEC. Today, the ICC is divided into two levels: (1) the Institute of Community College Bureau (ICCB) at central level, and (2) the community colleges at the local level. The education provision of ICC shall be managed by the Community Colleges at the local level.

3. Mission. The former purpose of community college that was to “provide education and training in both academic and vocational knowledge based on the curriculum that synchronized with the local needs and promote vocational development and quality of life of local people” (Ministerial Regulation regarding Under Degree of Higher Education Management using Community College Model 2003, pp. 1–2) has now been broadened in Section 8 of the ICCA that stipulates “to educate the local people, conduct research, provide the academic service, conserve art and culture, and promote lifelong learning in order to foster the strength of their local and community, sustainable development, develop personal potential, respond and harmonize with the needs and occupation of their local and community which lead to the development of the country.”
4. Purpose. In order to achieve the purpose as stated in Section 8, the ICC focuses on the following issues: (1) To create the opportunities and access to the education under degree level and lifelong learning of the people. The educational process shall be managed by using several models and all learners in each community can access it; (2) To respond to the needs of local community in terms of education, academic, and professional training; (3) To collaborate with higher education institutions in order to help community college students further their study in degree level, (4) To collaborate with educational institutions, industries, local administrative organizations, religious institutions, organizations related to culture public agencies, high educational institutions, and other institutions both internal and abroad in order to manage education provision; (5) To focus on the accepted academic standard and quality; (6) To mobilize the resources from both public and private agencies and local administrative organizations in order to manage education provision; (7) To manage education by focusing on good governance; (8) To focus on the participation of the people or community in order to manage education provision; and (9) To coordinate and collaborate with government service offices, local administrative organizations, or other official organizations concerned.

Structural Changes. There were some changes between the current structure and that of the former community colleges both at the central level and at the local level. For example, the Academic Council used to be placed at the local level, but at present it is placed at the central level. At the same time, the Commission for Promotion of Community College Activities is now placed at the local level instead of the former Academic Council. Prior to 2015, the Bureau of Community College

Administration was divided into four divisions: (1) Division of Administration, (2) Division of Policy and Planning, (3) Division of Academic Development and Standard, and (4) Division of Network Promotion (Punthumasan and Maki 2009). After the ICCA, the ICCB is now divided into six divisions namely: (1) Division of Administration, (2) Division of Human Resources Administration, (3) Division of Property Administration, (4) Division of Planning and Budget, (5) Division of Educational Standard and Research, and (6) Division of Promotion of Community College Activities. On the other hand, before the ICCA, the CCs at local level had four divisions: Division of Learning and Academic, Division of Administration and Student Activities, Division of Administration and Support, and Division of Network System. After the ICCA, it had three divisions: Office of Director, Office of Academic, and Center for the Promotion of Research and Lifelong Learning as shown in Fig. 1.

The ICCA 2015 identifies the roles and responsibilities of the ICC, ICCB, CCC, Community Colleges, and those of the head of each office. Most of them are similar to those of the past. For example, the ICCB serves as the secretariat for the

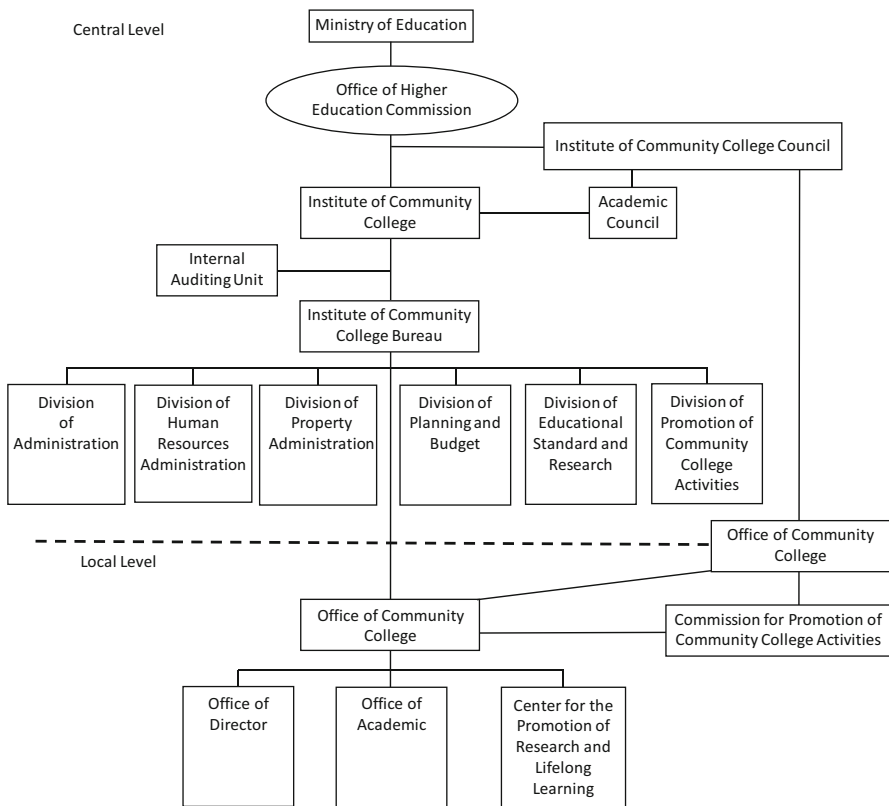


Fig. 1 Current administrative structure of institute of community college (Source: Institute of Community College 2015)

Community Colleges at the central level which is independent body responsible for regulating the overall Community College policies and plans, providing advice and recommendation, and improving the proposals submitted by the ICCB. While the power and duty of the Community College at the local level is similar to that of the Community College at the central level, it is now also responsible for the betterment of each Community College in its province. In addition, the act states the qualifications and criteria, and how to select the head of all offices and organizations of the ICC. Perhaps the most important is Section 33 which states that all community colleges cannot deny any person who wants to study, and cannot stop or slow down the study of any student due to his/her poverty or lack of money for paying the tuition fees. This shows that the Thai Government realizes the importance of education, so it makes great efforts to expand the number of the people in local areas to further their study that will help them to be employed and earn more money for their better living.

The ICCA B.E.2558 is the first law of ICC. Having its own Act, all personnel feel that they have a more stable office even though it is still under the supervision of OHEC. The main advantage is that the ICC is more independent than in the past in terms of budget management (Supatarakul 2016). The name changes do not affect community college personnel in any negative way because these happened in many agencies and offices under the Ministry of Education. The new mission is better than that of the past due to its broadening and more covering matters involving lifelong learning, for instance, research conducting and conservation of arts and culture. However, structural changes have both advantages and disadvantages. It is good that there are community college councils in both central level and local level. But moving the academic council from local level to central level might limit the “bottom up” way because subjects and training courses should meet the need of local people. It will be better to have the academic council at both levels.

Purpose and Philosophy of Community Colleges

At the beginning of the establishment of community colleges, the aim was to improve the quality of life of the local people by enhancing opportunities to higher education, providing both education and training. The concept of the community college was *the college of the community, the college by the community, and the college for the community*. At present, the philosophy of community colleges is to create the opportunities to access lower than degree of higher education level and several professional training courses in accord with the needs of each community so as to add the value of life and potential of the people and community. According to the ICCA, there are three main principles of community colleges: (1) people shall be able to the education with having quality, (2) the education provided to people shall be coincided with the needs of the community, and (3) community colleges shall work in collaboration with the community. This means that the purpose and philosophy of community colleges is still the same as that of the beginning one.

Quantitative Changes of Community Colleges

The following statistics show the changes of community colleges from the beginning of its establishment in 2002 to the present time in 2016 or during the past 12 years. The changes are relating to the number of community colleges, number of community college curriculums, number of teachers and educational personnel, and number of students (Institute of Community College Act 2015).

The Number of Community Colleges

At the beginning of the third period or a Strong Tree period, the first ten Community Colleges were established in 2002 in ten provinces: Maehongsorn Community College, Pijit Community College, Uhaithanee Community College, Ranong Community College, Narathivas Community College, Srakaew Community College, Mukdaharn Community College, Nong Bualumpu Community College, Burirum Community College, and Tak Community College. At present, ten more Community Colleges were gradually established namely: Pattani Community College, Yala Community College, Samut Sakorn Community College, Trad Community College, Pangnga Community College, Satul Community College, Prae Community College, Songkla Community College, and Nan Community College that was established in 2011. Therefore, at present the total number of Community Colleges is 20 situating in 20 provinces. These institutions are located in the four regions across the country: five in the north, four in the northeast, four in the central region, and seven in the south. Currently 18, or 90% of all Community Colleges are located in small and medium size provinces, situating along the border where the people do not have opportunity and are unable to access university educational services. The other two, or 10% are located in large size provinces, Songkla and Pattani, in the southern part where there is limited to access to University educational services.

The Number of Community College Curriculums

The Community College curriculum is divided into three categories. (1) the 2-year associated degree program, (2) Professional Certificates of Vocation Education (PCVE) and High Professional Certificates of Vocation Education (HPCVE), and (3) short-terms courses. The category number two was provided in Pijit Community College and Uthaithani Community College as both were transferred from Vocational Schools. All three categories provide all curriculums which respond to the needs of their local community in order to develop their economy and society.

For example, Trat Province is situated in eastern part of Thailand and borders the Gulf of Thailand. It is one of provinces which is famous in seafood. Soft-shelled crab is a type of seafood very popular for lots of tourists both from inside the country and other countries. But soft-shelled crabs are hard to be raised (farmed). In order to meet the need of the people who want to farm this marine life, Trat Community College

has set up a “Soft-shelled crab farming course” as a short-term training teaching by a group of soft-shelled specialists in this area. This course helps the people in many villages of Trat to do soft-shelled farming that made them earn much more money (Bureau of Community College Administration 2009).

From 2002 to 2006, 17 major fields of associated degrees, 12 programs of PCVE and HPCVE, and 189 short-terms courses were added to community colleges. Until 2016, only one field was added in associated degree program, making the total now at 18 fields. The 18 majors fields of the 2-year associated degree programs are: (1) local governance, (2) early childhood education, (3) business computer, (4) community development, (5) general management, (6) agriculture and food, (7) organic farming, (8) agricultural technology, (9) information technology, (10) accounting, (11) tourism, (12) automechanic technology, (13) hotel management, (14) community health care, (15) promotion of health care for community elderly (16) international trade in Indo-China region, (17) logistic management and border trade, and (18) management of local development for sustainability.

There are currently 12 fields in the curriculums of PCVE and HPCVE: (1) six fields in PCVE level: automechanic technology, electric setting, accounting, business computer (web-page), computer technology, and metal; (2) six fields in HPCVE are the same as those of PCVE except metal is replaced by electronics.

In addition, in 2012, the number of short-terms courses in all community colleges was expanded from 189 courses to 331 courses. The courses include: (1) professional promotion group, such as agriculture profession (there are courses on farming, Hang rice production, raw rubber production, agricultural development following the philosophy of sufficiency economy, etc.), management profession such as tourism, profession related to arts and culture such as boat invention, method of making pendant lighting, etc. and (2) the development of quality of life group such as basic law, speaking technique, English for communication course, etc. The short-term courses have been provided for both individual and group training, especially the groups of people who want to develop their community.

The Number of Teachers/Instructors and Educational Personnel

The government personnel who works in the overall of ICC system consists of three categories: (1) ordinary civil servants who are under the Civil Servants Act B.E.2551 (2008), (2) government teachers and educational personnel who follow the Teacher and Educational Personnel ACT B.E.2547 (2004), and (3) government employees who are under the Regulation of Prime Minister on Government Employees B. E.2547 (2004). In 2002, there were 245 members of Community Colleges at both central and local levels, 49 civil servants in the ICCB, 478 teachers and educational personnel and employees in all 20 community colleges, and 1,486 specials teachers from local areas.

The central level comprised of 19 members: (1) the Chairman, (2) four ex officio members, i.e., Secretary-General of OHEC, Director of Budget Bureau, Director-General of Local Administrative Department, and Director of ICCB;

(3) three representatives of private organizations; (4) one representative of Chairman of Community Colleges; (5) one representative of Director of Community Colleges; (6) two representatives of regular teachers, and seven experts on community and various professions.

At the local level, there were 11 members: (1) four representatives of community organization locating in each Community College local administrative organization, higher education institute, and Community College alumni; (2) seven experts with three of them came from private organizations.

The ICCB is comprised of 33 civil servants and 16 government employees, while all Community Colleges have 255 government teachers and 223 government employees. The civil servants and teachers have completed at least Master degree, while government employees completed Bachelor degree. The special teachers teaching in each community college are experts and experienced on the field of courses provided and were selected by each community college. Some of them usually work at public or private organization or educational institute, but some are local wisdoms.

As of 2015, there are 21 members of the Community College Council at the central level and about 15 members at the local level. The total number is 306. The ICCB has 55 regular personnel and include 37 civil servants and 18 government employees, while all CCS have 266 government teachers and 262 government employees. The total number is 583. In addition, there are 1,136 special teachers.

The Number of Students

From the beginning of community colleges establishment, the target groups of community colleges have been the population in working age (Nin-aged Group) and the people who lack the opportunities to access education. The two groups are: (1) high school graduates or relevant to high school graduates who are unable to study in university because it is far from their home, but still want to further their study even in lower than degree level (2) take the training course of community college to develop their knowledge and occupation.

The current community college statistics show the numbers of students as follows: The 2-year associated degree curriculum. Between 2003 and 2014, the total number of students who study in this curriculum is 69,906. Between 2004 and 2013, 40,764 students had completed the program. The number of students who are studying at present is 13,252. More than 80% of the students are employed and living in their community. Approximately 29.82% of students are officials or public personnel who are working as government service, 22.16% are workers, and 18.04% are employees in a company or private business. All of them are at age between 20 and 61 years old and the average age is 28 years old. The Report on Educational Management Statistics of Community Colleges and Research Study on the Dropped-Out Causes of Associate-Degree Students in Community Colleges between the Academic Year 2002 and 2015 shows that 4,159 out of 7,004 were graduated in 2010 thus the graduation rate is 59.4%; 4,681 out of 7,990 in 2011 (58.6%); 3,792

out of 6,900 in 2012 (55%); 4,040 out of 7,476 in 2013 (54%); and 3,892 out of 7,415 in 2014 (52.5%). While approximately 40–46% of all were dropped-out students, the other lefts were simply unable to pass the exams. The findings of the study also revealed that 77.67% of dropped-out students did not inform the community college before being absent, 12.38% did not pay tuition fee, 4.37% directly informed community college to resign, and 5.58% were others. The survey results from 20 community colleges found that the three main reasons for dropping out were the economic, personal, and family problems. Most of students were married and working during studying, so they must be responsible for their family, they could not afford tuition fee, and they could not manage their time appropriately. The results from student survey showed that 26.76% of students could not manage their time to attend classes, 22.48% of them thought that class time was not suitable for their work, 11.13% of them felt that they didn't have time for their family, and 16.28% were other reasons (Institute of Community College 2016).

The short-term curriculum is interesting. Between 2002 and 2014, the total number of students who studied this curriculum was 269,182. The average number of students who come to take this course each year is around 22,000.

Internal and External Evaluation of Community College

According to Section 47, 48, and 49 of the 1999 National Education Act, Thailand set up a system of educational quality assurance to ensure improvement of educational quality and standards at all levels. Every school and educational institution must prepare both internal and external quality assessment. Internal quality assurance (IQA) is the quality assurance system done in each institution itself, while external quality assurance (EQA) is the responsibility of the Office of National Education Standards and Quality Assurance (ONESQA)), a public organization established in 2000 following this Act (National Education Act B.E.2542 2004).

Internal quality assurance (IQA) is regarded as a part of educational administration which must be a continuous process. The Office of Higher Education Commission (OHEC) is responsible for establishing the IQA systems. The Higher educational institutions do self-assessment following the IQA system and other regulations and make annual reports to be submitted to the relevant organizations and available to the public to improve the educational quality and standards and provide the basis for the EQA (Office for National Education Standards and Quality Assessment 2016).

ONESQA is responsible for designing a quality assurance (QA) framework which incorporates both external QA for public accountability and internal QA for continuing improvement by using a set of comprehensive standards and key performance indicators (KPI) covering from educational institution inputs to student outcomes. More importantly, its duties are also to develop criteria and methods of external evaluation, and evaluate schools and educational institutions at all levels throughout the country once in every 5 year (Office for National Education Standards and Quality Assessment 2017).

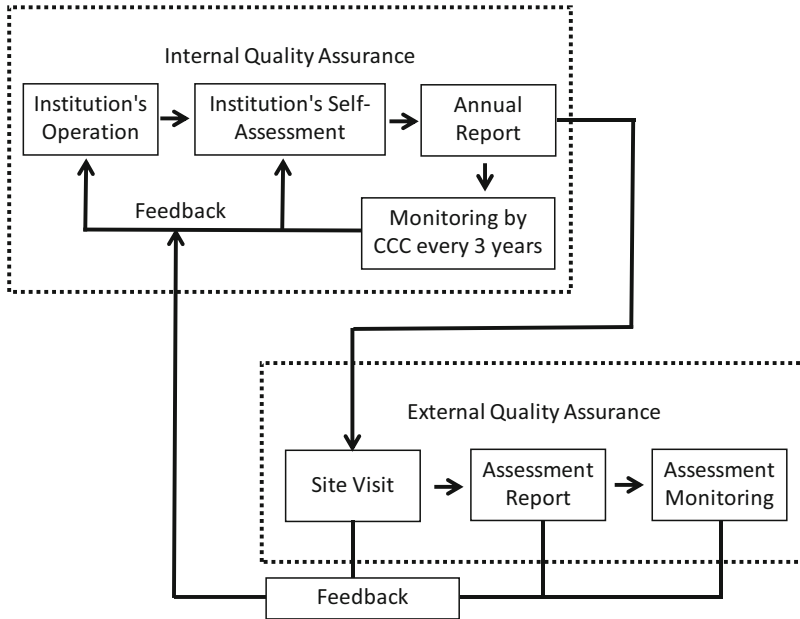


Fig. 2 Relationship between the internal quality assurance (IQA) and external quality assurance (EQA)

Since the establishment of ONESQA, all schools and educational institutions have been evaluated for three rounds. The first round operated between 2001 and 2005, the second round was carried out between 2006 and 2010, and the third one was done between 2011 and 2015. As for the 20 Community Colleges, some of them had been evaluated in each of the three rounds, while others were evaluated in one or two rounds based on the period of the establishment. Today, all Community Colleges need to prepare themselves for both internal and external evaluation following the internal quality assurance (IQA) and external quality assurance (EQA) framework set by the ONESQA (Office for National Education Standards and Quality Assessment 2016).

The IQA system is one part of the education administrative process and monitor the inputs, processes, and outputs/outcomes of the system while the EQA focuses on outputs/outcomes. The process of the EQA consists of forming a team of assessors; collecting assessment data, steps of assessment, and assessing external assessors' operations; and monitoring educational institutions' quality improvement. The two systems must relate to each other. The relationship between them is shown in Fig. 2.

As shown in Fig. 2, after each Community College completes the IQA process, they must prepare an annual IQA report which shows the results of the IQA. The report shall be presented to the Community College Council and relevant organizations as well as to the public and be monitored by them all. This report shall connect the ONESQA's EQA. Consequently, each Community College needs to make the

comprehensive self-assessment report that truly reflect its educational quality in every aspect (Office of the Higher Education Commission 2014).

The Community College is one of the four groups of Higher Education Institutions' category: Under the Second-Year Long-Range Plan for Higher Education (2008–2022). The Institution of Community College receives the Manuals of IQA from OHEC and the Manuals of EQA from ONESQA which are then sent to all 20 Community Colleges.

Internal Quality Assurance (IQA)

Each Community college needs to study the IQA manual and establish an IQA committee. The committee as assessors follows a framework for IQA with 9 aspects of quality components and 23 indicators as follows:

1. Philosophy, Mission, Objectives, and Action Plan (one indicator: Plan Process)
2. Produce Graduate (eight indicators)
3. The Activities for Developing Students (two indicators)
4. Research (three indicators)
5. Academic Services to society (two indicators)
6. Preserve Art and Culture (one indicator)
7. Administration and Management (four indicators)
8. Finances and Budgeting (one indicator)
9. Quality Assurance System and Mechanism (one indicator)

Each indicator needs to coincide with the standards and documents namely, the 1999 National Education Act of Office of the Education Council (OEC), the Second 15-Year Long-Range Plan for Higher Education (2008–2022), the National Education Standards of 2004 of OEC, the Higher Education Standards of 2006 of OHEC, the Higher Education Institutes Standards of 2008 of OHEC, Thai Qualification Framework for Higher Education of 2009 (TQF) of the OHEC, Ministerial Regulations regarding the Systems, Criteria and Procedures for Education Quality Assurance of 2010, MOE, Practical Guidelines for the Thai Qualification Framework for Higher Education of 2009, OHEC, Standard Criteria for Higher Education Curriculum of 2005 of OHEC, and Standards and Indicators for the 3rd External Assessment in Higher Education of 2010, ONESQA (Office of the Higher Education Commission 2016).

The committee uses each aspect that has indicator and criteria for assessment and score for judgment with the meaning of scores according to internal assessment as:

- 0.0–1.50 The Performance Urgently Needs Improvement
- 1.51–2.50 The Performance Needs Improve
- 2.51–3.50 The Performance is Fairly Efficient
- 3.51–4.50 The Performance is Good
- 4.51–5.00 The Performance is Very Good (Excellent) (Thaima 2012)

The report of the IQA results of the Community College in the 3rd round showed that the performances of most of the Community Colleges in component 1 to component 6 and 9 are Good, while those in component 7–8 are Fairly Efficient. So, the total IQA of the Community College shows a good performance. The reports also show the strong and weak points of their performances and gave some suggestions in each component of each Community College as the following examples. *Strong Point:* All people concerned in each Community College such as the CCC members, administrator, teachers, and educational personnel participate in making the Community College Strategy Plan. *Weak Point:* Some parts of the Annual Action Plan are not in line with the standards of IQA manual. *Suggestion:* There should be a mechanism for promoting the exchange of activities experience among students of other Community College in the same province.

External Quality Assurance (EQA)

Since its inception in 2000, ONESQA has undergone three rounds of quality assessment at the national level. Each round focused on different educational problems and possessed different characteristics. Throughout the decade, the changing policies and rationale of ONESQA are reflected through its changing quality indicators. The first round of assessment included 8 quality standards and 28 quality indicators. The unit of analysis was the institution itself. The second round of assessment included 7 standards and 48 quality indicators. The third round of assessment reduced to six standards. These standards are: (1) Quality Graduates; (2) Research and Innovation; (3) Academic Services; (4) Cultural Preservation; (5) Institutional Management; and (6) Internal Quality Assessment (IQA) (Sattayawaksakul et al. 2013).

In the 3rd Round assessment of the Community college, there are 16 indicators classified by multiple groups: Basic indicators with 12 indicators: (1) The graduates and trainee had better quality of lives; (2) The graduates and trainee made good things for the benefit of their local community; (3) After graduation, the graduates and trainee still live in their community; (4) Research and innovative works presented to the experts in their community; (5) Performances of teachers; (6) Results of using knowledge and experiences in strengthening their community; (7) Promoting and supporting students, trainee of educational personnel in Community College to have good lifestyle and behavior; (8) Results of CCC's role and performance; (9) Results of Academic Council's role and performance; (10) Leadership of Community College administrator; (11) Development of regular teachers and special instructors; (12) Accreditation of IQA result by ICC; (13) Administration resulted in building identity; (14) Results of the graduates and trainee's development following the identity; (15) Results of development following focus and prominent points that reflected the Community College identity; (16) Results of directions, prevention, and solving several dimensions of problems in relation to social responsibility.

The results of the Community College EQA found that the performances of indicator 1,2,7,9,10,11,14,15,16 were good; indicator 3,4,8 and indicator 6,12,13

were fairly efficient; and indicator 5 urgently needs improvement. So, the total IQA of the CCs show good performance (Nakornthap 2016). *Strong Point:* After graduation and training, graduates and trainee still live and work in their local community and are able to use their knowledge and experiences gained from the Community College for the benefit of their community. *Weak Point:* The shortage of teachers, special instructors and local wisdom needs improvement. *Suggestion:* The Community College needs to find more teachers and experts covering all curriculum.

The Rise of a New Community College in the Capital of Thailand

In Thailand, there are several Government agencies overseeing schools, universities, and other educational institutes throughout the country. Most of them are under the supervision of the Ministry of Education, while municipal schools belong to each local administration organization under the Ministry of Interior. Additional agencies, such as the Ministry of Tourism and Sports, the Ministry of Culture, the Ministry of Social Development and Human Security, Border Patrol Police Bureau, and Bangkok Metropolitan Administration (BMA) (Office of the Education Council 2008), also oversee some primary and secondary schools or occupational colleges. With so many agencies overseeing several educational institutions in the country, each agency has created its own vision and mission as well as policies and strategies to develop education. That made sometimes inconsistency between their mission as well as their policies that cause confusion among the stakeholders.

Like the capital of other countries, Bangkok has some problems related to the population density. Most of the population has come from the rural regions of different provinces in order to find jobs to earn more money and to live in the urban areas. Even though there are several schools, universities, and educational institutes around Bangkok, some parents cannot afford to support their children to have more knowledge and skills for finding jobs moreover further study at university.

In the past, BMA has had 10 Vocational Training Schools (VTS) that was overseen for years by one of the Community Development Bureau (CDB) departments. The VTS offered both short-term training courses and vocational courses that students who completed could receive a Professional Certificate of Vocational Education (PCVE). In order to provide opportunities to students who complete this vocational education to further their study to receive an associated-degree level, the BMA proposed a plan to establish a Community College in Bangkok (Bangkok Community College Office 2005). This plan was submitted to the Ministry of Education (MOE) and on June 6, 2003, the Ministry announced the establishment of Urban Community College Bangkok (UCCB). The UCCB used the Vocational Training School at Din Daeng 1 as the office and other 9 VTS as educational management units. At first, the UCCB was managed by using the same procedure as Community Colleges under the OHEC. The CDB selected members of UCCB Council to supervise the UCCB and the Council selected the director of UCCB Office. The UCCB is an educational institution under the

supervision of the BMA, not the OHEC of MOE like other Community Colleges because its budget was allocated by that of the BMA. BMA empowers the UCCB to manage itself. However, the Bureau of Community College Administration of the OHEC has assisted the UCCB in terms of academic affair.

The Urban Community College Bangkok (UCCB) is the first Community College in the capital of Thailand. It was established in accord with the stipulation of the National Education Act B.E.2542 (1999 A.D.), which states that local administration organization shall be able to manage and provide vocational education and lower than degree education level. The UCCB aims to promote lifelong learning of the people living in Bangkok by providing their further study in Associated Degree Program as well as short-term training courses in accordance with the economic and social needs of urban community in Bangkok.

During 2003–2010, the UCCB had three types of curriculums: (1) two-year associate degree curriculums such as development of early childhood education, electricity, business computer, and community development; (2) PCVE courses such as automechanic services; and (3) short-term curriculums with around 20 courses such as basic of automechanic services; electronic repairing; computer repairing; using of picture program; women clothes; readymade clothes with modern style; Thai food and dessert; snack making; bread making; Thai massage (body); Thai massage (foot); and Thai Spa.

The courses opened to the people at different ages, including both teenagers and those of working age. Most students took short-term curriculums, while few students took other two curriculums. For example, in the year 2003, there were 5,900 short-term course graduates, no graduates from others; in 2004, there were 16,536 short-term course graduates, 18 PCVE graduates, and 317 associate-degree graduates.

From the year 2010–2013, UCCB slowed down operation because the BMA considered to move the UCCB to be a faculty of its new university. According to the Bangkok Metropolitan Administration Act B.E.2553 (2010 A.D.), in 2011, the BMA established the first University formally named by His Majesty King Bhumibhol Adulyadej as “Navamindrathiraj University.” The meaning of “Navamindrathiraj” is the ninth monarch. It is a juristic University, located in Dusit District, Bangkok, and under the supervision of BMA. Navamindrathiraj University comprises four faculties: (1) Vajiraphayabal Medical Faculty and (2) Kua-karun Nursing Faculty, focusing on needy programs which meet the needs of Bangkokians. (3) City Development College, and (4) Urban Community College Bangkok. As for the CDB, it was renamed as Society Development Bureau responsible for vocational schools as before (Bangkok Post 2016).

The target of the new UCCB is students who completed their study from nonformal education system (known as Kor Sor Nor in short Thai Language). Most of them work while studying. And the new UCCB started to intake students from 2014 to the present times. There were two curriculums: (1) Associate degree program with three fields: (1) Early Childhood Development, (2) Rail Technology, and (3) High-Rise Building Management. Students take 1-year course work and apprentice one and a half year. There are nine regular teachers and some special instructors from many universities. The first field started from 2014 and completed

2016 with 90 graduates and most of them work at child development centers. The other two fields started from 2017, not yet complete at this time; (2) Short-term courses comprising seven courses, but being able to open three courses in 2014 and four courses in 2015 and 2016. The four courses are: English language for occupation (completed 227 students), Burmese language for occupation, high-rise building management, and housing estate management. These three fields have about 18–20 graduates in each term and already completed 2–3 terms ((Urban Community College Bangkok 2014). The UCCB also open E-learning courses with 12 courses and free tuition for both Thai and international students from inside and outside the country. It has opened an additional 12 short-term courses of E-learning since June 1, 2014. In 2014, there were 318 students and 13 graduates (Urban Community College Bangkok 2014). In 2015, there were 1743 students and 152 graduates (Urban Community College Bangkok 2015).

The principle of UCCB is to create educational opportunities for developing the occupations of the urban Community. Other intentions are as follows:

Philosophy: “Lifelong Learning source by the community and for the community.”

Resolution: “Focusing on building knowledge for developing and sustainably sustaining the urban community.”

Vision: “A Faculty with prominent and modern occupations of the city.”

Mission: (1) Provide higher education level both academic and occupational programs as well as training courses with the needs of community; (2) Open opportunity to community for participation in management; (3) Preserve arts and culture at the potential of and urban university; (4) Support, conserve, and develop arts and culture, wisdom, natural resources, and environment of local community; (5) Create collaborative network with both public and private industries; (6) Establish the curriculums to develop professional skills in order to raise the occupational standards for integration of the ASEAN community.

Goal: The UCCB shall be a hub of learning, cultivate students to be educated, have professional skills and public mind as well as conserve Thainess.

Identity: Having public mind

Uniqueness: Community for developing urban community

The structure of the Urban Community College Bangkok is composed of the UCCB board, the director, and deputy director, and it is divided into four Offices: Office of the college, Division of research and academic services, Division of students’ activities, and Division of academic. Because the UCCB is equivalent to a faculty of Navamindradhiraj University, it is under the supervision of the rector, university council, and academic council as shown in Fig. 3 (Urban Community College Bangkok 2016).

According to Dr. Pittaya Chinajitphan, director of UCCB, the UCCB Council is preparing to change the mission again by opening a 4-year bachelor degree curriculum in order to meet the needs of the students who want to raise their education level. “The meeting of the UCCB Council will be organized at the end of January 2017 to consider the bachelor degree program. I think this will make the difference

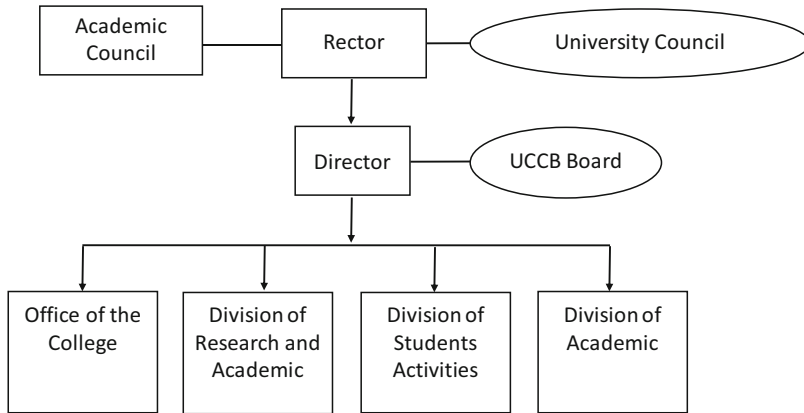


Fig. 3 The structure of urban community college Bangkok

between the UCCB and the CCs under the OHEC. And the programs will meet the needs of the local industries as well as those of students, especially high rise building management program and Rail technology program. These programs are taught only in the UCCB. And we are working collaborator with the industries and state enterprises concerned. For example, Bangkok Mass Transit System Public Company (BTS), Mass Rapid Transit (MRT), State Railway of Thailand” (Chinajitphan 2017).

Conclusion

The evolution process of Community Colleges in Thailand has had different levels of success. There was the initial attempt in the late 1970s and then the redevelopment of the institutions in the late 1990s. In both eras, the Community College was a response to the social and political changing context of the country. There are concrete examples of teaching and learning practices together with the widened purpose of responding to positive results of external evaluation, and all the graduates live and work within their community by making the fullest possible use of their knowledge and experiences gained from Community Colleges (Punthumasen and Maki 2009). In this respect, the Community Colleges in Thailand have successfully and continuously been providing the higher learning opportunity to local people.

Promulgation of the Institute of Community College Act (ICCA) B.E.2558 (A.D.2015) shows how the decentralization of higher education has occurred in accordance with the NEA 1999. At the dawn of this act, the Institute of Community College is more independent than in the past in terms of budget management. The Community Colleges under the supervision of OHEC, Ministry of Education, are successful in terms of organizing associate degree program following the intention, and the philosophy of Community College and the curriculums could meet the needs

of local people. Since then, the development of Community Colleges in Thailand has been continuous and extensively seeking how to synchronize curriculum with the local people's learning needs. However, the number of Community Colleges has not yet spread to more provinces and there are no new established higher education institutions. In addition, we could not say that the newly established Urban Community College Bangkok has obviously succeeded in its goals due to the instability of its administrative line between Bangkok Metropolitan Administration, Ministry of Education, and Navamindradhiraj University caused by recent political changes. Moreover, it appeared that there have has not been many students studying, but small number of graduates of both associate degree program and short-term courses and also those who completed e-learning program. Most importantly, the UCCB needs to expand from associate degree level to bachelor degree level in the near future to respond the needs of urban people. However, the UCCB has been trying to meet the needs of the local community by opening different courses which responded the demand of Bangkok enterprises.

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Feasibility and Challenges on a National Qualifications Framework and Permeability in Education and Training System in Japan

26

Keiichi Yoshimoto

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Abstract

A National Qualifications framework (NQF) is an important policy tool needed to achieve higher levels of transparency and permeability between academic and vocational pillars in education and training system. The NQF helps to guarantee the quality of education and training programs based on learning outcomes approaches. In this chapter, the feasibility and challenges of a NQF in Japan is explored based on the comparisons of NQF development in Anglophone countries as early starters of domestic interests, in second generation of Continental European countries that required international currency with European Qualifications Framework (EQF), and in East Asian countries with culturally unique traditions. The following elements related to NQF are considered: the societal contexts, the policy development, and the future challenges. The level descriptors have become more common in many NQFs as influenced by EQF approaches, covering both vocational and academic tracks vertically and horizontally. Thus, the NQF approach may have a powerful influence toward a globalization of education and training. It is questioned what are the current challenges and how countries are reforming the education and training system. In Japan, at the initial education phase, there are diversified qualifications and sectors in tertiary education system. As like the other East Asian countries, under the “academic credentialism,” education programs tend to be more diversified and hierarchically recognized, rather than transparent with certain standardization. At the further training phase, labor policies have been stimulating a shift from firm-specific certifications to those more standardized by industries. The further challenge is how to tune such the occupational certifications toward education and training programs by the field of industries and by the field of education.

Keywords

Qualifications framework · Descriptors · Competencies · Learning outcomes · Academic credentialism

Issues on a National Qualifications Framework in Japan

Historical Outlines of Establishing Tertiary VET and NQF Worldwide

Since WWII, there has been an expansion of university education in many developed countries due to massification and universalization. At the same time, in the 1960s and 1970s, new institutional sectors have focused on vocational education and training (hereafter referred to as VET) at the tertiary education level. In a parallel way to community colleges in the United States and other global counterparts, three

tertiary education sectors in Japan, known as Junior Colleges, Colleges of Technology, and Professional Training Colleges have expanded not only by taking on the technical functional needs, but also as serving as the receptacle of mass demands toward tertiary education. “Academic credentialism” and educational inflation in Japan and in neighboring East Asian countries (Dore 1976) have made these sectors compete with each other for higher achieving students and to develop their programs to become more diversified. While institutional scholastic levels become more visible, educational contents and learning outcomes became more invisible. At the same time, Japanese membership-based labor market began to place less attention to professional competency linked with specialized training in respective sectors.

During 1990s, the expanded and diversified education system in the world faced the challenge of the management of youngsters’ learning pathways and the transition from initial education to working life. At the same time, the economy and labor market, although different in each country, were affected by the so-called paradigm shifts, like Fordism and Neo- or post- Fordism, or from bureaucratic to flexible and so on (Brown and Lauder 1991).

In the twenty-first century, OECD (2000) conducted a thematic review of approaches to integrate academic and vocational learning within a national qualifications framework (hereafter referred to as NQF), which later became a focus in international development of educational policy (OECD 2004, 2007; ILO 2007). In related to this agenda, learning outcomes approaches developed by the quality assurance agenda supplemented the development of taxonomy and descriptors for NQFs. Particularly, following the introduction of the European Qualifications Framework (hereafter to as EQF), the NQF linked with learning outcomes approaches became a worldwide approach for education policies. According to UIL, ETF, and CEDEFOP (2015), more than 150 countries have developed or started working on a NQF by the end of 2014, which represents three-fourths of all the 193 member countries of the United Nations. The NQF system has rapidly spread across the world, partly for ensuring and improving quality assurance of qualifications in each sector, and partly for promoting mutual permeability of qualifications and learning pathways among sectors.

In Japan, three sectors of Junior Colleges, Colleges of Technology, and Professional Training Colleges cover the same level of education, at short cycle tertiary education as found in ISCED level 5 (ISCED 2011). These sectors include some education training fields that require national license remigration, like nursing. Upward reforms result in some overlap between these institutions and in some competition between them to supply plural levels of programs (Yoshimoto 2014a). In order to endorse program quality, clear definitions of program level are needed. Similarly, there is a need for working people who get upskilling for working requirements or reskilling for a renewed work career, to have a well-recognized further education and training program. A NQF meets various educational and societal needs, as the revised recommendation of UNESCO (2015) suggests, if it is developed with sound purposes and enough dialog of wide ranges of stakeholders (Raffe 2013).

This chapter elucidates both the history of the introduction and the basic characteristics of NQF and its relationships toward the empowerment of tertiary vocational education and training in multiple countries. The chapter also considers comparative global findings to examine the feasibility and challenges of developing a NQF in Japan. The following research questions are asked: (1) Why and how have the NQF systems spread around the world in the twenty-first century so rapidly? In what aspects can East Asian countries learn from these trends? (2) How are NQF systems in leading countries encouraging to develop permeable learning and career pathways and parity of esteem between academic and vocational sectors? In East Asia, how can we encourage recurrent learners by reforming education and training system? (3) How are approaches toward a NQF in Japan be relevant to Japanese society from now and into the future?

Common Futures and Varieties of Qualifications and a National Qualifications Framework

The System of Qualifications and the NQF

What is a NQF? A NQF is recognized as a means to classify and serves as a tool to develop qualifications according to a set of standards for each learning level to be achieved (OECD 2007). A NQF system demonstrates the current requirements that the quality of qualifications should be guaranteed and represented by the outcome. The NQF ensures that the quality of qualifications includes the following: planning and control levels, comprehensive frameworks, and limited frameworks geared to certain sectors, such as national qualifications, legislation, and consensus of social partners. Qualification systems are geared to subsystems of higher education, VET, and school education. The OECD (2007) states that all NQFs should articulate domestically and internationally the quality of and access to qualification systems, the link between a learning form and a qualifications system, and a basis for raising awareness of qualification systems in the labor market and society.

Qualifications as the Hot Arena

Questions regarding qualifications are at the heart of current hot arena of education and training system to bridge education and work. As a definition, a qualification is used as a collective term that targets the access, link, and awareness in the labor market, all of which guarantees the quality of the qualification. It conventionally means a package of standards or credits to determine the value of official certification in the form of a certificate (ILO 2007). Then, who defines qualifications? Public authorities and providers may define them, but also currently the involvements of stakeholders and social partners are highly recommended. ISCED 5 and 6 of the education and training system are a major arena for competition and convergence.

On the one hand, there exists vocational drifts of traditional higher education sectors, and on the other hand, academic drifts of advanced vocational education and training sector or short cycle nonuniversity sector (Dunkel and Mouillour 2013).

As additional remarks on qualification, there still exist internationally different streams of understanding on the term “qualification.” While a plural form of qualifications is used in Anglo-Saxon countries, in Germany a singular form of qualification is used. This difference can be said to result from different perspectives, i.e., one expresses the totality of competent individuals who are associated with each qualification and the other focuses on the partial nature for accumulation of qualifications in a program or career. So, the smallest unit of a qualification is a credit given at any institution. It is interrelated two extreme views on the continuum of qualifications, and in this chapter, the plural form is adopted due to the general usage in English literature for the convenience. Thus, the current qualification systems contain a variety of “qualifications,” such as module programs as the partial qualification, certificates, diplomas, and degree programs as traditionally established, and licenses and certifications for demonstration of competency for specific tasks. Serban (2012) points out that the concept of qualifications today are recognized as shifting from the qualifications that are directly connected with education and training programs as prerequisites onto the next stage of education or work, toward the qualifications that can be stated together with career background and social experiences in one’s resume and that serve as the certificates that guarantee appropriate qualities for the movement in the labor market.

Developments of NQF in the First Generation

What was the process of development for the NQF? The first generation of development of the NQF occurred in Anglo-Saxon countries. Allais et al. (2009) analyzed five case studies of the first generation, in England, Scotland, New Zealand, Australia, and South Africa.

Scottish Approaches from Qualifications Toward Permeability

Scotland launched the Scottish Credit and Qualifications Framework (hereafter referred to as SCQF) in 1980s (Raffe 2014; Allais et al. 2009). It covers three pillars of academic higher education qualifications, Scottish Vocational Qualifications, and SQA’s school certifications, with 12 levels from fundamental in schooling toward top of PhD driven mainly by the progress of recurrent learning thanks to the VET program at Further Education Colleges, the SCQF was developed as a tool for transparency and permeability to extend that progress to higher education schemes, such as the Higher National Diploma and Higher National Certificate located at level 6 and level 7 of the SCQF.

These qualifications had been in advance developed for bridging the academic and vocational sectors. Already in 1997, Further Education Colleges in Scotland had

more than 0.3 million of part time students, 70,000 students taking higher education programs and half of the graduates with diplomas and certificates went on to study for the first degree (Yoshimoto 2003). SCQF was formalized in 2001 and started to support these movements through clearly set so-called kilt-style NQF mapping by using existing qualifications. The SCQF was developed through close stakeholder dialogue by both sectors of university and nonuniversity education sectors. The SCQF is regarded as functioning effectively as a means for the construction of transparency and permeability; the articulation from the HE sector to the VET sector and vice versa (the so-called reverse articulation). Raffe (2013) considers the SCQF of Scotland as an academic certification framework based on a system of credit compatibility and transfer developed by reorganizing existing education and training program run by different sectors. Accordingly, he categorizes the SCQF as a good practice of “communication framework.”

Australian QF from Competencies and Outcomes for Responses to Globalization

The other influential model of the first generation is Australian Qualifications Framework (hereafter referred to as AQF) with ten levels. It is one of the oldest NQFs and its development began in 1972 under the government initiatives for industry and trade in order to secure and standardize skill levels of immigrants. The AQF started to function fully as an official framework in 1995. The framework was developed over time aiming to standardize different certifications provided by VET, by obtaining nationwide consensus regarding the qualifications with descriptors and linked with clusters of training packages (Doolette 2014). During 1980s, both the university education sector and the VET sector, which have different systems of quality assurance, joined to create the groundwork for the AQF, and accordingly, the details of AQF were developed with the involvement of all the stakeholders in the labor market, education, government, and regions.

In 2011, the new version of AQF took a more scientific approach on the levels of qualifications as competency-based trainings. The AQF today is highly valued for the reliability of the academic degrees and qualifications it provides and for the system itself, especially for the Industry Skills Councils (hereafter referred to as ISC, and superseded by Skills Service Organizations after the 2014 reform). The training packages of ISC provide competencies as symbols of the good maintenance of the framework managed at the level of each professional vocational field with the affiliation of educational circles and industry, being one of the most comprehensive and organized academic degree and certifications.

The first generation of NQF shows two poles when comparing Anglo-Saxon countries with clear mapping approaches of existing diverse qualifications to the Australian AQF approaches for creating reliable qualifications by setting maps of competencies.

Ireland's Approach with Relevance to the Contexts of the Japanese Academic Credentialism

Among Anglo-Saxon first generations, Ireland seems to have more similar contexts for the Asian perspective of the societies of “academic credentialism” where the initial VET did not develop much due to the high reliability of academic degrees. In contrast, there were a wide variety of certifications in the field of the Further VET, comprising a complicated overall situation, which may be called a jungle of qualifications. The National Framework for Qualifications of Ireland was introduced in 2003 in order to change such conditions of the two types of VET, initial and further (Quality and Qualifications Ireland 2017).

Unlike Scotland or Australia that developed systems that juxtaposed the qualifications frameworks of a different subsystem, Ireland adopted an integrated system that dealt with qualifications and the suppliers of education and training separately, while featuring the integrated description of the holistic framework of qualifications. This system is a case in which qualifications were organized and visualized under the categories of whole qualifications (major awards) and specific and partial qualifications (minor awards), while the higher education circle and the VET sector provided and promoted the higher education programs, as classified as “reform framework” by Raffe (2013).

Commonalities of the First Anglo-Saxon Generation for Empowering Vocational Qualifications

In Anglo-Saxon countries in the Commonwealth, such as those mentioned above, the NQFs of the first generation were introduced by the first half of 2000s and responded to each particular domestic context of each country. Qualifications were also developed against a common backdrop that the existing education programs had weak connections with vocations and that vocational education needs parity of esteem and more practically supports learners to get relevant access also with academic sectors. Also, there was only weak public intervention for the standardization of those programs. Both the cases of Scotland and Australia are representatives of such pattern. In the case of Scotland, the qualifications at the school sector, the VET sector, and the university sector are expressed comprehensively within the framework of the SCQF in order to enhance the social recognition of higher education programs provided by further education colleges for recurrent learning, and also promote transfer admissions toward universities.

The Original Roots or References for NQF in Continental Europe

The establishment of NQF in Anglo-Saxon countries to import the accurate quality assurance models for vocational education influenced other countries in the

European continent. Vocational education is better developed through the cooperation between relevant stakeholders, such as educational institutions, employers, trade unions, and professional organizations, as shown with the influence of the government in both the French school-based vocational education and the German apprenticeship-based training.

In Germany, standard occupational profiles of more occupations and subsequently the contents and outcomes-to-be are well defined as the standard of vocational education and training. *Nomenclature des niveaux de formation* in France was established in 1967, which evaluates academic education and vocational education with a single framework standard and is one of the earliest and basic models for the development of NQF. The system in France was mostly based on not only by the output, but also by input as the learning level and volume provided by the education sector (CEDEFOP 2015).

EQF and the Second Generation of Development Within Europe

European EQF as a Regional Reference Framework

The European EQF with eight levels and level descriptors was established resulting from the impact of the integration of EU to European countries. The main feature was a shift to the outcome-based approach based on descriptors in 2008. The establishment process of the EQF consisted mostly of two elements: one is the effort based on the Bologna Process which aimed for the standardization and visualization of university education programs based on learning outcomes in the university sector. The other was the effort based on the Copenhagen process that aimed for the visibility and permeability among different vocational educations and trainings in the nonuniversity sector. These two elements eventually led to the establishment of the EQF as the regional reference framework.

One important factor of the NQF is the level descriptors. The EQF, being a regional reference framework, consists of three dimensions of level descriptors, the dimensions of knowledge, skills, and competence. For example, Level 6 of the EQF is regarded as equivalent to the level of Bachelor's degree in higher education and focuses on "the critical understanding of reasons and principles" in the dimension of knowledge and the "Ability to deal with unpredicted issues" in the dimension of competency. In the EU, there is a need for the development of NQFs to express the learning outcomes of the education and training system and programs in all sectors in the country, by domestic descriptors that correspond to the descriptors of EQF. By developing such common and compatible language, the understanding with just one language would become possible in the education and other sectors, and in a variety of industries, of any country in the region.

Even in the case of the first generation, such as SCQF, the redefinition and adjustments were requested from input-based (volume of education) to the outcome-oriented (learning outcomes) for the compatibility with the EQF newly introduced. However, the adjustments have of course progressed more or less naturally.

In the Commonwealth Anglo-Saxon countries, the NQF was developed domestically and independently from the situation and there were no standard requirements. Thus, many discoveries of the first generation led the descriptors of EQF, so that the Anglo-Saxon preceding countries need minor tuning even newly required descriptors by EQF later.

Adjustments of German Corporative System Toward EQF

In the European continent countries, domestic adjustment toward international currency with EQF descriptors has been requested. This is to say, the process of redefining all domestic qualifications has been conditioned by the regional reference framework that has some compelling force in effect, such as the case of level 6 of the EQF in which the “knowledge of critical thinking” is predetermined as necessary (le Mouillour 2014).

The German qualifications framework, the *Der Deutsche Qualifikationsrahmen für Lebenslanges Lernen* (hereafter referred to as DQR), dimensions competencies and learning outcomes are expressed as a critical issue. To secure the compatibility with the EQF, the competency taxonomy in DQR was divided into two dimensions of “professional competence” and “personal competence.” The former corresponded to “knowledge” and “skills” in EQF and the latter to the “social competence” and “autonomy” that corresponds to “competence” in EQF. What is beautiful of the DQR descriptors is the equivalence concept between academic and vocational approaches. For examples, at the same level 6, where the *Meister* qualification as the vocational and the Bachelor’s degree as academic are located, the descriptor of the “knowledge” part is explained as following;

‘having the comprehensive and integrated knowledge of basic academic principles, being capable of applying what is taught in academic subjects into practice, and having the ability to critically understand the major theories and methods (thus far corresponds to Level 1: the level of Bachelor’s degree, in the European Framework for Higher Education),

OR having the comprehensive and integrated professional knowledge concerning contemporary technical advancement’,

and ‘having acquired the knowledge for the future development of academic subjects and disciplines,

OR having acquired the appropriate knowledge for communicating with other areas in the field of professional activities’ (capitals for ‘OR’ are by the author).

These OR’s show the consideration on the correspondence between academic knowledge and a vocational one. Same consideration of equivalence is shown in the skills and autonomy. Apart from that, in Germany, the three sectors related to education and training (higher education, VET, and school education) have not

reached an agreement, hence the introduction of DQR is progressing excluding typical school leaving qualification of Abitur at the time of the start of DQR.

Consideration on both of academic and vocational activities in the context of adjusting different leaning outcome models is an essential issue in the university sector on which the NQF does not focus. In Germany, the importance of the perspective of integrated curriculum design, with the right balance of academic profiles and vocational ones, is emphasized as in the case of the Tuning Project of EU (Gonzalez and Wagenaar 2008). The academic profiles tend to be regarded as more important in some other countries including the United Kingdom, a situation which has been regarded as subject to adjustment. The German approach of applying descriptors into its own context seems to be more relevant for East Asian countries, where work organizations emphasize more of corrective work compared with Anglo-Saxon tradition focusing individualism.

The Globalizing Trends Toward Asian Countries

East Asian Challenge to Outcomes Approaches

ETF (2013) shows that second generations for NQFs are widespread throughout Europe. In Asia, the NQF has also been increasing its popularity. First, NQF were found with the former Commonwealth countries such as Malaysia having initiated the trend in 2007 under the influence of the expansion of NQF in Europe. ASEAN countries also agreed to develop a regional framework in 2007 and designed the ASEAN Qualifications Reference Framework to stimulate international dialogue in South East Asian regions supported by Australian expertise (Bateman 2016). When changing the field of vision to East Asia, the university education as “academic credentials” is highly influential as a passport to society, and the university and other institutions are allocated into the steep hierarchical structure. Challenges to develop a NQF in this region are related with following major characteristics:

1. The low permeability of qualifications with regard to the use of them in other places for work, as a result of the development of diverse but small-scale and less visible Off-JTs and nonformal education and training, which in turn is a result of the heavy emphasis on continuous education and training provided popularity by workplace companies in the VET sector, since initial vocational trainings have not properly developed or been given appropriate social statuses because general school education is valued much highly in initial educational trainings.
2. There are little dialogues between the field of education and that of training, as the two are typically separated in the government administration structure of initial education and training.
3. The dialogues between the sector of initial VET and the sector of industry have also not been promoted sufficiently.

Korean National Competency Standards Toward Qualifications Framework

The case of Korea shows the clear challenges against such contexts with long-accumulated policy efforts for vocational qualifications. Academic credentialism is prevailing, equally or more severely than in Japan. Participation rates for tertiary education are one of the highest among advanced countries, particularly for new high school graduates. Initial VET at tertiary level has not been attractive, and instead, varieties of certificates and qualifications had been existing without enough transparency.

In 2002, the Ministry of Labor and the Human Resources Development Service of Korea launched a project to develop the National Competency Standards (hereafter referred as to NCS) in all major industrial and occupational fields. The purpose was to standardize and visualize more than 4,000 public certificates and qualifications, following competency defining approaches through the training packages in Australia (Lee 2016; WIP Japan 2013). These standards systematize vocational abilities, the knowledge, skills, and attitudes that are required for performing duties. This dimension of “attitude” may be the core of Asian work organization, as many Asian NQFs use it. After more than a decade, there are completed NCSs for 847 trades and by 2015 that rose to 887 trades. An agenda for the future is now considered to be the development of Korean Qualifications Framework, which integrates the NCS with the degree systems of higher education as well as the resolution of issues caused by the substantial discrepancies between different sectors.

What is to be learned in Japan, where the same kinds of approaches had been done during same periods is a collaboration among different governmental bodies from education and labor. In Korea, these fruits of NCSs were taken into learning module developments by Ministry of Education and Korean Research Institute of Vocational Education and Training. Then, all the sectors of polytechnics and VET were requested to use NCS for designing education programs and all public corporation for recruitment. In Japan, as described later in detail, visualizing vocation competency level was tried only by the labor end of the central government.

Transparency of VET and Professional Competency in Japan

Challenges on Education System from Sorting Devices Toward Lifelong Learning

Japan is now one of few developed countries that does not have a NQF. As Raffè et al. (1999) have pointed countries with a small population, like Scotland, can develop agreements between different stakeholders, and bigger countries, like England, Japan, and United States, may have larger sectors with serious tensions between and within the sectors, and need time to coordinate toward agreements (Raffè 2014).

Japan has a steep hierarchy among schools and institutions at both secondary and tertiary education. It is rather similar to other East Asian countries where institutions are tied to a pecking order under the social pressure of prevailing academic credentialism. Relatedly, there are unique aspects in Japan in the world of work, such as membership-based labor market. Under the academic credentialism and clear division between school-based initial education and firm-based further training show that initial qualifications arena may be more influenced by academic and general education sectors and continuing VET qualifications and vendor qualifications are to be less transparent. In light of such a situation, the policy issues on globalization and the promotion of lifelong learning are urging Japan to promote research on the NQF system (Yoshimoto 2014b). In the conventional relationships between education and work, which were formed after the war in the course of the development of Japanese-style management by separating school education from labor and training, VET programs in the school education sector to meet the needs of recurrent learning remained undeveloped. Encouraging recurrent learners has been the policy goals since 1970s, when lifelong learning was internationally promoted. A range of policy measures have been introduced from both sides of governments of education and labor since 1990s; such as special admission lots of “social active,” transfer arrangements from three tertiary sectors (junior college, college of technology, and professional training college) to 2nd or 3rd year grade in university, part-time learning scheme of extended study duration and special grants for recurrent learners from labor insurance, and so on.

Learning and career pathways have been more inflexible than policies expected. In OECD member countries, the actual situation of recurrent learning in higher education has been assessed under the statistical definition of learning by newly enrolled students of 25 years old or older. In Japan, the corresponding statistics of “socially active” students of recurrent learning is estimated. The percentage of “socially active” students in the nonuniversity sector is 16.6% compared with 39.8% of the corresponding figure of OECD member countries. Whereas that in the university sector is only 2.0% and it is quite behind from the corresponding figure of 21.1% in OECD (Goda 2014). The low policy interests in statistics for recurrent learning are partly because of hierarchical education system for screening and partly because of Japanese membership-based labor market. Then, now this labor market may be moving toward new paradigm, as next session discuss.

Japanese Membership-Based Labor Market in Transition

Graduates labor market in Japanese postwar periods considered the criterion of trainability by using educational credentials. Preparation by general education with a good reputation is enough and preferred for employment. Public and private intermediary links between institutions and employers. This is different from the external labor market model in accordance with the classic theory of human capital presumed and is the internal labor market model, in which firm specific competencies as well as social attitude for conformity are emphasized. The career ladder is

internally elaborated and appropriate movement becomes possible by job rotation and OJT. Koike (1997) and other Japanese researches point out that job rotation in the company is restricted to the business division and scope of job within a defined area, and so competency tends to be formed specifically by both the occupation and the firm.

Since 1990s, Japanese life-long employment practices have been reconstructed and the Japan Federation of Employers' Association (1995) has proposals for the restricted use of those expected long-term career with enough in-house training as those traditional graduates initial career. As symbolized by the three-tiered model, the traditional graduate white-collar employees with long-term career formation expected, should be regarded to be more limited, whereas the employee with the fixed term contract base by the professional expertise and the part-time casual employees are regarded to be more introduced. The actual employment structure has followed such directions of the said recommendation of change. Current Japanese policy trend takes notice of changes toward the high mobility and globalization of labor market and is responding to the expansion of the flexibility labor market model, which emphasizes the adjustment of labor supply and demand by such labor movement in the industrial sectors focusing attention on common capability in the industrial sector and such competency formation (Ministry of Health, Labour and Welfare 2014). However, these things are originally supposed to be promoted in close coordination with the policy of initial education and there are significant problems to be adjusted. In this way, amid global trend toward NQF development, the movement for reconstruction of national skill criterion and evaluation system is also emerging in Japan. Approaches by the Ministry of Health, Labor, and Welfare and those by the Cabinet Office are examined in this chapter.

Standardization Approaches for Vocational Competency Assessment

Since 1960, the policy concerning occupational skills development and evaluation by the Ministry of Health, Labor, and Welfare has promoted the trade skill test that centers on manufacturing and construction industries. The number of people with qualification of the trade skill test awarded in regarding 128 types of occupation exceeds one million. The skill levels are divided into four classes, the third class, second class, first class, and expert class. The test for the third class is for recognizing the entry-level competency, second class as fully fledged requiring two or more years of experiences, first class as professionals and supervisors requiring 7 years or more of experiences, and the expert class as top expert among first class holders. These levels of applicants are assessed by both the paper tests and practical skills examinations.

Determination of the vocational capability evaluation standard started in 2000s and is based on the above experience and accumulation. As a result of consultation and development among industry parties, vocational capability standard with four levels was developed by 275 occupations in 54 types of service industry sectors and nine type of clerical occupations across-industry. The website of Japan Vocational Ability Development Association has registrations of 6,500 and more of vocational

competency units and can be called Japanese version of “Training Package” (JAVADA 2016).

In Fiscal Year 2014, the introduction of the test system based on the said vocational capability evaluation standard system started an evaluation standard that presumes the level of trade skill test and internal logical consistency. However, in light of the meaning of this entry, while it assumes junior or senior high school graduates as standard completion level of school at the earlier time when system of trade skill test was established, in the cases of currently introduced it normally assumes graduates of junior colleges and professional training colleges according with the actual situation, and so empirical consistency is not ensured among fields (Yoshimoto 2016a, b). In 2010, the “Career grade system” was developed by the Cabinet Office and found that level and assessment as such actual condition is more difficult (Cabinet Office 2016). This system is promoted as “Practical vocational capability evaluation and recognition system in growing fields” by the Cabinet Office that makes appropriate adjustment as the government, not educational administration alone nor labor administration alone. As a result of examining the feasibility of many fields, the Cabinet Office finally limited this application to three fields of “long-term aged care professional,” “energy and environment manager” for energy saving and reduction of greenhouse gas and “the producer of sixtiary industrialization for food” turning agricultural, forestry, and fishery industries into value-added sextic industries continues the consideration. Here in this system, seven levels are preset from entry level of 1 as junior workers just after basic training in schooling, up to the top professional levels of 7. Core workers with fully fledged competency are to be classified into level 3 and workers with supervising competency into level 4 and higher.

These qualifications are gradually going into the implementation phase. In March 2017, the following numbers of applicants have been recognized in these three fields: 2,564 recognized for the “long-term aged care professional,” 213 for “energy and environment manager” and 1,693 for “sixtiary industrialization.” Some tertiary education institutions and senior high schools have started to develop education programs for preparation of the said applications. However, even as far as these three training fields go, actual applications to actual situation differ reasonably, field by field. For the long-term care field, it is assumed that the entry level is rather that for junior or senior high-school graduates or unskilled worker or applicant for work at first time in aged care field. It is currently organized as the observation of practical competencies by certified assessors. Another challenge is that this field is subject to the restriction in professional skill concerning care on the occasion of upgrading due to competition against nursing job, so that it is difficult to set the level 5 or higher. With respect to the “energy and environment management,” high engineering knowledge is required at the time of entry and even entry level 1 premises master’s degree or at least bachelor’s degree. Actually, some bachelor level of university programs had adopted the grade system. With respect to human resources for the sixtiary industrialization of food, wide varieties of experiences are needed for actual job load; i.e., basic skills in an agricultural field, the design and technical skills in food producing sector’s experiences, social network and others concerning trade and other tertiary industry are required although actually, elementary and entry level 1

are considered as part of agricultural high school as well as culinary arts of professional training colleges school of agricultural studies in the university.

It is an extremely serious obstacle to reach upward to even the entry level for youngsters. In that sense, a sense of unity is not recognized among levels in this career grade system and such visibility and permeability into other systems remain a problem.

Challenges for Recognition of Vocational Competencies and Appreciation of Schooling

Although both vocational capability evaluation standard by the Ministry of Health, Labor, and Welfare and the career grade system by the Cabinet Office deal with level explanation (level descriptors) of vocational capability, the visualization of professional competency level is not unified by mutual collaboration among ministries and there is a problem that different measure is set. There is an additional problem that the Japanese salary system has a tendency to be based on subsistence pay which follows in the wake of Japanese employment practices rather than based on occupational competency and such system puts an end to improvement of vocational capability.

A prominent example of this phenomenon is that of nurses that are qualified under the Ministry of Health, Labor, and Welfare. Currently, acquisition of a national license is a prior condition for nurses and various education institutions mingle to acquire the same level of qualification. Here the target of argument is the difference of competencies among graduates awarded national license of nurse from ISCED 5 of professional training colleges, ISCED 6 of universities, and ISCED 4 of advanced course of nursing high schools. Although there is a difference in learning time among courses of 2 years, 3 years and 4 years in terms of number of years after graduating from high school, national license that can be acquired is same. However, this difference in academic background gives rise to the difference in salary in worksite. This not only happened with nurses, but also in regards to national license fields of health and welfare. Difference in salary by criteria of duration of learning, experience, and age is based on the concept of subsistence pay. Academic background is evaluated and reflected in salary. Therefore, when system of vocational capability evaluation is to be spread widely, it is also necessary to change salary system based on Japanese employment convention from subsistence pay to pay for skill.

Learning from World Developments of NQFs and the Challenge in Japan

According to this examination, common characteristics and differences in NQFs are observed as follows. First, a NQF in every country sets multistep qualifications such as eight levels and offers explanations (using level descriptors) by multidimensional

competency that is expected to be acquired through learning or learning outcome. Although generally three dimensions of taxonomy of knowledge, skill, and competence such as EQF are used in many countries, especially in terms of learning outcome, the emphasis of “attitude” in Japan has the aspect that has a commonality at a fundamental level in Asian countries within a certain scope. This is thought to have relations with basic of labor and society in such country, which is common to “social competence” in “personal competence” in Germany.

Second, although NQF is in direction that each qualification and qualifications system in each sector is integrated into comprehensive framework as mapping, partial sectors cannot be included in some countries.

Third, a NQF is intensely interested in the handling of qualifications in VET sector and in that sense, education, and training programs concerning many types of industrial sectors and their qualifications and learning outcome descriptors are established and maintained in each field based on cooperation with a range of social partners such as in industrial world. In addition, although the first step of introduction is consistently clear policy decision-making with different governing bodies, the diversity leading to the said step is recognized in many countries.

Thus, NQF development approaches are more diversified and fragmented than standardised, but also policise are required to integrate them. Japanese approaches on standardisation of occupational competencies by labour policy side are still seperated from education policies by now. However, it may and should be regarded as an exploratory and partial NQF, as many approaches for NQF worldwide started partial and stepwise, like NCS approaches in Korea.

Fourth, NQF’s volume provision is based on standard learning time expected in each education and training program to acquire a qualification that has a difference in strong and weak within a considerable range. It is intended in recurrent learning for members of society, even in full set of education and training program, to develop and introduce the system to avoid redundant learning by certifying the learning outcome that has already been mastered including nonformal and informal learning (Werquin 2007). NQF is promoting efforts to produce a portable program with module structure, for instance, useful learning outcome at such level is partially required at the time of completion.

In conclusion, although the background and purpose of introduction of NQF vary in every country, they basically follow similar characteristics that begin with the upgrading and academic drift in the VET sector, especially expansion to tertiary education program and establishment of orientation are cited as purposes. In Anglo-Saxon countries, the efforts for NQF were started for domestic transparency and permeability of various qualifications of VET, i.e., the workload and level of learning in them and improvement of social cognition. In East Asia, efforts for visualization of continuous vocational training, which is quite different from learning system, or recognition system of such skill, is made as a problem. In addition, framework to extensively guarantee the quality of VET program is required and such the framework for quality assurance seems are to be expanded in pairs with a NQF. This development is the method for upgrading and academic drift in VET on the one hand, and a contributor to vocational reform of high education sector on the other

hand. Especially important is the expansion of dual learning and work-integrated learning of program that emphasis VET as the second route of learning mode in tertiary education and as a way of positioning it, equality and mutual permeability of the program between VET sector and high education sector, encouragement of recurrent type learning as the second chance and other matters are found in partial goal region. Also, the standpoint of ensuring international availability of academic degree and qualification as correspondence to globalization is sought in every NQF development as purposes.

In terms of these conditions for introduction of NQF, the following four points are also pointed out as problems in Japan. The first point is political decision-making for NQF development with the formation of consensus in different government bodies. The second point is establishment of planning and coordination team that is composed of experts who represent each related educational training institution and sector. The third is (a) adjustment of application of qualification that is cross-sectoral in the sector and (b) establishment of cross-sectoral framework and adjustment of application and both (a) and (b) are led by professionals. Lastly, is onsite activities by field to divert and redefine the educational training program so that such program may deal with qualification in each sector based on learning outcome when learning program is input-based.

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Quality Assurance in China's New Public Higher Education Institutions: Achievements, Challenges, and Illustrative Case Studies

27

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Abstract

Since the beginning of the twenty-first century, China's higher education has witnessed a quick period of growth and has evolved from elite education to mass education. During this period, the Chinese government has restructured the layout of higher education per the demand for regional economy, industry

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structure, and culture development. During this period, a large number of local higher education institutions (HEIs) were established.

From 2000 to 2015, 403 HEIs were founded and now they account for 42.7% of all the 944 HEIs in China. Most of the newly built HEIs are institutions that were upgraded from Higher Vocational Colleges, and most are located in the nonprovincial capital cities at the prefectural level. These HEIs satisfy the urgent social demand for higher education and play an important role in serving local economic and social development.

This study analyzes and illustrates the achievements and challenges of quality assurance in China's higher education, both at the system level and at the level of new public universities. Achievements and challenges at the system level are based on literature review and secondary data. Illustrative case studies are based on University data and interviews with University representatives. The higher education system in China has increased its enrollments substantially. The construction of the new universities and colleges that started enrolling students in the past few years contributed greatly to this achievement. Challenges accompanying this growth lie in funding, quality, and quantity of staffing, teaching practices, research and community service, and quality assurance.

Keywords

Quality assurance · Achievements and challenges · Higher education · New public universities and colleges · China

Overview of Newly Built Higher Education Institutions (NHEIs) in China

Newly built higher education institutions (NHEIs) in China refer to Universities and Colleges that were upgraded from Higher Vocational Colleges to institutions that offer bachelor degrees (Wang 2011; Liu 2011a). From 2000 to 2015, 403 NHEIs were founded and they account for 42.7% of all the 944 HEIs in China (HEEC 2016). The upgrading of institutions has similarity to the US Community Colleges, some of which have recently expanded into the realm of 4-year institutions (Cohen et al. 2014).

In China, 10 of the 3-year specialized higher education institutions were reorganized in 1999 and merged into undergraduate institutions. These institutions were called new undergraduate institutions because of their short history of the upgraded identity (Wang 2008). Most of these colleges and universities are upgraded from Higher Vocational Colleges and are located in the nonprovincial capital cities at the prefectural level. They greatly satisfy the urgent social demand for higher education and play an important role in serving local economic and social development. In this respect, they are like Community Colleges in the United States, in terms of their specific locations and functions (Shi and Ning 2006). Since the beginning of the twenty-first century, the NHEI's helped China's higher education to experience quick growth and to evolve from elite education to mass education. During

this period, the Chinese government restructured the layout of higher education according to the demand for regional economy, industry structure, and culture development.

Newly Built Higher Education Institutions (NHEIs)

In 1999, the Communist Party of China (CPC) Central Committee and the State Council jointly promulgated the *Decision on the Deepening of Educational Reform and the Full Promotion of Quality Education* and made an important decision to actively develop and expand higher education. Since then, China's higher education has witnessed major developments and improvements.

At the turn of the twenty-first century, China started to vigorously develop newly built Higher Education Institutes (NHEIs) by means of integration, improvement, and upgrading of already existing institutions. This was done to satisfy the demand for massification of higher education. Between 2000 and 2004, 150 newly built HEIs (excluding independent colleges) were set up by the Ministry of Education, including 139 state-owned HEIs and 11 private HEIs. Since 2011, private HEIs have been increasing rapidly. From 2011 to 2014, an additional 142 newly built HEIs opened, including 90 private HEIs (Higher Education Evaluation Center of the Ministry of Education HEEC 2016). In all, between 2000 and 2015, the number of newly built HEIs (excluding independent colleges) in China has increased to 403, which represents nearly half of all regular higher education institutes in the country. It is clear to say that the NHEI's have fundamentally changed the pattern of higher education in China (Ministry of Education MoE 2015).

Achievements of the Newly Built HEIs

All universities and colleges that were built, or upgraded before 2000 (considered to be "old" universities and colleges above undergraduate level), were subject to Undergraduate Teaching Evaluation by the Ministry of Education (MoE). During the period of 2003–2008, the newly built HEIs were required to participate in the Eligibility/Qualification Evaluation of Undergraduate Teaching (Liu 2011b). According to the statistics of Higher Education Evaluation Centre of Ministry of Education (HEEC of MoE), the evaluation of the NHEIs focused on faculty resources and teaching conditions. The evaluation research recommended that each participant HEI take steps to increase the number of full-time teachers at an average of 147 every year. The recommendations also suggested there be an increase of professors by 23 on average, full-time teachers with doctor's degrees per HEI by 46 on average and to include "double-qualified" (both academically and professionally) teachers per HEI by 74 on average (HEEC 2016). The total investment made by the financial authorities at different levels to participant NHEIs exceeds around RMB 86 billion yuan (12.29 billion US dollars). In regards to RMB, 616 million yuan (88 million US dollars) per HEI on average was spent including total fiscal fund for educational

undertaking within regular government budget of around RMB 50 billion yuan (7.14 billion US dollars), about RMB 399 million yuan (57 million US dollars) per HEI on average, and total fiscal debt resolution fund of around RMB 12 billion yuan (1.71 billion US dollars) and RMB 118 million yuan (16.86 million US dollars) per HEI on average. In the previous 5 years, NHEIs also increased both their land area and building area significantly. The increase included a total value of instruments and facilities of approximately RMB 8 billion yuan (1.14 billion US dollars) and RMB 52 million yuan (7.43 million US dollars) for each HEI on average (HEEC 2016).

Most importantly, students in China are realizing their dream of “going to college” (or getting access to higher education). In 1998, 11.2% of students obtained some form of higher education. In 2002, the higher education gross enrollment rate increased to 15% and entered the stage of massification of higher education (HEEC 2016; Wang 2013a, b). By 2005, 23 million students were receiving higher education of various forms in China, ranking them top in the world with the gross enrollment rate of higher education reaching 21%, which grew to 40% in 2015 (HEEC 2016).

With the rapid growth and wide distribution of newly built HEIs, the students in the less-developed areas, such as the central and western parts of China, benefitted greatly. Newly built HEIs tend to move towards nonprovincial capital cities. By May 2015, 208 newly built HEIs were distributed in such cities and accounted for 51.61% of all newly built HEIs in China. There are 339 cities at the prefecture level or above in the county and newly built HEIs are currently located in 196 of those cities, with coverage rate of 57% and 82%. With the increase in these institutions, the demand of the masses in remote areas for higher education is basically satisfied (National People’s Congress 2017; HEEC 2016; Wang 2011).

Challenges of the Newly Built HEIs

Although the new undergraduate colleges and universities have achieved remarkable results, because of the short history for undergraduate education, these institutions face different problems in the following aspects (Liu 2011a, b).

Faculty. There is a high student-teacher ratio and an imbalance of the development of programs. There is also a low percentage of “double-qualified” teachers, which causes an unfavorable influence on the improvement of quality of high-level practical-oriented talents.

Program building. There is a lack of clear orientation and characters. Moreover, there needs to be better program connotation.

Training mode. There is no clear understanding of the connotation of practical-oriented undergraduate education. The current top-level system design is lacking in talent cultivation mode reform. Moreover, the talent cultivation mechanism in the integration of industry, teaching, and research is still incomplete.

Quality management. There is a lack of oversight in the development of a teaching affairs management team that needs improvement in terms of staffing, age, and administrative capability. In addition, the working mechanism and method

of “teaching quality monitoring” still needs to be further developed and improved (HEEC 2016).

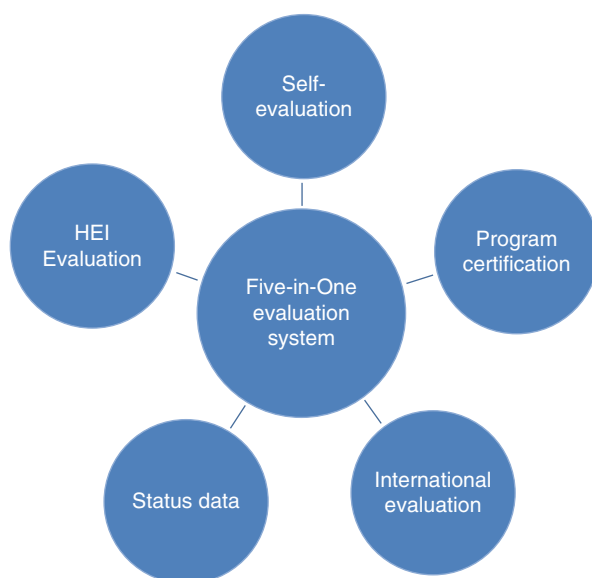
External Quality Assurance System at the National Level

The external quality assurance system at the national level was designed for both the old universities and colleges above undergraduate level (hereafter referred to as old Universities), including the elite Universities. There is a different external quality assurance system for the newly built HEIs. The periodic evaluation from the Ministry of Education uses Audit Evaluation for old Universities to encourage their distinguished characteristics of undergraduate teaching and talent culturing, and an Eligibility Evaluation for newly built HEIs to ensure they have the qualified facility and faculty to provide undergraduate teaching.

Concepts of the Five-in-One Quality Assurance

The five-in-one undergraduate teaching evaluation system is a concept developed by the *Ministry of Education*. This evaluation system consists of five ways to assure undergraduate teaching quality. It is a system to accommodate the diversity of higher education institutions (Wu 2015). The *Opinions of the Ministry of Education on Undergraduate Teaching Evaluation* released in 2011 gave an overall design of the undergraduate teaching evaluation of HEIs in the new phase. Figure 1 shows the

Fig. 1 Five-in-one undergraduate teaching evaluation system



2012 *Opinions of the Ministry of Education on Overall Improvement of Higher Education Quality* was issued to emphasize “perfecting education quality evaluation system” and to build a formal “five-in-one” undergraduate teaching evaluation system with Chinese characteristics. Different from any single evaluation, “five-in-one” evaluation combines governments, HEIs, special organizations, and social entities. It adopts multiple evaluation forms including monitoring, evaluation, audit, and accreditation for quality assurance (Wu 2014).

The evaluation has five emphases. First is to emphasize HEIs’ self-evaluation and to enhance the subject status and quality awareness of HEIs. Second is to build the basic educational status database and to conduct regular monitoring of the educational quality of HEIs. Third is to conduct evaluation of HEIs in different categories, to guide HEIs in rational positioning, and to have intensive development and characteristic development. Fourth is to conduct program accreditation and evaluation and to enhance the adaptiveness of talent training to social demand. Final one is evaluation to encourage international evaluation and to improve the internationalization level of China’s higher education (HEEC 2016).

Periodic quality evaluation and regular monitoring of big data has become a new pattern for international higher education quality monitoring evaluation. China has built a national data platform for higher education quality based on network and published various types of quality reports to the public based on data and facts, which is a magnificent feat in the world and receives high evaluation from all parties both at home and abroad (HEEC 2016).

Periodic Evaluation System

In China, early in 1990, the former State Education Commission issued the *Interim Provisions on Evaluation of Regular HEIs*. Due to the initially small scale of eligibility evaluation, the level evaluation and random evaluation of the periodic evaluation system had not taken shape. After enrollment was expanded in HEIs at the turn of the century, greater pressure was brought to quality assurance as shown in the *Plan for Rejuvenating Education (2003–2007)*. Recommendations suggested to “set up a higher education teaching evaluation system every five years.”

The first round of undergraduate teaching evaluation was conducted from 2003 to 2008. The evaluation established requirements for “scientific and standard evaluation system” as proposed in the Outline for China’s Education Plan. At that time, the Ministry of Education designed a “five-in-one” undergraduate teaching evaluation system framework in the new age. Since that time, the second round of undergraduate teaching evaluation has been fully implemented. The “five-in-one” evaluation combines governments, HEIs, special organizations, and social entities. It adopts diversified evaluation forms including monitoring, evaluation, audit, and accreditation for quality assurance. It is believed by international peers that “five-in-one” evaluation is not only with Chinese characteristics but also at the world’s advanced level (HEEC 2016).

Regular Monitoring Based on Big Data

Observed from the international trend, the monitoring evaluation based on education quality information databases/platforms will become a necessary trend for the world's need for higher education evaluation, development, and quality assurance. Big data evaluation is a product of modern information society and requires a new evaluation pattern. Several big data rankings place China's higher education ranks as one of the top in the world. To conform to the Big Data format, the "National Database of Basic Educational Status of HEIs" was created. By the end of 2014, more than 650 HEIs filled in the newly updated database 2.0 and over 1,000 regular HEIs (including independent colleges) were fully covered by the end of 2015. Today, China conducts regular monitoring based on modern information and technology means including big data and "Internet +." The data (data analysis report) and facts (expert evaluation report) is combined in an organic manner to compile annual reports assessing higher education quality that is released to the public (HEEC 2016).

It is a magnificent feat in the world, which is well recognized by all parties both at home and abroad. Carol Bobby, president of International Network for Quality Assurance Agencies in Higher Education, commented at an annual conference of representatives from 64 countries that China's concepts of "regarding HEIs as subject and student development as orientation, categorized evaluation and guidance as well as the action of regular quality monitoring and quality report release based on databases are advanced in the world. It provides excellent practice for quality assurance of powerful countries in higher education." Frans van Vught, director of the Center for Higher Education Policy Studies (the Netherlands) and the European Union U-Multirank Commission, said "the National Database of Basic Educational Status of HEIs built by China is amazing, enviable and well recognized." Judith Eaton, president of the Council for Higher Education Accreditation (CHEA), the USA, also commented, "So large a national database in China is eye-catching and attractive" (Wu 2016).

Internal Quality Assurance System at the Institutional Level

The old universities, especially the elite ones, continue to have a lot of advantages in teaching quality assurance and attract top students based on talented faculty, sufficient fees, and advanced facilities. These institutions can focus more on institutional vision and implementation of unique features such as strategic planning to distinguish themselves to achieve national and international reputation and visibility. As for the newly built HEIs, their only ace is to strive for more resources that can then attract students. The foundation of this strategy is to have a sound internal quality assurance system. That is why there are many more studies on internal quality assurance system for newly built HEIs than there are those for old Universities (Zhang and Yao 2014).

Internal Quality Assurance Organization and Team

It is important for eligibility evaluation to build and to perfect a quality assurance system. Before 2009, the teaching quality monitoring department of a newly built HEI was generally provided at the office of teaching affairs. In terms of administration, the administrative staff played the role of both “referee” and “sportsman” and quality monitoring remained at the stage of a “concept” or “lacked criteria.” Promoted by eligibility evaluation, the newly built HEIs have made remarkable achievements in the building of quality monitoring organizations.

Relatively independent quality assurance organizations were established in the 155 HEIs surveyed by a research team and included quality assurance office, quality monitoring office, and evaluation center (Liu 2011b). With the further deepening of eligibility evaluation, the quality assurance teams of newly built HEIs have been steadily growing and both educational background and professional titles have improved year by year. Per the Annual Report on Teaching Quality Monitoring of Newly-built HEIs, the number of quality assurance administrative staff of newly built HEIs reached 2,444 in 2001, 3,786 in 2012, and 4,644 in 2013, showing a trend of gradual increase. The percentage of personnel with master or doctor degrees and senior professional titles were 23.40% in 2011, 25.60% in 2012, and 40.31% in 2013. Those with senior professional titles were 33.41% in 2011, 36.15% in 2012, and 38.95% in 2013, which also shows annual increases (HEEC 2016).

Internal Quality Assurance Philosophy and System

With the advancement of eligibility evaluation, the newly built HEIs have (a) obtained a new awareness and orientation of quality standard building in terms of theory and practice, (b) corrected the problem of imitation, (c) gradually built and perfected the quality standards for major teaching links and evaluation standards for monitoring systems, (d) highlighted the characteristics of training of “practical-oriented” talents, and (e) implemented all procures in various quality monitoring tasks (Wang et al. 2014).

Eligibility evaluation requires that each HEI builds a self-evaluation system. The quality assurance system has tended to be perfect, not only in quantity but also in various links of quality monitoring, operations, and final quality evaluation. Specific regulations were formulated on monitoring subject, procedure, method, and mechanism to guarantee normal operation of quality monitoring system (Yang 2010).

The Annual Report on Teaching Quality Monitoring of Newly-Built HEIs

As per the votes of evaluation experts on the “rules and regulations” of 106 HEIs, satisfaction has increased year by year, with 97.04% for 2012, 98.82% for 2013, and 93% for 2014. According to the questionnaire survey made on 169 HEIs, 92.52% of

leaders and teachers of HEIs considered eligibility evaluation had produced a “significant effect” and “relatively significant effect” in facilitating HEIs to establish and perfect management documents (HEEC 2016).

Information Feedback Mechanism

The item of “quality monitoring” was designated in the eligibility evaluation indicator system. It was required that “HEIs should establish their own self-evaluation systems, bring the role of database of basic educational status of HEIs into full play and conduct regular monitoring of teaching quality.” The requirement is one of the key indicators in the Ministry of Education Evaluation Standards and Criteria for the newly built HEIs, and it is reflected in the fact whether the newly built HEIs establish a separate sector or division to take charge of the internal quality assurance. Also, the items of “student-teacher valuation” and “social evaluation” were designated to guide NHEIs to highlight the information feedback of students, teachers, and employers on NHEIs and make prompt improvements (Xia et al. 2012).

Since 2009, participant HEIs have started to fill and submit the “National Databases of Basic Educational Status of HEIs” and to build normal mechanisms of quality monitoring. In 2009, eight newly built HEIs filled the databases and in 2014, 323 filled the databases. In May 2015, 350 newly built HEIs had filled the databases, which provided a guarantee for regular quality monitoring. Also, the Higher Education Evaluation Center, Ministry of Education (HEEC), prepares and publishes the National Report on Teaching Quality Monitoring of newly built HEIs each year according to the data in databases (HEEC 2016).

In addition to building the “National Database of Basic Educational Status of HEIs” that defines eligibility evaluation, all newly built HEIs have established complete teaching information feedback systems in major teaching links by means of special inspection, leaders’ attending lectures in different categories (inspection), second-stage teaching supervision and inspection, expert evaluation, student evaluation, teacher evaluation, industry evaluation, and employer feedback. Also, all newly built HEIs fully took use of information technology and intelligence platform and built information feedback platforms by teaching quality monitoring web pages, hotlines, and emails (HEEC 2016).

Continuous Quality Improvement

Continuous quality improvement is an on-going task for HEIs. HEEC (2016) shows that in a questionnaire given to 155 newly built HEIs, 100% note that complete improvement mechanisms have been built. This includes establishing accountability mechanisms for improvement and incentives that include making sure that information and feedback is classified and analyzed from all sources, timely supervision of relevant executive subjects for making improvements, and optimizing and rebuilding incomplete quality assurance links to improve the matching degree of talent

cultivation with objective, standard, and quality assurance. Utilizing the above as an example, the talent training scheme is being carefully revised according to the information feedback from alumni, employers, and the industry. Also, the teaching quality monitoring office of each participant NHEI publishes Brief Quality Monitoring Report that analyzes the current status of teaching quality, reports relevant issues, makes suggestions for improvement, and carries out regulation in proper times. Using the questionnaire survey to 169 newly built HEIs, 84.02% of the teachers and students felt “satisfied” and “basically satisfied” with “information feedback improvement” (HEEC 2016).

Illustrative Case Studies

Three case studies are included to illustrate quality assurance in newly built HEIs. The availability of Community Colleges has contributed notably to the steady increase of Americans attending college (Cohen et al. 2014). Similarly, the existence of NHEIs has supported the trend of massification of higher education in China as it has provided the opportunity for some local institutions that did not offer a baccalaureate degree program to upgrade to the undergraduate level. Undoubtedly, building a matching quality assurance system thus becomes a top priority.

Changshu Institute of Technology: Effective Internal Quality Assurance System

Changshu Institute of Technology (CIT) was a 3-year associate equivalent degree offering institution and was upgraded to the undergraduate level in 2004. In China, Changshu Institute of Technology was not the first to expand into a 4-year institution, but it was the first pilot institution to accept the new round of Undergraduate Teaching Evaluation by the Ministry of Education. The Institute covers an area of 1,800 acres, with over 18,000 full-time undergraduate students and nearly 1,200 faculty and staff, and adheres to putting talent training at the center of their mission and aims to build an effective teaching quality assurance system (CIT 2016). The Institute is located regionally, offers admission to a wider range of students, and offers a curriculum designed to meet the economic needs of its community.

Changshu Institute of Technology set up the strategic thinking of quality first and then carried out extensive discussions on teaching quality, especially the teaching theories seminars among the key teachers, developing the philosophy of “education is service” and “quality is the lifeline of the school of education.” This thinking influenced the whole university. Firstly, the leaders developed a profound understanding of the importance of strategic thinking on quality, and secondly, different departments and individual personnel at all levels gained an understanding of the philosophy that teaching quality is not only the responsibilities of leaders but also that of all staff (Yu et al. 2011). The guideline of teaching and learning quality assurance system is the master file of Institute’s quality assurance system (hereinafter

referred to as the guideline). It consists of a quality assurance model built around and upon standards, content, and process. The quality assurance system is a closed loop with the features of full participation, the whole process and full range of monitoring, and continuous improvement (Fu 2011).

In 2006, Changshu Institute of Technology developed an internal quality assurance system. This system identifies four stages: top-level design research, development, improvement, and revision, which lasted for over 3 years. The Institute adopted ideas of TQM (Total Quality Management), the ISO quality standards, as well as the quality assurance system in Colleges and universities from home and abroad (Fu 2012). The Institute set up the quality assurance goals and gave tasks to the academic and administrative departments and sectors of all levels of internal organization. At the same time, the duties and responsibilities of each was made clear. The Institute gradually achieved its quality objectives through process control. Since the implementation of the quality assurance system, faculty and staff are fully made aware that the improvement of teaching quality is the result of full play of the people and the resources (Fu 2012).

Changshu Institute of Technology applied ISO 9000 quality management theory, and Total Quality Management theory is an internal quality assurance experience in higher education and found throughout China and abroad. They combined it with their own institutional characteristics to establish new ideas of internal quality assurance, namely being customer oriented. This entailed learning how to pay more attention to the social needs of students; practicing prevention first; embracing the idea of quality management which relates to full participation, the whole process, and all its aspects; learning the concept of quality culture – advocating self-management and self-assurance of quality culture (Fu 2011). The Institute's teaching quality assurance system is "Changshu Institute of Technology teaching quality assurance system outline" (hereinafter referred to as the "Outline"). It defines the teaching quality assurance mode, standards, project, monitoring content, and process. The "Outline" includes 18 indicators and 38 observation points. Each item shows who takes responsibility, who is to implement the quality standards and what the work content is. The teaching quality assurance system has the features of full participation, whole process guarantee, omni-directional monitoring, circulation closed, and continuous improvement (Fu 2011).

The quality management system consists of four levels; the first level is the guiding document, that is, the quality manual. It determines the direction of the university, express the purpose of quality objectives and management means. The second level is indicative of documents in the form of process files. It is designed to make clear "who to do," "what to do," "where and when" to implement the specific assignments. The third level is the creation of documents of measure. It includes specific job responsibilities and work processes that are designed to solve the problem of "how to do," that is, the specific content of the work or the operating essentials generally referred to work instructions. The fourth level is the creation of supporting documents. It includes the identification and evaluation of reports and records (Fu 2007).

Changshu Institute of Technology establishes teaching files for each faculty member and tracks the evaluation of teachers' teaching activities to relate the

evaluation results to the assessment of teachers' awards and promotions and to link it to the year-end performance allowance distribution. Another initiative at the Institute is to evaluate the management. Those participating in the process include the managers themselves, teachers, and students. The results are related to awards, promotions, as well as allowance distribution. This is to strengthen the teaching quality awareness of the administrative staff, so that they put the quality of teaching as the lifeline of the university (Yu et al. 2011).

Changshu Institute of Technology collects information in several ways and includes: (1) assessment and evaluation organized by Office of Teaching Quality Management that involves collecting dynamic information of teaching quality assurance activities as well as the results of the static information, (2) information provided by the employer related to graduates' adaptability, work ability and knowledge structure, (3) collection of information through teaching supervision group, programs, student questionnaires, activities related to seminars, and other direct methods related to modern information technology – website evaluation, hotlines, and mailboxes, and (4) specialized information processing staff who help ensure the quality of teaching information for scientific statistics and analysis. The university improves the quality of teaching and teaching management by using a virtuous cycle of evaluation, feedback, and improvement (Fu 2007).

Hefei University: The International Standard of Quality Assurance as the German Universities of Applied Science

At the end of October 2015, Chinese Premier Li Keqiang held talks with German Chancellor Angela Merkel in Beijing. China and Germany announced the cooperation in strategic emerging industries. Merkel and Li visited Hefei University in China where they tasted black beer brewed by the students. A question remains as to why the prime minister selected a visit to Hefei University (HU). The University is a newly built HEI which was upgraded to undergraduate level in 2002. At that time, most of the newly built HEIs were faced with the problem of low status, which in turn attracted lower achievement levels of student. Many faculty members in NHEIs were used to low levels of academic performance, weak dedication to study, and academic goal directedness. In this respect, Hefei University instructors were like some US Community College faculty (Cohen et al. 2014) who also acknowledge the low-level of student academic work. However, many of the newly upgraded HEIs wanted to copy the research Universities and enhance the academic levels thereby providing a context where students would be able to pursue for graduate education.

Hefei University has a long relationship with the Universities of Applied Sciences in Germany. The Hefei Union University grew out of cooperative agreements between China and Germany in 1985 and was founded by a Chinese radiochemistry founder Mr. Yang Chengzong who studied in Germany. Prof Horne was the Professor of the Department of Industrial Design, Hannover University of Applied Sciences and was later appointed as the vice president of Hefei University by the Education Department of Anhui Province. He was the first foreign president of the

University in Anhui. Hefei University was funded both by Anhui Province and the German Lower Saxony and involved collaborative projects with five German universities of Applied Sciences. In November 2009, based on joint efforts of both sides, Hefei University established the German Institute of Applied Sciences in Hefei. Hefei University thus distinguished itself by aiming to an international standard of quality assurance affiliated with the German Universities of Applied Science (China Daily 2015; Wang et al. 2014; Zhou et al. 2014).

As for the internal quality assurance system, Hefei University developed a series of quality standards covering curriculum, teaching process, experiment, practice, and graduation thesis. They monitored the entire process of training, planning, curriculum development, classroom teaching, and extracurricular activities. Hefei University believes that the teaching quality should meet two demands that meet the needs of society and developmental needs of the people. The teaching quality should also achieve two satisfactions that achieve the students' satisfaction on learning effect and the employers' satisfaction of quality of personnel training in Colleges and Universities.

Hefei University developed a quality assurance program called "three Quan two Hua," namely full participation, full control, comprehensive evaluation, and normalization and information. "Full participation" refers to all the departments and individuals who are fully engaged in the process of quality assurance, from the quality monitoring department to the department of teaching management, teaching, and administration sections, from the high-level and middle-level leaders to teachers and students. All of them are responsible for teaching quality. "Full control" refers to the whole process being monitored. "Comprehensive evaluation" refers to quality assurance that is not only related to the teaching and learning management, but also to the quality investigation of graduates, social institutions, peer expert evaluation, and social evaluation; "normalization" refers to quality teaching control and evaluation is a systematic, long-term, and routine work; "information" refers to the use of modern management methods and technical means to improve the efficiency of management (Wang 2014).

Hefei University established a comprehensive information collection system, including the website, hotline, special electronic mailbox, etc., which provides the communication platform for teachers and students. The university set up teaching quality information classification system and identifies the information as three types: "consulting," "teaching," "management," and "major or emergency." "Consulting" questions are timely replied, "teaching" problems are forwarded to the teaching units and "management" problems to the administration departments, and "major or emergency" is given approved corrective recommendations and promptly forwarded to the provost office (Wang 2014).

Jinling Institute of Technology: Industry Oriented Quality Standard

Community Colleges in the United States emphasize the needs of local students and preparation of study so that these students can gain jobs in the local job market

(Cohen et al. 2014). Jinling Institute of Technology (JIT) in Nanjing City Jiangsu Province was upgraded to a NHEI in 2005 and aimed to bring up the applied and practical talents to meet city development needs and serve the local economic and social development needs (Chen 2011).

Nanjing is the first “software city” in China and put forward the goal of becoming an “international software city.” In 2012, the government of Nanjing decided to promote the transformation of the Jinling Institute of Technology to create the Nanjing’s higher education institution of software technology. The Institute had the strategy of integrating academic and vocational education to build a modern applied higher education system. In that process, a double certificate system, combining the content of vocational qualification certificate with the curriculum, was created. They established a “2 + 1 + 1” undergraduate talent training system. In the first year, students have the basic core courses of the major; in the third year, the courses are industry oriented, and in the fourth year, courses are customized to some certain vocations. The Institute also helped to develop professional and vocational standards for modern enterprise professions and reformed their practical curriculum and teaching material system; they helped graduates gain required skills and capabilities (Xinhua Daily 2015).

Jinling Institute of Technology established assessment methods of teaching for schools or department to strengthen the process of teaching evaluation and award for the outstanding school or department (Duan 2015). The Institute also put into use teaching and learning management information system in 2006, and with its teaching evaluation system, students can realize online teaching evaluation, and the system can provide the teachers ranking, without in-depth explanation of teachers ranks (Zhu 2014). It is worth noting that the university has developed a new evaluation software to carry out teaching evaluation, and achieved the 3-in-1 evaluation system for “curriculum evaluation,” “teacher evaluation,” and “student satisfaction” (Duan 2015). The assessments link curriculum to local market economy.

Conclusion and Future Directions

China’s higher education system has increased its enrollments substantially. The construction of and/or the upgrading of old Universities and Colleges to newly built Universities (NHEI) has contributed greatly to student achievement. Challenges accompanying this growth lie in funding, quality, and quantity of staffing, teaching practices, research, community service, and quality assurance.

The present study contributes to existing literature by describing three case studies that illustrate challenges and achievements in NHEI in China’s higher education. As for the external quality assurance system at the national level, Chinese Universities focus on concepts of the Five-in-One Quality Assurance, establishment of periodic evaluation system, and regular monitoring based on big data. Internal quality assurance system at the institutional level is achieved mainly through the following aspects: complete quality assurance agency system, gradually improved capacity of quality assurance team, “practical-oriented” philosophy highlighted in

quality standards, improved quality assurance system, more smooth information feedback channels, and “continuous quality improvement” highlighted in quality monitoring.

Illustrative case studies show that the newly built HEIs applied ISO 9000 quality management theory and Total Quality Management theory, as well as the internal quality assurance experience in higher education institutions at home and abroad, combined with their own institutional characteristics, to establish new ideas of the internal quality assurance. Most of them developed a teaching quality assurance system. They established a comprehensive information collection system, including the website, hotline, special electronic mailbox, etc., to smooth the communication.

This study is mainly based on data and reports from the leaders at institutional level and official statistics. Future research should be focused on the effects and achievements from the stakeholder views, such as students, faculties, and employers.

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Part VI

Internationalization: Designing Curricular, Mobility, and Partnerships Opportunities



Enablers and Constrainers of Internationalization of Higher Education Institutions: A Case Study from Portugal

28

Anabela Mesquita and Olímpio Castilho

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Abstract

In this chapter, we describe a case of a situation from a higher education school from the biggest Portuguese Polytechnic that, despite all constraints, was able to advance with a project of internationalization about 10 years ago. Slowly, it was able to establish contacts, build a network, and promote its courses, experience, and resources internationally. There were difficulties in this process, but the institution always managed to overcome them. Using a qualitative methodology – interviews with the key persons in this process – it was possible to identify the enablers and

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constrainers of this process. Lessons learned can help other institutions plan and manage an internationalization process, as well as overcome the difficulties such process entails.

Keywords

Case study · Portugal · Internationalization · Higher education · Enabling and constraining factors

Introduction

In the last decades, several changes occurred in higher education worldwide. These include internationalization, massification, increased competition, collaboration, identification of new teaching methods, and ICT revolution, just to name a few. Borders no longer have their traditional meaning, and the selection of a higher education institution to proceed with studies happens at a global level, which contributes to the emergence of a new student profile, involving more diverse age groups, mature and working students, from different ethnic and national backgrounds (Gul et al. 2010, p. 1881). The number of international students in the OECD countries has also increased in the last years. In 2000, the number of foreign students enrolled in tertiary education outside their country of origin (OECD countries) was 2,071,963, while in 2010 this figure more than doubled, reaching 4,119,002 (OECD 2012).

All the changes occurring in higher education internationally and particularly in Europe, are forcing higher education institutions to open themselves to the exterior (Brandenburg and Wit 2011), offering different solutions to attract foreign students if they want to remain competitive (Oxford University 2015). However, this internationalization does not happen the same way in all institutions. There are higher education institutions that focus more on mobility, while others prefer the development of collaboration and networking. There are others facing difficulties in starting this process. In this chapter, we describe a situation of a school from a Portuguese Polytechnic that, despite all the constraints, was able to put forward an internationalization project about 10 years ago. Slowly, contacts were established, and a network was built to promote its internationalization. There were some difficulties in this process, but the institution always managed to overcome them. We also describe the evolution of the internationalization process in this school and identify the constrainers and enablers that contributed to this success. This chapter is structured as follows: (a) short introduction to the topic at a global perspective (definition of internationalization, its benefits, challenges, and possible formats), (b) describe higher education system in Portugal and the Polytechnics focusing on the internationalization and in the students' exchange, and (c) offer a case study and results discussed before presenting conclusions and ideas for future research.

Internationalization: A Global Perspective

Definitions and Strategies

A traditional definition of internationalization of higher education (Knight 1994; Knight and de Wit 1997, in Hawawini 2011, p. 5) sees it as the “process to integrate an international, intercultural and/or global dimension in the objectives, functions (learning/teaching research and services) and distribution of higher education.” According to Hawawini (2011, p. 5), this definition restricts internationalization to the capacity of an institution to introduce an international dimension in a structure and already existing *modus operandi*. It doesn’t capture the essence of the process whose main objective should be “to integrate the institution in a global knowledge and learning network instead of integrating an international dimension in a scenario that already exists.” For these authors, the process should emphasize the capacity of an institution to become part of the global learning ecosystem not only to benefit from it but also to contribute. This perspective helps the institution to play a more active role, contributing to knowledge and levels of education, training, and learning. Of course, this implies some changes in the structure of the institution, its *modus operandi*, and mentalities (Hawawini 2011).

Although the concept and definition of internationalization points toward a very wide scope, in practice, when applied, it is reduced to just a few activities related with the curriculum (Hristova et al. 2013) or with student mobility (University of Oxford 2015). In fact, according to Knight (2008, p. 1), the strategies to internationalize can be related with four quadrants: research, education, technical assistance, and extracurricular activities:

- Research comprises the establishment of centers of excellence or research with an international focus, the incorporation of an international perspective and international issues into existing research centers and programs, collaboration with international partners, development of comparative approaches, dissemination of research results and sharing of knowledge through international networks and communication systems (e.g., reviews and publications, databases, conferences, seminars, workshops, etc.), the establishment of networks of research institutes or networks and associations of researchers, participation in international R&D programs and funding and mobility of researchers, and cooperation between researchers and research institutes and international business, to name a few.
- Education encompasses the internationalization of curriculum (curricular units with international content, comparative approaches, international studies, intercultural studies), foreign languages studies and the recruitment of foreign students for full degree program, opportunities to study abroad, international cooperation agreements and international exchange of students and faculty for teaching, international guest lecturers, joint and/or double degree programs,

systems of credit transfer, international internships for students and faculty, international summer courses, and international study visits, among the most important ones.

- Technical assistance includes the training of staff and students in the lead institutions, training of staff and students by faculty of the lead institutions at the receiving institutions, curriculum advising, research training and sending books and equipment and instructions in the use of these facilities, and management advising and support for the incidental costs of maintaining the bilateral link.
- Extracurricular activities and institutional services embrace international student advisers; orientation programs, social events, and other facilities for foreign guests; international students' associations; international houses for students and scholars; international guest organizations; and the provision of institutional facilities for foreign students and scholar (e.g., libraries, restaurants, medical services, sport facilities).

This variety of solutions allows each higher education institution to internationalize according to its own key areas or strengths, being able to evolve to other type of solutions.

Being aware of the importance of internationalization of higher education and the possible different strategies and solutions, how is Europe dealing with this? Is there a global strategy?

Some of the European countries, individually, have defined a strategy for the internationalization of its higher education (Portuguese Government 2014). For instance, Denmark has launched the second part of their action plan for internationalization called *Denmark – An attractive destination to study* that focused on the aim to transform Danish higher education and make it more attractive for international students and fix more highly qualified people in the country after concluding studies (op. cit., p. 34). In 2011, Spain presented their strategy called *Strategy for internationalization of Spanish university system* which aimed to help institutions to become more attractive and competitive in a globalized world (op. cit., p. 36). Finland also established a strategy for the period 2009–2015 to transform this country in a very attractive destiny for foreign students in order to promote an open society and balanced multicultural environment which contributes with solutions for global problems (op. cit., p. 37). The last example comes from the UK that in 1999 started the first internationalization attempt called *Initiative for International Education*. The objective was to increase the number of international students enrolled in higher education institutions.

While there are some initiatives, according to the Communication from the European Commission, *European Higher Education in the World*, in 2013 (European Commission 2013), the focus is essentially in mobility of students. In a global way, academic cooperation is fragmented and is the result of individual efforts and not necessarily related with institutional or national strategies. Moreover, the European Commission also refers that in order to be effective, strategies should cover not only mobility of students and staff but also the development and internationalization of curricula and digital learning, including the application of new ways of teaching and the

encouragement of a strategic cooperation, establishment of partnerships for research and innovation, and reinforcement of capabilities (European Commission 2013, p. 4).

Benefits and Challenges

Among the reasons to entail international activities, there is a positive conveyance of values, attitudes, and knowledge about people, systems, cultures, and different nations. It is also referred that internationalization allows those involved to understand their position in relation to others and the fact that students and staff want to and really learn foreign languages as well as various cultural views. Furthermore, internationalization prepares knowledgeable and informative students and helps them develop international skills and attitudes (Ardakani et al. 2011, pp. 1691–1693). Bordean and Borza (2013) add that benefits of internationalization are also related with the cultural and social impact in local, regional, and national communities. Moreover, the mobility of student and staff allows them to gain new perspectives, so they become more aware of the possibilities of cooperation. Internationalization also grants students and staff to be able to recognize new opportunities and be internationally oriented. Finally, all these activities and exchanges force institutions to develop new perspectives regarding quality assurance.

As highlighted in the 2014 Trends Report, as Polytechnics develop more international experience, there is a growing shift from student-focused initiatives, that is, from international student recruitment and branch campuses, toward developing research capacity in partnership with colleagues overseas. In part, this is a tactical shift reflecting the growth of academic engagement in industrial R&D, and in part this has grown out of an understanding that developing research partnerships work for the benefit of both institutions (University of Oxford 2015, pp. 19–25). However, internationalization does not happen in the same way for all institutions. There are higher education institutions that focus more on mobility, while others prefer the development of collaboration and networking. There are others with difficulty in starting this process.

Portuguese Situation

In order to provide some information about the Portuguese context, in the next sections we describe the higher education system, the situation of the Polytechnics, and the Portuguese scenario regarding internationalization and student exchange.

After signing the Bologna Declaration in 1999 (EHEA 1999), Portugal adopted a three-cycle framework (EHEA 2014), as shown in Fig. 1. In Polytechnics, the first cycle lasts 3 years (18–21 years old), followed by a 2-year master (21–23 years old). Universities could choose between a 3-year cycle for the first degree (Bachelor) (18–21 years old) and a 4-year cycle (18–22 years old) where the student would get a master's diploma at the end. For some professions, this first degree would last 5 years (e.g., medicine, architecture) and the student would get a masters' diploma at the

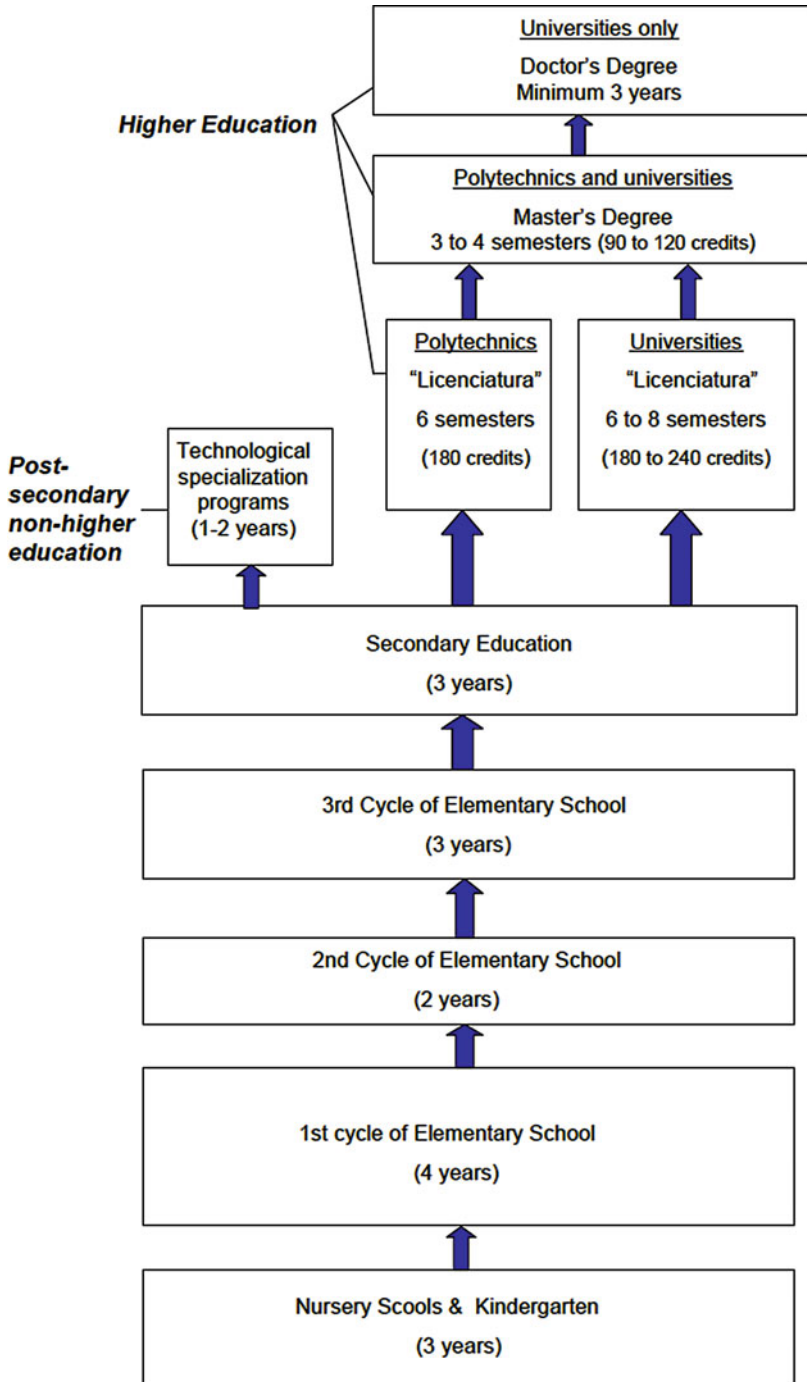


Fig. 1 Portuguese education system (Source: Fulbright 2010)

end. The doctoral degree can only be offered by Universities. Figure 1 shows the Portuguese education system, since nursery till the end of PhD.

The difference between Polytechnics and Universities in Portugal is related to the division of HE in this country. As a matter of fact, HE in Portugal is a dual system, being composed of two sub systems: Universities and Polytechnics (Decree-Law 62/2007). HE can also be public or private. The available places in higher education (Universities and Polytechnics) are offered on a competitive basis, a system of *numerus clausus* assigned through a national database on students' admission. Additionally, every HE institution offers a number of additional vacant places through other extraordinary admission processes (top-level athletes, mature applicants aged 23 and over, international students, foreign students from the Portuguese-speaking countries, degree holders from other institutions, students from other institutions (academic transfer), former students (readmission), and course change, which are subjected to specific regulations set by each institution) (Executive Order no. 199-B/2016 of 20th July).

According to the Decree Law 62/2007 of 10th September, 2007, in Portugal, the university system has a strong theoretical basis and is highly research oriented, while the Polytechnic system provides a more practical training and is profession oriented (articles 6 and 7 of the referred Decree Law). Degrees such as medicine, law, pharmacy, natural sciences, architecture, and economics are taught only in Universities. Engineering, technology, management, education, or humanities are taught both in Universities and Polytechnics. As for this last situation, in practice there are no relevant differences in the courses offered by the two subsystems. The biggest difference is related with the possibility a student has to apply for a PhD in a University and not being able to do the same in a Polytechnic. Accounting, pre-school, and primary school teaching are only offered by Polytechnics. The two systems – University and Polytechnic – are linked, and it is possible to transfer from one to the other.

The network of public HEI comprises 14 Universities, 20 Polytechnic, and 6 institutions of military and police HE. Portuguese Universities have existed since 1290. The oldest institution, the University of Coimbra, was first established in Lisbon and then moved to Coimbra. Polytechnics were forecast in 1973, by the Law of the Basis of the Educational System and effectively created in 1977 as higher education of short duration with the objective to prepare technicians of medium level. In 1979 they were designated as “Polytechnic Higher Education,” a designation that they still have today. Polytechnics are based in each district, in the main city, having the possibility to have poles in other cities (CCISP s/n; Mourato 2014, p. 122). The creation and the decision to designate these institutions as offering courses of “short duration,” of “preparing technicians of medium level,” and finally “Polytechnic education” were not without polemic and controversy. For instance, the creation of the Polytechnic Institute of Porto, in 1985, comprising some schools that already existed long before the creation of the mother institution, was, somehow, the result of students' strike that wanted to prevent the transformation of the education institutions (Polytechnic and its schools) in an education institution of medium level (Instituto Politécnico do Porto 2016).

The 20 Polytechnics do not have all the same size and characteristics. There are four big Polytechnics, and Porto is the biggest which offer the number of places available for the first cycle at around 3000 (FENPROF 2012). Other big Polytechnics are Lisbon, Coimbra, and Leiria. All the others are very small (for instance, the number of places available for the first cycle in the Polytechnic Institute of Cávado and Ave is around 850) (FENPROF 2012). Despite being small, the Polytechnics are very important for the region where they are implemented since they help the region to grow and to fix the population in the area, in particular the youngsters. Each Polytechnic has several schools and corresponds to the faculties in relation to the Universities. Some of the smaller institutes are now offering courses of medium level (level 4) since they are not able to attract students for the first and second cycles. These courses, that last 2 years, are only offered by Polytechnics even if classes take place in other institutions rather than in the schools of the HEI. And since these courses and its offer are still a very sensitive subject in Portugal, even if they have similarities with other courses offered by colleges, in the context of this chapter, they are designated as of medium level instead of secondary/high school level. We would also like to draw attention to the IPP that in the last years that has developed tremendously. Today, they are able to compete with Universities as far as research and innovation are concerned.

Internationalization in Higher Education in Portugal

A higher education institution in Portugal, being international, is widely recognized as important and needed. Actually, one of the quality indicators of any HEI is its internationalization level. However, it is curious to note that the indicators used (see form of A3ES 2015, p. 18) are related with mobility (percentage of international students enrolled in the institution, percentage of students in mobility IN and OUT, percentage of foreign lecturers including those in mobility). Of course, in the form, there are also indicators about research and innovation, knowledge transfer, and facilities available. But these, as the way the questions are formulated, are not related with internationalization in a particular way. As for the form, internationalization is related with mobility.

The internationalization of HE, according to the results of a study ordered by the Portuguese Government and issued in 2014, is not articulated between the different sectors of public administration and institutions involved (this goes in line with the results described for Europe, in a global way and as presented in the previous section (European Commission 2013)). If analyzed individually, the results are globally positive. However, it is recognized that with the available resources, more could have been done in this area. As for higher education institutions, one can notice that the activities to attract international students (mostly involving mobilities) are conceived and executed in isolation, by each institution and not in an articulated and synergetic way (Portuguese Government 2014). In the referred document, the government presents a strategy that tries to motivate institutions to work together, to build consortia in order to structure curricula, to promote relations between

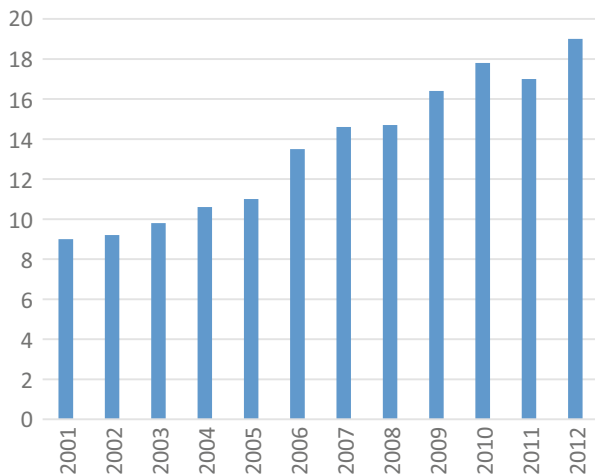
researchers, to conceive projects together, and to increase the mobility of students, teachers, and researchers. In particular, one of the goals is to increase the number of international students (the objective is to double the figure till 2020). The recent approval of the statute of international student is the first tool toward this goal. Other related with accommodation, visa, language, etc. will follow. Besides this, another strategy focuses on the amplification of the offer of courses at distance (Portuguese Government 2014, pp. 11–12).

Students Exchange

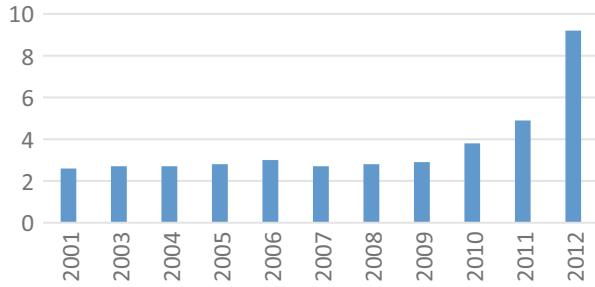
The global population of students who move to another country to study continues to rise. The OECD has projected that, with demographic changes, international student mobility is likely to reach eight million students per year by 2025. These figures reflect the perceived benefits that students see in those exchanges. In fact, studying abroad and having an international experience is seen as very valuable as it allows for the development of a wide range of soft competencies such as intercultural communication, openness to new challenges, problem-solving, and decision-making (European Commission 2016). The European Commission’s 2014 report on the “Effects of mobility on the skills and employability of students and the internationalization of higher education institutions” found that there is clear quantitative evidence to illustrate the value of studying abroad for students, both in terms of their initial employability as new graduates and on their later career development (European Commission 2014a, p.14). Countries sending out more students are France, Italy, Germany, Poland, and Turkey. On the other hand, the countries that are welcoming students are France, the UK, Germany, and the Netherlands. Portugal is performing in the average in both situations.

Graphs 1 and 2, based on the information provided in Eurostat (2016) compare the situation of incoming and outgoing students and illustrate a huge gap between

Graph 1 Incoming students in Portugal (Source: Eurostat 2016)



Graph 2 Outgoing students in Portugal



them. Portugal is attractive to foreign students. According to UNESCO (2014), the top six countries sending students to Portugal are Brazil, Angola, Cabo Verde, Spain, and Mozambique. The top European countries are Spain, Italy, France, and Germany. This can be due to several reasons – considering that students chose a higher education institution abroad to pursue their studies based on quality indicators, one can imagine that the weather and cost of living as well as gastronomy, history, and culture can and does play a decisive role when choosing Portugal. On the other hand, the number of outgoing students is low and the reasons may be linked to cultural roots and cost of living. These flows are evident in the Erasmus Lisbon (2016a) and Erasmus Porto (2016b) websites.

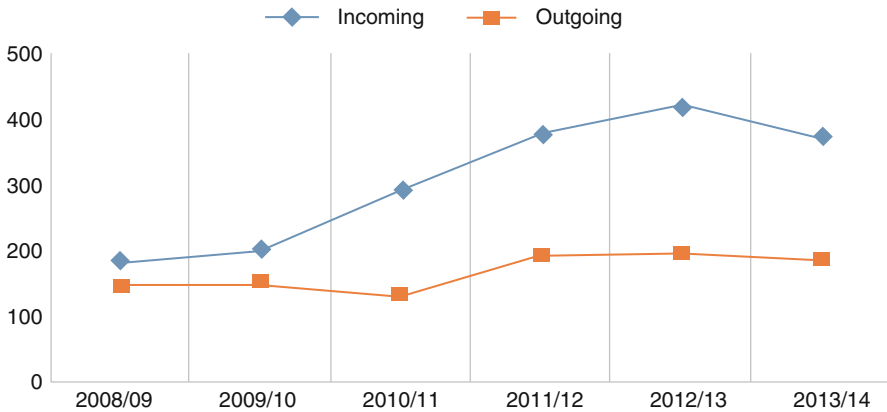
Looking into mobility in more detail, Table 1 shows how students were distributed in higher education (Polytechnic and University, Private/Public) between 2011 and 2014 as well as the proportion of mobile students in the total of enrolled students in Portugal. The number of mobile students has increased in almost all situation, except for the public University. For all the remaining subsystems, this growth represents, in some cases, almost the double.

According to UNESCO (2014), the top destination countries for outgoing Portuguese students (Universities and Polytechnics) are (in this order) Germany, the UK, France, the USA, Italy, Denmark, and the Netherlands. As for Polytechnics, the data reveals that, since 2008/2009 when data collection started, incoming mobility has been consistently higher than outgoing mobility. The gap between the two widened from 2009/2010 onward with incoming mobility about double of outgoing mobility. Graph 3 shows that while outgoing mobility has stagnated over the past 3 years, incoming mobility has kept rising, except in 2013/2014. This is indicative of the growing attractiveness of the Portuguese higher education Polytechnics. The socioeconomic background of its student's population might be a likely explanation for the lower levels of outgoing mobility, as well as the financial crisis and limitations (Sin et al. 2015). Universities have always been more attractive to students than were Polytechnics. This means that for a long time, Polytechnics received students that were not so good at secondary education or received students from the district (residence area). In part, this is due to the cost of attending a university that means, for a lot of families, an extra expense since the student needs to move and live in another city. And not all families can afford this situation.

Table 1 Proportion of mobile students in the total of enrolled students by higher education subsystem in Portugal

Year	Public university			Public polytechnic			Private university			Private polytechnic			Total		
	Enrolled	Mobile	%	Enrolled	Mobile	%	Enrolled	Mobile	%	Enrolled	Mobile	%	Enrolled	Mobile	%
11/12	197912	5721	2.9	113662	1378	1.2	55147	897	1.6	23552	121	0.5	390273	8117	2.1
12/13	197036	7665	3.9	106674	1575	1.5	48716	805	1.7	18574	137	0.7	371000	10182	2.7
13/14	198380	7624	3.8	103274	2458	2.4	44495	1365	3.1	16051	240	1.5	362200	11687	3.2

Source: Sin et al. (2015), p. 7



Graph 3 Evolution in the number of mobile students at polytechnics (Source: Sin et al. 2015, p. 9)

The Case of Internationalization of ISCAP

Research Design

The aim of this study is twofold: (a) to understand how internationalization in Accounting and Business School (ISCAP) has evolved (by identifying the milestones and the activities carried out during this evolution) and (b) to identify the enablers and constrainers of this evolution. To attain the objectives proposed, we first did a literature review concerning internationalization in order to understand and limit the concepts involved. In a second stage, we described and characterized the context where the study was going to take place – Portugal > higher education system > Polytechnic > ISCAP – Porto Accounting and Business School. The method used to gather data was document analysis. Finally, to identify the milestones, enablers, and constrainers of the evolution, in addition to document analysis, some interviews with key people involved in the process were also conducted (head of the international office, project manager, vice dean responsible for the school’s internationalization, and three lecturers actively involved in the internationalization process). The information gathering took place between March and June 2016. In the next section, we present the results by first describing the evolution of the school’s internationalization, then by presenting the factors that have enabled or constrained this evolution, and, finally, by drawing some lessons learned during this period.

Evolution of the Internationalization of ISCAP

Porto Accounting and Business School (*Instituto Superior de Contabilidade e Administração do Porto, ISCAP*) (www.iscap.ipp.pt) is the second biggest school of the eight of the Polytechnic of Porto (IPP) and is the biggest Polytechnic in

Portugal. Its biggest area of intervention is related to Business Sciences. In 2015, ISCAP had around 4400 students and 240 teachers (coordinator professor, adjunct professor, and assistant). It offers several graduate courses (bachelor and master) as well as some postgraduate courses, specializations, and short courses in the area of Business Sciences. Examples of bachelor courses are “Accounting and Administration,” “Marketing,” “Business Communication,” “International Commerce,” and “Human Resources” to name a few. As for master courses are, for instance, “Digital Marketing,” “Entrepreneurship and Internationalization,” “Accounting and Finances,” “Business Administration,” “Audit,” and “Translation and Interpretation.” Postgraduations include “Technologies for Communication and Innovation,” (b-learning) “Translation Assisted by Computer,” and “Russian Studies.” There is also a course of Mandarin. Students can attend day classes (normally younger students, between 18 and 21 years old) or evening classes (older students, usually already working).

The information presented in the following paragraphs was based on the analysis of the reports produced by the International Office (GRI), Project Management Office (GAP), and Presidency, as well as the results from the interviews conducted during this research. The information was compiled and will be presented in a chronological manner, noting the goals, results, and difficulties met during the full process.

ISCAP’s internationalization begun in 2004, as before that time the number of international students was low to nonexistent. The few existing mobilities were weak and non-structured. During that year, the school’s board decided to undertake internationalization as a strategy and as something with important value, creating the International Office (*Gabinete de Relações Internacionais, GRI*) and nominating someone to lead the newly created office. The main difficulties felt at the beginning of the internationalization process were (1) the lack of English programs for foreign students and (2) some resistance to the dissemination of information of international scope. Although most of the students come from non-English speaking countries, in Europe, English works as lingua franca, allowing students to be mobile and attend classes everywhere. An institution not offering classes in English will have a lot of difficulty to attract international students, in particular those coming from countries where the mother tongue is different from the mother tongue of the hosting institution.

Aware of the need to develop an international culture connecting every one of the school’s collaborators, GRI started by organizing ISCAP International Day in 2004. This was the first event of its kind in all IPP. The goal was to sensitize ISCAP’s academic community for the mobility issues via the testimony of students and teachers of and from ISCAP. Another objective was to reinforce partnerships and to captivate new possible partners. At the time, the main difficulties were related to some technical aspects (for instance, database with the names and contacts of foreign teachers to be invited, internal facilities, staff to help to organize the event, disseminate the event internally, and encourage teachers and other staff to attend), as well as to the captivation of interest of other Universities. Besides, it was very difficult to disseminate materials and courses in English.

In 2005, ISCAP became a member of the European network SPACE: European Network for Languages and Business Studies (www.space-network.org). As a consequence of active participation in the network (by being present at its various meetings over the years), the number of partnerships, projects, and mobilities started to increase. Till March 2016, two chairs of the committees of the network worked at ISCAP, and nowadays, even the president of the network is from ISCAP.

Another event that has been organized since 2006 is ISCAP's International Week, promoted by GRI. This event consists of an internal internationalization policy, harboring visiting teachers to present their subjects to classes of Portuguese students in ISCAP. The subjects taught are, usually, related to the course/class the visiting lecturer teaches. It is also possible for the content to be an introduction to a foreign language nonexistent in the curriculum of the several courses (e.g., Polish, Czech). This concept of the International Week was already presented in some partner Universities and seemed to be an interesting way to help increase ISCAP's internationalization. However, the concept was adapted and customized according to the profile of ISCAP. It should also be noted that this concept has won an honorable mention in 2014, with the prize for good practice for internationalization and mobility in IPP (*Prémio das Boas Práticas de Internacionalização e Mobilidade no IPP*). One of the difficulties felt at the time remained the lack of classes in English that could increase the number of incoming students. To solve this problem, the English program (*Programa em Inglês*, the first of its kind in IPP) was created in 2008 to match the offer of Portuguese for foreign students (*Português para Estrangeiros*). At the time, an increase in the number of students willing to make their mobility to ISCAP was already noticed, so the strategy of the Tutor Project (*Projecto Tutorado*) was no longer enforceable. As a consequence, the number of IN students started to increase exponentially. The obstacles remaining were related to the fact that the offer of English classes was just in a limited number of subjects, as not all teachers were equally fluent in that language.

The next step was to think of a way for foreign students to better integrate in ISCAP and the city, simultaneously promoting their involvement with the sponsors (ISCAP students who support and accompany the foreign students) and the remaining students. For that goal, an Orientation Week of ISCAP (*Semana de Orientação do ISCAP*) was created (the first event of this nature to be created within the Polytechnic Institute of Porto). This event consists of a week of activities of entertainment and information, of the Portuguese students, along with the foreign ones. The main difficulties felt were related to the late publication of the academic calendars and the fact that the chosen dates for the event were not always the best possible (in the first semester, especially).

In 2011, the "Cultures on the Move" event was first organized. This is a biannual dissemination event of the cultures from IN students to ISCAP students who have signed up for mobility, having as its purpose an intercultural preparation. Until 2013, this preparation was mostly done in an event with presentations from the IN students; but since 2013 the format has been changed: (a) ISCAP students (OUT) need to write a cultural motivation letter about the desired destination country; (b) IN students comment on the expectations and needs of a mobile student in that country;

(c) Portuguese and IN students meet in a small gathering, discuss important topics about the destination country and its culture, exchange contacts, and initiate a relationship that is intended to support ISCAP students' mobility. The main difficulties found with this event concern how to motivate ISCAP students for the presentations of IN students.

It must be said that, upon arrival at ISCAP, each international student is assigned a tutor (a teacher who also helps him/her integrate in the community and helps with pedagogical matters). Also in 2011, COMAP – ISCAP's Accompany Commission (*Comissão de Acompanhamento do ISCAP*) – was created, which consists of an informal group of students from ISCAP who collaborate with GRI in the support of IN students in activities such as sponsor management and distribution, support in housing offers, and Orientation Week Organization, to name but a few. The main challenges concern the creation of a regular and effective interaction between IN and ISCAP students, lasting beyond Orientation Week in the first semester.

In 2012, the first double diploma between ISCAP and a foreign university was created, in this case Université Bretagne Sud (France). Another double diploma soon followed, with Alytus College (Lithuania). These double diplomas allowed for the beginning of an internationalization of ISCAP's curriculum. The main difficulties were related to motivating the students to participate, especially with the French university, as the work language must be French.

In 2014, ISCAP accomplished its first Joint Programme (*JP*) with two foreign institutions, one from Lithuania and one from Estonia. The main difference between a double diploma and a *JP* is that the latter means the offer of an equal program (usually developed in cooperation) between all the institutions involved, while the double diploma allows for students to obtain credits in a foreign institution that later recognizes and credits them, allowing the student to have a double diploma.

In 2014, ISCAP also joined another network – ACINET – that is mostly comprised of institutions from South America, allowing for the diversification of students and not only from Europe. This has helped to open doors to Brazil. The relationship started with one institution – UNIS – and evolved to involve others. The activities carried out together include the mobility of students and teachers, the offer of international modules (at ISCAP) for Brazilian students (who come to ISCAP to spend 2 weeks and attend these modules), a Business Game, the involvement of teachers in research, activities within the network (conferences, seminars, connection with companies), and more recently the admission of Brazilian students in master programs. Table 2 illustrates the increase in the number of mobilities between

Table 2 Evolution in the number of mobile students at ISCAP according to origin country

	EU	South America	Russia + Ukraine + Belarus and other neighboring countries	Africa	Other	Total
2011	120	24	16	84	6	250
2012	144	33	19	75	8	279
2013	147	33	29	64	10	283
2014	138	40	30	61	9	278
2015	189	96	23	51	12	371

2014 and 2015 from South America, which has more than doubled. The institution is also attractive by Africa and this can be explained by the existence of countries where official language is Portuguese. Students from former Portuguese colonies chose Portugal (and in this case ISCAP) for their studies.

Graph 3 shows that the figures for mobile students at ISCAP are line with those for the other Polytechnics. The existence of another type of mobility, not only for studies, should also be noted. We are referring to traineeship mobility. In fact, over the last 4 years, ISCAP has received dozens of students wanting to exert some kind of professional activity over their summer holidays. ISCAP has been integrating these students in diversified services and organizations. Table 2 shows the number of IN students that came to ISCAP in the last 5 years within this scope. It is possible to see that the number of students has been increasing. Between 2014 and 2015, the increase was more significant due to new agreements signed with Brazil within the scope of master degree programs. The institutions with whom ISCAP has exchange agreements are similar to the school and to IPP, meaning Polytechnics or Universities of applied sciences since in Europe the designation of this kind of educational institution may vary from country to country (for instance, in some countries Polytechnics are designated as Universities of applied sciences). There are also some Universities among the partners.

However, mobilities are not the only factor making up for the history of ISCAP's internationalization. In the school's curriculum, the evolution in terms of international projects should also be mentioned. The first project in which ISCAP participated as a partner was InterCom – International Communication – within the *Comenius* programme, in 2005. This was followed by others where the school was also a partner, and, in 2010, ISCAP has its first two projects as a coordinator approved – “Love language” (Leonardo da Vinci) and FinLiCo (Grundtvig). The main challenges felt with the projects were related to the teachers' motivations to present and submit applications at a national and European level. There were also some problems at the administrative and management levels, related to the projects' formalities. For that, an office was created – the Project Management Office (*Gabinete de Apoio a Projetos – GAP*) – and a full-time employee was assigned, whose functions are, on one hand, to identify opportunities to submit projects and inform the teachers of these opportunities, as well as the procedures to follow for application submission and for their follow-up. On the other hand, GAP must provide support for financial and administrative procedures following the project's approval. It should be noted that the people involved have little or no previous training in the subject, making any initiative or activity troublesome and time-consuming. Table 3 shows the number of projects conducted since the first year of

Table 3 Projects funded between 2005 and 2016 at ISCAP

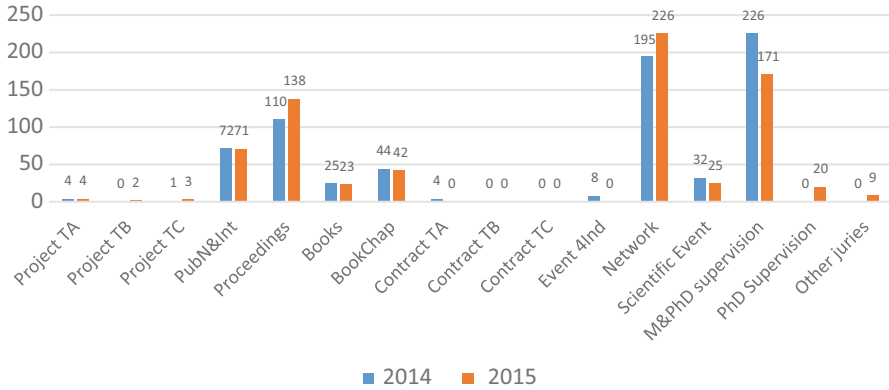
Start year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Number of projects	1	1	0	0	2	5	10	2	2	4	2	4

introduction in ISCAP. In 2016, there are three ongoing financed projects, all from Erasmus+ (started before 2016 and ended between August and October). Also, in 2016 four more projects were approved and funded by Erasmus+ (new projects).

It should also be noted that, within the SPACE network, several Theme Groups (*Grupos Temáticos*) existed till March 2016. In 2008, the head of the ISCAP International Office and a lecturer from the institution attended a SPACE meeting to more actively participate in the several Groups. Following this participation, ISCAP has begun to be actively involved in these Groups' activities. Shortly, these teachers became the chairs of two of the Theme Groups. These Groups' activities imply the execution of projects of a lesser dimension, with teachers and students from several European educational institutions, which contributes to ISCAP's internationalization, as more persons become aware of ISCAP, its teachers, and its work.

In 2012, the Presidency decided to create some incentives for lecturers to participate more actively in research activities. For that purpose, a regulation was created where points are awarded to specific indicators, which would later be transformed into funds that could be used to participate in conferences, to buy bibliography, and to enroll in training courses. The categories of those indicators were as follows: (a) projects, (b) publications (including journals, proceedings, books, book chapters, etc.), (c) relations with industry (contracts and events), (d) networks (participation in networks and scientific events), and (e) juries (masters, doctorates, and others). It must be said that by that time there were four research centers at the school – two of them already with some years of existence and other two that had been recently created. At the time this chapter was being finalized, three of these research centers were in process of fusion meaning that at the beginning of 2017 instead of four centers, there will be only two centers – one related with intercultural studies and another one (resulting from the fusion) about organizational and social studies. It was decided by the presidency that the funds were awarded to each center according to their previous performance, which means that the points obtained were in accordance with the indicators presented. This also means that each center had to manage its own budget and motivate all researchers to work harder and be more active so that would mean more funds. Graph 4 shows the scientific production for 2014 and 2015 in an aggregated way. It is possible to see that there are slight differences between the 2 years – the number of publications increased as well as the network activity, while the supervision decreases. In fact, in 2014, the presidency recognized that not all the indicators were correct in the first year (2014) and so some corrections for the following year were introduced, meaning that some new indicators were created (Doctorate supervisions and other juries alone). Each indicator also had different weights – for instance, the indicator “network” could not have the same weight as an international project or a publication in a highly ranked journal.

At ISCAP, each time a lecturer or a member of staff travels for a mission in a foreign country, he/she needs to fill in a form and explain the nature of that mission. We also analyzed these documents (2014, 2015, and 2016 till the end of July), and results are summarized in Table 4. Figures show that the number of mobilities is still



Graph 4 Scientific production in 2014 and 2015

Table 4 Evolution in the number and type of international mobility for lecturers and staff

	2014	2015	2016 ^a
Conferences	22	27	28
Projects (meetings or other missions within projects)	21	19	16
Mobility (Erasmus)	20	34	37
Meetings	7	9	8

^aTill the end of July 2016

rising, in particular those related with Erasmus. Participation in conferences has also increased. In 2016, although we have figures only for half of the year, these figures show that lecturers are getting more and more involved in all international activities (conferences, project proposal submission, mobilities, and even international meetings).

Figure 2 summarizes the activities carried out under the internationalization umbrella using the categories suggested by Knight (2008) – extracurricular activities, education, research, and technical support. Although, at the beginning, the activities were concentrated mostly under the education strategies (mobility), rapidly they evolved to other possibilities. Today, they cover all the quadrants.

At the beginning of this section, it was referred that internationalization started with mobilities (students and teachers) and then it proceeded with the internationalization of curricula. Of course the analysis and comments cannot be done in an atomized way since the result obtained is more than the sum of the parts. In fact each activity and result of an activity is enabling other effects and influences. A colleague that goes abroad to teach is an example for the others. And a teacher that decides to make an effort and teach in English is also regarded as a brave person, as an example for the others. The same happens with the use of technology and participation in projects. Synergies are created, ideas are advanced step-by-step, and other teachers start getting involved and are willing to participate. More contacts are established,

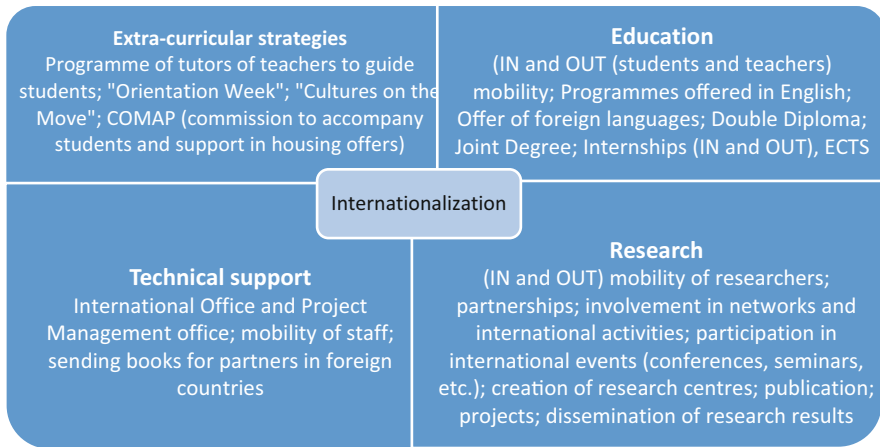


Fig. 2 Summary of all activities being carried out under the umbrella of internationalization at ISCAP

networks built, and good practices identified and applied in the school. Just as an example, in 2015 two of the masters (Business Administration and Entrepreneurship and Internationalization) had, for the first time, about 30 students from Brazil. The whole school had to adapt to this reality. Students spent 2 weeks in Porto to attend classes (15 h of contact), and the remaining classes were taught at distance. This meant an additional effort to all teachers since some of them had never had contact with the technologies enabling distance learning. Courses had to be provided as well as technological support. In the second semester, some teachers went to Brazil for some seminars, and this also represented a challenge since some of them were not used to travel, in particular for such far away destinations. For the second edition of this exchange with Brazil, things are going more smoothly, and some of the problems identified in the first edition are now being corrected. The description made in this section was a general one. We did not describe the details since our aim, at this point, was to give the reader a general idea. However, one must say that each activity cannot be in an isolated form since all the activities are related and connect.

Enablers and Constrainers

Internationalization at ISCAP started with students' mobility (as described in the literature (Knight 2008; Hawawini 2011)) as this seems to be the easiest activity to internationalize due to the existence of Erasmus scholarships (at least for students coming from Europe). In just 10 years, the number of students increased from 0 to about 200 students choosing ISCAP for their mobility. This initiative's success was due to several factors: the creation of an organizational structure (GRI), the appointment of a responsible person for this office with suitable skills (dynamic, enthusiastic, motivated, with dialogue skills and able to involve other colleagues and students,

leader, fluent in English), and the strong support from the school's board. The participation in an HEI European network (in this case, SPACE network) was equally important, mostly for the ability to meet partners, to establish a dialogue, and to allow the partners to meet ISCAP, the people providing the school's public face, as these personal contacts allow for the layout of trust bonds, essential when a student hesitates between two different institutions at the time to choose his or her mobility. This confidence is not only needed for mobility but also for every other activity related to internationalization. In fact, double diplomas arise precisely as a result of this preexisting confidence between both institutions. It should be said that, even when a good mutual knowledge already exists, the processes can be long and complicated until a final outcome emerges; how would it be if the partners hadn't met before and had to develop trust from scratch?

That same factor – trust – was also present at the dawn of the *Joint Programme*, whose development process was only possible given the trust relationships between every partner involved. And that was only possible because of their participation in the SPACE network. Another crucial factor is related to financial support which is needed, in particular, to organize events (namely, the International Week, which involves harboring around 100 people simultaneously) and potential trips abroad (e.g., participation in SPACE network and respective Theme Group meetings, participation in IUNC – International University Network Conference – allowing for the establishment of bridges with Russia, Ukraine, Moldavia, etc., and participation in the ACINNET, just to name a few).

Still, a third factor contributing to the success was the involvement of students and the Student's Union (*Associação de Estudantes*). The many welcoming activities for international students were possible only thanks to their collaboration and involvement. The same happened with helping to find places for the students to stay. If, at the beginning, this activity was carried out in an ad hoc and marginal fashion, it has quickly evolved into something more formal and professional, giving rise to both a website and a database that have been growing over the years (www.comap-portugal.com/). The financial situation should also be mentioned. If, at the beginning, it did not seem very relevant (given the small number of persons involved) it quickly became apparent that it was about to change. And, in fact, when a HEI decides to follow an internationalization path, it is not immediately perceivable, all the costs involved, be they in the execution of welcoming activities for students, school promotion activities, participation in international networks (quotas, participation in meetings, etc.), teacher training (e.g., in English language), etc. The solution found was to gather resources from different sources. And “resources” mean exactly that – all kinds of resources not only financial ones. For example, during International Week, some local partners wishing to promote their products were invited to take part in the event. That way, the welcoming session, which was initially supported by the school, was quickly sponsored by local partners (food and drinks). The execution of the events relies on the help of several volunteers that receive a participation diploma at the end, confirming their involvement, and which goes into their Diploma Supplement, contributing to the student's professionalization and their employability. The fact that the school considers International Week's

activities as essential to its internationalization, and consequent project developments, has made it possible for the funding received by one of its sponsors (a bank) to be granted to this event.

Concerning the mobility, a rationalization of the scholarships attributed to teachers was sought. Currently, there are more teachers wanting to do mobility than scholarships available. To solve this problem, it was decided, in some cases, to split the scholarships in half (doubling their number) and, in other cases, to adjust the value of the scholarship to the effective amount spent. As a consequence, if on the one hand this solution has made it possible for more teachers to accomplish their mobilities, on the other the effective value of the scholarship was reduced and may not be enough to cover the mobility's full expenses, causing the teacher to complete the spent amount with their own money. And, if for some teachers, that does not affect their family budget in a relevant way, for others this may mean a mobility is simply not possible, which may affect, at a later time, their performance evaluations.

Another issue is the personality of some teachers (individual characteristics). During the interviews, it was possible to identify some personality traits that reflect an unwillingness to try new things, to embrace new challenges, to do things in a different way, and to meet colleagues from other countries and cultures. These teachers do not belong all to the same scientific area but they are now working together, preparing, and submitting project proposals together. Somehow, informally, they created a community of practice having as shared practice the willingness to embrace new challenges and know more, new, and different things (including people, countries, and cultures).

Figure 3 summarizes the factors involved in the schools' internationalization process. Four factors related with the school of the case study were identified – human factors, political factors, cultural factors, and structural factors. A fifth factor was also identified – regulation body. Changes in the external environment of the school, such as law and other regulation issued by the government – have impact in the way the school develops its strategy and decides what activities can and should be implemented. Needless to say that in Portugal, half of the budget of any public higher education institution comes from the State Budget, which implies that any cut has a strong impact in whole of the educational system. We position it outside the school. In fact, it influences in an indirect way, with the publication of different laws and regulations that, at the end, will force changes to happen.

Human factors are related with people. These can be individual (for instance, personality traits) or group (social interactions, communities of practice). As mentioned before, we identified that personality can trigger change, since there are teachers willing to try new things and embrace challenges. There are also other teachers who prefer to wait and if necessary, then follow the first ones. There are also other teachers who will embrace change only if they are obliged to. Actually in the case described, it was possible to identify some teachers that acted as leaders of the internationalization process and somehow constituted an example for the others. Some of these teachers also tried to motivate the colleagues by inviting them to collaborate, for instance, in the European projects and inviting them to become responsible for the partner. This situation leads to another one consisting of these

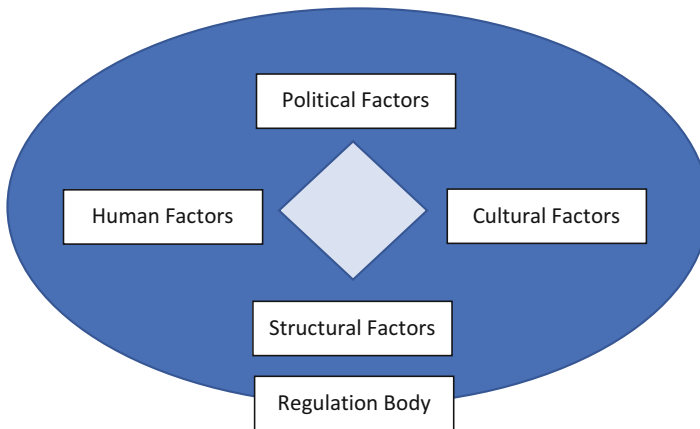


Fig. 3 Enablers and constrainers of internationalization

teachers inviting other teachers and so on. This involvement is also leading to the creating of communities of practice related with the different activities (e.g., tutoring, staff exchange, projects).

Political factors are related with power, with decision taking, and the establishment of a strategy. In this case, there was first the resolution that internationalization was important for the school and, related with this, some decisions were taken. As mentioned, there was the agreement to create the offices related with internationalization and project management. A person was appointed to the GRI with certain characteristics needed to motivate and trigger changes among the colleagues and get the collaboration of students. Later, another office was created to deal with projects with a full-time staff to help teachers in the process of submitting project proposals and managing it after its approval. Another decision was to change some internal regulation in order to give more autonomy to the research centers and making them responsible for the management of the granted funds. A consequence of this was that funds were distributed to teachers according to their work in the previous year – the more they worked, the more they received. Of course this decision was not accepted pacifically by everyone since this meant a change in the status quo. But now, since criteria are clearer and measurable, all teachers know what they have to do in order to have more funds to attend conferences or do other types of mobility.

Cultural factors are those related to the characteristics of the organization, such as individual autonomy, structure and supervision, performance and reward, and the establishment of clear objectives. Also in this case, it is possible to identify aspects related with this – each teacher was given a certain autonomy to decide to embrace a project or not. Of course, at a certain moment, it was possible to identify a multiplier effect related with the example of those teachers who decided to change or introduce novelty in their daily work life. It was possible to see teachers who wanted to mimic the behavior of their colleagues and try new things. And

there were those who felt they needed to do something or they would be left behind. Of course if we see that in the meantime some legislation was put into practice making it compulsory for teachers' performance to be assessed, with heavy consequences for those who did not reach the threshold level, one can only guess that those teachers would suddenly realize that they needed to do something. Also, within cultural factors, it is possible to refer the aura of motivation and the encouragement felt with all the events that were organized, with all the visiting teachers and students, and with all the activities within the research centers. Internationalization became something "normal" and regular, and meeting foreign students at the cafeteria or in the corridors is something quite usual. English became the language spoken everywhere along with Portuguese. Even the menus at the cafeteria are also written in English.

As for the structural factors, it is possible to mention the creation of the research centers; the participation in networks; the mobility done by students, teachers, and staff; and the involvement of students in all the activities (like the involvement of the students' union and other groups of students in the welcome week of international students, just as an example).

Looking back, it is not possible to say which factor has the most influence. Actually, they influence each other, and change is the result of this interaction that happens throughout time (Sarmiento 2004). Just like in the works of Tsuruta (2013) and Robson (2011), so has ISCAP witnessed benefits at both institutional and personal levels. At an institutional level, this process allowed for the spreading of the school's name and brand and improved its image and reputation abroad (foreign countries and the community involved) with its consequent increase in internationalization, in all its sides. At an individual level, the teachers involved were able to share their experiences, learn from each other, open themselves up to the exterior, collaborate, grow, and improve their tolerance and self-reflection. Teachers have also improved their English language skills, learned new teaching and evaluation methods, found new opportunities for collaboration, and saw overall improvement in their skills.

Conclusions and Future Work Direction

Internationalization is not something new worldwide and in Europe in particular, but it is a must and a need nowadays. More and more, students are looking for other countries and foreign institutions to spend some months. This is considered a valuable and unforgettable experience, both for students and employers who recognize that mobility contributes to the development of some skills that would not be developed otherwise.

Usually internationalization starts with mobility whether of students or teachers, evolving then to other activities enabled by the kind of relation, trust, and confidence established among partner institutions. In an ideal situation, internationalization should comprise all dimensions of educational institutions. It should be seen in a holistic and bidirectional way – being open to be influenced but also being able to

influence. Of course, this is a long way and the result of the interaction of different factors such as human factors (individual and group level), political, cultural, and structural.

Being aware that this is not an easy process, our purpose with this chapter was to share an experience of one of the school's biggest Polytechnic in Portugal – Accounting and Business School of the Polytechnic Institute of Porto. Results showed that the evolution was done step-by-step throughout the last 10 years being the kickoff done in 2004 when the administration of the school considered internationalization as something strategic for the survival and competitiveness of the institution. Ten years later, the experience is assessed as positive, and this school is now being considered the most internationalized one in this Polytechnic as for mobile students. Although there were positive results, there were constraints and problems to face and solve. Some decision at the top management had to be made in order to make this internationalization possible. Motivation and involvement can be described as the keywords for the success.

One of the questions that we may ask ourselves now is in which direction should or can this school continue as for internationalization? Where to go from here? As said, internationalization cannot be confined to mobility and so other strategies should be developed. This means that research and innovation should also be target of a strategy. This means that projects developed together with other researchers from other schools and countries should be encouraged and cherished. Education cannot be forgotten and the good work should be continued being the education at distance and the use of technology as one possible solution. For this more training about technologies should be offered to teachers. It is not enough just to say that teachers need to use technologies as well as new pedagogies. They need to learn how to do that. They need to have opportunities to try and fail and not be punished. A possible pathway could be the offer of distance learning courses as well as MOOC. Additionally, although ISCAP has a lot of students from Portuguese-speaking countries, one cannot forget those coming from Europe. And this means enabling teachers to speak proper English and to encourage them to expose themselves. A final word to say is that the internationalization at home cannot be forgotten and the attractiveness of the school to foreign teachers should be maintained or, if possible, increased.

At a macrolevel, the identification of the enablers and constraints helps to understand how an internationalization process can be developed. As a next step, it is necessary to identify all the factors intervening here as well as the result of the interaction among them, which might constitute the focus of future research. For this, similar studies should be conducted in different countries and different types of organizations so all the factors are identified.

Finally, and since internationalization is a global issue and almost all higher education institutions try to be more international, it would be interesting to start an observatory using the dimensions and indicators already developed by Knight (2008). This could help to accompany the evolution of internationalization of HEI as well as to identify good practices allowing others to avoid outfalls already experienced by other institutions.

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The Internationalization of Vocational Education in Brazil's Federal Institutes: Another Model

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Marcelo Camilo and David Shallenberger

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Abstract

In Brazil, the closest equivalent to a US-style Community College is the Federal Institute of Education, Science and Technology, a federally funded institution created to meet the vocational needs of the country's states. This chapter describes this institution, its similarities and differences to community colleges, and the

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ways in which it is internationalizing, in particular with respect to its curriculum. This case study focuses on one such example, but draws parallels to the broader situation through research studies done by the authors.

Keywords

Internationalization · Vocational education · Brazil · Public education

Introduction and Context

As we think about promising models of education for a rapidly changing and more globally interconnected society, we might turn to a particularly Brazilian approach: the Federal Institute of Education, Science and Technology (in Portuguese, Instituto Federal de Educação, Ciência e Tecnologia). The latest version of an institution that has evolved over the last century as society's needs have changed, the Federal Institute has a particular social function and approach to learning that directly reflect local and regional needs.

Federal Institutes (FIs) were officially created in late 2008, growing out of society's needs for skilled workers and built upon a series of previously existing organizations that dated back to 1909. In reverse chronological order, the most important of these include the Centros Federais de Educação Profissional e Tecnológica (CEFETs or Federal Centers of Professional and Technological Education) and the Escolas de Aprendizes e Artífices (Schools of Apprentices and Craftsmen). What is most important about this history is the ongoing commitment of the FI educational system to reform education to serve the people, a principle that is captured in the Brazilian constitution. Indeed, education is free to all students attending public institutions, many of which (at the tertiary level) are considered the best schools in the country. This is demonstrated in the tri-annual General Index of Courses (in Portuguese, Índice Geral de Cursos), published by the Brazilian Ministry of Education, which assigns a quality indicator to each institution; many public institutions, including Federal Institutes, are at the top of this list.

At the time when FIs were being envisioned and created, Brazil was facing a significant scarcity in skilled labor: only 18.3% of all those who were looking for work in Brazil in 2007 had the qualifications to immediately assume positions that were then open (IPEA, cited in Pacheco 2011). Similarly, there was a particularly acute shortage of qualified teachers, which only threatened to extend the cycle of poorly educated citizens.

Meeting this challenge is reflected in the prominence of the FIs' social mission, to combat inequality and remove barriers to social inclusion of those who had been historically distant from Brazil's development and modernization, through education and training at all levels from secondary school through graduate levels. Indeed, this verticality is one of the key principles of the FIs.

Today, each of Brazil's 26 states (and its Federal District) has at least one FI, and each FI typically has multiple campuses spread out throughout the state. Together, the FIs make up the Federal Network of Professional, Scientific and Technological

Education (in Portuguese, Rede Federal de Educação Profissional, Científica e Tecnológica); these institutions currently contain 562 campuses, having added more than 200 schools just over the last 4 years; in total, they host 600,000 students (Rede Federal 2015, para. 2). Based on the fact that 50% of the admissions are designated to the socioeconomically lower classes by using technical criteria, we are led to believe that this alone leads to the idea of an enormous transformation in Brazil's social reality for it provides access to quality education and therefore social mobility to the excluded ones. However, we have found no evidence of studies to confirm that theory.

This chapter explores internationalization of the federal institute as a community college equivalent, with particular focus on one FI as illustrative of the opportunities and challenges faced.

Comparison to US Community Colleges

There are significant similarities with and differences from US community colleges. The history of Federal Institutes (FI), described above, reflects our first point of comparison to Community Colleges: their role to train workers. Given the different contexts, however, this commitment plays itself out in distinct structures. The range of diplomas and degrees offered is greater than at a US Community College, with programs that range from full and supplemental secondary programs through 3-year, 4-year, and graduate courses. Table 1 depicts those levels: one could compare the 3-year “technologist” programs to an associate’s degree and the postsecondary technician to many “certificate” programs offered by US Community Colleges.

As noted the FI system reflects local Brazilian realities and labor needs. Students can attend any of these levels depending on their previous education, entrance examination scores, and vocational objectives. If one aspires to management, a “technologist” (US Associates’ equivalent) degree is the minimum level necessary, while an assistant could find employment at the “technician” (postsecondary certificate) level.

Table 1 Levels of educational programs at FIs

Type	Length
Technician (High school level)	4 years
Postsecondary technician (intermediate between secondary and tertiary) technician (similar to Community College shorter degrees)	18–24 months
Undergraduate technologist –similar to a Community College Associate Degree	3 years
Undergraduate Teacher’s Licensure program – similar to a US BA degree	4 years
Undergraduate Engineering degree – equivalent to a BA in Engineering	5 years
Graduate-level specialist diploma	12–18 months
Graduate-level masters’ degree (in both professional/applied and academic areas)	18–24 months

While this structure is necessarily distinct from that of US Community Colleges, there are other powerful similarities. As mentioned before, perhaps the most significant parallel to US Community Colleges is its vocational and technological mission, i.e., preparing individuals for the workforce. Given social realities and this focus, two other structural similarities are not surprising: (1) courses are offered on a part-time basis and (2) students are often working while they are attending courses.

Theoretical Context

In this review, we are drawing upon three key concepts related to internationalization: comprehensive internationalization, internationalization “at home,” and the mapping and assessment of internationalization. All of these concepts are part of the professional discourse of international educators in Brazil, though they have been applied in somewhat distinct ways, as we present below.

Comprehensive Internationalization. The term “comprehensive internationalization” is of very recent coinage, as is demonstrated by a database search that shows only four references to the term in publications before 1995 and well over 200 in the last 4 years. Hudzik and others (Hudzik and McCarthy 2012; Hudzik and Stohl 2012; Hudzik 2011) have been cited most frequently on the use of this term, though others (Olson et al. 2006). Knight (2004) and (2009) have addressed similar or identical concepts with slightly different terminology. This study uses the Hudzik (2011) definition:

Comprehensive internationalization (CIZN) is a commitment, confirmed through *action*, to integrate international, global, and comparative perspectives throughout the teaching, research, and service missions of higher education. It is a means to advance the core learning, discovery, and engagement objectives of higher education in a twenty-first century context. (p. 6)

What is common to the most recent publications on the topic is the multifaceted nature of comprehensive internationalization, reaching virtually all parts of an institution and grounded in a deeply rooted set of interdependent values and principles. These core beliefs may differ significantly among institutions both within the United States and beyond and often stem from their preeminent reasons *for* internationalization: for some schools, learning how to live and work in a globalized world grounds their internationalization strategies, while others focus on creating a more peaceful world, improving their competitive ranking, or increasing the number of students. Regardless of motivation, more and more higher education institutions recognize the necessity to look beyond just study abroad and international students and the importance of buy-in at all levels of the organization. Clearly, these dynamics play themselves out in different ways across the world because of distinct local and regional realities, as this chapter attempts to demonstrate.

The term “comprehensive internationalization” (or “*internacionalização abrangente*,” in Portuguese) has – to our knowledge – only been used in Brazilian

conference presentations, such as those given by the authors. The simpler term “internationalization” has been part of significant work in the country (Chaves and Castro 2016; Knobel 2011; Flach and Flach 2010; Laus and Morosini 2005), but not the expanded term as we are using it here. Notably, there has been virtually no writing on the internationalization of FIs specifically, though there have been some professional presentations and there is a network of FI international officers who share “best practices.”

Internationalization “at home.” The second body of theory and practice relates to “internationalization at home,” a term which has been defined in multiple, but closely related ways, has received significant focus from such writers as Leask (2001, 2009, 2012), Beelen (2012), Knight (2004), Mestenhauser (2003), and many others over the last 15 years or so. For the purposes of this chapter, this term applies to the variety of initiatives which, taken comprehensively, help students develop intercultural and global competence on the home campus; these can include, for example, internationalization of the curriculum through the use of nonnational materials, cases, and examples; connecting classrooms across borders through the use of technology; incorporating international speakers, conferences, and events into school life and programs; offering internationally focused residences; and integrating globally oriented internships and community activities.

Internationalization at home has growing awareness in Brazil and was a significant topic in the latest conferences of the Brazilian International Education association, FAUBAI, beginning in 2014. Reinforced by almost all the external (i.e., non-Brazilian speakers), including one of the authors of this article, the topic drew a great deal of attention throughout the conference. While historically, Brazil – like many of its neighbors – has thought of internationalization as mobility, this greater emphasis on extending this strategy to the home campus and the 97% of students who do not travel has begun to have greater relevance.

Measuring Internationalization. The third body of literature that informs this chapter is that which relates to measuring internationalization. Drawing on the field of educational evaluation as well as the practice of accreditors and international educators, many researchers refer to instruments and studies that offer metrics and indicators to measure and compare internationalization across institutions. A variety of schema have been developed (see for example, those profiled in Beerkens et al. 2010) throughout the world. The International Association of Universities (IAU) has undertaken and published a survey on the internationalization of higher education, its most recent update having been published in 2014 (IAU 2014). Other relevant reports include British Council’s “Megatrends: The future of international education” (British Council 2013). We have found no evidence of Brazilian educators involved in this specific project. However, two universities from São Paulo are members of IAU, Sao Paulo State University “Julio de Mesquita Filho” (UNESP), and the State University of Campinas.

However, it is our belief that given the variety of institutional and societal contexts around the world, measuring internationalization in a coherent and widely comparable way is challenging, if not impossible. One can certainly count the number of international students on a campus, the percentage of domestic students

who go abroad for part of their studies, or the extent to which professors have experience in doing research with partners outside of their home country, but pulling this information together cohesively and *meaningfully* defies our best efforts; the comprehensiveness of internationalization is more than numbers. One cannot compare the internationalization of institutions in Northeast Brazil, for example, with those in Northern Europe, in a significant way, because the contexts are so different.

The Opportunities of Internationalization

The internationalization of education in Brazil is developing unevenly, more quickly in some institutions than in others; larger universities in São Paulo or Rio de Janeiro, for example, have far greater numbers of international students and domestic students studying abroad; smaller schools as well as those outside of the wealthier Southeast find it difficult to attract international students or find funding for their students to leave the country. As Chaves and Castro (2016) note, most students from the global north prefer to live in the larger, more important cities and attend the best-known schools in Brazil. As for outbound mobility, currently, there has been a shortage of federal funds for internationalization nationwide while institutions are in search of new ways to finance mobility as one of Brazil's most encouraged internationalization strategies; this financial shortfall has exacerbated as Brazil's economy has fallen steadily in 2015 and 2016, and only those schools with the largest budgets can support outward mobility.

This uneven engagement in internationalization is reflected in the relatively poor participation (approximating 10% of higher education institutions nationwide) in the annual FAUBAI (international education) conference, which is the central meeting point of Brazilian and foreign schools seeking to deepen their internationalization strategies.

Sadly, FIs are among those institutions that find it difficult to attend the conference in spite of their institutes' apparently great potential to internationalize. When asked about why they do not attend, most say they do not have the necessary financial resources, given the view of their institution's senior leadership that internationalization is not the most significant driver for educational development in a time of limited funding. This does not mean that international officers are uninterested in the opportunities to deepen the internationalization at their institutions; it is merely a matter of budget (and competing institutional priorities).

Budget aside, their underlying philosophies and approaches suggest an excellent fit and opportunity for internationalization: Underpinning their social missions are such principles as interdisciplinary and respect for diverse cultures; their focus is on the same fields recognized by the large "Science without Borders" program (otherwise known as the Brazil Scientific Mobility Undergraduate program) relevant "hot" areas, such as bio-combustibles and alternative and renewable energy; their approach is applied rather than theoretical (which fits with the competency models growing in popularity around the world); and the needs for a more globalized curriculum are increasingly apparent, even in the most remote regions of the country. Alas, the

potential exceeds the current reality; while some key players in these institutions are eager to support internationalization, others have different priorities, particularly given limited budgets, as we discuss below.

The Case: The Federal Institute of Rio Grande Do Norte

As a way to describe more richly the Federal Institute (FI), this chapter focuses on a particular example in the Northeast of the country. An enormous country with great variety, Brazil cannot be fully represented by any single region; that said, the Northeast has great demographic and geographic diversity and can offer some valuable insights into the country's nuances and complexities.

The Federal Institute of Rio Grande do Norte (IFRN, in its Portuguese abbreviation) serves one of Brazil's smaller states with 21 campuses, including three in its capital city, Natal. In the institution's *Political Pedagogical Project*, a collaborative document typical of Brazilian educational institutions, it expresses its social function as: "To offer professional and technological education . . . committed to holistic human development, to the exercise of citizenship and the production and application of knowledge, envisioning, above all, the transformation of reality with respect to equality and social justice" (IFRN 2012, p. 21).

This commitment plays itself out in multiple ways: in a vertically integrated system of education that extends from secondary school through graduate studies (as is typical of FIs and was noted before); in an interdisciplinary curriculum that covers over 100 degree programs from Administration to Zootechnics (Husbandry) plus another similar number of courses for "professional qualifications"; in a policy of reserving 50% of its places for students from the public schools of the state, generally populated by those students from lower-income families; and in a collaborative approach to learning. The "law of quotas" is actually fairly complicated. The 50% from public schools is broken out into subquotas for students of color and those of low income, groups which actually overlap significantly.

Educational programs. Matching the general model depicted in the introduction, the IFRN offers courses at all the levels listed above in Table 1. The degree areas vary, depending on the academic level and focus. Two levels are most similar to the US community college: (1) the supplemental secondary programs for students who have completed their high school studies elsewhere, but who want additional technical or vocational studies; and (2) the 3-year undergraduate college degree. The following Table 2 summarizes these degree areas:

While most students attend classes in a face-to-face modality, IFRN has a rapidly growing program of distance learning (*ensino a distância*) that includes programs running from secondary through graduate levels. Five thousand students are enrolled in these courses. It should be noted that this is a very rapidly growing area, growing on a national level from just over 300,000 students in 2004 to almost 7,000,000 in 2013 (ABED 2013; Campus 2014).

Looking at this list, one can easily see the relevance to today's economy, as they reflect new and developing fields.

Table 2 Disciplines taught at IFRN

Supplemental secondary (“técnico subsecuente”)	3-year college (“tecnólogo”)
Specializations that are offered at both levels:	
Agriculture (including additional specializations at the supplemental secondary level)	
Food	
Computer networks	
Specializations only at the supplemental secondary level	Specializations only at the 3-year degree level
<i>Business and management</i> : four areas of specialization including administration, business, cooperativism, and workplace security	<i>Business and management</i> : six areas of specialization including International commerce; specialized management, logistics, and marketing
<i>Engineering</i> : 14 areas of specialization including such areas as biofuels, environmental control, mining, petroleum and gas, electronics, mechanics, and buildings	<i>Engineering</i> : three areas of specialization, including industrial automation, building construction, and mechanical manufacturing
<i>Information Technology</i> : two areas of specialization	<i>Information Technology</i> : two areas of specialization including systems analysis and development, and internet systems
<i>Other</i> : Chemistry Geology Tourism (for guides) Clothing Events Biomedical equipment	<i>Other</i> : Cultural production Renewable energy Chemical processes Fashion design

Internationalization at IFRN

We decided to delve into this quandary at IFRN, beginning with an exercise in mapping internationalization at the institution, funded in part by a grant from the Fulbright Scholarship Program. Using a mixed-methods research approach, this mapping activity included several methods to reach a richer understanding: formal and informal meetings with students and teaching and administrative staff at several campuses; review of classroom materials and course descriptions; study of key institutional documents and websites; and a survey of faculty from throughout the institution. This work led us to explore various aspects of this strategy and to evaluate, in particular, “internationalization at home.” This emphasis makes sense because relatively few students undertake mobility programs; IFRN’s commitment to meeting local and regional needs in an interdisciplinary and globally relevant way seemed to reflect great potential to ensure that all students graduated with global competencies. And so, our research took us to explore the level to which they are exposed to global concepts in their classes and on their campuses. We then expanded the survey to reach other Federal Institutes in Brazil as a way to assess whether the situation at IFRN was typical of the FI network schools.

Learning About IFRN

A profile of IFRN stemmed from meetings with faculty and students, visits to rural and urban campuses, and review of documents relating to organizational values, courses, and curricula. This familiarization approach was followed up by a survey of teachers across the campuses and interviews of a subset of those respondents, which was then extended to eight more Federal Institutes. The findings shared below come most directly from the survey, but are more fully understood through the other sources listed above.

Survey. The survey, administered electronically, asked faculty to answer questions about their international experience studying and doing research; their interest in internationalization of their courses; and their use of specific strategies within the classroom. Questions were both multiple choice and open-ended, allowing additional comments even on the more quantitatively focused questions.

Key questions included:

- Have you studied abroad? If yes, where and for how long?
- Have you done research abroad, alone or with colleagues from other countries? If yes, describe briefly.
- Do you have other internationally focused professional interests? If yes, explain.
- Have you used the following strategies in your courses? If yes, please describe. (Each of these was a separate question)
 - Use of readings, data, and material from outside the country
 - Use of Skype and social media to connect with students and classes outside the country
 - Integration of students with international experience in classes
 - Presentation of talks by visiting international professionals
 - Use of other strategies (if so, please describe)
- Are you interested in a training workshop on the internationalization of the classroom?

In order to assess the extent to which IFRN is representative of the larger FI network, we also sent the survey to the teaching staff of the other Federal Institutes.

IFRN and Internationalization: Voices from Faculty

A total of 158 IFRN teachers answered the survey, representing 18 campuses and Distance Learning; in addition, 508 teachers answered the survey from 12 other Federal Institutes. In both cases, the surveys returned represented about 10% of the total number of teachers, and the national and IFRN responses are remarkably similar (with only one exception), as the reader will see below. A summary of their responses follows.

International Experience

We asked participants whether they had studied outside of Brazil or participated in any internationally focused research. At IFRN as well as at the other FIs, 20–21% of respondents had studied abroad. The percentage doing research outside of Brazil differed significantly; however, while at IFRN 13.92% had done internationally focused research, the number at other FIs was much higher, 35.71%. There can be any number of explanations for this discrepancy, ranging from the level of institutional support (and availability of resources) for such efforts to the possibility that certain institutes may draw more experienced faculty.

Use of Common Strategies of Curricular Internationalization

We asked participants whether they had used any of the common strategies listed above for internationalizing their courses; the responses are captured in Table 3, below.

We also asked participants to comment freely in addition to their “yes” or “no” answer, an option which most took advantage of. Through those comments, we know that:

- Nonnational materials include predominantly articles and websites and varied depending on the class discipline; information technology courses, for example, drew more heavily on non-Brazilian resources than did the humanities.
- Connecting technology is not used much in the classroom itself, due to limits in Internet access; it is more common to network with colleagues outside of the country.
- Internationally experienced students and international speakers are often not used because there is little opportunity, i.e., there are few relevant speakers and students available; this access depends in large part on the location of the specific campus

Further analysis of the results shows that those professors with international study and research experience are significantly more likely to employ these internationalization strategies, especially the use of nonnational readings and connecting technology.

Table 3 Use of internationalization strategies in the classroom

Institution	Using nonnational materials	Connecting technologically across borders	Integrating students with international experience	Integrating international speakers
IFRN	62.66%	21.52%	23.42%	20.89%
Other Federal Institutes	65.21%	18.89%	23.73%	17.51%

Other Strategies

Many of the strategies mentioned here were specific applications of the general ideas mentioned in the other questions, such as the use of websites, videos/documentaries, cases, and articles from other countries. Given the technological focus of the institution, it is not surprising that many of the examples had to do with new, cutting-edge developments:

- *I always try to use examples of research going on at CERN.*
- *I try to show what is being researched around the world with respect to the topic that is being discussed in class.*
- *Recently, I presented an innovation in fishing trawls, a device created in Glasgow, Scotland, near where I visited.*
- *In my classes on entrepreneurship, [I present] startups to the students.*
- *I try to get my students to participate in open source projects online.*

Of course, as Federal Institutes are committed to interdisciplinary strategies, there are also many options for students to explore areas beyond their local, vocational interests through language study (all IFRN campuses offer English and Spanish while the main campus offers French and Portuguese as a foreign language, as well), “cultural fairs and festivals,” annual technology exhibits, science fairs, the analysis of Afro-Brazilian poetry and music, a band, a choir, and the like.

Interest in Internationalization of the Curriculum

The other relevant finding here is the very high level of interest in international aspects of their profession, summarized in Table 4 below. This can be seen coming through in several questions, one which asked if they had other internationally focused professional interests. Another asked whether they were interested in participating in a workshop to develop their skills at internationalizing their curriculum and teaching.

The numbers of positive responses were given dimension in the comments offered by respondents. A total of 115 of the 158 IFRN respondents made strongly

Table 4 Interest in internationalization of the curriculum

Institution	Do you have other internationally focused professional interests?	Are you interested in a workshop about how to internationalize your courses? YES	Are you interested in a workshop about how to internationalize your courses? IT DEPENDS
IFRN	81.01%	72.78%	25.32%
Other Federal Institutes	75.81%	75.58%	20.97%

positive comments about the possibility of attending a workshop to develop their skills in internationalization of the classroom, such as:

- *That can only enrich our classes.*
- *It would be an enormous contribution to the work I do.*
- *I am eager to begin.*

Finally, the last question was open-ended and asked for any other ideas they might have. The following comment represents the value and energy felt by respondents: “I hope this does not remain only on paper, but becomes fact.”

Conclusion and Future Directions

Brazil’s Federal Institutes have grown out of a particular context, for which they are responsive and responsible change agents. They offer hope and vision in a developing society undergoing rapid transitions, and they suggest ways in which other countries can respond to social needs. Internationalized, interdisciplinary curricula that span secondary and tertiary education and that are grounded in local needs may indeed change the world.

While use of some specific strategies for internationalizing the classroom is far from universal, there is a strong interest on the part of teaching staff to learn how to do this work. Perhaps this comes from the commitment to an education that is vocationally valuable, which will help students become workers in the twenty-first century, globalized world. It may also come from the largely non-Brazilian foundations of the fields being studied; indeed, it is impossible to learn information technology or renewable energy (for example) without turning to authors and research from abroad.

So, what is keeping the necessary professional development from moving forward? Assessment of “institutional readiness” for comprehensive internationalization is an important next step. Conversations and interviews with Brazilian colleagues as part of this research have identified the following potential barriers:

- *Lack of support at the top.* Leadership of Federal Institutes (and most Brazilian HEIs) is headed by a rector, who is elected for one or two 4-year terms. The rector identifies projects of personal priority, within which internationalization may or may not be included. Without the strong support of the rector, institute-wide initiatives are unlikely to be successful and resources will typically not be allocated. The newly elected rector at IFRN supports internationalization as an investment in the future of the school, though this has not always been the perspective of senior leadership. Shifting priorities make international leadership difficult.
- *Part-time international officers.* Implementation of comprehensive internationalization takes the leadership of the institution’s senior international officer, yet this person typically maintains his or her teaching and research responsibilities; this

reality results from the fact that the individual is typically chosen by the rector, and when a new rector comes in, it is likely that a new individual will take over the responsibilities – and the former international officer will return full time to the academic department. Often the only employee in the entire institution (comprising multiple campuses and tens of thousands of students) charged with internationalization, the head of the international office cannot dedicate the energy to a full-scale implementation of such a broad new initiative.

- *Bureaucracy*. Due to the Ministry of Education's bureaucracy, elaborating new curricula or making major changes in the existing ones requires a specialists' committee work, which might slow down FIs' internationalization process in some ways. However, international issues are being discussed and considered more and more during curricula elaboration processes these days in an attempt to overcome and avoid future difficulties.

These barriers are not easily overcome, particularly given recent economic and political turmoil in Brazil. The slowing down of the Brazilian economy, the downsizing of the Science without Borders program, and extended corruption scandals on all levels threaten to derail the efforts that looked so promising even 2 or 3 years ago. Forward-looking rectors and staff who make the argument for greater and more comprehensive internationalization that fits the individual needs of their institutions would be a crucial step – and this is happening in some FIs.

In conclusion, we note that the internationalization of Brazil's Federal Institutes is to date under-researched and deserves much more attention. It appears that this attention is imminent, as reflected in the increase of attention being given to these institutions in the 2015 FAUBAI Conference. Where FIs were all but invisible in 2014 and before, they were the topic of four sessions in 2015. That is a hopeful sign for future students of IFRN and other FIs, who can expect greater attention to the development of global competence.

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A Horse of a Different Color? Reexamining International Students at Community Colleges in the USA and Canada

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Jonathan Z. Friedman

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Abstract

International students have become a growth area in community colleges in the USA and Canada. Broadly, this has been viewed as a microcosm of changes seen at all levels of higher education related to globalization. However, there are reasons to suggest that this phenomenon deserves greater attention. Community colleges occupy a distinct role in higher education systems, and their international students can also be viewed this way, as somewhat of a “horse of a different color” from their counterparts in universities. To be sure, international student mobility shares commonalities across tertiary providers, but the aim of this chapter is to highlight ways that the community college context generates unique conditions for international students worthy of further research. This is undertaken in this chapter by focusing on three lines of inquiry, pertaining to international students’ backgrounds, their academic and social experiences, and their pathways through and beyond these institutions. Throughout, examples are drawn from existing research in both the Canadian and American contexts, with

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some reference to informational interviews conducted with college personnel working in the two countries. Although further research might focus on articulating cross-national differences between these contexts in greater depth, the aim of this chapter is to draw attention to the transnational dimensions of this phenomenon. Paying more attention to international students in community colleges may not just improve these students' experiences, but also shed more light on the course of internationalization as it has advanced in different tiers of higher education.

Keywords

International students · Internationalization · Differentiation · Academic and social integration · Equity

Introduction

There is a major shift underway in community colleges in the USA and Canada. Since the turn of the century, these institutions have become hosts to ever greater numbers of international students. In Canada, recent growth has been more rapid, with the number of international students attending their colleges and institutes growing from 12,000 in 2009 to over 29,000 in 2013 (Canadian Bureau for International Education 2014). Steady growth though has also been seen in the USA with the sector expanding from 81,000 international students a decade ago to over 91,000 in 2014–2015 (Institute of International Education 2015). Debates persist in some quarters concerning the compatibility of the community college model with international students (Budd et al. 2016), but there has been increasing acceptance that educating international students is something community colleges “do.” There are multiple reasons for this development. Globalization has been a key facilitator, as communication and travel across borders have been eased to make international student recruitment possible. There have also been changes related to the business models employed by community colleges (Levin 2005) – not dissimilar from changes in the management of universities – which have, in many cases, made the enrollment of greater numbers of tuition-paying international students financially lucrative. At the same time, community colleges have not been immune to the rise of a new global imperative in higher education, whereby international students are rationalized as a mechanism for making domestic students more globally aware (Manns 2014). Economic changes in other countries, such as the growth of a global middle class (Brandt and Büge 2014), have also produced new “markets” in which North American community college credentials can be viably “sold.”

As the practice of enrolling international students has grown rapidly in community colleges, some have expressed reason for concern. As Anayah and Kuk (2015) explain: “the rapid increase in the presence of international students at U.S. community colleges has caught many institutions off guard” (p. 1099). In Canada, Skinkle and Embleton (2014) likewise report that actions by colleges to introduce support services for these students have been uneven, and often have “not kept pace

with recruitment” (p. 47). These challenges are by no means specific to community colleges, as they are related to the growth of international student mobility in higher education worldwide, an unprecedented phenomenon which has gained widespread scholarly interest (Streitwieser 2014). But community colleges have received little attention in most discussions of internationalization in higher education, where the bulk of research has been on institutions offering traditional academic degrees, rather than on institutions more focused on vocation and practical skills. This myopia is common, as in both national, and global discussions of higher education, more selective and prestigious institutions receive “the lion’s share of academic and media attention” (Stevens 2015, p. 2) – even when other forms of tertiary institution serve greater numbers of students (see also Deil-Amen 2015). Efforts to analyze international students in community colleges have drawn heavily on writing about these populations in universities, admittedly because of a lack of sector-specific research (Hagedorn and Zhang 2013).

This chapter constitutes an effort to approach the rise of international students in community colleges in terms of its unique properties, by synthesizing existing research and suggesting future lines of inquiry. It is well-known that these institutions occupy a distinct role in their higher education systems; but how might the growth of international students among them be seen as similarly distinctive, somewhat of a “horse of a different color” from their growth within universities? To generate preliminary answers to this question, this chapter first articulates conventional differences between community colleges and other higher education institutions in the USA and Canada. Then, it focuses on three dimensions of the trajectory of international students through community college, aiming to highlight what may be distinctive to this sector concerning *student backgrounds*, *student experiences*, and *student pathways*. Each of these is presented broadly, meant to encompass multiple dimensions of variation deserving greater attention. The chapter closes by considering the expansion of international student mobility in the community college sector worldwide, focusing on how this development might have different implications beyond those which have been previously associated with the internationalization of universities.

Throughout, the chapter draws from existing theory and research in the study of both universities and community colleges. Insights developed primarily through a literature review are also buttressed by reference to two interviews conducted with personnel at community colleges who interface with international student populations, one in each of the USA and Canada. These informational interviews were conducted in 2016 as part of preliminary research for a broader study. Each employed a semi-structured interview method (Galletta 2013), consisting of open-ended questions concerning the origins, experiences, and pathways of international students at these institutions. Pseudonyms are used to maintain confidentiality of these research participants, and all information and quotations are utilized with their consent. Although by no means generalizable to the entire community college sector in either country, these anecdotal voices from the field are used to verify observations developed from other academic sources. Further, there is minimal focus herein on differences between the college contexts of the USA and Canada, as they are

discussed together to make sense of this trend as a transnational process. Future research could build on this framework however to articulate dimensions of cross-national variation.

Differentiation and Tertiary Sectors in the USA and Canada

Given the historic development of higher education systems within nation-states, there remain key differences between countries in terms of the structure of tertiary education and its mass provision. Nonetheless, it is possible to observe general similarities between systems worldwide, most notably the differentiation of groups of providers which either offer their students theoretically-oriented academic degrees or vocationally-oriented certification in trades. So common is this distinction that it has been adopted by the Organisation for Economic Co-operation and Development (OECD) as a means of organizing statistics concerning tertiary enrolment across different national systems (OECD 2008). In Canada, this distinction broadly corresponds to a national distinction between a sector of universities, on the one hand, and a sector of colleges and institutes, on the other. In the USA, there is a more varied set of tertiary providers, as the higher education market is much larger, but there is a similar distinction made between 4-year institutions which offer bachelor's, master's, or doctorate degrees, and 2-year community colleges which offer associate's degrees. For simplicity, the American term *community college* has been adopted to refer to this sector, as well as to the college sector in Canada, as both are included in what the OECD refers to as tertiary provision type B: "programmes. . . that are more occupationally oriented and lead to direct labour market access" (OECD 2008, p. 57). This will be contrasted with the *university sector* in both countries, which corresponds to the OECD category of tertiary provision type A: "programmes [that] are largely theory based and designed to provide qualifications for entry into advanced research programmes and highly skilled professions" (OECD 2008, p. 57). Although this is not a perfect means of dividing between these sectors in each of these countries, it allows for some general comparisons to be made between them.

For example, beyond their focus on skills for direct application to the labor market, there are a bundle of other factors generally unique to community colleges in both the USA and Canada. Their programs tend to be both shorter than those offered in universities, as well as less expensive. They are also less likely to have a residential offering for their students, or to occupy large, secluded campus spaces. Because community colleges were historically designed as educational institutions serving their local or regional areas, many offer part-time options for students who work full-time, and they often enroll students with different demographics than those found among universities – broadly referred to as "non-traditional" students. Finally, community colleges occupy a common status, as in both countries their credentials are often viewed as less valued than academic degrees from universities. This may be more polarizing in the USA, where the institutional hierarchy of tertiary providers is much steeper (Davies and Hammack 2005), and where there is a legacy of academic

critique of community colleges as an institutionalized means of social stratification, reproducing disadvantage for lower social classes (Schudde and Goldrick-Rab 2015; Brint and Karabel 1989). However, in Canada community colleges have also historically been oriented to offering terminal vocational diplomas rather than offering tracks for students to transfer into the university sector – the latter being more common in the USA – so there is a similar construction of this educational pathway as a distinct and lower-status post-secondary track.

Broadly then, the rise of international students in community colleges in these two countries has meant the channeling of individuals from other national contexts into a particular form of tertiary education with unique properties, which are somewhat unlike those associated with “traditional” universities. This suggests that there may be other aspects of this form of international student mobility that are distinct and deserving of greater investigation. This chapter suggests that these can be usefully analyzed in terms of distinctions in three areas: student backgrounds, student experiences, and student pathways.

Student Backgrounds

One of the ambiguities when talking about international students is specifying just who such a term includes. As part of their profile of “non-traditional” students, community colleges often enroll individuals pursuing educational credentials with varying visa statuses, including recently immigrated adults seeking improved linguistic skills and employability potential. Adam, who worked in the international office of a community college in a metropolitan American city, confirmed a degree of ambiguity in this regard at his institution, relating that students were themselves often confused about whether they should come to his office. He explained that nonetheless they were only counted as “international” if they required a specific visa to study there (typically an F-1 or J-1). Lisa, who worked in student services at a community college in a large Canadian city, noted similar confusion, explaining that she dealt with many students from international backgrounds without knowing their specific status, and that only some fit the official designation. For the purposes of this chapter, international students are defined in terms of this official categorization, although it is worth noting that in the community college sector this can be perhaps a fuzzier concept than it has been in more traditional universities, which do not usually have the same association with the education of immigrant populations.

Using this definition, it is possible to surmise multiple ways in which the backgrounds of international students at community colleges are different from those at universities. It is not a given, for example, that trends in the national origins of students in the two sectors will be identical. As an illustration, Table 1 lists the top ten countries of origin for international students for these tertiary sectors in Canada in 2012, as recorded by the OECD (from <http://stats.oecd.org>). In many instances, countries are leaders in sending their students to both sectors, with the number of students coming into the community college sector at about 10% of the total coming into universities. This is a hardly a universal comparison however, as in various

Table 1 Number of international students in Canada from leading countries of origin, 2012

Leading countries of origin in community colleges ^a		Leading countries of origin in universities ^b	
India	3,939	China	21,384
China	3,681	France	6,690
South Korea	1,026	United States	6,162
France	700	India	3,759
Japan	300	South Korea	3,015
Pakistan	240	Saudi Arabia	2,799
Saudi Arabia	213	Nigeria	1,806
Hong Kong	183	Pakistan	1,599
Morocco	180	Trinidad and Tobago	1,392
United States	177	Hong Kong	1,338

^aSource: OECD statistics for tertiary type B programs in Canada, 2012

^bSource: OECD statistics for tertiary type A programs in Canada, 2012

instances countries register as leaders in one sector, but not the other. For example, while China was by far the most prominent country of origin in the university sector in 2012, it ranked second behind India in the community college sector. In contrast, that year more students from India attended Canadian community colleges (3,939 students) than universities (3,759 students). Whereas the USA ranked prominently as country of origin for university students, this was much less so among community colleges. Conversely, Japan was a relatively prevalent country of origin at community colleges, but much less so at universities. Clearly the community college share of international students is much lower when compared to universities overall, but these totals also suggest that students from particular countries are not necessarily attracted to these two tertiary sectors equally.

There is no single source which reports on these data across Canada and the USA longitudinally, so the most reliable data, which comes from the Institute of International Education for the USA, is used alongside that from the OECD for Canada for the means of general illustration. Additionally, in the USA, data for doctorate granting institutions is used because they represent the largest segment of the US university sector attended by international students.

As shown in Table 2, Saudi Arabia, Canada, Taiwan, Turkey, and Iran all registered as top sending countries to American universities in 2012, but not to American community colleges. Instead, Vietnam, Hong Kong, Indonesia, Nepal, and Venezuela all ranked in the top 10 in the community college sector. Vietnam, in particular, sent more students to US community colleges in this academic year than to US universities (7,600 vs. 5,300 students) – a surprising fact, perhaps, given the much higher number of international students in the university sector generally. As in Canada, some countries of origin were present as top senders in both sectors, like China, India, and South Korea. But it is also clear that there was not the same interest from India in attending US community colleges in this academic year as there was in attending US universities. While overall the growth in both sectors has been dominated by international students from countries in East Asia, there are complex

Table 2 Number of international students in the USA from leading countries of origin, 2012

Leading countries of origin in community colleges ^a		Leading countries of origin in universities ^b	
South Korea	11,700	China	144,600
China	11,400	India	71,500
Vietnam	7,600	South Korea	44,700
Japan	5,000	Saudi Arabia	19,400
Mexico	3,500	Canada	16,000
Hong Kong	3,100	Taiwan	15,500
Indonesia	2,300	Japan	8,700
Nepal	2,200	Turkey	8,200
Venezuela	2,000	Mexico	7,300
India	1,900	Iran	5,800

^aSource: IIE data for associate's institutions, 2011–2012

^bSource: IIE data for doctorate granting institutions, 2011–2012. From Farrugia et al. (2012), p. 54. Numbers in this table have been rounded

dynamics at work which can lead to differentiation in the backgrounds of students arriving at institutions in these two sectors.

These trends were not discussed by either Adam or Lisa in their interviews, as they are more evident at the national-level than within any one institution. However, they are significant. Longitudinally, these two sectors can experience opposite trends, with students from one sending country decreasing in their community colleges and increasing in their universities, or vice versa. There are likely very good reasons why this is, as students from countries with less widespread English fluency may need to pursue community college enrollment before they can attend North American universities. In other contexts, universities may have an appeal that community colleges do not. For example, while Americans and Canadians do cross their border to attend each other's universities, this is unsurprisingly less so for their community colleges, likely because local or in-country options in both contexts are considered sufficient and more attractive. Overall, while this kind of geographic variation by sector has been virtually unconsidered in studies of international student mobility, it means that the mix of students from different national backgrounds in community colleges and universities can be somewhat variable, and fluctuate over time.

Additionally, less well documented but equally consequential may be differences in the financial resources and motives of students who come to the USA and Canada for community college compared to those who come to attend universities. Generally, there are two interpretations of the growth in international student mobility to Western countries with regard to students' ability to pay rising tuition. One is the view that, particularly in elite universities with high global standing, there has been a convergence among affluent families, who see these institutions as pathways into the global elite class (Freeland 2012). The second view is that middle class families in emerging economies have saved money to send their students to Western higher education institutions, in part as a reaction to increased academic competition within their home countries, and the perception that international academic mobility will provide an alternative path to prosperity for their children (Hu and Hagedorn 2013;

Waters 2006). It remains an open question however, whether these trends are equally at work in community colleges as they have been in universities, where factors like the lower cost of tuition, the lessened prestige of the credentials, the generally smaller class sizes, and the shorter time to completion, all may mean that they attract a different segment of the international population. In fact, Adam shared his familiarity with a menu of motives among international students who attended his institution, including: students who saw it as a cheaper option than attending universities; students who wanted to pursue English training or improve their SAT scores; students who wanted to gain credits in order to transfer to universities; students who were advanced academically and had been admitted to top-tier US universities, but could not afford them; and students who had been put on academic probation at universities, or even had completed bachelor's degrees already, who used the community college as a "placeholder," since they did not want to return to their home countries and needed time to "figure out what they want to do with their lives." Adam stressed that most international students who came to his institution in any fashion were predominantly interested in remaining in the USA long-term, seeing it as pathway to immigration. He described how these students' families often made "sacrifices" to send their children to the USA, and that in return, these students sought to "maximize" their opportunities to remain there permanently. These factors are likely also at work in residential universities – especially as community college students often pursue transfer routes into bachelor's programs – but Adam certainly perceived his incoming international students as generally of a lower social class than many of those who first arrive in the USA to study for traditional academic degrees.

A third set of differences in student backgrounds between these sectors centers on fluency in English. With the exception of institutions in Quebec in Canada where the language of instruction can also be French, the vast majority of community colleges in the USA and Canada are English environments. But whereas among universities admission of international students is widely predicated on English proficiency, this is less universal among community colleges. Many, in fact, advertise that they require students only to have some English proficiency to gain admission, and compensate for that low proficiency by offering preparatory and intensive English programs. This means that a pathway has opened for students who are not proficient in English to be accepted to study at community colleges, which is largely closed among universities. When combined with differences in financial resources and national origins, this makes for a potentially significant difference among the international students who are enrolling in these two sectors.

Student Experiences

The notion of post-secondary education as entailing something more than academic study is well established in the American and Canadian contexts. Of course, academic degrees are widely viewed as a baseline for successful careers in a range of fields, but there is also a set of cultural connotations surrounding the experience

of going to university, centered on adolescent growth, independence, and self-discovery – among other effects (Pascarella and Terenzini 2005). Particularly in the USA, numerous studies have focused on understanding the many dimensions of the “student experience”, including students’ academic persistence, their cocurricular participation, the development of friendships, interests, and identities, and the cultivation of civic-mindedness.

In recent years, there has been growing interest in understanding the international student experience in universities along these lines. Nathan (2005), for example, highlighted how international students became outsiders in her study of one US campus, ignored by their American peers. Others have examined the challenges international students encounter in forming multicultural friendships (Williams and Johnson 2011), or the ways in which they experience racism (Lee and Rice 2007). There is also a general literature on the challenges of operating in foreign cultural environments for international students, with scholars pointing to issues related to acculturative stress and mental health (Smith and Khawaja 2011; Misra and Castillo 2004). Some have offered recommendations for how university counselors can best serve these populations (Wedding et al. 2009; Mori 2000). In Canada, recent work has drawn attention to the range of challenges international students encounter beyond the psychological and interpersonal, as they face work restrictions, challenges related to international currency fluctuation, and complications in securing reliable, affordable housing (Calder et al. 2016). International students can also face issues securing visas, transferring between them, and crossing borders, even just for a visit home, which adds to the stressors and challenges they face beyond the experiences localized to their campus environments. English proficiency, in both the USA and Canada, commonly forms another obstacle (Andrade 2009). It can prove more difficult than expected for these students to thrive in classrooms where the norms of academic learning and discussion are foreign to them, and where such cultural barriers may be underappreciated by their faculty and peers (Campbell et al. 2016; Palmer 2016).

These issues are surely not unique to international student populations at universities; however, it is possible to speculate that they may be different, and possibly exacerbated, in the context of a community college. As noted above, community colleges tend to be nonresidential institutions, and often enroll many “non-traditional” students, meaning students who study part-time while having full-time jobs, students who do not progress to tertiary education immediately following secondary-level completion, and students who are older and often have care responsibilities for family members. This is generally different from universities, and particularly so from more selective universities, where the average student is an emerging adolescent with the flexibility to participate actively in the social, residential, and cocurricular dimensions of campus life. As Deil-Amen (2011) explains, the problem with much research on how students experience and integrate into university campuses is that, “All the models were developed based on traditional students in traditional residential institutions” (p. 55). She elaborates that this means the conventional distinction made between students’ academic and social integration as two separate spheres of activity does not apply well to the community college context, where the

two are more intertwined and “indistinguishable.” Because students’ time on campus is dominated by classroom instruction, she found that they prioritized academic integration and that their social integration was “often characterized by academic utility” (p. 82). There are implications then, for how the international student experience at these institutions will be shaped, and how it should be conceptualized by scholars.

Although many community colleges are active in supporting clubs and social events for their international students, have designated social spaces for them, and offer counseling and advising to them just as their university counterparts do, it is a pertinent question whether these integrating strategies are the ones best suited to the community college context. Social outings for international students, for example, might be promoted at community colleges, but not match up with students’ more purposive focus on academic integration and success. Challenges with English proficiency meanwhile, may exacerbate intercultural difficulties in these contexts, especially when English ability has been relaxed as a requirement for entry. In these milieus, international students may be even more likely to retreat into segmented communities and friend networks composed only of students from their home countries. The challenges faced in this realm are not entirely dissimilar from those among universities, but they may attain a different significance and require different institutional responses in settings where the student population is older and primarily interested in acquiring practical credentials. This may put a relative onus on faculty in the community college to facilitate international students’ integration, as compared to university environments where there are more offices and more personnel tasked with supporting students’ social development, as well as perhaps stronger norms concerning students’ active participation in campus life.

Other research looking at the social experience of international students in a community college setting has similarly emphasized this point: that more attention should be invested in improving orientations and advisor support for students’ successful integration and acclimation (Miller 2015). Both Adam and Lisa remarked that these were areas in which they thought their institutions could improve. Adam explained that new students often showed up at his office because they were lost, unable to find university buildings and unprepared generally to navigate life in the USA independently. He contrasted this with other university settings in which he had previously worked, noting that conversations with international students at his community college were “completely different” and focused on more basic issues. Adam recounted numerous instances of confusion and “misinformation” among international students enrolled at his institution concerning the transferability of credits and the value of an associate’s degree, as well as pertaining to students’ abilities to travel and work legally. He thought this information needed to be better disseminated to students, and worried that his senior administration had been too focused on recruiting international students rather than retaining them. In Canada, Lisa similarly related how difficult it was for many new students to even register for classes if they had poor English proficiency, because there was no one assigned to serve as a translator. For students arriving to Canadian winter from warmer climates, he also described a common form of shock, “both cultural and meteorological,” as

they were inadequately prepared with sufficient winter clothing to weather the low temperatures.

Along these lines, it is also worth considering the way that international students may be viewed by the domestic students they meet who attend universities and community colleges. Robertson (2015) found, for example, that the majority of students she surveyed at an American community college were uninterested in global topics and international education, as they found them “boring or uninteresting,” (p. 482). She concluded that professors and others must do more to stimulate students’ interest and help them to “understand the connection between their lives and the world at large” (p. 482). Of course, it is hard to generalize from this sample to North American higher education as a whole, but there is reason to suspect that facilitating such peer interactions, when they require extra-curricular time and space, may be more easily adopted into the residential environments of universities. Again, these challenges may not be unique to community colleges, but there is certainly a longer precedent of international students attending US and Canadian universities in large numbers, so they may be more widely expected, accepted, and embraced in those institutional contexts. Conversely, it may be that community colleges are more welcoming and friendly for international students than larger universities, and facilitate their integration more smoothly.

There are additional dimensions of this growing international population in community colleges worthy of further analysis, as particularly when they are located in settings with limited diversity, international students may be helping to reshape the experience of their domestic counterparts in positive ways. Urban and rural differences may prove consequential in such an analysis, considering that some domestic populations are thought to be more removed from cultural diversity and global affairs than others. As has often been claimed, there may indeed be greater global awareness being generated in higher education through the increasing enrollment of international students at Canadian and American post-secondary institutions, but more attention ought to be paid to the ways these interpersonal and cross-cultural dimensions of campus life are unfolding specifically in community college contexts.

Student Pathways

A final set of comparisons center on international students’ pathways, referring to the ways that these populations move through community colleges as part of their life trajectories. One issue in this area is students’ persistence to degree or diploma completion. On this point, while Canadian colleges have one of the best records in completion among OECD countries generally, the USA fares much worse (The Conference Board of Canada 2016). This problem is well-known among US scholars looking at community colleges, where there are often low rates of completion of terminal programs, and low rates of success in transferring to academic tracks in universities. One analysis from Schudde and Goldrick-Rab (2015) explains: “Despite serving students with diverse backgrounds and needs, who are often less academically prepared for college, community colleges offer little institutional

structure and guidance to support students in navigating bureaucratic hurdles and dealing with conflicting demands” (p. 34). They note that one effect is that some students in the USA “swirl” around in the community college sector, moving laterally between multiple institutions rather than directly through one, following “long, meandering educational pathways” (p. 34; see also Goldrick-Rab 2006). A salient question then is how these organizational conditions affect the increasing number of international students who have been moving through them. Mirroring the immense body of scholarship on college persistence, some research has emerged specific to international students in community colleges, with Mamiseishvili (2012) emphasizing that the development of relationships with faculty, advisors, and peers was paramount to student success. Future studies using large-scale data could reveal what proportions of international students “meander” or “swirl,” as well as how their educational trajectories involve criss-crossing national borders. Meanwhile, the stronger record of Canada’s community colleges may mean that they provide better pathways to completion for international students, relative to the USA. It should be noted that both Adam and Lisa gestured toward some proportion of international students at their institutions who seemed to follow meandering trajectories, not only because of academic challenges, but sometimes from the desire not to return to their home countries.

Relatedly, many international students aspire to transfer from the college sectors in both countries into their universities, but little is known about these desires or their rates of success. It is interesting to note from OECD data, for example, that while Morocco declined in sending students to Canadian community colleges from 2008 to 2012, the total number of students from the country attending Canadian universities was on the rise (gathered from <http://stats.oecd.org>). This may represent a successful wave of students who moved up through the Canadian system, beginning in its colleges and then moving into its universities. There is some tracking in Canada of this sort, concerning the number of university students that have previously attended colleges there (Canadian Bureau for International Education 2014). However, it is not detailed enough to draw definitive conclusions about this trend. Nonetheless this points to a unique role that community colleges have come to play in helping to expand the pool of international students who are even eligible to apply to universities in both countries. Their institutional niche, in this sense, is uniquely significant to the revenues which universities have been able to generate from international markets, although their role as a stepping stone to universities has largely gone unremarked. For the students, meanwhile, it seems that those who begin at community colleges can be embarking on a long-term immigration pathway, but little is known about the contours of their trajectories. Both Adam and Lisa also noted that they had known international students at their institutions who had decided to “reverse transfer” – as in, move down from universities to community colleges – either because they were more affordable or were perceived as less academically rigorous. Little is known about these patterns for international students at a national-level in either country.

The same gap holds true concerning these students’ success at immigrating to the USA or Canada, and how their attendance at a community college intersects with

that aim. There is only emerging consideration of how these processes are complexly interconnected (e.g., Anayah and Kuk 2015), and none that seeks to compare the pathways of students through these two tertiary sectors relatively. In Canada in particular, there has been a recent push by provincial and federal governments to pursue international students as part of a strategy to recruit skilled immigrants (Redden 2014). But this policy aim is rarely considered in academic scholarship in terms of its different effects on community colleges as compared to universities. Cross-national comparisons among students pursuing these trajectories between the USA and Canada could be fruitful for understanding how students find success in the two contexts, as well as how this might be different between these two sectors.

Beyond the need to better track international students' pathways, it is also worth noting that the choice to travel abroad for post-secondary study presents distinct risks to international students, which are likely less acute among universities. The pathways of students at community colleges may be more tenuous and uncertain than among students who arrive more fluent in English, primed to pursue the more traditional academic track. For students who return to their native countries upon graduation, it also remains an open question how their credentials are received, because the model of the community college and its diplomas and degrees may not be well understood in international contexts. Conversely, it may actually be well understood by employers that community colleges are of lesser status in the North American context than universities, thus lowering the value of these credentials in spite of students' expectations. Adam related as much, detailing how many international students he knew had discovered that their associate's degrees were not as prestigious as they expected, and then developed new strategies to remain in the USA longer to pursue more educational credentials before returning home. These challenges are likely different for international students acquiring bachelor's degrees or above, where the scaffolding of academic credentials is more universally recognizable. Interestingly, while it is well-documented how recruiting international students can contribute to community colleges' financial stability, to the Canadian or American economy, or to making domestic students more globally aware, the value of these credentials to these students, and how these choices impact their broader life trajectories are questions that have garnered much less serious or concerted attention. This represents the tendency in the sector generally to think about international students primarily in terms of how they benefit their host countries, and only secondarily in terms of the benefits to the students themselves.

Conclusion and Future Directions

This chapter has put forth three lines of inquiry for examining the growth of international students in Canadian and American community colleges. While there undoubtedly are similarities with the university sectors in these countries, there are various reasons why community college contexts may form a differentiated environment for international students, with unique challenges and opportunities. For example, international students arriving to these institutions may, as a group, possess

different characteristics from their university counterparts, which include geographic origins, financial resources, and English proficiency. However, they also arrive to educational institutions which have historically served niche, local populations, and which have developed somewhat differently from universities, to serve “non-traditional” students, usually in non-residential environments. While there are some discussions which explore the motives of international students in pursuing community college credentials, and the motives of these institutions in seeking to recruit them (Anayah and Kuk 2015; Hagedorn and Zhang 2013), there remains little empirical or theoretical work considering this phenomena in its own right. Some scholars have begun to examine questions pertaining to the student experience of community colleges (Deil-Amen 2011), and concerning their international students specifically (Mamiseishvili 2012); but there are multiple contours of this phenomenon which deserve greater attention, especially pertaining to students’ pathways into, through, and out of these institutions. As noted above, it is also in this sector where some of the challenges of hosting international students may be particularly exacerbated. Conversely, it may be that some of the challenges facing international students in universities are actually lessened in these institutional environments, where the norms of peer interactions and academic orientation are different.

Future research should consider these different possibilities, and probe this “horse of a different color” within the field of international student mobility in higher education in greater depth. Practical strategies for community colleges that are specific to their organizational evolution and the populations they serve will surely be of great value to their leaders, faculty, and staff. Meanwhile, absent a concerted effort to focus on their particular needs, the rise of international students on these tertiary pathways will remain overshadowed by their rise in universities, and largely assumed to be undifferentiated from them. For, just as these institutions have historically occupied a unique place within their higher education systems nationally, so too should the rise of international student mobility in these environments be considered in terms of its distinct properties. While scholars have noted that paying attention to international students’ origins matters to the development of institutional responses and other services (Hagedorn and Zhang 2013), it is also significant that the group of sending countries in the community college sector can actually differ from that found in universities.

From the perspective of theory building in the field of global higher education, the growth of international student mobility within this tertiary sector may also represent something different about globalization and shifting international academic relations than that which has previously been considered regarding universities (Streitwieser 2014). For example, while much has been written about international student mobility as an elite phenomenon (Igarashi and Saito 2014), and the growth of diverse campus populations as something unique to world-leading universities (Baker 2014), there has been little consideration of how these trends are different among community colleges, as they have pursued internationalization strategies, too. Though there has been much written about the rise of the global university, the rise of the global community college may be an equally significant development, considering the local histories of these institutions and their niche educational

design. This may in fact be different between the American and Canadian contexts, as further cross-national research could reveal, but as a transnational phenomenon these changes are also worthy of further investigation. These changes speak to something important about the globalization of the middle class, and they do not just represent the massification of higher education attainment. They can also be seen as entailing the massification of international relations and global awareness among a greater population of post-secondary students worldwide than ever before – a point that may be much better understood through the analysis of these changes in community colleges than in more traditional residential universities.

Finally, while there has been a growing discussion of the ethics of internationalization (Stein and Andreotti 2016; Garson 2012), this work has, like other scholarship in higher education, largely focused on the university sector. Successful in drawing attention to the history of unequal economic and cultural relations between the West and other countries and regions, there is a need for consideration of these legacies as they apply specifically to the community college sector. Certainly, the goal of making international education more accessible to a greater proportion of the American and Canadian populations is admirable, but it is important that community colleges not do so at the expense of their international students, who in some cases have become their highest-paying “customers” – but not necessarily their most important priorities.

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Vietnam and Higher Education Internationalization: The Promise of Community Colleges

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Kayla Whitney, Lisa Reid, and Bernhard Streitwieser

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Abstract

Despite educational reform practices since the 1980s, including a shift from Soviet- to Western-style education and gradual growth in participation in higher education, the greatest chronic problem affecting higher education institutions in Vietnam today is access. The extant research suggests that Vietnam has adopted the US community college system as a means to improving access for more rural Vietnamese students, while it also internationalizes the Vietnamese education system through partnerships with community colleges in Western nations. This chapter discusses the Vietnamese efforts to internationalize aspects of the higher education system, both through the continuation of international mobility and partnerships and through the development of community colleges. While

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international mobility remains the privilege of few and may be a drain on the country's intellectual resources, the community college movement promises to expand access to students in rural areas and so widen overall participation in higher education. The chapter draws on recent studies, policy reports, and relevant academic literature to make recommendations for future policy and practice.

Keywords

Vietnam · Higher education · Community college · Internationalization · Reform

Introduction

Vietnam has undergone rapid changes since 1986 when “Doi Moi” or economic reforms were initiated. Doi Moi marked not only the move toward a socialist-oriented market economy but the start of industrialization after a long history of agriculture. This shift created a growing need for a more specialized labor force and thus an increased demand for higher education, spurred on by population growth; now nearly two thirds of which are under the age of 30. In Vietnam, rural populations today make up 76% of the total population, but most universities are still located almost exclusively in the metropolitan centers (Lee 2007; Oliver 2004).

In 1987, there were 133,136 students participating in higher education; by 2008 that number had grown to 1.7 million (Clark 2010). This rapid growth in demand has provided an opportunity for the Ministry of Education and Technology (MOET) to overhaul the higher education system and to focus on important questions of quantity and quality. Their response came in two forms. First, Report No. 8195/DH, issued in 1996, called for the resurrection of community colleges in Vietnam, which had been defunct since the beginning of the Communist era (Le 2013). Second, the Higher Education Reform Act (HERA), initiated in 2005, called for the system to grow and change in order to reach a global standard by the year 2020. Trends of international partnerships and international student mobility have contributed to improving quality and access to higher education in Vietnam in the ensuing years.

In 2005, the main goals of HERA included increasing participation in higher education, improving the quality and efficiency of the system, expanding research capacity through improvement in the quality of teaching and learning, improving governance, and developing more international partnerships (Raby and Valeau 2012, 3). These goals provided a unique opportunity for Vietnam to reshape the future of its system. Yet, a rapid rate of expansion has also posed several challenges for implementing the reforms.

The system as a whole has faced challenges related to funding, governance, and lack of human resources in attempting to implement changes. Though the government has pushed forward with their goal of increasing enrollment, proceeding in this way will run the risk of pushing expansion at an unsustainable rate. Figures show that from 1987 to 2009 the number of students in the higher education system increased 13 times and the number of institutions increased by a factor of 3.3, yet

the number of lecturers increased only three times (Clark 2010). Indeed, the pace of growth seems to have recently caught up with MOET, which announced in 2014 that 207 undergraduate programs would be cut for the 2014–2015 academic year due to a lack of qualified teaching staff (Pham 2014).

Additionally, because MOET still oversees reform and universities have little autonomy, efforts to improve the quality of universities are being hindered. In 2008, Valley and Wilkinson (2008) characterized this dilemma as a “crisis” in Vietnamese higher education stemming from a tumultuous history and poor governance (p. 3). Other researchers have also focused attention on this more recently, including in 2014 when Do commented:

Despite efforts by the government to ensure and enhance the quality of the higher education system, the rapid expansion of the number of higher education institutions and growth in enrollments, coupled with the ineffective financing and governance policies, have put the quality of higher education at stake in Vietnam. (Do 2014, p. 47)

While efforts to address the issue of quality at the higher education level continue and large challenges certainly remain, Vietnam must walk a careful line between expansion and ensuring the quality of the education being provided.

Internationalization

Though Vietnam had until 2012 lacked an official policy or strategy for internationalization in education (MOET 2012 as cited in Tran et al. 2014, 138), as an educational system it has adjusted under multiple international influences, going as far back as the tenth century when Chinese Confucianism was introduced under imperialist policy. Since then, Vietnam’s education system has evolved under influences by the French, Americans, and Russians (Lee 2007, 153). Despite the many changes and influences felt by the Vietnamese education system, the effects of Confucianism, which places great value on education, are still tangible in an education system which places highest value on traditional university education (Oliver 2004). This presents an additional hurdle for community colleges in the public perception, as a fairly new phenomenon community colleges suffer from a prestige deficit and a skepticism of their quality (Le 2013).

During the division of Vietnam from 1955 to 1975 into the North and South, the South was heavily influenced by the American model of education. In 1971, this led to the establishment of the first community colleges. Raby and Valeau (2012) argue that the community college model is present in many countries, including Vietnam, and is not merely attributed to American influence, as some may believe. While it is true that Vietnam has adapted the community college to fit their specific needs, there is evidence, as described in Lam and Vi (2009), that Vietnamese government officials were sent to the United States to learn more about the community college system and how it could be implemented in Vietnam. However, the American educational influence did not last long. With the reunification of the North and

South in 1975, the Soviet model took over throughout the country, and any American-style schools were shut down. This period lasted almost a decade, from 1975 to 1986. However, this highly centralized system in all aspects of governance was not sustainable, leading Vietnam to suffer a major economic crisis, which led to new reforms, or Doi Moi, which were introduced in 1986 (Le 2013).

In 2012, official national education policy drew attention to the idea of intentional internationalization as an official policy when amendments were added to the Higher Education Reform Act. The three main goals for internationalization included: increasing mobility through training of staff and students abroad, bringing in more international actors to support and invest in Vietnamese education and research, and encouraging cooperation with foreign institutions (MOET 2012 as cited in Tran et al. 2014, 138). Although not specifically mentioned, it is on this third policy recommendation where community colleges show the most promise in terms of developing partnerships, as will be discussed. However, internationalization remains a secondary rather than a central activity of reform, and issues such as the internationalization of the student experience or of the curriculum are not widely discussed (Tran et al. 2014, 128). Encouraging student mobility and establishing a variety of international partnerships has been a key strategy the government has encouraged in order to increase quality, and while they show some short-term benefits, as demonstrated below, we find that they are also both limited in serving as long-term methods for improvement.

Community Colleges in Vietnam

Traditionally Vietnamese higher education has been accessible to only a relatively small portion of the general population and primarily those clustered in the urban centers. The advent of community colleges in the early 1970s and then their resurgence in the 1990s, however, promise to broaden access considerably. While a prestige deficit and a lack of clear legal framework for the system will continue to hamper participation and focus government support, efforts and initiatives of the past 20 years show that the model is not only succeeding in broadening participation but also contributing to internationalization. We believe it is possible for community colleges in Vietnam to both show great potential and exert positive influence on educational opportunity widely within the country, while also struggling in some important areas. Through the expansion of community colleges, an internationalization strategy stands to not only increase quality but also improve access for Vietnamese students. The creation of new community colleges supplies access to education that until then was mostly impossible for much of Vietnam's rural population (Lee 2007; Oliver 2004). To put this into greater perspective, in 2009 there were 150 universities in all of Vietnam, and 102 of them were concentrated in only major cities (Le 2013).

A great advantage of a community college is that it can provide specialized education for a local population (Spangler et al. 2011). Taking the large rural population of Vietnam as an example, this aspect is critical as it makes an education for the

majority rural population more attainable than ever. MOET's current Deputy Director General, Dr. Vu Thi Tu Anh, also points out that community colleges can serve as a stepping stone to 4-year institutions, with an option to transfer (Anh 2015, 23). The community college system in Vietnam also offers both general- and vocation-oriented education (Anh 2015, 24). Emphasis on proximity, combined with this flexible nature of the community college model, means that education can be tailored to serve the specific needs of a community where a college is located. This embodies the aim of the educational system to help each person achieve their full potential, whatever that might be (Oliver 2004). As Dr. Anh states, the universities are failing to produce the kind of educated workers that the country's economy needs, and reforms are needed not just for education's sake but to spur socioeconomic growth (Anh 2015, 12, 15). In interviews with community college leaders in Vietnam in 2009, Epperson found that many leaders referenced their institutions as a place for training that served the socioeconomic and human resource needs of their communities (p. 120). According to Becker (2008), education and training are key to investing in human capital, and by focusing on these aspects through reform, Vietnam will be able to ensure that its economic growth continues well into the twenty-first century. New institutions and an economic goal, coupled with a mission to improve quality, means that community colleges can act as a beacon for the future, educating the underserved populations in order to improve the country as a whole.

MOET Reform Efforts Related to Internationalization

Mobility

The most recognized attribute of higher education internationalization is student and staff mobility. However, in most societies, including the most advanced Western nations, only a small, elite segment of the population in fact can participate in study abroad and exchange. In Vietnam, this is even more so the case. Community colleges should be considered an aspect of the country's wider internationalization efforts – in that they are ensuring access to currently underserved populations who may eventually contribute importantly.

In terms of student mobility, Vietnam still largely engages in outbound flow rather than inbound (Tran et al. 2014, 138). In 2012, approximately 106,000 Vietnamese students studied overseas, with about 36% of them in the United States or Australia (Clark 2014). Outbound mobility gives an opportunity to students to receive quality education that they may not be able to receive at home. Vietnam has faced huge challenges in expanding its faculty in step with the expansion in student enrollment. Because of an extremely high student to faculty ratio, MOET has used mobility as a strategy for students to receive the qualifications they need for the workforce abroad, in the hopes that they will return and begin to reverse the divergent growth.

Students themselves also seek out international academic experiences because they see it as an opportunity to get away from high levels of perceived corruption within the Vietnamese system. A 2013 survey conducted by Transparency

International found that 49% of Vietnamese respondents perceived their education system as a whole to be extremely or very corrupt (2013, 3). The push factors that send students abroad for education benefit students by providing them with the education they need to enter the workforce and contribute to the economy. However, encouraging mobility as an official way to combat issues of quality faces challenges in funding and risks creating a continuous cycle of “brain drain” with newly qualified graduates who may not return. This is where community colleges can fill in. Because they are tailored to individual communities, they allow students to invest their knowledge and expertise directly back into their communities.

Another challenge of encouraging student mobility as a response to the lack of quality at home is that there is limited funding for students seeking to spend time abroad. Because of the lack of resources to cover the costs of foreign study, the option to receive home country funding is available to only a limited number of students. Between 2000 and 2010, the government funded about 450 students and faculty each year to study overseas through Project 322 (HERA as cited in Welch 2010, 202). Then Project 911 was decided in June of 2010 so that through 2020, the Vietnamese government set aside funding to support 23,000 doctoral students, 10,000 of whom are intended to complete studies overseas (Nguyen 2012 as cited in Tran et al. 2014, 141). Some cities also provide scholarships to local students to go abroad (Tran et al. 2014, 141). Yet looking at these numbers, they are fairly low given the total number of students in the higher education system. Current efforts by the government to increase mobility hardly touch the community college sector. This is because, while community colleges must be approved by MOET at creation, they are delegated funds by local governments with little financial support from MOET (Epperson 2010, 117). A 2015 survey estimated that 90% of Vietnamese students overseas were self-funded (Anh 2015, 18). If the government continues to rely on mobility as a method for the population to obtain quality education without expanding its financial support, it may perpetuate the issue of unequal access to higher education.

Relying on mobility for receiving quality education may also begin to create a brain drain. MOET hopes that many students who study overseas will return to Vietnam and then contribute to increasing the quality of the higher education system by becoming lecturers. Yet many students who study overseas do not want to return to Vietnam, and if they do, they may not want to work in higher education (Tran et al. 2014, 142). Data from the Ministry of Science and Technology released in 2014 shows that there are 24,300 PhD holders in Vietnam, yet only 8,520 PhD holders teach in universities and 633 at community colleges (Pham 2014). The government has tried to counter this lack of return by placing mandatory service requirements on funding (such as requiring a return to Vietnam for government work for a set time) or offering incentives “in the form of salaries accommodation, tax and academic research” (Nguyen and Chi Hong 2013, 139). However, motivation still remains low – salaries for faculty in Vietnam average \$150 per month and private sectors are growing more quickly and drawing more graduates (Clark 2010). Even with these efforts to incentivize a return to academics, encouraging mobility as a strategy for increasing the number of qualified faculty does not seem to be working, and sending

students abroad to receive the teaching qualifications needed for improved quality should not be seen as a long-term solution.

These issues can be mitigated if the government chooses to fully embrace and utilize community colleges. As discussed earlier, the emphasis of a community college is to improve and benefit the local region, making it ideal for students who do not have the luxury to travel far from home to receive an education. In order for community colleges to be fully embraced by the government, however, they will have to overcome obstacles, such as the stigma that a community college education is not as good as a university education and the lack of a clear legal framework within which to regulate Vietnam's community college system (Le 2013). These two issues alone will continue to pose challenges to the growth and development of community colleges in the future.

International Partnerships

Another mission that the government has adopted in its search for quality improvement has been growing the number of international partnerships, both at the university and community college level. This strategy gives the opportunity to draw from international partners' expertise and success in a variety of areas including curriculum development, faculty training, and management. Across the system, partnerships have a wide range of purposes; some are joint-degree programs, others are curriculum development programs, and still others are entirely new international universities. In June of 2016, MOET Director General Dr. Pham Quang Hung stated there were 255 approved joint programs with foreign partners in 33 different countries at the time, though it is unclear how many are currently in operation (Hung 2016, 12). These partnerships have faced many challenges with matching resources to growth but have also shown the benefit of introducing curriculum of a high international standard and providing faculty with unique training opportunities. Partnership development is also already in place for community colleges and the Vietnam Association of Community Colleges (VACC). Community colleges and the VACC have made great strides of increasing international partnerships in their sphere. The VACC boasts 54 members, 9 of which are foreign, representing community colleges from the United States, Canada, and the Philippines, including the American Association of Community Colleges. The VACC also has 37 international partnerships, most of which are with North American Community Colleges (VACC 2016). However, since the VACC website is sparse, it is difficult to say more about these without on the ground investigation. While community colleges are recognized by MOET, much of their planning is conducted by local communities, and so it is unclear whether MOET officially recognizes these partnerships as a part of its internationalization plans.

One partnership project at the university level that MOET has taken part in is the New Model University Project (NMUP), an effort to open new "model" universities with international partners, supported by the World Bank and Asian Development Bank. These universities are intended to serve as examples in teaching and learning

and provide an opportunity for the government to explore new methods of management, and these universities have been given a greater level of autonomy than other Vietnamese institutions (Clark 2010). Three such universities have been opened at this point, Vietnamese German University, University of Science and Technology of Hanoi, and Vietnam-Japan University. The government set as a goal to have each of these institutions ranked within the top 200 worldwide by 2020 but has recently had to pull back on this. In 2014, the government decided to halt the process of opening any new institutions under NMUP in an effort to divert resources back to quality improvement of two national universities in Hanoi and Ho Chi Minh, hoping to have at least one of them reach the top 200 globally (ICEF 2015). The challenges faced here with resources being unable to keep up with growth will likely continue. Rather than attempting to develop big-name universities, the system could benefit from directing some of those resources into localized opportunities through the community college system.

Other partnerships have directly targeted faculty training, such as the Fulbright Economics Teaching Program, founded in 1994 between the Harvard Kennedy School and the University of Economics, Ho Chi Minh City. Programs like this provide the benefit of faculty being able to receive guidance from international leaders in their fields, while maintaining their physical presence in Vietnam. It also allows for universities to implement global standard curriculum with guidance from universities who have already succeeded. Another example of this is the partnership between the University of Illinois, Urbana-Champaign, and the Hanoi University of Science which was established in 2007. University of Illinois professors have been training Vietnamese faculty partners to implement chemistry curriculum, and some faculty have taken part in short-term trips to Illinois to attend lectures (Clark 2010). Similar programs exist in other places, including at the University of Buffalo and Thai Nguyen University with aerospace engineering, Portland State University and Ho Chi Minh University of Science with computer-science, and the Medical University Vienna and Vietnam National University with medical curriculum (Clark 2010). These programs could serve as a good alternative to sending students and faculty abroad, as they seek to improve the quality of education within Vietnam.

Partnerships at the level of established higher education institutions exemplify the positive impact that partnerships can have. Community colleges are attempting to implement such partnerships within their own contexts. Through a partnership with the Canadian community college system, the VACC was inspired to establish links with local enterprises that would allow them to develop programs based on the needs of employers (Epperson 2010, 136). While this is a promising example to demonstrate the impact that partnerships have, little information can be found about partnerships claimed by the VACC in other countries. In 2013, a partnership was developed between Tra Vinh University and Oklahoma State University Institute of Technology. The campus newsletter describes that the universities signed two Memorandums of Understanding (MOU). The article went on to explain that Tra Vinh being one of the first community colleges in Vietnam, established in 2001, is seen as an exemplary model of community colleges for the rest of Vietnam (OSUIT 2013). While an interesting example of partnership bridging institutional types,

some might argue that an MOU by itself does not necessarily constitute a full-fledged partnership. Institutions can have multiple MOUs with no tangible programming resulting from them. However the many differences between the United States and Vietnam, especially considering the history of the Vietnam War, any type of communication and agreement between the nations is an encouraging step toward sharing ideas and improving education on both sides.

Outside of academic development, a growth in international partnerships carries the potential benefit of decreasing the occurrence of corrupt practices. McCormac (2012) discusses how international faculty mentoring programs have the potential to address issues of plagiarism, cheating, and academic integrity. However, these programs also risk imposing Western standards and systems in Vietnamese institutions. If such programs are to continue and grow, they should, as McCormac argued, recognize that mentoring is not an authoritative process but should foster an equal relationship (McCormac 2012, 272). It is unclear how beneficial programs such as these have been for Vietnamese faculty, and more research in this area would be useful in order to direct more of MOET's attention and resources to these kinds of programs. If these programs prove to be successful, extending them to the community college system could further contribute to its effectiveness.

Discussion

Vietnam's introduction of the Higher Education Reform Act in 2005 was based on the idea that higher education is meant to serve economic need and respond to the needs of society by investing in their human capital, a common practice for developing countries lacking in resources (Nguyen 2011, 132; Oliver 2004). The question to be answered is whether or not, as Vietnam responds to Western influences and experiences the world trend of commoditization in higher education, these goals to serve the population's needs will remain. Vu and Marginson (2014) argue from a positive outlook that as Vietnam continues to borrow policies (such as it has done throughout history) and move forward with reform, it will seek out its own unique identity (p. 159). Yet, according to Lam and Vi (2009), since the development of the community college, there has not yet been a full-fledged internal evaluation of the effectiveness of this model. Epperson (2010) study of the system was useful to help understand the characteristics and functioning of the system but did not assess its effectiveness. As the model is still relatively new, it would be prudent for MOET to perform such an evaluation in order to determine if community colleges are in fact achieving what they set out to do and, from the results, determine how to best move forward to fully realize that goal. Given the multiple overlapping layers of the Vietnamese higher education system and the tenuous position of community colleges within this system, such an evaluation would be beneficial to all.

As Vietnam seeks out international partnerships and pushes for more mobile students and faculty, this action has been guided by the demand for quality education and access to that education. These internationalization strategies still remain secondary to the search for quality, and their purpose has thus far continued to focus on

servicing national economic and social benefit (Tran et al. 2014, 127). However, good intentions do not guarantee success. Because institutions and international partnerships are still being governed from a government-centered planning mentality, institutions still lack autonomy. Eventually these limitations may begin to affect these strategies. And in the case of community colleges, one can already see the difficulty this lack of autonomy poses. The approaches of borrowing from other nations, in terms of developing more partnerships, sending more students to complete education abroad, and introducing new opportunities through community colleges, will be strategies to observe as the 2020 goal mark approaches.

It is also a risk that if Vietnam relies too heavily on other nations for education, they will become more dependent. Tran et al. (2014) argue that an increasing dependency will have negative effects on Vietnam because “as cross-border knowledge flows become more and more important in shaping human affairs, and in a globally integrated world its distinctive culture will become isolated and weakened” (p. 234). A community college system can be seen as a means to counter this risk of dependency, because it can be tailored to local needs. Tran, as discussed in Oliver, Thanh, Elsner, Phuong, and Trung emphasizes the “Vietnamese factor” at play in the adoption of new educational models in Vietnam (Oliver et al. 2009, 197). Namely, Vietnam should not adopt a system outright but instead pick and choose what is best for itself and its context while leaving the rest. Any new system, despite its origins, once established in Vietnam, will have its own distinct characteristics. In this way, if Vietnam can develop a sustainable community college system to provide access to its students, it will enable them to move away from other practices that create a cycle of dependency for the educational system at large. It is thus imperative that as Vietnam moves forward, the questions of quality and access must also begin to play into questions of self-sustainability.

Conclusion

The ambition of the Higher Education Reform Act of 2005 to create a higher education system of recognized global quality by 2020 is admirable, yet currently unrealistic given the pace of reform that Vietnam has exhibited since the act’s inauguration. While the act intends to improve quality and access, the challenges present in the system have led to risky implementation of reforms. The rapid rate of expansion has at times perpetuated problems with quality rather than improving it. Policies such as encouraging faculty and student mobility in order to receive quality education abroad have some benefits but are not permanent solutions to the issues of quality or access. And in fact, they perpetuate the lack of solutions for access to education within Vietnam.

International partnerships carry the potential to help the development of both faculty and curriculum, but they must be careful about creating dependent relationships and of the values that they impose. The community college model offers one of the best chances for Vietnam to succeed in tailoring its higher education system to local needs, yet the many obstacles facing it will have to be handled with thoughtful

planning for the system to excel. As the Ministry of Education moves forward with further reforms, more attention must be given to issues of funding, corruption, and partnership growth, so that there is no longer a need for outward mobility to replace in-country education. Mobility will ideally in time become a complement to an otherwise successful higher education system, rather than a necessity.

So far it has been difficult to trace the positive effects that the Higher Education Reform Act and internationalization strategies have had in the Vietnamese higher education system. As 2020 approaches, it will be key for researchers and officials to pay attention to not only enrollment numbers but feedback from university administrators, faculty, students, and the workplaces that are hiring graduates of this rapidly changing system and what the Ministry of Education will do with that information in the future.

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Promoting Green Skills in the Caribbean: A Grenada–Canada Partnership to Educate and Train the Sustainable Development Practitioner for the Twenty-First Century

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Pierre-Luc Gagnon and John N. Telesford

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Abstract

This chapter analyzes an institutional partnership (CAR-11) between two Canadian institutions and a Caribbean institution to develop a program in Environmental Sustainability Practices. The chapter starts by providing an overview of recent trends in international educational partnerships. The review shows that the scope of international partnerships has widened over the last decades, moving from the traditional student exchange model to longer-term institutional collaborations including, for instance, curriculum building and capacity development. The second section introduces the CAR-11 project in detail, including the project's objectives, the partner selection process, and the main collaborative activities that have taken place during the partnership. The third section looks at some of the challenges that surfaced during the partnership's implementation. The first challenge was allowing partners to work in partnership with each other and to reach a consensus on key concepts and methodologies. The second challenge turned out to be mitigating sociocultural differences between partners. The third challenge was the achievement of a balance between individual and institutional commitment. Perhaps because partnerships are formalized between institutions, and not individuals, there is a tendency to minimize the importance of individuals in ensuring the success of a partnership. The chapter concludes by stating that, to be successful, international educational partnerships need to be flexible enough to adjust to changing circumstances. This flexibility is made possible by promoting reciprocity between partner institutions, implementing initiatives that are in tune with national sociocultural contexts and by facilitating the involvement of individuals with a thorough understanding of their partners' needs and realities.

Keywords

Grenada · Canada · International partnership · Competency-based approach · Sustainable development · Applied research

Introduction

Students and educational organizations increasingly see international experience as a valuable asset in their resumes. For students, enrolling at a foreign college or University is a way to add weight to their resumes and to improve their chances of finding employment upon graduation. For educational institutions, the international market provides opportunities for revenues, either by recruiting foreign students or by entering into partnerships with other organizations. These trends require institutions to adapt to dynamic environments where expectations and performances are influenced by a mix of cultures and socioeconomic outlooks. If highly rewarding when successful, new partnerships can lead to complex and unpredictable outcomes. To gain insights into how such dynamics materialize, this chapter analyzes a partnership between a Grenadian College and two Canadian Colleges.

The chapter is divided into three sections. The first section reviews the literature on international education; it offers an overview of trends, presents common motives

for partnerships, and synthesizes partnership development models as well as institutional change theories. The second section introduces the Grenada–Canada partnership’s parameters, especially the context, objectives, partners, and deliverables. The third section analyzes the partnership’s main challenges: institutional complementarity and compatibility, the impact of sociocultural differences between partners, and the importance of balancing individual team members’ inputs and institutional commitment to ensure the partnership’s success.

The analytical methodology used in this chapter loosely follows that of a case study. The material presented in section “[The Case Study: CAR 11 Partnership](#)” was gathered from official and nonofficial documents distributed or produced during the course of the partnership. Most of the material presented in section “[Retrospective and Perspectives on CAR-11’s Outcomes](#)” comes from the authors’ notes and experience in the partnership. Thus, personal biases represent the main potential weaknesses of the study. The chapter makes no inference claim but aims to offer insights on how some of the challenges covered in the international partnership literature unfolded in CAR-11.

Trends in International Partnerships

International exchanges between higher education institutions are far from a recent innovation. For instance, de Wit (2002) provides an interesting look at how Universities initiated in the Middle Ages a tradition of “academic pilgrimages,” where higher education students would travel between university cities to acquire otherwise unavailable learning experiences. Outcomes like the rise of the nation state, the development of national Universities and philosophical movements such as the European Enlightenment also promoted the dissemination of knowledge and education across borders.

The internationalization of education has also been influenced by more contemporary political dynamics. Varghese (2007) provides a vivid example of this by distinguishing three eras in the internationalization of education since the nineteenth century. The first era is the European colonial period, during which colonial powers encouraged nationals to travel to imperial capitals to receive a Western education. The nationals would stay in the imperial capital for the length of their studies before going back home, hopefully having internalized the skills and values of the rulers.

Varghese (2007) then singles out the Second World War’s aftermath as a distinct phase, one where higher education went hand in hand with both European and developing countries’ development needs. At the same time, the intensification of Cold War politics shaped the internationalization of education along a United–Sates–Soviet Union ideological divide. Most foreign aid and funding for foreign studies were shaped by the tug of war between the two superpowers, both seeking ways to stem each other’s influence in international affairs.

The end of the Cold War marked the beginning of a third era, one characterized by globalization, the preeminence of market principles, and the knowledge economy. Hébert and Abdi (2013) suggest that some of the same criticism that has been leveled

against globalization also applies to the internationalization of higher education, for instance, the supremacy of neoliberal values, the dominance of Western educational tradition, and the survival of postcolonial dynamics between international partners. In addition, according to this criticism, the acquisition of knowledge and skills has mainly become yet another way for people to gain access to employment instead of being motivated by a quest for self-fulfillment. According to Varghese (2007, 10-11):

Institutions of higher education, in the context of globalization, become yet another group of organizations producing and selling a good or a service for the global market for profit. In other words, under this frame of analysis, higher education institutions become corporate entities functioning on the basis of the operating principles of the corporate sector.

The fact that cross-border education has become a tradable commodity under the General Agreement on Trade in Services (GATS) is perceived as an indicator of the integration of higher education in the market (Knight 2002). In the same way, life-long education trends are criticized for having become another tool used by people to position themselves in the market, instead of promoting continuous personal growth (Hébert and Abdi 2013).

The Increasing Diversity of International Education

Student exchanges have been the traditional international education model for a long period of time. Under this model, two (or more) educational organizations enter an agreement to facilitate the mutual exchange of students. This model has, however, exploded into various types of ventures, achieving different goals and using various methodologies (Sakamoto and Chapman 2011; Sutton and Obst 2011). This increasing variety in goals has led to the introduction of curriculum development, faculty and staff capacity development, collaborative work on pressing issues, joint research and technology initiatives, collaboration in strengthening institutional management, testing, collaboration in quality assurance, and sharing of technology. These goals are then implemented through a myriad of forms and methods, such as offshore campuses, dual degrees, custom-made programs for partner institutions, online programs and courses, etc. To make sense of this diversity, Sutton and Obst (2011, xvii) differentiate between transactional and transformational partnerships:

Partnerships focused exclusively on student exchange are at the transactional end because students are traded in a manner that resembles transactions in a marketplace. The individuals who travel from one institution to another are changed as a result of the partnership, but the institutions themselves remain largely separate and unaffected. Transformational collaborations, in contrast, are those that change or transform entire departments, offices, and institutions, through the generation of common goals, projects, and products. Both sides emerge from the relationship somewhat altered. Transformational partnerships combine resources and view linkages as sources of institutional growth and collaborative learning. They often produce new initiatives that go far beyond what was originally planned.

Whether they are transactional or transformational, all types of partnerships refer to a common basic idea; individuals or organizations joining forces to work together. In international education, this concept can be described as a partnership, that is “[a cooperative agreement] between a higher education institution and another distinct organization to coordinate activities, share resources, or divide responsibilities related to a specific project or goal” (Kinser and Green 2009, 4). Eddy (2010a, 10) provides a similar definition when she states that partnerships “are considered a collaborative between two or more institutions of higher education, businesses, or social agencies, with the goal of obtaining a shared objective.” According to Kinser and Green (2009), most international educational partnerships share three characteristics. The first characteristic is that a partnership must involve partners not attached to the same institution. A partnership, for instance, could not involve two departments from the same institution. The second characteristic is that partners have to work in cooperation and avoid unilateral approaches because they defeat the purpose of a partnership and are difficult to maintain over time. The third characteristic is that partners have to work toward the achievement of tangible common goals, which should be clearly understood and accepted by all.

Understanding Partnerships

Once goals have been set and partners identified, partnerships are put in motion, often revealing complex social dynamics. Eddy (2010b, 3) suggests that “looking at the motivation of each of the institutions involved” is the first step in understanding what drives institutions to collaborate with one another. In their study on strategic cooperation between firms, Eisenhardt and Schoonhoven (1996) adopted a resource-based view of partnerships when they analyzed the incentives driving firms to enter into partnerships. They define resources as representing organizational strengths or assets that are either tangible (for instance, capital or technology) or intangible (for instance, knowledge or reputation). Assessing its own tangible and intangible resources allows a firm to identify what it has to offer and what it needs to acquire in order to develop. According to this approach, firms are “bundles of resources” offering potentially interesting opportunities for a partner.

Eisenhardt and Schoonhoven (1996) identify both strategic and social aspects of cooperation as key collaboration drivers between firms. The strategic aspect of cooperation rests on the analysis of individuals’ self-interest. According to this theory, people will seek to enter into a partnership because they expect the pay-off for cooperation to exceed that of proceeding alone. A similar reasoning can be applied to a firm (or any types of organization), which will seek collaboration when it stands to benefit more from a partnership than by proceeding on its own, or put another way, when its bundle of resources does not allow it to reach its objectives on its own. Through collaboration, the firm hopes to benefit from its partners’ tangible or intangible resources. Eisenhardt and Schoonhoven (1996, 137) summarize these dynamics by stating that the underlying logic of strategic

cooperation is “need.” A need can take various forms, for instance: legitimacy, cost reduction, new skills, or better strategic position (Gulati 1995).

The social aspects of cooperation also play a key role in defining partnerships. Although partnerships and alliances are struck between firms or organizations, in reality, they are initiated and entertained by individuals. Familiarity and prior relationships between individuals can thus play a facilitating role. In addition, status and reputation are factors that facilitate alliances because they project added value to a partnership. Firms enjoying strong social positions and a well-developed social network are also more likely to attract reliable partners. The authors summarize by stating that the underlying theoretical logic of developing and maintaining strong social positions is “opportunity”: “[alliances between firms] are, therefore, cooperative relationships driven by a logic of strategic resource needs and social resource opportunities” (Eisenhardt and Schoonhoven 1996, 137).

When looking at factors promoting collaboration, such as needs and opportunities, Sarkar et al. (2001, 358–359) argue that potential partners should be looking for a balanced set of similarities and dissimilarities:

Specifically, we suggest that collaborative value creation requires the pursuit of partners who possess similar characteristics on certain dimensions and dissimilar and/or complementary characteristics on other dimensions. Value generated from alliances is enhanced when partners have different resource and capability profiles yet share similarities in their social institutions. These partner characteristics are important since they help in the formation of relationship capital or the behavioral and socio-psychological aspects of an alliance that find expression in relational dynamics such as mutual trust, commitment, and information exchange[...]

In order to reach maximum effectiveness, these relational dynamics are best represented through high levels of complementarity between partners. Crouch et al. (2005) offer a thorough discussion about institutional complementarity. Although the authors do not specifically target the education sector, they nonetheless offer a broad spectrum for the application of the concept of complementarity by presenting three meanings for it: (1) components of a whole mutually compensating for each other’s deficiencies in constituting the whole; (2) complementarity in the economist’s sense of two goods, where a fall in the price of one leads to a rise in the demand for the other; or (3) similarity. Complementarity, in the context of partnerships, closely corresponds to Crouch et al.’s (2005) first definition, where components of a whole mutually compensate for each other’s deficiencies in constituting the whole. Such complementarity needs to be assessed before entering into a partnership because it quantifies the collaborative value of the alliance by fleshing out similarities and dissimilarities in needs and opportunities.

Partnership Development Models

The process through which institutions develop partnerships is highly context-dependent. To deconstruct this complexity, Heffernan and Poole (2004, 80)

conducted a marketing and business-to-business literature review to develop a five-stage interorganizational relationship model. According to their model, partnerships are initiated by the *prerelationship* stage, where selection criteria are established and the search for a partner is initiated. This initial step presupposes a strategic analysis to identify the needs that the partnership will fulfill. The prerelationship stage also incorporates the selection of the right partner. Second, in the *early interaction* stage, the governance parameters of the relationship (goals, objectives, expectations, and relationship boundaries) are defined and structured. The early interaction stage can be a breaking point, especially when the social aspects of the partnership do not rest on familiarity and partners do not know each other. Thirdly, during *relationship growth*, partners intensify mutual learning and adapt to each other. Key components during relationship growth are communication, trust, and commitment. The fourth stage is the *partnership* stage. It is at this stage that the objectives behind the partnership materialize, partners cooperate, routines are institutionalized, and performance is monitored. The last stage is *partnership end*, which happens when the partnership comes to its predetermined end and partners do not wish to renew. In a way, a partnership ends when partners feel like the costs outweigh the benefits.

Amey et al. (2007) and Amey (2010) developed a conceptual three-stage collaboration model similar to Heffernan's and Poole's, but theirs focuses on collaborations between American Community Colleges and K-12 schools. The model's first stage (*getting started*) includes the preparatory work that partners have to go through before actually implementing the partnership, for instance: identifying what the goals, the motives, and the benefits are and assessing the availability of resources. The second stage (*partnership development*) "captures the processes involved in developing the collaboration beyond the self-interest of partners. It begins to illustrate the factors that contribute to or inhibit partnership evolution, and it identifies potential outcomes and aspects of the institutional and leadership context of the partnership" (Amey 2010, 339). The third stage (*incorporating the partnerships*) deals with the creation of partnership capital, which is created by amalgamating social capital emerging from existing partnerships.

Relying on Coleman (Coleman and James 1988), Eddy (2010a, 29) mentions that "[social] capital represents the interconnections individuals have with one another and between social networks." Social capital is thus connected to social structure and facilitates the actions of stakeholders through trust, respect, commitment, and integrity. In the context of international partnerships, securing social capital between partners can be made more difficult by the partners' different cultures. Echoing Triandis (1972), Doney et al. (Doney et al. 1998, 601) write that "[since] each culture's 'collective programming' results in different norms and values, the processes trustors use to decide whether and whom to trust may be heavily dependent upon a society's culture. Indeed, one of the greatest impacts of culture is on how information is used to make decisions." Doney, Cannon, and Mullen adopt Charles W.L. Hill's description of culture as being "a system of values and norms that are shared among a group of people and that when taken together constitute a design for living" (Hill 1997, 67). The level of openness and receptiveness to other cultures is also a factor that can influence the smooth delivery of a partnership since national

cultures can influence how people behave and shape their expectations. The prospects for success and the development of trust will be dim if compromises are one-sided and if one of the partners sticks to a predetermined agenda dictated by self-interests. Such inability to establish a trust relationship is counterproductive since the lack of trust between partners is likely to prohibit the development of creative and innovative methods (Dovey 2009, 313):

Innovation depends upon the collaborative learning, idea generation and idea realization practices of stakeholders in an organization. The effective execution of these practices requires individuals (and groups) to make themselves vulnerable: either to the rejection of their ideas (and associated embarrassment); the lack of recognition from others (through their ideas not being taken seriously); or by revealing “ignorance” (tacitly or explicitly) and thereby investing faith in others not to take advantage of self-initiated vulnerability. Thus, to a large extent, all three of these practices, that underpin innovation in organizations, can be said to depend on the level of interpersonal trust between stakeholders.

The drive to develop creative and fruitful relationship can also come from, especially, motivated and energetic individuals. The “champion,” or “faculty champion,” is indeed a core component of social capital in an educational partnership. Eddy (2010a, 27) defines a champion “as an individual who advocates for the development of a partnership and who brings together others to engage in the project.” Although an organization may officially have prioritized partnerships, there often needs to be an individual involved in the partnership who cares more than others about the project’s success. The argument in favor of the “champion” suggests that a dedicated individual can get more done than an institutionalized practice delivered by someone with no particular interest for results (Cooper and Mitsunaga 2010). On the other hand, according to Amey (2010, 58), “[if] the international partnership indeed is to be sustained beyond funding cycles and the initial passions of a faculty champion, it needs to become more institutionalized into the fabric of the department or institution.” Relying too intensively on one individual is risky because the individual can leave the organization at any point in time, thereby, compromising the success of a partnership. There needs to be a balance between individual drive and institutional commitment. The dilemma then is to recognize whether the partnership weakness is located at the institutional or staff level.

Ultimately, fully developed social capital is expected to yield partnership capital, which can be described as a network of social interactions that “forms after a collaborative effort moves beyond a mere collection of individual partners’ interests to a sense of shared norms that guide the venture” (Eddy 2010a, 49).

Implementing Institutional Change through Partnerships

Partnerships between educational institutions are increasingly designed to introduce change. Being an incremental process, change is rarely achieved through a single intervention. The need to anchor institutional change in a long-term approach

becomes clearer when one reflects on the innate purpose of institutions. According to March and Olsen (2008) “[an] institution is a relatively enduring collection of rules and organized practices, embedded in structures of meaning and resources that are relatively invariant in the face of turnover of individuals and relatively resilient to the idiosyncratic preferences and expectations of individuals and changing external circumstances” (March and Olsen 2008, 3). Criticizing institutions for being reluctant to change is really a compliment in disguise, since the main purpose of institutions is to constrain people’s behavior to achieve predetermined goals or to facilitate agreements between stakeholders. One could argue that, up to a certain extent, institutions fulfill their existential goals by refraining organizations from introducing quick and overarching change.

In spite of this, educational institutions often enter into a partnership hoping to induce some kind of change, whether it’s at the staff, management, or infrastructure level. Change is, however, not unidirectional. The thrust for change, and resistance to it, may come from management or from faculty staff. For instance, a partnership aiming to change an organization’s pedagogical approach may run into resistance from either professors not wishing to alter their teaching methods or from management, which might not be convinced about the added value of the proposed change.

Depending on the type of partnership, some organizations might not be that interested in change at all. For instance, Sakamoto and Chapman (2011, 5) differentiate motives between the exporter and the importer of custom-made partnership programs: “For the most part, these programs are motivated by an interest in revenue generation, at least for those exporting the program. Satisfying the unmet demand and building educational capacity are reported more frequently by the importing side of the partnership.” As a result, the willingness to institutionalize change will vary from partner to partner.

The Case Study: CAR 11 Partnership

This section introduces the parameters of the CAR-11 partnership. The context and creation of the partnership are first described. Key deliverables are then summarized.

Context and Creation of the Partnership

The idea of an Environmental Sustainability Practices (ESP) program is predicated on two fundamental facets: (1) the need to develop and launch into creation of “ecologically literate” Homo sapiens (Orr 2004) who are eager to be successful sustainability practitioners and problem solvers and who can live in harmony with nature and (2) the critical twenty-first (21st) century necessity for world class citizens who will be highly skilled employees and entrepreneurs, ready to grab on to the opportunities created by the thrust toward the blue-green economy. Moreover, on Small Island Development States (SIDS) which are “uniquely special” due to their very characteristics, these issues are exacerbated. In fact the United Nations

Environment Programme (UNEP) cites several environmental and socio-economic issues that SIDS must address in the twenty-first century, amongst these are: the critical cross-cutting issues of developing SIDS specific indicators that will better reflect the “true” socioeconomic realities of SIDS; the creation of unique skills for island sustainability and the bringing together of “Indigenous and Local Knowledge with Modern Science” to create appropriate and relevant SIDS focused sustainability strategies (UNEP 2014, v-vi). The ESP program developed under this partnership seeks to address these critical issues, by creating Twenty-First Century Environmental Practitioners, with the related green skills.

The partnership between two Canadian postsecondary institutions and the T.A. Marryshow Community College (TAMCC), on the small Caribbean Island of Grenada, was the first collaboration between these institutions. The project took place in the wider context of the Caribbean Community (CARICOM) *Education for Employment Program* (C-EFE) funded by Global Affairs Canada (previously the Department of Foreign Affairs, Trade and Development Canada). The C-EFE program was designed to (C-EFE 2013a, 1):

support the economic development of the Caribbean region through the strengthening of its technical and vocational education and training (TVET) system. It supports education and training institutions and national training agencies (NTAs) in the region to move from a traditional, academic, supply-driven training system to a more responsive, applied, demand-driven one that will meet the needs of the labor market and provide learners with skills required by the labor market.

The C-EFE comprises sixteen partnerships between several Canadian and Caribbean institutions. These partnerships were brokered by Colleges and Institutes Canada (CICan), which represents publicly supported institutions both in Canada and internationally. These institutions offer postsecondary as well as continuing education. As such they offer programs similar to those offered by American Community Colleges. Like the Canadian counterparts, the Grenadian Community College focuses on offering associate degrees, certificates to postsecondary students and continuing education to working adults. For each program, Canadian institutions work in partnership with CARICOM institutions to develop programs that are responsive to local and national labor markets. Development teams also had to keep in mind that the standards and curricula for each program have to be designed in order to serve the training needs of other institutions across CARICOM. As a result, each partnership is linked to a second Caribbean institution in order to extend C-EFE’s benefits to other Caribbean nations. Indeed, “[it] is hoped that the two Caribbean [partner] institutions will remain linked and continue the exchange of information fostered by the C-EFE activities, and that there will be a network of Caribbean institutions collaborating on program development and institutional strengthening going forward” (C-EFE 2014, 1).

All C-EFE programs aim to increase economic growth in Caribbean countries by helping them to develop a more competitive, productive, and gender-equitable workforce. To achieve this objective, the new programs must meet a set of common criteria: they must be demand-driven; integrate gender equality, environmental sustainability,

and entrepreneurship considerations; facilitate employment and selfemployment of female and male graduates; embed employability and entrepreneurial skills; and provide competency-based education and training (C-EFE 2013a, 5).

A particular partnership is initiated by a Request for Proposals (RfP) and is managed by Colleges and Institutes-Canada (CICan). A critical component of the RfP is the Caribbean institution's profile and the context in which the particular program for development is pitched. In this case, the TAMCC placed the need for careers in green skills within the wider context of Grenada moving toward a green economy. In this regard, TAMCC took the cue from the Grenadian government, which initiated a transition toward a new economy that requires the reshaping of careers and skills to fulfill the green jobs that will be created. The partnership therefore, focused on the development of a program on ESP. The *ESP* program takes place in the wider context of a shift toward a green economy in Grenada, which focuses on economic growth, jobs, social equity, and environmental sustainability. These elements are indicative of an integrated understanding of sustainability, where the environment is not separated from the people who rely on it for livelihoods. This understanding is clearly stated in the program's terms of reference (C-EFE 2013b, 8). Strategically, the partnership would answer some of TAMCC's needs, such as an introduction to CBET pedagogy and expertise in fields related to the green economy.

Three Canadian institutions responded to the TAMCC's RfP for the development of the ESP program. After a rigorous initial evaluation by a TAMCC Team, the three institutions were invited to an interview session that occurred in Canada, in October 2013. Two institutions were selected: Canadore College, in North Bay Ontario as the lead Canadian Institute and the Cégep de la Gaspésie et des Îles de la Madeleine (CEGIM), in the Gaspé region of Quebec as the second partner Canadian institution. The practice of creating multicollège partnerships was adopted by most of the participating Caribbean Colleges. Indeed, only six of the sixteen partnerships involved one Caribbean institution and one Canadian institution. For the Canadian Colleges, the partnership offered an opportunity to promote their expertise and programs, work with new partners, and generate revenues based on their respective inputs in the project. The Grenadian College benefited from the project by receiving a program recognized by the National Training Agency (body that accredits TVET programs) and a research instituted mirroring the CCTTs in Canada, laboratory equipment, and capacity building, including training in delivering CBET programs. Finally, the Dominica State College, on the small island of Dominica, was the second Caribbean partner and stood to benefit from the partnership by participating and exchanging information fostered by the C-EFE activities.

The main collaborative activities that have taken place in the development of the ESP and the partnership as a whole included: the actual program development using a job-analysis workshop (JAW), CBET pedagogy, curriculum and standard development, training sessions for trainers, and the socioeconomic survey and analysis for the development for an applied research center. TAMCC operationalized each Canadian College's contribution to the project by dividing the work based on what it saw as the best outputs from each college (Table 1).

Table 1 Canadian college contributions to CAR-11 based on TAMCC's division of tasks

Areas for output provided by		Proposed activities
CEGIM	CANADORE	
Course materials		
Fisheries and aquaculture	Environmental policies and compliance	Faculty input from both colleges in regards to sharing of materials (curricular, course outlines, assessment techniques, field and lab work assignments, etc.)
Forestry	Environmental management	
Eco-tourism and adventure	Science-based subjects	
Industrial engineering and renewables		
Cross-cutting module on environmental literacy and awareness for all teachers at TAMCC		
Training and development		
Curriculum design and development, competency-based education and training		Training provided to about two faculty members on curriculum design using DACUM (Train the trainers)
Train the trainers (CBET)	Teacher training for delivering courses	Training for teachers on CBET methodology and course delivery techniques
	Field camp to introduce the module as a capstone course for current TMACC and CANDORE colleges' students	Field camp organization
Research, eco innovation, and entrepreneurship		
Centre for technology transfer evaluation Community research module		Attachment at CEGIM to view current operations and discuss the establishment of the center and sharing of materials
	Development of green classroom and wider "green campus"	Design and execution

Table 2 summarizes CAR-11's development stages according to the two partnership development models presented in section "[Partnership Development Models](#)". The main challenges to the partnership's implementation occurred during the *getting started* and *partnership development* stages according to the model of Amey et al. (2007), Amey (2010) or the *early interaction*, *relationship growth*, and *partnership* stages according to the model of Heffernan and Poole (2004). Table 2 merged the *relation growth* and *partnership* stages for the sake of clarity.

The Job Analysis Workshop

The Job Analysis Workshop (JAW) took place during a 2-week mission in Grenada, in April 2014. The aim of the mission was to identify the competencies, which in

Table 2 Theoretical models of partnership development under the CAR 11 partnership

Partnership development model stages		Development activities under CAR 11	
Amey et al. (2007), Amey (2010)	Heffernan and Poole (2004)		
Getting started	Pre-relationship	1. Project drafting	2013
		2. Request for proposal from partners with supporting importer partner context	
		3. Initial review and short listing of partners	
		4. Interview of partners	
		5. Selection and notification	
	Early interaction	1. Visit to partner institutions	2014
		2. Development of the project implementation plan (objectives, activities, budgets and monitoring, and evaluation)	
		3. Initial visit by exporting institutions	
		4. Institutional reports to CICan	
	Partnership development	Relationship growth and Partnership	1. Visits by exporting institutions for curriculum development
2. Curriculum design and development			
3. Visit to assist with the development of dedicated laboratory space			
4. Formal partnership launch and piloting of the program			
5. Institutional report to CICan			
6. Visits by exporting institutions for CBET training and socioeconomic analysis for research institute			
7. Institutional report			
8. Piloting of research projects			
Incorporating the partnership	Partnership end	1. Proposed life of partnership to end in April 2017	2017
		2. Institutional report to CICan	

turn would be used to identify courses and to develop the curriculum. To identify competencies, the development team relied on an analytical process developed by Quebec's ministry of Education, Recreation, and Sports (Quebec 2005), which focuses on identifying tasks and operations. The process' theoretical and practical backgrounds can be found in the early DACUM work carried out in the 1980s. DACUM stands for *Developing a Curriculum* and it is a fast-track occupational analysis method that yields information used to develop curricula.

The JAW for the *ESP* program relied on 14 participants from industry, governmental departments, and TAMCC. Participants provided valuable insights into the tasks and operations relevant for environmental sustainability practices in Grenada,

and the broader Caribbean region. As the workshop progressed, the team identified key tasks and operations and posted them on a wall to create a chart. Tasks and operations were moved around in the chart to be as representative as possible to what is being done in the field or what will be needed in the future. The results were then discussed and validated by participants. Program developers conducted additional individual interviews with participants in order to translate tasks and operations into competencies, elements of competencies, and performance criteria.

The Curriculum Development Process

Curriculum development took place during the subsequent May–June mission to Grenada. The curriculum development mission was divided into three steps: (1) linking competencies to the curriculum, (2) developing syllabi, and (3) making sure that program components correspond to TAMCC’s credit system and fit within the broader Grenadian and Caribbean educational systems.

The program developers’ first task was to draw the competency-course correlation table, which provides a clear and visual representation of the link between competencies and courses. Once the table was completed, the team progressed to write curriculum for each course. Each curriculum writer was assigned a number of draft syllabi to write during the mission. Team members met regularly to share inputs on the process and to discuss the links between competencies and courses. All writers used the same CBET template to write syllabi, which required identifying relevant skills and knowledge. Writers also provided TAMCC with tentative teaching strategies and scenarios as well as evaluation methods and criteria.

Lastly, the team met with TAMCC and Grenada’s National Training Agency (GNTA) representatives both at the beginning and at the end of the mission in order to make sure that the program complied with the educational system’s requirements. In addition to harmonizing hours and credits, the development team linked the program to the appropriate Caribbean Vocational Qualification (CVQ) levels. The RfP also specified that the program had to be developed in modules to make it more flexible and available for those interested in professional development (C-EFE 2013b, 18). As a result, the program features three distinct exit points. Each exit point corresponds to a module, and each module corresponds to a level in the qualifications framework.

The CBET Training Sessions

Another key output of the partnership was the design and delivery of a two-week train-the-trainer workshop for teachers in CBET pedagogy. Approximately, 15 teachers from the TAMCC were trained in the fundamentals of CBET, including, how to teach in a CBET program, the drafting of a CBET syllabus, learning evaluations, and guidelines to preparing a descriptive evaluation grid.

The Socioeconomic Evaluation for an Applied Research Institute

In addition to the development of the ESP program, the partnership also focused on the implementation of a College Center for Technology Transfer (CCTT) at the TAMCC. CCTTs are Community College-level research centers specialized in applied research. The CCTT model was developed in Quebec, Canada in the early 1980s. There are currently 49 CCTTs in Quebec and they are divided into two groups. The 43 technological CCTTs work on various technologies, ranging from laser welding to forestry. The other six CCTTs specialize in innovative social practices (ISP) and their research work focuses on issues with strong social components, such as immigration and sustainable development. CCTTs' mission is to help companies and organizations innovate by providing technical support, technological development, and information and training.

To properly adapt this Canadian model to the Grenadian context, team members conducted a series of interviews and focus groups, which allowed them to collect data that would help to develop appropriate institutional and efficient management structures as well as to target relevant research fields. To accomplish these objectives, the consultations focused on issues such as research needs in Grenada and in the Caribbean, research services, equipment, national and regional innovation policies, potential management structures, and finally stakeholder recommendations on the institute's early development phase. The collected information was gathered in the *TAMCC Research Institute (TARI) Model, Organizational and Operational Guide*, which was then shared with TAMCC's management.

Retrospective and Perspectives on CAR-11's Outcomes

This section analyzes some of the main challenges that have surfaced during the partnership. These challenges are related to institutional complementarity and compatibility, the impact of sociocultural differences between partners, and the importance of balancing individual team members' inputs and institutional commitment to ensure the partnership's success.

Institutional Complementarity and Compatibility

Institutional complementarity and compatibility in a partnership should be addressed at the beginning of a partnership (*getting started* or *prerelationship* stages) because a careful analysis of potential partners' assets and weaknesses is likely to safeguard against difficulties down the road, especially for transformational partnerships. When TAMCC went through the partner selection process, it had to keep in mind that the selected partner would have to be able to help the college achieve transformational objectives. CAR-11 is partly transactional because it facilitates student exchanges between colleges, but it is essentially

a transformational collaboration because most of its criteria seek to introduce change into TAMCC's workings. Of all the changes that had to be implemented (for instance, demand-driven programs, gender equality, etc.), introducing the CBET pedagogy proved to be the most problematic one. Effectively implementing such a transition through a partnership imposes quite a few prerequisites. The reform first needs to be supported by the importing organization's professors and management, all of whom must understand the nature of the change and agree upon its usefulness before the organization enters the *pre-relationship* stage. A similar process needs to be repeated among partners during the *early interaction* stage. This is important because there needs to be a common understanding and acceptance of the reform's meaning, the objectives to be met and an agreement on the methodology needed to successfully implement the transition. If TAMCC's staff was mostly onboard with the transition toward CBET, CAR-11 partners struggled to achieve such cohesion. This challenge was not apparent in the selection process, but surfaced during the early interaction stage and persisted into the partnership stage. This approach was extremely difficult for one of the Canadian partners to grasp as their experience in CBET was lacking. However, as the lead Canadian partner, there was a tendency to impose their approach to curriculum development. The challenge was overcome, however, with persistence from the importing partner that the CBET approach to curriculum development would not be compromised.

Although the ESP program was indeed developed according to a standard JAW/DACUM methodology, the partnership's long-term planning internalized this lack of pedagogical cohesion and arguably diverted resources that should have been invested in training teachers and management on the CBET approach. This is especially true given the fact that TAMCC saw CBET training provided under CAR-11 as an opportunity to not only train staff working on the ESP program but also staff from other schools and departments. Indeed, the hopeful transition to the proposed CBET approach has achieved mixed results. In this regard, a few TVET-related programs have started a process of transition, while many programs are yet to get off the block. The reason for this slow move is still unclear, but it seems to be pointing toward inertia in academic management to change. Moreover, the idea of CBET is relatively new to the TAMCC, and therefore more time and effort will be required to effectively change.

As it relates to the ESP program, efforts are being made to continue with the CBET model, through a pilot of the program. These efforts, however, are delayed by the fact that there is an initial lack of materials and equipment and that the adjunct staff involved in the delivery of the program are not adequately trained in the CBET approach despite the 2-week training. This result is not surprising because transitioning to CBET is, in fact, a paradigm change. Such a change is "a process of gradual modification and experimentation through which we alter many organizational parts in light of a new vision for the whole" (Barr and Tagg 1995, 20). To be successful, the staff needs managerial support ready to recognize the breadth of the changes necessary to achieve a style of education that is based not on instruction but on learning.

The Impact of Sociocultural Differences Between Partners

If a lack of understanding of the idea of complementarity by the importing partner can explain the reason for the initial challenge bringing together different pedagogical traditions, one also has to consider the impact of sociocultural differences between partner individuals and organizations. The genesis of some of the early challenges seemed to stem from a variety of cultural differences that shaped how each institution expected the partnership to unfold. An important cultural difference to consider is the fact that the partners come from three different education systems. The Canadian Colleges come from two different provinces, an Anglophone one and a Francophone one, each with their own pedagogical traditions and educational system. As a result, the organization, delivery, and assessment of curricula will be different from one jurisdiction to the next. The Caribbean model of education, on the other hand, is highly influenced by the British and American approaches. So, if ever there is an “educational cultural rainbow,” it exists with this partnership.

It is also worth highlighting the fact that each educational organization develops its own internal culture over time. The organization’s history, its geographical location, its key programs, and its policies may all be elements that shape how individuals behave. Organizational culture can be a fuzzy term as it can refer to a generic understanding of how people behave when they work together. Odom et al. (1990), however, point toward common elements from various authors’ definitions of organizational culture such as shared values, beliefs, assumptions, relationship patterns, and behaviors. Organizational culture can also shape people’s perception of what is important and of how things should be done.

The Importance of Individuals

Individual team members can significantly influence how a partnership unfolds. Ultimately, individuals are the ones who translate cultural preferences, traditions, and organizational policies into actions. This can be seen at the leadership level, but also in the field.

CAR-11 involved three project coordinators, one for each college. Together, they coordinated activities, managed funds, and ensured objectives were being met. Although partners aimed to ensure collegiality, some prerogatives were attributed to each college based on their status in the partnership. For instance, the project coordinator from the Canadian lead institution had the mandate to manage the overall project funds, to validate activities, and was responsible for the project’s accountability with donors. At the same time, the project coordinator from the Caribbean institution plays an especially important role since EFE program developers used guiding principles from the Paris Declaration on Aid Effectiveness as guiding principles. These guiding principles extend an important role to partner countries in terms of project ownership, alignment, harmonization, results-based management, and accountability (C-EFE 2013a, 3–4). As a result, although most of the funds are managed by the Canadian lead institution, the Caribbean coordinator

plays a key role in determining how the project unfolds. Project coordinators from the second Canadian and Caribbean institutions, on the other hand, must rely on the collegiality spirit of the lead institutions to influence decisions.

Despite the fact that the individual relationships developed by the partnership were positive, there were challenges associated with individuals involved with the partnership. It is interesting to highlight the fact that CAR-11's project coordinators boasted opposite personalities and management approaches. From the "let's get this done as soon as possible" approach to the "let's take our time" approach, the project coordinators' individual styles actually influenced the pace and quality of the outcomes and objectives of the relationship. Activity pacing is important in a JAW/DACUM process because the relevance of a program depends on a series of steps ensuring that the tasks and operations performed in the industry are accurately represented in the curriculum. The pace steer approach in CAR-11 resulted in many of the outcomes being achieved in a hasty but timely manner. This eagerness was often tempered by the more cautious project coordinator in order to ensure that the process was foolproof and that the quality of the curriculum was high. In hindsight, one could argue that condensing most activities in the early phase of the partnership may have been detrimental to the development of strong partnership capital. Team members met repeatedly in the first few months of the partnership but little follow-up was done afterwards to maintain a network of social interactions. It would be difficult to assert that individual team members' contributions moved "beyond a mere collection of individual partners' interests to a sense of shared norms that [guided] the venture" (Eddy 2010a, 49). Developing shared norms between partner institutions would have necessitated partners to meet and exchange in a concerted way over the full length of the project.

These leadership approaches were also manifested in the individuals executing the project. There was a sense of a more meticulous approach evident in one institution, which was in direct relationship to the management approach of the project coordinator from that institution. A direct link cannot be established here, but it would have been interesting to analyze how the different organizational cultures influenced the project coordinators' approaches since, as previously above, some authors suggest that organizational culture can influence individuals' behaviors and priorities.

The concept of "champion" also demonstrates the importance of individuals in partnerships. As previously mentioned, one of CAR-11's objectives are to help TAMCC develop an applied research institute. Apart from one-off initiatives from professors and students, there are no formal research activities being conducted at the college. However, it is interesting to highlight the fact that research is part of TAMCC's official mandate. Indeed, according to the *T.A. Marryshow Community College Act 1996*, there is a legal standing for research at the college "to secure the advancement of knowledge" and "to carry out relevant research and provide services to the community within its competence so to do." In order to promote the development of research activities, TAMCC management allowed human resources to be dedicated to the development of the research institute. CAR-11 team members produced a guide describing a process for institutionalizing the CCTT model at the

college. Ultimately, it was up to college management to decide how the propositions would materialize. As there is no institutionalized research precedent for TAMCC to rely on and to show the way forward, the task of promoting the institute and ensuring that it materializes mostly rests on the TAMCC team member who participated in the drafting of the guide, thereby assuming the role of a *champion*. Such a scenario puts pressure on one individual to deliver results. Despite the champion's willingness to push for the project, the research institute is still in development. The capacity of the champion to induce change is indeed limited by institutional priorities.

This Canadian/Caribbean partnership revealed some key points. In this regard, partnership delivered an important program that will develop the skills, knowledge, and attitudes of the twenty-first century environmental practitioner. Additionally, the partnership laid the foundation for a transformation of the educational approach used at TAMCC. For example, the TAMCC is attempting to transition some of its TVET program to the CBET model of program delivery. Finally, this case study demonstrates the partnership process and highlighted key opportunities and challenges that prospective institutions wishing to collaborate can employ and avoid, respectively. The key in this regard, is to pay close attention to the steps in partnership development illustrated in Table 2.

Conclusion and Future Directions

This chapter introduced a postsecondary partnership between a Grenadian College and two Canadian Colleges. The chapter showed that although the main goal of such a partnership is to share expertise and promote development, in fact, partnerships often turn out to be exercises in social skills development. Whether it is about solving conflicting project management styles or developing new and lasting friendships, partnerships create unique challenges and opportunities. Challenges come in different forms and almost always benefit from continuous communication between partners. Opportunities during partnership implementation can lead to further collaborations down the line, thereby extending the benefits of the initial alliance. As a result, how a partnership unfolds very much depends on how partners deal with some of the social issues mentioned in this chapter.

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Part VII

Innovation: Adaptation to Education Needs of the Learner



Adult Learning in Italy: Historical Context and Perspectives for a New Provision

33

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Abstract

At present in Italy, there is neither a specific provision, different from the traditional programs in tertiary education, nor a financial support dedicated to adults who need to be (re)skilled. Nevertheless, the needs of the most disadvantaged groups exist. This relevant gap in the Italian Vocational and Educational Training system, unprecedented in other Western developed countries (Italy is the third most important economy in the European Union) (Eurostat, Eurostat database 2016. <http://ec.europa.eu/eurostat/web/population-demography-migration-projections/population-projections/database>. Accessed 15 May 2016, 2016a; Eurostat site on Labour Force Survey. <http://ec.europa.eu/Eurostat/web/microdata/european-union-labour-force-survey>. Accessed 15 May 2016, 2016b),

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is the unwanted result of recent reforms of the lifelong learning system, which has seen a somewhat incoherent evolution of tools and educational provisions. This fragmentation is also the result of the European policy guidelines (governance and financing) on adult learning. Within these constraints, as a matter of fact, the Italian institutions (government, regions, employer's representations, trade unions, etc.) have not been able to coordinate these different inputs in a homogeneous frame.

The present contribution constitutes the first step in a larger endeavor aiming at deeply analyzing the potential demand, bottlenecks and constraints, management, and financial governance related to the development of an educational offer for adults with low skills in Italy. The study is finalized to enlarge the current debate around adult learning perspectives at global and local level, especially regarding low-skilled adults, and to propose a viable and feasible alternative to the current policies in the field of adult learning in Italy.

Keywords

Adult learning policies and governance · Italian adult education and learning system

Introduction: General Education and VET (Vocational Education and Training) in Italy

Compulsory Education and Secondary Education

In this section, the general education and VET – vocational education and training – in Italy, funded by public policies financed by public fund, is outlined. Data is abstracted from ISFOL/CEDEFOP (2014).

All young people in Italy have the “right and duty” (*diritto/dovere*) (Law 53/2003) to pursue their education and training for at least 12 years before reaching age 18. The aim is that young people should not leave education and training without a qualification. However, compulsory education lasts 10 years, up to 16, and includes the first 2 years of upper secondary general education or VET. Young people finish lower secondary education at age 14. At this stage, learners sit for a state exam to acquire a certificate (European Qualifications Framework – hereinafter EQF, level 1) which grants admission to the upper secondary level where young people have the opportunity to choose between general education and VET.

The European Qualifications Framework (EQF) (2016) is a translation tool that helps to compare different qualification systems in Europe. Its eight common European reference levels are described in terms of learning outcomes: knowledge, skills, and competences. This allows any national qualifications systems, national qualifications frameworks (NQFs), and qualifications in Europe to relate to the EQF levels. Learners, graduates, providers, and employers can use these levels to understand and compare qualifications awarded in different countries and by different education and training systems.

At upper secondary level, young people may opt for:

- (a) Five-year programs which include the 2 last years of compulsory education and 3 years (under the right/duty of education and training) in (1) high schools (*licei*) which provide general education programs at upper secondary level, (2) technical schools, and (3) vocational schools. High schools (*licei*) offer artistic, classical, linguistic, scientific, human sciences, music, and dance strands. The qualifications awarded after successful completion of high school and technical and vocational school are at EQF level 4, and a State leaving exam at the end of them gives access to higher education.
- (b) Vocational education and training programs organized by the regions (IVET – initial vocational education and training).
- (c) An apprenticeship-type scheme (after age 15).

At post-secondary level, the Italian system features higher technical training and short programs or courses (post-IVET – initial vocational education and training). Figure 1 shows that VET courses also exist at post-higher education level.

Tertiary Education

Tertiary education (ISCED levels 665, 667, 766, 767, 768, 864) is divided into higher education programs at the university and higher education programs at nonuniversity institutions as illustrated by Fig. 1:

- (a) Universities: can be public or private and follow the three cycles of the Bologna Process structure – bachelor (*laurea*), master (*laurea specialistica/magistrale*), and specialization or PhD programs (*masters universitario di secondo livello, dottore di ricerca*). In June 1999, 29 European ministers in charge of higher education met in Bologna to lay the basis for establishing a European Higher Education Area by 2010 and for promoting the European system of higher education worldwide. In the Bologna Declaration, the ministers affirmed their intention to (a) adopt a system of easily readable and comparable degrees, (b) adopt a system with two main cycles (undergraduate/graduate), (c) establish a system of credits (such as ECTS), (d) promote mobility by overcoming obstacles, (e) promote European cooperation in quality assurance, and (f) promote European dimensions in higher education.
- (b) Higher artistic and musical programs (*alta formazione artistica e musicale*) which are nonuniversity programs based on the three-cycle structure.

Apprenticeship. Apprenticeship is a job contract aimed at training and employing young people. According to the innovations introduced by the recent Unified Text on Apprenticeship (2011), there are three types of apprenticeship aimed at different training objectives with different linkages with the education and training system:

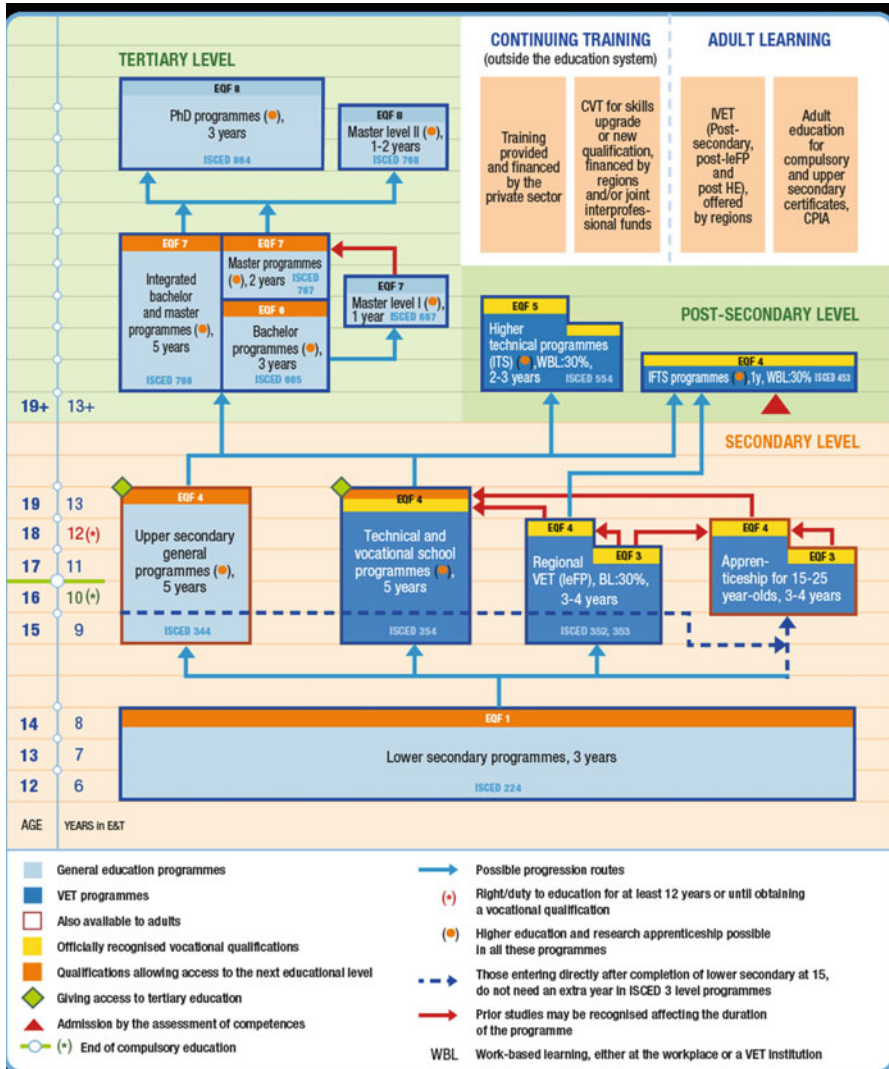


Fig. 1 VET in Italy’s education and training system (ISCED-11) (funded with public resources) (Source: ISFOL/CEDEFOP 2014)

- (a) Apprenticeship addressed to young people between 15 and 25 years of age. This type of apprenticeship lasts 3 years if aimed at acquiring an *Attestato di qualifica di operatore professionale* (Professional operator certificate) and 4 years if aimed at a *Diploma professionale di tecnico* (Professional technician diploma).
- (b) Work-oriented apprenticeship addressed to young people between the age of 18 and 29. Collective agreements define the duration of the contract, which cannot exceed 3 years (5 years for crafts activities), the professional standards, and the

provision of technical vocational training. Regions rely on a range of activities aimed at the development of basic and transversal competencies, for a maximum of 120 h over 3 years. At the end of a work-oriented apprenticeship, it is possible to obtain a regional qualification, a certification of competencies, or the validation of a qualification for contractual purposes.

- (c) Higher education and research apprenticeship addressed to people aged between 18 and 29, hired in all public or private sectors. It can be aimed at obtaining a qualification (upper secondary education diploma, postsecondary vocational education certificates (*ITS/IFTS*), and university degrees, including PhD) and acquiring research experience, as well as accessing regulated professions.

Adult Education

Adult education includes education and training activities for the professional upgrading or functional literacy of people in adulthood and is aimed at the acquisition and/or development of competencies, also of cultural and social nature, related to their personal and professional profile. Adult education was reformed in 2012 (see parr: 2. The beginning of the Adult education movement in Italy; 3. The European and international discourse on lifelong learning and Adult learning and the reform of the Adult Education Centers in Italy) and at present is provided through the new Provincial Centres for Adult Education (CPIA) and evening classes in secondary education schools. They supply a different kind of service:

- CPIA usually offer general education courses for achieving a compulsory education certificate.
- Evening classes are mainly aimed to the attainment of a second cycle qualification.

CPIA are committed to teaching Italian to foreigners, in compliance with recent regulations for residence permits. They are established by the Regional School Offices in the first and second cycle schools. These centers can be linked to secondary centers based on libraries, hospitals, detention institutes, and communities.

With the above regulation, the pathways of adult education are reorganized as follows: (a) first-level paths (two teaching periods) leading to the final qualification of the first cycle of education and to the *Certificato delle competenze di base acquisite in esito all'assolvimento dell'obbligo di istruzione* (Compulsory education certificate), acknowledging the acquisition of the related basic skills; (b) second-level pathways (three teaching periods) leading to the *diploma di istruzione tecnica, professionale e di Licei artistici* (Upper secondary education diploma – technical schools, professional schools, and artistic Licei); (c) literacy and Italian language learning pathways for adult foreigners, aimed at obtaining an Italian language proficiency certificate no lower than level A2 of the CEFR – *Common European Framework of Reference for Languages*. In the framework of specific network agreements between the Provincial Centers for Education (supplying first-level

Table 1 Italian education and training programs related to EQF levels and to ISCED-11 classification

Education/training programs	ISCED level 2011	EQF	Competent authority
Lower secondary programs, 3 years	244	1	Italian Ministry of Education – MIUR
Upper secondary general programs, 5 years	344	4	Italian Ministry of Education – MIUR
Technical and vocational school programs, 5 years	354	4	Italian Ministry of Education – MIUR
Vocational programs, work-based learning: 30%, 3 years	352	3	Regions
Vocational programs, work-based learning: 30%, 4 years	353	4	Regions
Apprenticeship for 15–25-year-olds, 3–4 years	Depends on the type of apprenticeship		Italian Ministry of Education – MIUR
IFTS courses, 1 year, WBL: 30%	453	4	Regions
Higher technical courses (ITS), work-based learning: 30%, 2–3 years	554	5	Italian Ministry of Education – MIUR
Bachelor degree, 3 years	665	6	Italian Ministry of Education – MIUR
Master degree, 2 years	767	7	Italian Ministry of Education – MIUR
Combined bachelor and master degree, 5 years	766	7	Italian Ministry of Education – MIUR
University master, level 1, 1 year	667	7	Italian Ministry of Education – MIUR
University master, level 2, 1–2 years	768	8	Italian Ministry of Education – MIUR
PhD programs, 3 years	864	8	Italian Ministry of Education – MIUR

Source: Based on First Italian Referencing Report (2012); CEDEFOP (2014)

pathways) and the schools that provide technical, professional, and artistic education pathways (supplying second-level pathways), dedicated committees will be set up in order to ensure that the adults attending the courses receive adequate guidance services as shown in Table 1.

Continuous training.

Continuous training provision, aimed at employed or unemployed people looking for a new job, refers to a wide range of courses and includes both public- and private-funded training initiatives. With regard to the public system, continuous training is set up by:

- (a) Regions and autonomous provinces, elaborating strategies with their own resources, including European Social Fund resources and funds allocated by the Ministry of Labour.

- (b) Social partners, mainly operating through Inter-professional Funds for Continuous Training, under the control of the Ministry of Labour. These funds are based on an agreement between social partners. To date, there are 18 authorized funds. State-funded continuous training activities are provided by a range of actors and institutions that can be grouped into three main categories:
1. Public and private enterprises and public and private organizations: training activities for their employees, consortia of enterprises, etc.
 2. Training organizations and institutes: accredited and nonaccredited training agencies, bilateral organizations, other organizations linked to social partners, category or professional associations, professional directories, and other associations
 3. Institutional organizations: job centers, schools, universities, and university networks

The Positioning of Italy in the European Context of Adult Learning

The educational training offer in the community college model comprehends several strands: traditional liberal arts education geared toward transfer to universities, credit-bearing workforce education geared toward employment, noncredit educational offerings directed at both enjoyment and workforce training, and developmental education to achieve high school degrees or necessary high school skills to enter a college.

The analysis in this chapter of the Italian system shows that there is a need for the education/training of unemployed adults who need to be upskilled. Even though this kind of provision is only a smaller part of the whole educational offer in community colleges, this is the most urgent need for the Italian context, as other strands are already developed in the Italian education system. On the contrary, this target – unemployed adults who need to be upskilled – at present cannot find any educational/training offer to meet their need, neither in the continuing training (addressed to employed people) nor in the current adult learning system (geared only to the achievement of lower secondary degree, upper secondary degree, or Italian as second language certification). The aim of this study is to deepen the historical and economic reasons why it is possible to observe a lack of this provision in the Italian adult education system and what could be a possible alternative to the present Italian policies on adult learning.

Any analysis on publicly funded education and training systems for the adult population in Italy cannot ignore the context at European level, as well as the trend of participation in lifelong learning activity, systematically evaluated by the European Commission since the last 15 years.

To involve citizens (and workers) in a constant maintenance of their skills is a cornerstone upon which making Europe the most competitive, as well as inclusive and equitable economy in the world. This is the main aim of the European Union agenda: “Education and Training 2020 -ET 2020” (Official Journal of the European

Union 2009). The agenda relaunches the program previously initiated in Lisbon in 2000 and identifies several objectives to be reached by the year 2020 as shown in the strategic framework (ET 2020; 2009/c 119/02). In particular, attention was focused on the level of participation in educational and training activities of the adult population (from 25 to 64 years old – as conventionally established in UNESCO, OECD, Eurostat statistics), setting a precise benchmark according to which, within 2020, no less than 15% of the European population, 25–64 years old, should be involved in educational or training activities.

Consequently, for all the European Union member states, including Italy, the matter is to structure a coherent and permanent educational offer for adult learners with different needs, according to their educational level, occupational status, age, social condition, etc.

In this overall process, it is well known that Italy is not recording excellent results, while on the opposite, the countries from Northern Europe (and especially the Scandinavian countries) stand out for the most consistent participation rates.

To achieve the objective of 15% of adult population participating in educational and training activities in 2020, in Italy, no less than five million people each year should be involved to bridge the current gap. In 2015, only 7.3% of the population 25–64 years old took part in educational and training activities on average, that is, 2.4 million people (Eurostat 2016a). Within the definition given by the ET 2020 program, based on the lifelong learning paradigm, educational and training activities include all the activities promoting formal learning at any ISCED level as well as any activity promoting training, even when it is neither vocational nor strictly related to work or career development.

Women have a greater tendency to carry out educational and training activities, as shown in Table 2, where the participation rates of some European countries and the European Union average (calculated on the 28 member states) are illustrated. The gender gap, as can be observed, is present not only in Italy. In fact, this tends to

Table 2 Participation rate of the 25–64-year-old population in education and training activities during the last 4 weeks before the interview for sex and total in some European countries (2015; AVG; %)

Country	Participation rate		
	M	F	T
Denmark	25.3	37.3	31.3
Sweden	22.3	36.7	29.4
Netherlands	18.4	19.4	18.9
France	15.9	21.1	18.6
United Kingdom	13.9	17.5	15.7
Spain	9.2	10.7	9.9
Germany	8.2	8.0	8.1
Italy	6.9	7.7	7.3
<i>EU (28 countries)</i>	<i>9.7</i>	<i>11.7</i>	<i>10.7</i>

Source: Elaborated from Eurostat 2016b – Labour Force Survey data, data extracted on 05–15–2016

Table 3 Participation rate of the 25–64-year-old population in education and training during the last 4 weeks before the interview for age class in some European countries (2015; AVG; %)

Country	Age class			
	25–34	35–44	45–54	55–64
Denmark	43.3	31.0	28.2	23.6
Sweden	38.1	30.4	27.4	20.8
Netherlands	28.7	19.2	16.8	11.8
France	24.2	20.6	17.0	12.8
United Kingdom	19.9	16.9	14.8	10.8
Spain	18.6	10.1	7.3	4.0
Germany	18.5	6.9	5.2	3.1
Italy	14.3	6.6	5.6	4.0
<i>EU (28 countries)</i>	<i>17.4</i>	<i>10.8</i>	<i>9.0</i>	<i>6.0</i>

Source: Elaborated from Eurostat 2016b – Labour Force Survey data, data extracted on 05–15–2016

widen especially in the countries with the highest (and consolidated) level of involvement of adults in lifelong learning activities.

Age is the second variable strongly related with participation rates: younger generations are more frequently involved in training courses. As for Italy, even though the rates of participation are constantly below the European average in every age, however in 2015 a peak of 14.3% is registered among 25–34-year-old population as shown in Table 3.

Occupational status is also tightly related to participation rates. The European participation average rate is characterized by a stronger presence in training activities of the employed (11.6%) in comparison with unemployed (9.5%) and inactive people (8.2%). At the European level, it is possible to observe that the countries featuring a developed network of employment services, combined with a deep-rooted policy of maintenance of the competences in the population, achieve the highest rates of participation in educational and training activities as shown in Table 4.

Looking at the occupational status correlated with the level of qualification, it is evident that in Europe, the higher levels of participation are related to higher educational qualifications, thus confirming a well-known trend: those who already have higher levels of competence tend to get trained more recurrently and more continuously, while those who would most need to strengthen their skills more often are not reached by the educational and training provision. In Italy, in 2015, 17.0% of graduates took part in training activities, against the 8.4% of people with upper secondary titles and 2.0% with lower secondary titles as shown in Table 5. This means that those with lower titles and skills, who need more to participate in training and education courses, are the less involved (Franzosi 2015).

The Italian case is even more emergent when considering the general level of education of the population, lower than the European average for the lower secondary education and the tertiary education. This population represents the next generation of adults, workers, and citizens, so these data are quite alarming even

Table 4 Participation rate (by occupational status) of the 25–64-year-old population in education and training during the last 4 weeks before the interview for labor status in some European countries (2015; AVG; %)

Country	Labor status ^a		
	Employed persons	Unemployed persons	Inactive persons
Denmark	31.9	28.9	29.3
Sweden	28.7	44	28.5
Netherlands	20.8	18.3	11
France	20.7	14.7	12.8
United Kingdom	17.3	14.2	9.5
Spain	10	11.2	8.6
Germany	7.9	6.2	9.8
Italy	7.6	5.3	7.2
<i>EU (28 countries)</i>	<i>11.6</i>	<i>9.5</i>	<i>8.2</i>

Source: Elaborated from Eurostat 2016b – Labour Force Survey data, data extracted on 05–15–2016

^aDefinitions given by ILO – International Labour Organization:

“Inactive are all the persons outside the labour force. Persons outside the labour force comprise all persons of working age who, during the specified reference period, were not in the labour force (that is, were not employed or unemployed). The working age population is commonly defined as persons aged 15 years and older, but this varies from country to country. In addition to using a minimum age threshold, certain countries also apply a maximum age limit. The inactivity rate conveys the number of persons of working age not economically active (persons outside the labour force) expressed as a percentage of the working age population (*even considering the university student – note of the authors*). The discouraged job-seekers are a subset of the persons outside the labour force. They are those persons of working age who during a specified reference period were without work and available for work, but did not look for work in the recent past for specific reasons (for example, believing that there were no jobs available, there were none for which they would qualify, or having given up hope of finding employment)

The *employed* comprise all persons of working age who during a specified brief period, such as one week or one day, were in the following categories: (a) paid employment (whether at work or with a job but not at work); or (b) self-employment (whether at work or with an enterprise but not at work). The *employment-to-population ratio (EPR)* is calculated as the number of persons who are employed during a given reference period as a percent of the total of working age population in the same reference period

The *unemployed* comprise all persons of working age who were: (a) without work during the reference period, i.e. were not in paid employment or self-employment; (b) currently available for work, i.e. were available for paid employment or self-employment during the reference period; and (c) seeking work, i.e. had taken specific steps in a specified recent period to seek paid employment or self-employment. For purposes of international comparability, the period of job search is often defined as the preceding four weeks, but this varies from country to country

The specific steps taken to seek employment may include registration at a public or private employment exchange; application to employers; checking at worksites, farms, factory gates, market or other assembly places; placing or answering newspaper advertisements; seeking assistance of friends or relatives; looking for land, building, machinery or equipment to establish own enterprise; arranging for financial resources; and applying for permits and licences. The *unemployment rate* is calculated as the number of persons who are unemployed during the reference period given as a percent of the total number of employed and unemployed persons (i.e., the labour force) in the same reference period” (see http://www.ilo.org/ilostat/faces/home/statisticaldata/conceptsdefinitions?_afzLoop=46478441514570#!%40%40%3F_afzLoop%3D46478441514570%26_adf.ctrl-state%3Dqk83j1mcb_21)

Table 5 Participation rate (by educational levels of participants) of the 25–64-year-old population in education and training during the last 4 weeks before the interview in some European countries (2015; AVG; %)

Country	Educational levels of participants		
	Lower ^a secondary education (ISCED UNESCO 2013 levels 0–2)	Upper secondary ^a education and non-tertiary post-secondary (ISCED UNESCO 2013 levels 3–4)	Tertiary education ^a (ISCED UNESCO 2013 levels 5–8)
Denmark	21.7	28.3	39.7
Sweden	20.0	24.7	38.5
Netherlands	9.3	18.6	26.2
France	7.7	15.5	29.7
United Kingdom	6.8	13.3	22.6
Spain	3.6	9.9	17.5
Germany	3.4	7.2	12.3
Italy	2.0	8.4	17.0
<i>EU (28 countries)</i>	<i>4.3</i>	<i>8.8</i>	<i>18.8</i>

Source: Elaborated from Eurostat 2016b – Labour Force Survey data, data extracted on 05–15-2016

^aFor further details on lower secondary, upper secondary, and tertiary education in Italy, see the description of the Italian education system in the introduction.

considering adult education, as it means that a certain quota of the next generation of adults probably hasn't got the necessary competences to be a good worker and an active citizen. In 2015, adults 25–64-year-olds, holding at least an upper secondary title (level 3–4 ISCED UNESCO 2013), were 59.9% against the 76.5% recorded on average in the European Union. In Italy, the average unemployment rate of 25–64-year-old population is 10.2%, but it rises to 14.2% among those holding lower qualifications (not beyond ISCED UNESCO 2013 level 2), who are less involved in training opportunities.

It is therefore possible to conclude that the need for a targeted educational and training offer for disadvantaged adults is emergent in Italy, particularly for those who have the lowest levels of qualification.

The Beginning of the Adult Education Movement in Italy

The path of education of adults in Italy has been anything but straightforward. In fact, it has not been originated by a comprehensive framework of legislative measures in the field of education, training, and culture, but by a movement of claim for an enlargement of the access to education on the part of civil society, with all the contradictions, frictions, and tensions generated by this process.

After the Second World War, in Italy, the issue of access to education, as a lever for an enlargement of the participation in the new democratic life, was the center of the nascent Republic. It was in this period that various associations are established,

strongly characterized by the enlargement of civil and political rights: the Community Movement (Movimento Comunità), the Civic Collaboration Movement (Movimento di collaborazione civica), and the National Union for the Fight Against Illiteracy (Unione Nazionale per la Lotta contro l'Analfabetismo – UNLA). With the exception of the latter association, the others did not support adult education as a statutory purpose; nevertheless, they gave a contribution with their engagement on the theme of emancipation and active participation to the democratic life.

On November 15, 1960, a series of television broadcasts entitled “It’s never too late” started in Italy. This would bring, over the next 8 years, more than one million illiterate people to achieve a primary school certificate. The program was conducted by an elementary school teacher, Alberto Manzi, who had a thrice-weekly structure, included lessons in Italian and mathematics, and could be followed over more than 2000 “receiving points” scattered throughout Italy: in bars, cafes, and clubs of the peninsula. The program “It’s never too late” was later awarded by UNESCO (Teheran 1965, World Conference on literacy) as one of the best television programs for the fight against illiteracy.

In the following years, the evolution of adult education is parallel to the claim for the right to study for workers, which has been gradually recognized in national contracts, starting from the textile sector in 1957, until it was fully established in the “Workers’ Statute” in 1970. This right to study is enforced in schools, in evening courses run in the same buildings and by the same teachers of the morning hours, to obtain primary and secondary cycle titles. Subsequently, in the various national agreements, several benefits are planned, ranging from the granting of unpaid permits to the exemption from overtime work, paid leaves for exams, facilitations in shifts, and vouchers to buy books, as a first attempt to strengthen nonformal and informal learning.

Here are the premises for the recognition of the “right to 150 paid hours for studying.” In this historical perspective, the renewal of the national metalworkers’ contract of 1973 is particularly relevant: for the first time, this contract provides that employers are obliged to recognize the right to studying, through 150 paid hours along the year. During the 1970s, almost all collective agreements have adopted the “right to the 150 h.” This statement marked an important stage in the development of the Italian education system of lifelong education, due to the direct and close relationship that was created between education and the labor market (Daniele 2012).

In 1988, the right to study for workers was claimed in the Decree of the President of the Republic No. 395 with application to all sectors of collective bargaining in the public sector. The next stage in the affirmation of an extensive right to training was the introduction of a training leave in the Law 53 of 2000 (right to care and training) “for employees of public or private employers who have at least five years of service at the same company or administration.” Employees may request a suspension of the employment relationship leave for training or education “for a period not exceeding eleven months, continuous or fractionated, throughout working lives. During the period of leave for training the employee keeps his job and has no right to remuneration.” Personalized courses, certified and recognized at national and European level, are included in this provision: “The training may constitute an independent

choice of the employees or be organized by the company, through corporate or territorial training plans agreed between the social partners.” At this moment, the training provision in Italy, as it will be explained into details in paragraph 4, is represented either by courses managed by the regions and financed by the European Social Fund or by training activities managed by the Joint Interprofessional Funds dedicated exclusively to the employees of the companies adhering to the funds.

As for strictly adult education, an important step for the realization of an adult education system was represented by the Ministerial Decree of the Ministry of Education, University and Scientific Research (MIUR) No. 455 of 1997: “Adult education - Education and training in elementary and middle school.” In fact, in Italy, adult education has been characterized for years by the achievement of a school qualification: in this context exists the provision of literacy classes for the achievement of the primary school title and the lower secondary title (even taking advantage of the “150 paid hours for studying”). The decree established the Permanent Territorial Centres for Adult Education (CTP) at district level. The CTPs were designed as places where the needs for literacy and numeracy were satisfied. They used to offer training and guidance services, primary and functional literacy, foreign languages, and computer courses, thus establishing a first relevant form of collaboration between schools and training agencies in the field of adult education. A further important step was represented by the Congress of the State-Regions-Local Administrations on March 2000 which approved the document: “The reorganization and the strengthening of Adult education.” In the document, the priorities of work are identified as facilitating the reentry into the formal system of education and vocational training, as well as the acquisition of specific skills related to the work and social life. Till the recent reform of 2012, the provision of courses aimed to meet the need of workers, unemployed adults, but also citizens. The type of courses until 2012 was represented by:

- Courses leading to qualifications
- Short or modular courses
- Italian for foreigners’ courses, for their social and linguistic integration

The short and modular courses accounted for 31% of the total provision. Overall, before the reform of 2012, in 2010/2011, 14,192 courses were carried out, of which 7855 courses were leading to a title of the first cycle of education (primary school), 1925 were courses for the integration of foreigners, and 4412 were short and modular courses. The short and modular courses concerned the information and communication technology (ICT) competence (37% of courses) and foreign languages (38% of courses). This kind of provision included guidance to vocational training or placement activities, aimed particularly at young unemployed or those looking for their first job. The total number of adults attending before the reform of 2012 was 345,771; of these, more than 50% were between 20 and 50 years, and 33.4% had a qualification diploma or high school: these categories in the new reform will have no access, as the new provision of courses, after 2012, is limited to those not holding a primary or secondary title.

The European and International Discourse on Lifelong Learning and Adult Learning and the Reform of the Adult Education Centers in Italy

This first phase of the adult education in Italy, from the 1960s to the 1990s, mirrors the evolution of the European and international discourse on lifelong learning and adult education: the first declination of the notion of lifelong learning in the contemporary world can be traced back to the definition given by the United Nations Educational, Scientific and Cultural Organization (UNESCO), to meet the challenges of a changing world, in the 1960s. The Second International Conference on Adult Education, held in 1960 on the theme “Adult education in a changing world” stated that:

Recognizing the importance of Adult Education in a world of rapid change, this Conference urges all Member States of UNESCO to invest a higher proportion of their resources in the development of Adult Education.

In another education report commissioned by the United Nations Educational, Scientific and Cultural Organization (UNESCO), *Learning to be*, otherwise known as the *Faure Report* (1972), it is stated that “we propose education as the master concept for educational policies in the years to come for both developed and developing countries” (Faure et al. 1972). A holistic interpretation of lifelong learning is usually adopted in relation to the *Faure Report*. As Schuetze (2006, 290) stated, Faure’s idea of lifelong education was based on “the philosophical-political concept of a humanistic, democratic and emancipatory system of learning opportunities for everybody, independent of class, race or financial means, and independent of the age of learner.”

Twenty-eight years after the Faure Report, lifelong education has been transformed into lifelong learning. In 1996 UNESCO’s report *Learning: The Treasure Within*, otherwise known as the *Delors Report*, it was underlined that learning was a key to the twenty-first century and learning throughout life will be essential, for adapting to the evolving requirements of the labor market and for better mastery of the changing time-frames and rhythms of individual existence. Further, it was emphasized that:

There is a need to rethink and broaden the notion of lifelong education. Not only must it adapt to changes in the nature of work, but it must also constitute a continuous process of forming whole beings—their knowledge and aptitudes, as well as the critical faculty and ability to act. It should enable people to develop awareness of themselves and their environment and encourage them to play their social role and work in the community. (p. 21).

Several studies arrive at the same conclusions, the presence of three main phases, and points of view on lifelong learning (Antikainen 2009; Matheson and Matheson 1996; Bagnall 1990). The first phase is represented by the humanistic concept and the focus during the 1960s and 1970s on more comprehensive and integrated goals

such as developing more human individuals and communities able to face social change. The second phase, after the 1980s, is connected with retraining and learning new skills that would enable workers to cope with the change in the labor market and new technologies. The economic point of view taken by both the OECD and the European Union is related to recurrent education: education after compulsory schooling to alternate with periods of work and other social activity (Holford and Mohorčič 2014). In the third and present phase, lifelong learning has become more individual oriented (Griffin 1999).

After 2000, the European Council launched the *Strategic Framework for European Cooperation in Education and Training (ET2020)* (Official Journal of the European Union 2009). In this document as well as in the next ones, *Agenda for New Skills and Jobs: European Contribution Towards Full Employment* (Official Journal of the European Union 2010) and the *Renewed European Agenda for Adult Learning* (Official Journal of the European Union 2011), it is evident that active citizenship and personal fulfillment are related to economic growth and employability and lifelong learning is only ancillary to employability. Related to Italy, it is evident that the more recent reform in the field of adult education mirrors this shift toward a neoliberal posture in the education policies at European level. What we observe till the reform of 2012 is a very complex and articulated provision of courses, as we have seen, with the main aim of meeting the need of citizens, employed and unemployed adults.

In the following years, 2012–2014, relevant steps were taken toward the construction of a regulatory framework of reference for adult learning and a system of recognition and validation of prior learning. These normative innovations were the result of a broader process of reform that started in 2009 and culminated in the period December 2012 to January 2013 with the adoption of a substantial package of agreements among the central administration and the regions that constitute the backbone of the current Italian adult learning. In the intention of the legislator, the primary objective was to increase access to education and training for 16–65-year-olds and to integrate services and government funding, for the purpose of improving its effectiveness.

These agreements include a reform of evening courses and of CTPs (Centri Territoriali Permanenti – Territorial Centers for Lifelong Learning) which are transformed into CPIAs (Centri Provinciali per l’Istruzione Degli Adulti – Centers for the Education of Adults at Provincial Level). The reform, approved with a Decree of the President of the Republic No. 263 of October 4, 2012, involves greater rationalization of the training offer in the territories, in theory to optimize the use of the resources. The centers have the main function of offering training activities aimed at attainment of titles and certifications. All the activities of lifelong learning and promotion of self-fulfillment are abolished, to concentrate the efforts on raising the level of qualification in the adult population.

An important innovation in the reform is the possibility of enrolling at centers for young people that have reached age 16 and who have not succeeded in obtaining a title concluding the lower secondary cycle of education or who have not completed compulsory education. This effort is intended to reduce school dropouts and to offer

a second chance to the numerous young people that interrupt the course of studies and after a few years decide to reenter the education system to complete a diploma, motivated by the realization that an upper secondary qualification is a minimum requisite to have an access to the labor market.

As stated in the introduction, CPIAs and evening courses run education courses with reference to the following levels (see the “[Introduction: General Education and VET \(Vocational Education And Training\) In Italy](#)”):

- (a) First level – courses for attainment of the qualification concluding the lower secondary cycle of education
- (b) Second level – courses for attainment of the diploma of technical, vocational, and artistic education (upper secondary cycle)
- (c) Italian language for foreign adults

Given these positive aspects of the reform, it should be emphasized that the system of lifelong learning in Italy presents some structural limits that the reform has not been able to cope with. First, the prevalence of a “supply-oriented” more than a “demand-oriented market” brings to the selection of the more explicit and stronger demand, thus leaving aside the socially and culturally weaker demand. Secondly, the lack of tools, shared by both the education and the labor market side, for the certification of skills acquired in nonformal (work experience) and informal context (life experience: voluntary work, association, maternity, private life, etc.), limits the access of adults. The introduction of these tools would raise the motivation of adults to take part in adult education. Finally, the underestimation in the choices of decision-makers of adult education as a cultural lever and a tool to strengthen active citizenship and social cohesion causes a substantial lack of support for activities of this kind promoted by the social sector and the education system.

Against this background, the reform of the Adult Learning Centers, approved on October 4, 2012, leaves some questions on the ground. One issue is represented by the financial resources that are allocated on the basis of the number of titles and certificates issued during the previous year, not according to local needs. The long-standing problem of the definition of the profile of the trainer/educator for adults has remained unsolved, thus leaving out the question of how to define the related and specific professional profile, the recruitment criteria, the career trajectories, or the evaluation of performances. The elimination of all the flexible, short modular provision has cut out also the audience which was attracted by this kind of provision: senior citizens, house-makers, graduated and/or working people, etc. There is no longer any provision related to the skills maintenance and updating or related to the strengthening of basic skills (35% of the audience in 2010–2011, before the reform). Moreover, those who already have a diploma are excluded from the courses aimed at acquiring the upper secondary title – even when they are workers with obsolete diplomas or useless for their career prospects – thus ignoring the needs for an increased employability (before the reform, 41,6% of the audience was represented by this target). Finally, the courses of Italian language for foreigners receive insufficient funds and do not cover more advanced needs (only courses aimed at the

levels A1/A2 in the Common European Framework – which is called “elementary level” – are delivered), nor “Italian for work” courses are provided.

All the actions against the functional illiteracy in adult people were canceled by the new reform of 2012. This means that all the adults with a lower secondary title, but having lost their competence in literacy, with a “literacy risk,” cannot have access to the Adult Learning Centers. There is currently no place for adults to go who need to maintain or strengthen their basic skills or who need to learn English or ICT competence, which can be useful even in everyday life. There is also no educational place for those who need a more advanced Italian (native speakers or foreigners), more elementary mathematics, and a better ability to read/understand/write a text or for those who need more “familiarization” with structured learning through short modular activities so as to be persuaded to resume the path of education and training. All this, from now on, is delegated to local administration, to the private social sector, and to popular universities, none of which can issue nationally recognized certificates. Funding is inconsistent and is active in some territories and not in others, thus producing a kind of discrimination among more advanced and less advantaged territories.

The Development of Policies for the Training and Upskilling of Workers in Italy

The gap of the Italian education system in the field of adult education has had very serious effects not only with regard to the educational and training offer for adults with low skills (as argued in the previous paragraph), but for workers already integrated into the labor market and who need to upgrade and maintain their competences.

It is difficult to identify the reasons for such a gap. Certainly, the dynamics of the negotiations between the social partners has played a decisive role. To struggle against the employment crises that occurred over time, from the 1970s to 1990s, the social partners mainly adopted either corporate bailouts financed with public resources or temporary or semipermanent income support through a Wage Supplement Fund as “short-term allowances” to (temporarily) laid-off workers (Cassa Integrazioni Guadagni – CIG) (Sapelli 2012).

Briefly, during the economic boom – after the Second World War till the end of the 1960s – the issue of the professional retraining for the employees affected by a corporate crisis simply did not arise, as it was easy to find another job for the very few who were made redundant. In fact, the training and upskilling of the population coming from the rural areas to the industrialized towns were much more emergent (Graziani 1989). Against this background, in the following decades (from the crisis of the early 1970s onward), public resources supported the income of workers and the production in a simplified economic context, which was mainly focused on domestic consumption, and still relatively sheltered from international competition generated by technological innovation (Fiorelli 2009). The choices made in the past decades did not allow to address the current economic and productive challenges,

where a consequent solid training offer is an indispensable requirement (Banca d'Italia 2009).

Before the launch of the community programs for the training of workers (1994), only large enterprises on the national territory and a small part of the public sector had organized training initiatives for their employees with a very specific scope, for example, the initial entry training and the update in response to particular events (the purchase of a new machine, the introduction of new regulations). In this time, private training promoted by Catholic and trade unionist organizations started to grow, often matching the training needs of the big industrial companies based in the northern regions (Amatori 2013). These organizations will become also a reference for many local communities, being involved in the training of young and adult citizens (D'Amico 2015).

In Italy, only since 1994 was a system for the upskilling and training of workers established with the launch of the first European Union programs financed by the European Social Fund. A European Social Fund program (ec.europa 2016) is developed through 6 years according to a partnership agreement among the European Commission and each member state. Each country then adopts an "Operational Programme" (OP), which "break down the overarching strategic objectives agreed in the Partnership Agreement into investment priorities, specific objectives and further into concrete actions."

According to the European Union guidelines, these programs for the upskilling and training of workers (employed or unemployed) represent one of the tools at the disposal of a modern industrial policy that would put the right emphasis on the importance of a competent workforce, able to understand and to enhance rapid technological innovation in the production processes. This principle expressed at the community level is undermined in Italy by the fact that the programming guidelines decided at governmental level are accompanied by a peripheral implementation carried out by the regions, who are responsible for the organization of training activities according to Constitutional Charter of the Italian Republic. The Italian territory is divided into 19 regions and 2 autonomous provinces, as envisaged by the Constitutional Charter of the Italian Republic in 1948, and fully activated in 1977. The Constitutional Charter assigns to the regions and autonomous provinces with different competences, including vocational training.

Therefore, the effectiveness of the interventions depends on the different levels of efficiency of the regional administrations and on the different economic strength and industrial tradition present in the local contexts, thus producing, as a result, a widening gap between advanced regions (in the North of the country) and regions whose development is lagging behind (in the South). Moreover, lacking a strong strategy and an overall policy at the national level, the introduction of new principles inspired by the community regulations has impacted only superficially the practices and approaches adopted until that time by the trade unions and employers' organizations. These circumstances have actually canceled the possibility of including the training and upskilling of workers within a relevant national industrial policy.

In addition to the existing gap concerning the different levels of efficiency among the regional administrations, another factor will prove decisive. The management of

ESF programs is subject to compliance with competition rules, thus forcing the Italian regions to entrust the implementation of the training activities to providers by means of public tenders. Consequently, the initiatives financed by the ESF under the different regional programs appear to be sporadic and unsystematic, depending on the outcome and timing of the tenders, and the training offer is subject to the administrative requirements which take precedence over any other instance. Sometimes there are long periods when regions do not organize any training activity. Or, on the other hand, when the end of the ESF program is approaching, the regions face the risk of losing all the resources allocated and not engaged. In these circumstances, the regional governments tend to finance as many training activities as they can, without a serious selection.

During the 1990s, the growing economic competition and the innovation processes increased the need for skills maintenance and updating. After negotiations that lasted several years and on the basis of experiences already realized in France, the Joint Interprofessional Funds for Continuing Education and Training, private organizations managed by the trade union and employers' organizations, were created.

Briefly, a part of the contributions that all enterprises pay annually to finance the social security is directed to these new bodies, for the funding of training activities involving the employees. Each enterprise is free to join the chosen fund. Currently 18 funds are active (in several sectors: industry, handicraft, finance, commerce, etc.). This reform constitutes a real innovation for the Italian system (Nobili and Grelli 2006). The approach is theoretically correct: active policy tools, such as training and upskilling, are intended to enable the employees to maintain and upgrade their skills and, at the same time, to enable companies to maintain and increase their competitiveness. To achieve the first goal (avoid obsolescence of the skills and the redundancy of the workers), the Joint Interprofessional Funds would have to ensure the realization of long (at least 400 h), expensive, and demanding training activities addressed to the most disadvantaged workers, i.e., those with low skills and poor performances. To achieve the second objective (to enhance the company's competitiveness through the development of skills of its workforce), training activities would have instead to focus on the most skilled and performing workers, organizing highly specialized interventions, with short duration so as to not interfere with the production process.

In fact, as it is easy to imagine for companies investing resources and time in the legitimate expectation of competitive advantages, the second approach was massively chosen: the Joint Interprofessional Funds in the majority of cases offer course activities of very limited duration (16–24 h); workers with low qualifications, performing generic tasks, are underrepresented, while middle-aged workers, with a middle-high level of qualification, are more involved.

Summarily, training policies dedicated to employed or unemployed workers (not considering the training activities organized independently by the enterprise without any public contribution) in Italy are characterized by the following most important measures:

- Training courses managed by the regions and financed by the European Social Fund, with a different implementation throughout the national territory, both considering the volume and the quality of the interventions, which are sporadic, unsystematic, and dependent on administrative procedures and timing related to public tenders.
- Training activities managed by the Joint Interprofessional Funds (which absorb around 600 million euro per year), dedicated exclusively to the employees of the companies adhering to the funds. They have as their main objective the company's competitiveness and internationalization and not the worker's employability (Nobili (ed.) 2014).

Conclusion: The Criteria of a Necessary Reform

It is evident that the current training policy does not take into due consideration the needs of a large quota of the population, which will increasingly represent a social cost in the absence of appropriate interventions. In particular, there is a need to educate:

- Workers with low or obsolete qualifications.
- Long-term unemployed workers.
- Workers with a discontinuous career path.
- Migrants.

Since the beginning of the recent economic crisis in 2008, the consistency of these disadvantaged categories is growing steadily, especially among young people all over Europe (see data in the first paragraph). Nevertheless, the provision of adequate training and the investment dedicated to this dossier are declining in Italy (emblematic the aforementioned redesign of Territorial Centres for Adult Education). Against this background, in other national contexts, the provision of training and upskilling for low-skilled adults takes on defined contours, arousing much debate and investment. For example, in Northern Europe, a significant expansion of the financial support for those willing to reenter in training and education pathways is taking place, while in the Anglo-Saxon world with the community college and in Japan with the junior university, a training offer characterized by those elements missing (or deficient) in the Italian context is expanding rapidly.

Those elements, which represent the minimum standards for an Italian modern "system for adult training and upskilling," are:

- A stable and systemic training offer
- The presence of training activities throughout the national territory
- Content planning according to the priorities defined by the local and central government
- Reduced fees for disadvantaged groups

The reform of the labor market policies that, through highs and lows, has been carried out in the last couple of years in Italy might be receptive, putting the accent on the inclusion of those socially marginalized through the development of a new offer of adult education and learning. But still many efforts remain to be made to accomplish these goals. It is evident that the first condition is the necessary financial investment. The government budgetary constraints do not allow drawing too ambitious strategies, at least for the moment. Thus, it is impossible to imagine, in the short time, a “pure” community college model transferred to Italy.

Nevertheless, inspired by the criteria listed above, some guidelines can be identified and practiced, but certainly at a cost. First, it is necessary to overcome the method of implementation of the training activities through public tender. This method theoretically ensures competition between the training providers, but it also causes uncertainties and discontinuities. The stability and the systematic nature of the initiatives is not a detail; on the contrary, this is the cornerstone on which we build the trust of the citizens, the visibility of the training, and its value for the local enterprises that will later absorb “the outcome” of training initiatives. In this regard, it is necessary to dedicate specific locations to the organization of training activities, throughout the national territory: the only solution now available in the short-medium term is the involvement, on a new basis, of school facilities, for example, from the technical and professional upper secondary cycle (ISCED 2013, level 3, accessed 26 Apr 2016). A relatively small investment could allow a strengthening of the educational offer of vocational colleges with the introduction of medium- and long-term courses for the training and upskilling of workers (employed and unemployed), even with the collaboration of the training agencies, already involved in the initial training, as mentioned earlier. A solution of this kind would offer several advantages:

- A tangible presence on the territory of the training initiatives for adults, within already equipped and recognizable facilities
- A full-time utilization of the facilities not limited to school hours
- The insertion of new young teachers for the new tasks in the adult education and learning sector
- A virtuous integration between public institutions and private training agency bearers of different teaching methods, in relation to labor market-oriented approaches or to particular target groups

The public financial effort may be supported by an individual contribution to costs, according to the income level of the trainee. This would contribute, moreover, to the fee reduction in favor of the disadvantaged population. The public funding could be realized also by a system of vouchers or grants financed by the central or regional resources or by the European Social Fund.

The authors of this chapter are currently engaged in a deeper analysis of the normative aspects and in a quantification of the investment required to start a reform in this perspective. In any case, it is impelling to say that the investment required could not be any higher than the costs that the growing social marginalization

produces. These costs are relevant not only from an economic point of view but also from a social and political perspective, as it is sadly frequent to observe nowadays in our European countries.

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Meeting the Challenges of Globalization while Preserving Institutional Singularity: The Case of Quebec CEGEPs

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Olivier Bégin-Caouette

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Abstract

Focusing on the case of Quebec general and vocational colleges (*collèges d'enseignement général et professionnel* – CEGEPs), this chapter will explore how colleges' responses to global challenges may relate symbiotically with the nature of the higher education system in which they are embedded, and thus preserve their singularity in the global era. CEGEPs interact with organizations across borders and across spatial levels, but their capacity to preserve their singularity relies on institutional initiatives consistent with and supported by the local and provincial contexts. College-university transfer is not an issue in Quebec because it is embedded in the system. CEGEPs, however, need to respond to the growing knowledge intensiveness of the economy, and they do so by establishing DEC-BAC dual degrees with local universities and as well as by

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developing a coherent system of CCTTs that conducts locally relevant research. CEGEPs have also responded to the global devaluation of diplomas by engaging in international activities that are consistent with Quebec's knowledge diplomacy, i.e., a province, a region, or a country using international education activities to outsource its values, communicate the relevance of its political agenda, and increase its attractiveness.

Keywords

CEGEP · Quebec · Globalization · Academic drift · College-university transfers · Knowledge diplomacy · Internationalization

Introduction

In medieval times in Europe, the *Studium* was one of the three great powers, along with the *Sacerdotum* and the *Imperium* (Neave 2001). Universities were mainly concerned with providing a religious or liberal education to the ruling class, and left it to other institutions to teach “useful” knowledge. As they emerged, nation states founded technical and vocational education institutions to support their economic and military development. These institutions were different from the more traditional universities because of their curricular diversity, open admissions, governmental control, community orientation, responsiveness to economic needs and the applied background of faculty members. More recently in the twentieth century, community colleges spread throughout Canada and the United States in order to meet the growing demand for postsecondary education, and in order to adjust to the transforming needs of local industries (Skolnik 2008).

The distinction between Universities and Community Colleges was relevant when higher education was elitist and nationalistic, but massification and globalization have brought their share of unprecedented challenges. One first needs to distinguish between *global challenges* and *the challenges of globalization*. Global challenges refer to a changing global landscape that forces institutions in different countries to adapt. For instance, in his study of community colleges in Canada and the United States, Levin (2001) noted that they faced challenges in terms of commodifying their educational services for industries, adopting New Public Management principles, reducing costs in the face of public budget costs, and shifting toward distance and mass online learning.

In addition to economic, demographic, and technological challenges, globalization itself, as a geospatial process, undermines the traditional hierarchy between local, provincial, national, and international scales (Sassen 2009). It allows sub-national actors (such as Community Colleges) to establish transnational connections on all spatial scales, but it also forces them to redefine their boundaries and act globally to remain relevant locally. As the Association of Colleges of Applied Arts and Technology of Ontario (1999) noted: “the definition of ‘community’ [...] has now expanded to include not only local geography, but a profession, skill trade, niche market or global workplace” (p. 3).

With globalization, institutional actors can interact and compare themselves across borders. In order to be recognized by other governments, institutions, and students, there is a tendency in colleges to drift toward a more “universal” and academic model. This does not only affect colleges’ missions, but also their names, with such names appearing in Canada as “Institutes of Technology,” “Polytechnic Institutes,” “Institutes of Technology and Advanced Learning,” and “University Colleges” (Fisher 2009). Despite this process of “universalization,” differentiation – i.e., the division of higher education by mission as well as supported by distinct beliefs, structures, and traditions (Clark 1983) – is a core feature of most higher education systems. Diversity is believed to increase performance, access, market-responsiveness, innovation, and balance between mass and elite education (van Vught 2008).

The purpose of this chapter is to examine how the Québec *collèges d’enseignement général et professionnel* (vocational and general education colleges, CEGEPs), as a very distinct form of community college, have preserved their institutional singularity in this new global space where actors interact transnationally. More precisely, this chapter describes the Quebec context and then identifies CEGEPs’ institutional practices in responding to three challenges of globalization, often associated with academic drift: college-university transfers, degree provision, and research activities. These transformations are impelled by a transforming global landscape, with colleges establishing transnational interactions with actors at different levels and in different regions and thereby bringing into question the role played by colleges at home (compared to other higher education institutions) and abroad.

Canadian colleges respond to local needs, operate within provincial regulations, are affected by federal initiatives and may get involved internationally. In order to highlight the intricate context in which CEGEPs’ institutional strategies are developed, the present analysis relies on a multilevel governance framework. This framework is actor-centered in that it emphasizes how different levels are “traveled” by the various institutional and noninstitutional actors populating the policy network (Piattoni 2009). This synoptic model recognizes the existence of a formal hierarchy of organizations while also emphasizing the multilevel character of HES and retaining an analytical openness to the multiple social forces that interact with the decision-making process (Becher and Kogan 1992). Also, multiple comparisons with the Ontario and British Columbia contexts will highlight some of the distinct features of the Quebec case.

Canadian and Quebec College Systems

Before the 1960s, Canada counted 49 Junior Colleges, more than half of which were in Quebec, and 40 were controlled by the churches (Campbell 1971). In the 1960s and 1970s, Community Colleges spread throughout Canada because they could efficiently increase human capital, meet the demand for post-secondary education, and adjust to the needs of industries (Skolnik 2008). Across Canada, colleges are

crown agencies, comprehensive, flexible, and responsive to the market. However, education being placed within provincial jurisdiction, there are great variations in college structure from province to province. Prince Edward Island uses colleges for students not eligible to Universities. Manitoba, New Brunswick, and Newfoundland focus on short-term work-entry training. Alberta and British Columbia combine technical training and university transfer, while Saskatchewan relies on colleges without walls and technical institutes (Gallagher and Dennison 1995).

The 19 universities in Ontario have their own establishing act that specifies their responsibilities and their capacity to award degrees (Clark et al. 2009). In 1967, the Government founded the Colleges of Applied Arts and Technology (CAATs) to promote the “development of each individual to the limit of his ability” (Ontario Department of Education 1967, p. 5). Between 1951 and 1980, the total full-time student enrollment in Ontario increased from 91,000 to 857,000, with the largest growth happening in the province’s colleges (Skolnik 2005). The government then decided to limit interactions between university and colleges, but also set up a committee that would determine the conditions under which university admission might be granted to outstanding students graduating from a CAAT. Ontario has set an objective of attaining 70% of participation in higher education (now 62%). CAATs can effectively meet this demand since the participation from the lowest income categories is 50% greater in Colleges than in Universities, and they have fewer students who had “A” averages in high school (Clark et al. 2009).

In comparison, before the 1960s, the Quebec education system was under religious influence. The province had the highest elementary school dropout rate and academic preparation was offered in classical colleges to a small financial elite (Donald 1997). Classical colleges offered four-year secondary schooling followed by four years of preuniversity education (baccalaureate) that gave access to one of the few universities in the province: McGill (founded in 1821), Laval (1852), Bishop (1853), Loyola College (1896), and Montreal (1920). Quebec’s higher education system was reshaped during the Quiet Revolution of the 1960s. The Royal Commission of Inquiry on Education proposed the creation of a Ministry of Education and a Superior Council of Education. Existing charter Universities developed graduate programs, provincial research councils were created and the Université du Québec (UQ) campuses were established in five cities to ensure regional access to university education.

The commission also proposed the creation of public and free “intermediate higher education institutions” that would educate students who either wished to attend university or follow a vocational training (Rocher 2008). These institutions, later known as CEGEPs, encompassed the purviews of classical colleges and existing technical institutes, and were designed to interact closely with secondary schools, universities, and local communities. Today there count 48 CEGEPs throughout all of Quebec’s regions that share the same three missions: to educate/train; to contribute socially, economically, and culturally to their environments; and to advance knowledge through research and innovation. CEGEP education being a prerequisite to access university, and secondary education terminating at Grade 11, the college population is much younger than elsewhere and the participation in

higher education is the highest in Canada (Fisher 2009). Since the 1990s, the proportion of students enrolled in preuniversity programs has oscillated around 50% (CSE 2015).

In line with its original values, Quebec's higher education system is characterized by expanded accessibility (CEGEPs are tuition free), regional equity (there is at least one CEGEP in each region), comprehensiveness and uniformity (all CEGEPs offer the same preuniversity diplomas and students can at any time transfer from a technical to a preuniversity program), as well as permeability (transfer from CEGEP to university is embedded in the system).

CEGEPs are distinctive in that they are tuition free, mandatory for university studies, closely connected to high school and university sectors, and in that they offer a mandatory core curriculum while also providing preuniversity, technical and continuing education. Like their Community College counterparts, however, CEGEPs now act on a global scale, and through their transnational interactions they are faced with two major challenges which they must meet.

This chapter explores CEGEPs' institutional responses to three of the many facets of academic drift, i.e., college-university transfers, degree provision, and applied research. These three transformations emerge from a globalized context that fosters transnational interactions between various actors, and they appear crucial in understanding the evolving role of community colleges and similar institutions. Indeed, college-university transfers pose major challenges in terms of colleges' place in the institutional landscape. Degree provision also poses a challenge regarding the education mission of colleges, and the increasing importance of applied research poses the challenge of responding to the global demand for knowledge while preserving the core design of colleges.

College-University Transfers

Transfer can be defined as the capacity for a student to move from one higher education sector to another. For Skolnik (2011), a lack of transfer options undermines the equity, efficiency, and prestige of a university. In many jurisdictions, it is possible for students to complete a two-year associate degree in a college and then to transfer to a university and complete, in two years, an undergraduate degree.

Since British Columbia had for a long time only one university, it seemed important for colleges (and then university colleges) in that province to offer degrees. In contrast, Ontario met the demand for university education in the 1960s by increasing the number of Universities. Still, Universities could not respond to the shortage of technical skills training, so CAATs were specifically designed to respond to the needs of industry. University leaders argued that if students who are less academically capable have access to technical training, it would be superfluous to also offer a transfer function. Ontarian policy makers also thought allowing transfer would increase general education to the detriment of vocational training. Colleges would raise their academic standards and invest more in recruiting faculty to teach these general education courses, leaving less resources for apprenticeships.

Consequently, few CAATs provide general education and only 6% of university students come from CAATs (Clark et al. 2009). Moreover, since 2011, Ontario funds multilateral agreements in specific fields and has created the Ontario Council on Articulation and Transfer (Ibid). That said, Colleges and Universities are paid according to the number of students, and since some CAATs can offer degrees, the incentives to promote transfers are limited.

Unlike British Columbia and Ontario, the Quebec system is well-integrated because it was designed comprehensively by the Parent Commission (Rocher 2008). The eight preuniversity programs (e.g., natural sciences, social sciences, fine arts, etc.) are designed to offer courses in various disciplines so students can better decide in which program they want to enroll at the university level. Even if a student completes a preuniversity degree in the natural sciences, he or she can apply to a program in the social sciences at a university (the opposite is more difficult because of the extensive list of prerequisites in the natural sciences). Moreover, students who complete a diploma in a technical program can always apply to a university program (and are encouraged to do so by business and engineering schools). In fact, around 30% of college graduates with a technical diploma pursue university education (CSE 2015).

These transfers are possible because the curriculum is defined by the Ministry of Education (Lavoie 2008), because CEGEP students have 14 general education courses, and because the Government of Quebec designed multiple “*loci* of interaction” between education sectors. For instance, the Superior Council of Education includes four commissions (primary, secondary, college, and university education) that jointly prepare their report, ensuring coherent propositions to the Ministry (Donald 1997). Other “*loci* of interaction” include both CEGEP boards and the UQ members’ boards. The law prescribes that these boards include a member from the other sector to ensure coherence (Lavoie 2008). This form of “permeable system” seems both efficient (in that it allows institutions to specialize) and equitable (for it removes dead-ends and barriers to social mobility). In this respect, it is relevant to compare Ontario’s approach of limiting transfers and the Quebec education system’s approach of forcing them. There are, however, some criticisms regarding the duplication of university and CEGEP courses (Donald 1997).

From Diplomas to Degrees

The second transformation forwarded by transnational interactions is the conversion of colleges diplomas into three-year degrees, which tend to be more widely recognized across borders. Clark et al. (2009) reported that, in systems limiting college-university transfers, college presidents call more insistently for the right to award degrees. In Canada, the provinces of Alberta, British Columbia, Manitoba, Ontario, Prince Edward Island, and Saskatchewan, as well as the Yukon territory all allow colleges to grant degrees (CSE 2015). Since 1989, some colleges in British Columbia became “University Colleges” and started offering degrees. In 2003, all colleges

received the approval to grant bachelor's degrees, and in 2008, University Colleges became Universities and obtained the right to award master's degrees.

There is also an important demand for degrees in Ontario. For Colleges Ontario (2012), diplomas are an "anomaly" hardly compatible with what is offered in other parts of the world. In 2004, 40% of high school students wanted to obtain a degree, and, in 2008, CAATs received 11,778 applications to their degree programs, but could only accept 3000 students (Clark et al. 2011); forcing rejected students to either enroll in a program leading to a diploma, apply to other higher education institutions in Ontario, apply to institutions in other provinces, or opt for a working experience. Some CAATs are even planning to become "Polytechnics" that would mix liberal and vocational education, and offer a variety of trainings ranging "from apprenticeships to PhDs" (Doern 2008). In Ontario, 52 baccalaureate programs are offered in 12 colleges to 6000 students (Clark et al. 2011). These degrees are closely monitored by the Ontario Post-Secondary Education Quality Assurance Board (PEQAB), but universities hesitate to grant access to their graduate programs, forcing students who want to pursue their education to apply elsewhere (Clark et al. 2009).

In Quebec, since transfers are an integral part of the HES, it is impossible for CEGEPs to offer degrees. This situation is consistent with the original design of the system, but it creates two challenges: first, adapting to society's growing knowledge intensiveness, and second, explaining the value of CEGEP diplomas to partners abroad. Regarding the latter challenge, since the Quiet Revolution the Government of Quebec uses knowledge diplomacy to promote its distinctive character. In 1965, the Quebec Minister of Education, Paul Gérin-Lajoie, formulated a doctrine stating that the Province of Quebec can establish international relations in its fields of jurisdiction (Paquin 2006). In 2002, the Ministry of Education had elaborated a "National Strategy to Succeed in Internationalizing Quebec Education," and one of the five policy goals was to increase the international presence of Quebec internationally and to promote its distinctive character.

To achieve this goal, the government has set up incentives in the form of programs so that institutions engage in international activities. These programs include support to student mobility (e.g., Scholarships for Short Stays, OFQJ, OQAJ), faculty mobility, the promotion of Quebec culture (e.g., Quebec Program to Support Art Activities), and the recruitment of international students (through tuition fee exemptions for students from countries where there is an agreement with the government). As a result, in 2013–2014, 4379 CEGEP students (3.42% of the students) went abroad, 1257 received funding from the province, and 1685 were supported by their CEGEP, a publicly funded institution (Fédération des CEGEPs 2014). Moreover, 690 faculty members participated in mobility projects in the year 2013–2014 to present conferences, conduct research or exchange positions, and accompany students.

While most Canadian colleges focus on recruiting international students for revenue generation (ACCC 2010), the incentive structure in Quebec makes this activity less interesting, since CEGEPs are tuition-free institutions and the fees paid by international students have to be given back to the provincial government. In any

case, it is worth noting that, since CEGEPs are unique to the province, their international activities have the indirect effect of promoting the Quebec higher education system as a whole. In fact, a survey revealed that 95% of college leaders believed that the international activities conducted by their institution improved the reputation of Quebec internationally (CI 2011). CEGEPs' international cooperation activities have also helped to promote the Quebec system and, as an example, UNESCO now promotes technical education using what is called the "Quebec method" (CI 2008).

However, even if CEGEPs and the provincial government succeed in explaining the comprehensive role of colleges in Quebec, it remains that the knowledge society is transforming the world of work. In 2009, the World Health Organization recommended that nurses around the globe should have a degree. In Ontario, in the 1980s, 80% of nurses were trained in CAATs, so when the government decided to require degrees, 22 colleges participated with 12 universities to offer collaborative programs (Clark et al. 2009).

In Quebec, the Order of Nurses (OIIQ 2012) announced its intention to require degrees for nurses to increase nurses' responsibilities, adapt to the North American context, promote the profession, and deal with more complex diseases. But the nurses' union (FIQ 2013) was worried about short-term consequences. A Federation of CEGEPs' (2013) report stated that 73% of students were against the proposition, and it was concerned by the actual shortage of nurses, the obligation for students to leave their region to complete studies, and the massive reduction of CEGEP students it would create. At the time of writing, the working group created by the Government of Quebec acknowledged the increasing complexity in nurses' work, but could not come to a consensus regarding recommendations. A similar pressure came from the Order of Respiratory Therapists (supported by the Quebec College of Physicians), and the Chamber of Judicial Officers (supported by the Chamber of Notaries).

Without a consensus, and with Quebec being a "consensus-seeing society" (Trottier et al. 2014), the most significant responses have been at the institutional level. Since the early 2000s, there is in Quebec a multiplication of joint college-university programs (DEC-BAC) in which students with a diploma in a technical field can obtain a university degree in a related field in two years instead of three. The DEC-BAC system is consistent with the core policy in Quebec, i.e., allowing students in all regions to pursue college education, providing college graduates with opportunities to develop cutting-edge knowledge, increasing permeability between sectors and, since CEGEPs are tuition free, lowering the cost of bachelor's degrees. In an integrated system, these uncoordinated agreements relying on the goodwill of individual are problematic for two reasons.

First, although all CEGEPs have at least one DEC-BAC agreement, some universities have concluded many agreements while other universities (like McGill University and Concordia University) do not offer any DEC-BAC (CSE 2015). This means that certain students (English-speaking college students, for instance) who study in some regions in specific disciplines might be prevented from taking advantage of this dual-degree possibility. Although there is no provincial data on DEC-BAC, some reports (e.g., CSE 2015) suggest that, in some universities, the

student body consists of 30% of graduates with technical diplomas (such as Laval University and the University of Quebec in Montreal), while in others, these graduates compose only 10% of the student body. Second, the Quebec Government imposed cuts to the budget for college-university partnerships. At this stage, there is no centralized system indexing all the DEC-BAC programs. Multiple organizations, including the Superior Council of Education, call for the systematization of the development of DEC-BAC, to make it accessible to students all over the province, and in order to respond to the challenge of adapting college education to the transformations of the global job market.

Applied Research

The third facet of academic drift is the integration of research activities into colleges' mandates. While the two previous facets regarded mostly the institutional and provincial levels of governance, this third facet requires the addition of another level: the federal government. While education in Canada is an exclusive provincial jurisdiction, the federal government shapes the research landscape through the intervention of Industry Canada and the multiple research councils and agencies it oversees. Consequently, driven largely by a federal initiative to strengthen the capacity of Canadian colleges to contribute to innovation and discovery in a globally competitive market, colleges themselves consider research to be relevant to their mission since it helps producing graduates who are more highly qualified and contribute to regional innovation and economic development (Fisher 2009).

The Natural Sciences and Engineering Research Council (NSERC) established in 2008 the Community College Innovation program, and its budget increased from 15 to 30 million Canadian dollars in 2013 (Williams 2014). Other federal sources of funding include the Canadian Foundation for Innovation and Canada's National Research Council. Not all colleges are eligible for such funding since they need to include faculty researchers as full participants in all stages of the research process, and few college instructors have dedicated time for research. Despite funding opportunities, Fisher (2009) found that less than 1% of CFI research grants and less than one-half of 1% of NSERC research grants were attributed to college faculty.

Although more than 30% of Canadian Community Colleges conduct project-based research, and 1500 faculty and staff as well as 24,000 students participate in applied research activities (ACCC 2012), the fact remains that all college faculty members' time is dedicated to teaching and administrative tasks. Based on a survey disseminated nation-wide, Fisher (2009) reported that only 12% of college faculty have doctoral credentials, which are a prerequisite for most granting councils.

In both Quebec and Ontario, colleges have the mission to conduct pedagogical, disciplinary, and technical research; this was part of CEGEPs' mission since their inception (Donald 1997) and it became part of CAATs' mission in 2002. But without proper research time allocation, institutions in each province have developed different strategies to fulfill their research missions. In Ontario, CAATs' strategies consist in integrating research with other activities already counted in the province-wide

collective agreement (Rosenkrantz 2013). The other strategy consists in having applied research built into the curriculum.

For Ivany (2000), colleges' dual mission of employment education and economic development find their response in research activities that involve students and integrate (or create) new technologies. In Quebec, soon after the creation of the first CEGEPs, the government was convinced of the need to provide basic support for research. Since CEGEPs were the first colleges of their kind, there was a critical need to conduct research on pedagogy and learning (Piché et al. 2008). The first fund was established in 1972, and, ten years later, it resulted in the publication of 315 scientific articles. In 1995, the government argued that the system had reached maturity and the hours used for research were reduced significantly.

Forwarded by a need to conduct applied technological research rather than pedagogical research, in 1983 some CEGEPs developed college centers for technological transfer (CCTTs). All provinces possess colleges that provide employment training, consultancy, and applied research services to local enterprises. But on the eve of the twenty-first century and facing major budget cuts, CEGEPs systematized and formalized the structure of CCTTs and succeeded in attracting support from both private and public purses. There are today 46 CCTTs all over the Quebec territory collaborating annually with 4000 enterprises and organizations (more than 80% being small-to-medium enterprises). Policies stipulate that each CEGEP can have only one CCTT in a specific area of expertise (Bensouda et al. 2013). CCTTs are said to contribute to lecturers' professional development, to increase resources for better equipment, and to foster curriculum renewal in a perspective of responding to changes in industries (Trépanier et al. 2003). A study from KPMG-SECOR (2014) also revealed that in 2012–2013 more than 160 students acquired their first research-related work experience through an internship in a CCTT.

While the rationale for the early research activities in CEGEPs was capacity-building, the CCTTs also follow an economic rationale. The revenues generated by CCTTs increased by 9.4% annually since 2008–2009 to reach 50.4 million Canadian dollars in 2012–2013 (Ibid). KPMG-SECOR also calculated that, in 2012–2013, the impact of CCTTs on enterprises' profitability was of 210 million Canadian dollars. Interestingly, CCTTs are completely in line with the Quebec policy goals and values regarding colleges: provincial coordination, uniformity across CEGEPs, regional access to research activities, and contribution to the development of small or remote municipalities. It thus comes as no surprise that the province's government increasingly invests in the development of these centers. Not to mention that, in 2012–2013, it was estimated that each dollar invested by the Government of Quebec resulted in \$4.30 in revenues by the CCTT.

Preserving Singularity in a Multilevel Governance Context

Globalization is a challenge for Community Colleges in that it deconstructs the hierarchy of spatial scales and forces institutions to interact across borders and levels of authority. The objective of this chapter was to explore the strategies employed by

CEGEPs to preserve their institutional singularity. This last section relies on a multilevel governance framework (Becher and Kogan 1992) to analyze the intricate context and multiple social forces that interact with institutional strategies.

At the international level, it is interesting to note that CEGEPs' strategies are partly a response to international transformations. CEGEPs were developed to expand access to higher education, provide tuition-free technical training across the province, and allow an easy transfer to university education. If the value of CEGEP diplomas remains well recognized in Quebec, globalization has brought it into question. The response of CEGEPs has been internationalization and this fits within the provincial context of Quebec's knowledge diplomacy initiative. CEGEPs being unique to Quebec, the government has supported their international activities and, in the end, an international organization (UNESCO) has recognized the technical education provided by CEGEP as an international reference.

However, another international organization, the World Health Organization, has recommended that nurses possess a university degree. This demand has been echoed by the provincial nurse association in Quebec. As the global world of work becomes more knowledge-intensive, CEGEPs are partnering with universities to develop DEC-BAC dual-degrees. Unfortunately, this initiative has not received the same support from the province as its other endeavors and remains to this day unsystematic, highly dependent on the field of study, location, and language of students.

There is no ministry of education at the federal level in Canada. Consequently, CEGEPs' institutional strategies regarding diplomas and pedagogical research have been conducted as if the "federal level" was inexistent. That said, CEGEPs do interact with the Government of Canada when they apply for research funds through NSERC or the CFI. It is unclear how this involvement interacts with the provincial specificity of Quebec, though it is fair to say that, thanks to the development of a provincial network of CCTTs, CEGEPs have acquired the infrastructure and experience to apply for federal grants.

The federal government also interacts with the institutional internationalization strategies, since it is responsible for Canada's foreign affairs. Its influence was until recently limited since it adhered to a fragmented approach according to which the internationalization of education was considered a part of foreign affairs, the development of human resources, and international cooperation (Trilokekar 2009). The 2014 *Canada's International Education Strategy* and the merger of three ministries into Global Affairs Canada in 2015 could, however, reinforced and made more consistent the role of the federal level on education. It will be worth studying if this stronger role is compatible with CEGEPs' attempts to preserve their singularity. At this point, it is rather difficult to assess if federal initiatives support or hinder institutional capacities.

The provincial level has the most influence on CEGEPs' strategies. In line with the major reforms of the Quiet Revolution, Quebec's higher education system is characterized by expanded accessibility (CEGEPs are tuition-free), regional equity (there is at least one CEGEP in each region), comprehensiveness and uniformity (all CEGEPs offer the same preuniversity diplomas and students can at any time transfer

from a technical to a preuniversity program), as well as permeability (transfer from CEGEP to university is embedded in the system). The previous sections of this chapter provided examples regarding how these policy goals have influenced institutional strategies: the CCTTs were established as a coordinated system respecting regional equity, tuition fees paid by international students must be returned to the Government of Quebec since CEGEPs are tuition-free, and DEC-BAC dual degrees are praised for their consistency with the permeable nature of the Quebec system but criticized for their unsystematic character.

Analyzing the issues of college-university transfer, degree granting, applied research, and knowledge diplomacy, one could infer that CEGEPs' institutional strategies to preserve their singularity have been more successful when they are consistent with the provincial context and, more precisely, with the government's strategies. For instance, at the time when CEGEPs had just been created, pedagogical research was funded by the government. When this funding was cut, CEGEPs established CCTTs as institution-based centers. These centers networked and, being fully in line with Quebec policy goals, received support from local industries, municipalities, and the provincial government. A previous study (Bégin-Caouette 2012) has suggested that the existing consistency between CEGEPs' international activities and the government's strategies is crucial for an effective internationalization of the CEGEP system.

The Ministry of Education is the only organization responsible for all levels of education in Quebec, facilitating coherent action between primary, secondary, and higher education. Moreover, unlike primary and secondary schools, CEGEPs have no intermediate organizations, so they interact directly with the Ministry. CEGEPs, however, have created an organization, namely CEGEP International (now integrated with the Federation of CEGEPs), to promote CEGEPs abroad and lobby the government at home. Consistency thus takes the form of the dynamic interplay between CEGEPs, which have the autonomy to develop their own strategies; the Federation of CEGEPs, which promotes these activities in view of attracting funding; and the Government of Quebec, which funds them in accordance with its own policy goals (Ibid).

In contrast to this dynamic interplay and the initiatives it has given birth to, the DEC-BAC dual-degree initiative remains restricted to the institutional level. This chapter suggests that, despite its consistency with Quebec's traditional policy goals, the lack of support from the provincial level limits its sustainability. A similar observation was made by Clark et al. (2009) about the Ontario higher education system. Some colleges can now offer baccalaureate programs, but despite being monitored by a quality assurance agency (PEQAB), the lack of involvement of the provincial government has resulted in universities hesitating to grant students coming from such baccalaureate programs access to their graduate programs. One could infer that institutional strategies are more likely to succeed when they are consistent with the provincial level and supported by an active provincial government.

There was unfortunately little space in this chapter to explore the influence of the local context on CEGEPs' strategies. The examples of CCTTs specializing in areas

relevant to local expertise, and of the DEC-BAC being primarily established between nearby CEGEPs and universities, suggest the importance of the local level. Moreover, another study (Bégin-Caouette 2013) showed important differences between the internationalization of rural and urban CEGEPs. The latter have tended to focus on internationalizing the curriculum and study abroad programs, guided by a process that is more ad-hoc and spontaneous. In contrast, rural CEGEPs receive less external funding and seem to compensate by following a more systematic approach. Their international activities are consequently more focused and coherently organized. Another noted difference is that rural CEGEPs are more involved in the recruitment of international students in order to maintain population in less popular programs (Foy 2008). The admission system in Quebec is centralized and the government encourages international students to move to remote regions. Unlike American and other Canadian rural community colleges, rural CEGEPs are internationally active because they benefit from an equalizing CEGEP system in which curricula, structures, and working conditions are determined by the Government of Quebec. In sum, it seems that the local context also mitigates global influences.

Conclusion

The objective of this chapter was to explore the strategies employed by CEGEPs to preserve their institutional singularity while facing the challenges of globalization. CEGEPs interact with organizations across borders and across spatial levels, but their capacity to preserve their singularity relies on institutional initiatives consistent with and supported by the local and provincial contexts. College-university transfer is not an issue in Quebec because it is embedded in the system. CEGEPs, however, have had to respond to the growing knowledge-intensiveness of the economy and have done so by establishing DEC-BAC dual degrees with local universities as well as by developing a coherent system of CCTTs that conduct locally relevant research. CEGEPs have also responded to the global devaluation of diplomas by engaging in international activities that are consistent with Quebec's knowledge diplomacy.

These successes do not mean that CEGEPs' singularity is immutable. In the last decades, political parties, school boards, and universities in Quebec have argued that the province would save more than a billion dollars per year if it abolished the CEGEP system. Although successive governments have not been persuaded, major budget cuts have been imposed, and since CEGEPs are publicly funded, these cuts have threatened initiatives such as the DEC-BAC dual-degree and even internationalization. A recent report (Fédération des CEGEPs 2014) reveals that the number of students participating in study abroad programs, the number of international students recruited by CEGEPs, and the number of programs with an international component are all increasing. However, the number of institutional partnerships and the proportion of CEGEPs with a dedicated international office has declined between 2004 and 2014. Following Raby and Valeau's (2007) framework, one might wonder if CEGEPs have not entered a postinstitutionalization phase in which they require less support from a coordinated provincial structure. This question and others will

require scholars to closely study whether this evolution ultimately helps CEGEPs to preserve their singularity by granting them more flexibility and autonomy, or if it will weaken their position in the global landscape. A future study could also link the institutional, provincial, and federal strategies listed above with the multiple studies conducted on student success in Quebec's CEGEPs (e.g. Picard 2015; Allal and Ménard 2014).

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Roles of Community College for Community Development in Malaysia: Entrepreneurship Education Program 35

Wan Naliza Wan Jaafar and Takayoshi Maki

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Abstract

This study aims to evaluate the effectiveness of community college in Malaysia in playing its roles as alternative pathway for community development particularly through entrepreneurship education programs. Community college in Malaysia aims to be leading TVET institutions in line with government's desire to mainstream TVET with the purpose for the realization of high-income economy. It is

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acknowledged that courses offered by community college have impressive outcomes in terms of income before and after enrolling in courses as well as participants' knowledge and skills and also entrepreneurial intentions and potential. Through review of related documents and informal conversational interview with community college officers to deepen understanding about related documents, authors discuss present status of community college roles in contributing to economic development through learning opportunities of community college and entrepreneurship education. Most important is community college has bright potentials in creating positive entrepreneurship environment in Malaysia by producing courageous individuals.

Keywords

Malaysia · Community development · Entrepreneurship education · TVET

Introduction: Challenges of TVET in Malaysia

Malaysia's number one challenge as a multiracial country is to ensure community development that involves all races so that no community is marginalized. Bumiputera is a Malaysian term to describe the Malay race and other indigenous peoples of Southeast Asia. When Malaysia achieved independence in 1957, it faced economic imbalance among races with about 70% of Bumiputera living under extreme poverty: 86% of the poverty families being located in rural area as compared to 14% of poverty being located in urban areas ("Prime Minister Office" 2016). Since then, efforts to improve community standard of living can be seen as Malaysia implemented policy to restructure and balance the development of community in line with the main objective, that is, national unity. The New Economic Policy (1970–1990) was introduced to overcome this matter which was seen as a way to reduce poverty among Bumiputera and at the same time to balance economic achievement among all races. The policy successfully reduced national poverty to 16.5% at the end of New Economic Policy in 1990 (Department of Information Malaysia 2013).

Vision 2020 was introduced in 1991 with the objective of assuring that Malaysia will become a fully developed nation with its own mold by the year 2020. Part of the plan was to aim for an incremental national economy growth rate of 7% per annum. During the period 1991–2000, the Malaysia economy performance was stronger than other countries in the Association of Southeast Asian Nations (ASEAN) region. Malaysia was an example of a developed economies that was able to make the early transition from a lower-income nation to a middle-income nation (Prime Minister Office 2010). Yet the 1997 economic crisis brought a slower growth rate to the Malaysian economy (Prime Minister Office 2010) and encouraged Malaysia to devote attention toward community development. This was done by creating awareness about the potential of Technical and Vocational Education and Training (TVET). Compared to developed countries, Malaysia tended to have a stereotype of TVET as a limited career prospect and generally considered TVET to be a last choice of career path (Ministry of Higher Education 2012). Among the reasons that

contributed to the atmosphere was that TVET leavers and practitioners were not recognized as professionals by Malaysia Engineer Board. This limited their opportunity in demanding higher salary as well as career improvement (Economic Unit Plan 2015a). Meanwhile, less input from industries in curriculum development caused mismatches between needed skills by the industries and skills achieved by TVET leavers (Economic Unit Plan 2015a) which contributed to increment growth of unemployment rates. Malaysia was dominated by non-highly skilled labor workers and high dependence on low-skilled foreign workers. Low-skilled foreign workers in Malaysia increased by 152% within 2000–2013 (Economic Unit Plan 2015b), and in January 2016, there were 2.08 million foreign workers from Indonesia, Nepal, Bangladesh, Myanmar, and India who worked in five formal sectors: manufacture (36.1%), agriculture (23.5%), construction (19.9%), service (13.0%), and domestic (7.5%) (KOSMO Online 2016). The availability of jobs contradicted the high unemployment rates among Malaysians. In turn, a dependency on foreign workers became an alarm for the need to put new reforms in place that would create opportunities for community development that in turn would allow Malaysia to become a high-income nation by 2020.

Figure 1 shows a summary of how TVET economy growth is part of Vision 2020 and how that influenced the establishment of community college. Community colleges in Malaysia have a mission of “Leveraging on Technical and Vocational

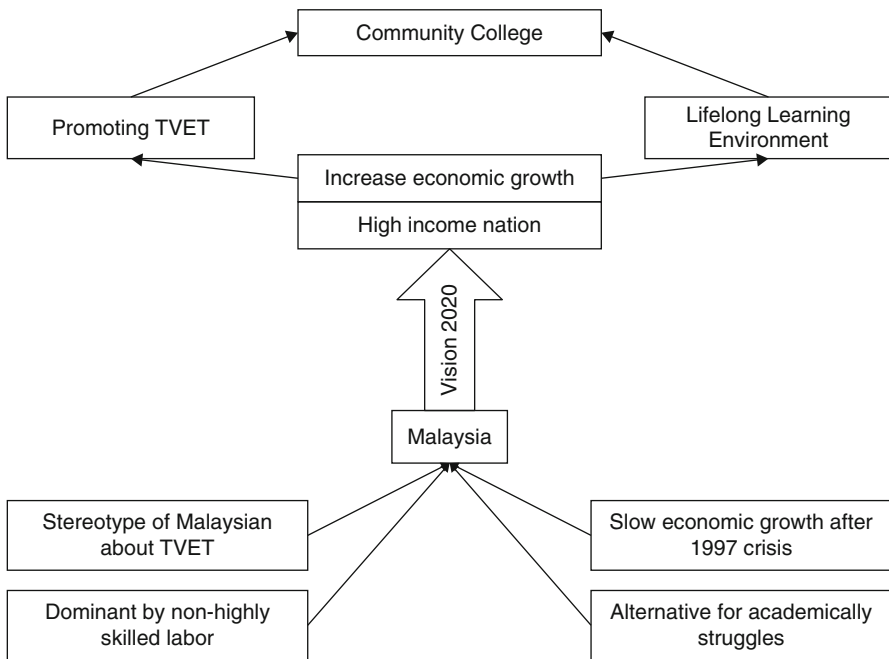


Fig. 1 Establishment background of community college in Malaysia (Ministry of Higher Education 2012; Prime Minister Office 2010)

Education and Training, and Lifelong Learning as a means of developing local communities into a knowledgeable and trained workforce to fulfil the demands of the world of work” (Ministry of Higher Education 2015a). Community colleges were introduced in 2001 after it was proposed by the Ministry of Education (MOE), Malaysia, to establish an institution at every parliament that would provide needed training and skills to all. Skills-related activities were once considered as an alternative for those who academically struggled as this type of education would help those students to master particular skills as a way to survive. The mindset of skills-related activities as an option was driven toward a global trend that focused on the need for excellence in formal learning as a way to bring to the outcome of producing more workers. Academically excellent workers’ phenomena have raised global awareness to the significance of promoting community to become independent and multiskilled through continuous involvement in lifelong learning. Lifelong learning has produced many skilled workers to fulfill industry needs in line with the requirements of economic development (Buntat et al. 2013).

The focus on participants enrolling in short courses has allowed the community college to have a healthy potential to contribute to economic development. By 2015, community colleges showed a magnificent performance in the increment of students’ enrollment with 1,139 diploma graduates, 56,204 community college certificates, and 69,146 community college certificates in modular programs (Ministry of Higher Education 2015a). Trend in lifelong learning participation 2002–2014 (Fig. 2) shows that the community college has trained several of the 1,623,069 participants, a sign of building community trust toward community college credibility and relevance of courses offered.

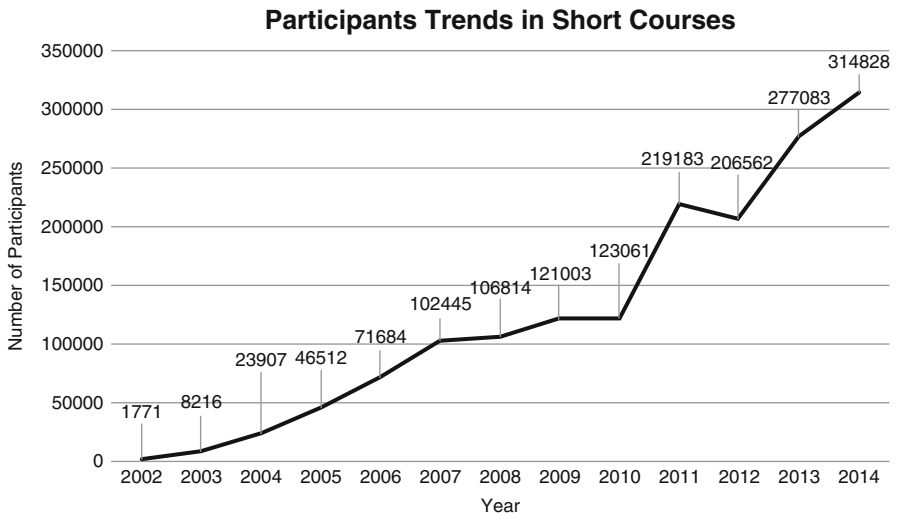


Fig. 2 Participants trends in community college short courses (Source: Ministry of Higher Education 2015a)

Entrepreneurship and Economic Development

On April 2015, the Malaysia Education Blueprint 2013–2025 was launched, and it is a turning point in Malaysia education system toward a significant transformation. One of the obvious changes is a tremendous effort toward emerging entrepreneurship within the system to create awareness and promote entrepreneurship among the Malaysian community. Even though entrepreneurship in education is not a new issue, less effective previous implemented plans and policies have now urged Malaysia to develop a plan of action. Among the reasons to implement such changes are the realization of Vision 2020 and the slow growth rate of Malaysia's economy after the 1997 economic crisis.

Even though there is no rigid definition of entrepreneurship, entrepreneurship-related literature defines entrepreneurship into three main categories: behavioral definitions, occupational definitions, and synthesis definition (Toma et al. 2014; Naudé 2013). Taking one definition of “entrepreneurship” mentioned by Wenekers and Thurik (1999) in Carree and Thurik (2010): “Entrepreneurship is the manifest ability and willingness of individuals, on their own, in teams, within and outside existing organizations to perceive and create new economic opportunities (new products, new production methods, new organizational schemes, and new product–market combinations), and to introduce their ideas to the market in the face of uncertainty and other obstacles by making decisions on location, form and the use of resources and institutions.” (Wenekers and Thurik 1999, p. 564–565).

Entrepreneurship takes place when the entrepreneur creates new opportunities that can contribute to changes in the community and through this process indeed influence economic development (Toma et al. 2014). Although linking entrepreneurship and economy growth is a complex discourse (Naudé 2013), previous studies come to agree that entrepreneurship is the fundamental of economic development. A positive entrepreneurship environment will create opportunity leading to positive economic development.

Entrepreneurship Environment in Malaysia

Figure 3 shows entrepreneurial pipelines which are phases of entrepreneurship used by Global Entrepreneurship Monitor (GEM) to study the entrepreneurship trends that occur in a country. The term “potential entrepreneur” refers to individuals with knowledge and skills who see optimistic opportunity in their environment but who have no assurance to start a business. These individuals will only precede to the next stage of the entrepreneurial pipeline as an “intentional entrepreneur” once they decide to start a business (Ooi and Nasiru 2015; Xavier et al. 2016; Krueger and Brazeal 2016; Hessels et al. 2011). Entrepreneurial activity occurs in the third stage of the pipeline as the individuals eventually establish a business or exit and stop continuing business.

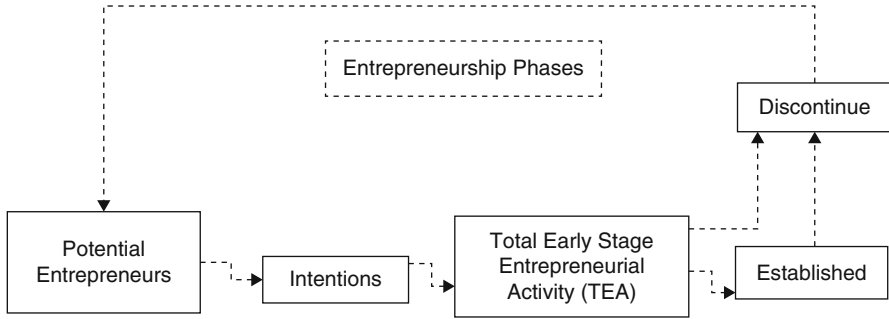


Fig. 3 Theoretical framework from GEM’s entrepreneurial pipeline (Source: GEM Global Report 2011, cited in Xavier et al. 2016).



Fig. 4 Simplified diagram of community college roles in contributing to economic development (Source: Authors)

Understanding the entrepreneurship environment in Malaysia, it is important to identify the roles of entrepreneurship education program in community colleges for community development. Figure 4 shows the conceptual framework used in the study.

Purpose of the Study

Malaysian community colleges entered the strengthening phase of the institution in 2013–2015, with an emphasis in providing an improved quality of services. As Fig. 2 shows, community colleges have trained a big number of participants through short-term courses, and the number of participants has increased year by year since 2002. With the trust given by the community, it is important for community colleges to continue to provide good-quality programs and services. The main purpose of this study is to evaluate the effectiveness of community colleges in playing its role as an alternative pathway for community development. In particular, the objective is to determine the significance and challenges of community college particularly entrepreneurship education programs for community development in Malaysia.

Research Question

To achieve the abovementioned purpose, this chapter will explore the following research questions:

1. How does the community college program meet its mission as a means of developing local communities into a knowledgeable and trained workforce to fulfill the demands of the world of work?
2. What is the relationship between entrepreneurship education program and entrepreneurship intention?
3. How does entrepreneurship education program in community college influence entrepreneurship environment?

Methodology

This study employs a qualitative approach to evaluate the roles of entrepreneurship education programs in Malaysian community college for community development using document review and informal conversational interviews (Patton 2015) with community college officers. The interviews are conducted to complement understanding about related documents. We choose a case, Paya Besar Community College, as an example for this study to compare against relevant sources that are drawn upon in this chapter. We use the following documents in this study and categorize them into four main groups:

- Entrepreneurship and economy growth-related articles
- Entrepreneurship education in Malaysian community college-related articles
- Government documents and reports of Malaysian community college
- Entrepreneurial activity reports of Paya Besar Community College, Malaysia

Analysis of Data: Learning Opportunities and Outcome of Community College in Malaysia

The Industrial Training Institute of Kuala Lumpur is one of the earliest TVET institutions in Malaysia that was underseen by the Ministry of Human Resource in 1964. Today, there are more than 500 TVET institutions nationwide that are underseen by seven different ministries (Economic Unit Plan 2015a). The polytechnic and the community college are two different TVET institutions that are under the Ministry of Higher Education, Malaysia (MOHE). Each of these institutions has an aim which is to benefit different target groups. The community college was first established in 2001 under the 8th Malaysia Plan (2001–2005) with 36 colleges to serve as a second chance for those in the community who struggled academically and to provide a TVET education and training along with lifelong learning programs that would improve their quality of life (Che Hassan et al. 2013; Ministry of Higher Education 2015a). Compared to other TVET institutions, the community college has unique features, such as flexible, easy access as well as offering a variety of courses to fulfill local community needs with a basic requirement of enrollment: (i) Malaysian citizen and (ii) literate (Ministry of Higher Education 2015a).

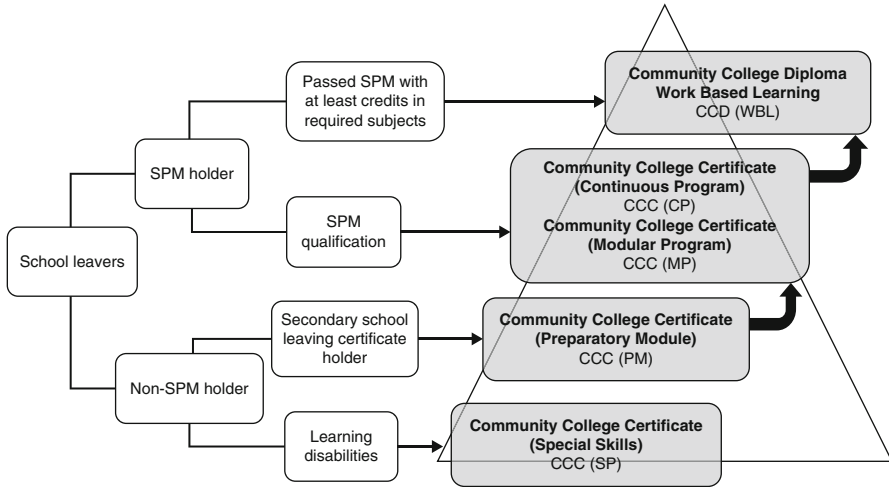


Fig. 5 Summarized diagram of full-time programs offered by community college in Malaysia (Ministry of Higher Education 2015a)

In the 10th Malaysia Plan (2011–2015), the government decided to mainstream and widen the access to TVET as an effort of building community development for the purpose of economic development. The government placed trust in the community college as one of the major players in producing skilled labors through TVET as well as through strengthening lifelong learning programs for upskilling purpose. Programs offered at the community college come in two main categories: (i) full-time programs and (ii) short courses. Full-time programs are offered at certificate and diploma levels with a very minimum requirement as shown in Fig. 5 (SPM is an abbreviation of Sijil Pelajaran Malaysia, a national examination taken by fifth grade of secondary school students before entering tertiary education). As a community college, the main objective is to offer learning opportunity to all community regardless of age, education, and socioeconomic backgrounds. Full-time programs come in four different categories as to fit in these variety backgrounds from school leavers to students with learning disabilities. Short courses are lifelong learning programs under different course clusters. These are held on weekdays or weekends depending upon the demand with very affordable fees targeting all community members (Ministry of Higher Education 2015a).

The community college has proven to be successful in helping a community to improve quality of life through TVET courses and training as well as lifelong learning program (Don et al. 2014; Che Hassan et al. 2013; Don et al. 2012). An outcome and impact assessment on community college programs in Fig. 6 shows differences in terms of income before and after enrolling in courses as well as participants' knowledge and skills (Don et al. 2012, 2014,) with high potential to overcome unemployment rate in Malaysia (Che Hassan et al. 2013). Data in Fig. 6, however, represent respondents who are already working while enrolled in short courses in community college.

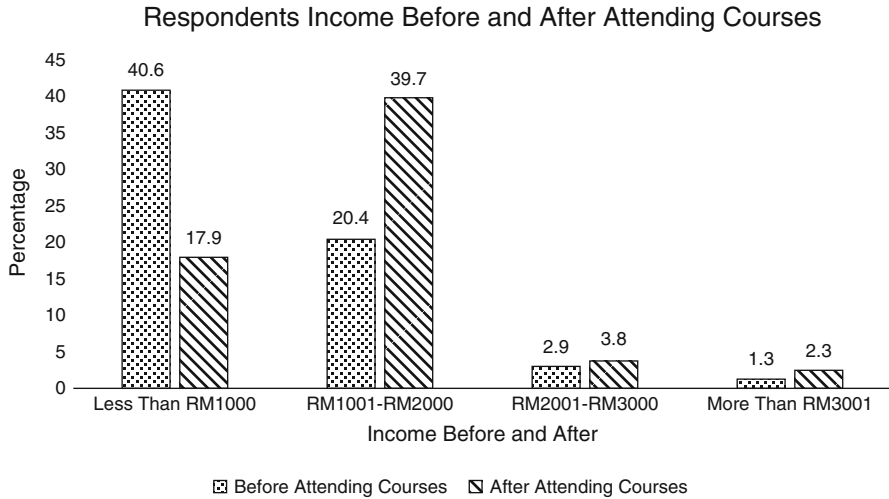


Fig. 6 Comparison of respondents spread according to before attending courses income and current income (Source: Don et al. 2014; Don et al. 2012)

Even though courses offered by the community college positively impact students’ knowledge and skills, there is still a problem in allowing students’ creativity to apply earned knowledge and skills to create opportunities to others. Community colleges aim not only to produce skilled workers but as well as to create independent graduates as entrepreneurs (Buang and Awalludin 2011). While skilled workers are created, the development of entrepreneurs is limited. With less than 4 years to face the year 2020, Malaysia is still struggling to become a high-income nation and is stuck in the middle-income trap (Sipon and Pihie 2013b; Prime Minister Office 2010). As such, it is considered to concentrate to the efforts to develop entrepreneurs (Rizal et al. 2014).

Entrepreneurship Education and Entrepreneurship Intentions

The relationship between entrepreneurship education and entrepreneurship intentions provides positive evidence (Ooi and Nasiru 2015; Bae et al. 2014; Raposo and Paço 2011) of the opportunity for entrepreneurship education to create positive entrepreneurship environment in Malaysia. Even though there are contradict discussions about the outcomes of entrepreneurship education toward entrepreneurship intentions (Martin et al. 2013; Von Graevenitz et al. 2010), in the Malaysian community college context, entrepreneurship education is starting to bring positive outcomes by enhancing students’ knowledge, interest, and confidence to choose entrepreneurship as career of choice (Don et al. 2014; Martin et al. 2013). Studies show more than half of community college program graduate (both full-time and lifelong learning) students and that many have intention to choose entrepreneur as

career choice (Don et al. 2014; Sipon and Pihie 2013b). Yet, progression to the second stage of entrepreneurial development has yet to occur. This is surprising considering the high enrolment in the community college programs (both full-time and lifelong learning) and the positive impact that education is having on entrepreneurial intentions. While students indicate that they want to become entrepreneurs, they do not follow that pathway, and the intentions are nonparallel with the number of students who are actually becoming entrepreneurs. According to the ASEAN Regional Entrepreneurship Report 2015/2016 by the Global Entrepreneurship Monitor (GEM) 2016, Malaysia performs poorly in most of the indicators compared to neighborhood countries. Survey studies show that Malaysians have a low level of confidence of entrepreneurial abilities and have a stereotype mindset about careers in entrepreneurship (Xavier et al. 2016; Ministry of Higher Education 2012). As a result, the number of graduates who get involved in entrepreneurship is very small (Sipon and Pihie 2013a). Further study needs to be done on how to keep these potential entrepreneurs with high intentions to keep on going and moving forward through the phases of entrepreneurial development.

Figure 7 is data of entrepreneurial pipelines in 2015 of five ASEAN countries. From the data presented, it shows an obvious pessimistic trend of entrepreneurship environment in Malaysia as well as in comparison with neighborhood countries. Only 14.8% of Malaysians believe there are good opportunities for them (with required skills) to start a business. The trend becomes more worrying when entering the next phase, as only 5.6% remain as intentional entrepreneurs who decided to start a business within 3 years (Xavier et al. 2016). The figures of these two phases in 2015 are actually declining from previous years. According to GEM, the potential

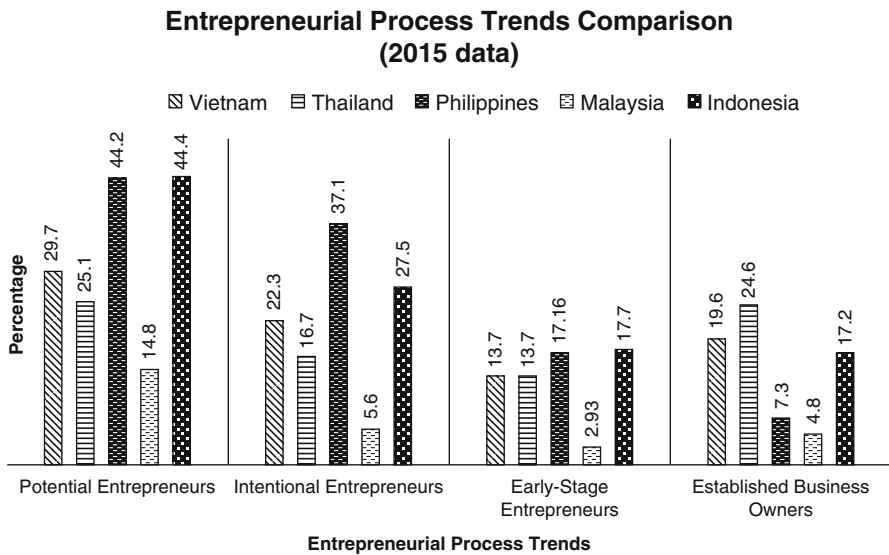


Fig. 7 Entrepreneurial process trend comparison (Source: ASEAN Regional Entrepreneurship Report 2015/2016)

and intentions phases are crucial because it will determine the continuity and consequences in entrepreneurial pipelines. The entrepreneur environment trend in Malaysia clearly is nonparallel with Schumpeter (1911) opinions of entrepreneurial process: new goods, new production methods, new markets, new source of materials, and new organization (Toma et al. 2014). The five-step entrepreneurial process which was mentioned earlier in this chapter occurs with contribution of entrepreneur's role as agent in creating new goods, new production methods, new markets, new source of materials, and new organization. Without a sufficient number of entrepreneurs, entrepreneurship will not get affected which also then influences any potential for economic development of a nation. The top 5 key constraints in Malaysia for entrepreneurship are finance (50%), government policies (26.9%), capacity for entrepreneurship (34.6%), internal market openness (26.9%), and education and training (23.1%) (Xavier et al. 2016). Under the 11th Malaysia Plan (2016–2020), community development through entrepreneurship activities has been recognized as an important factor in supporting transition of economy sectors to knowledge-intensive and innovation-intensive activities (Ministry of Higher Education 2015b). While from a bigger point of view, entrepreneurial intentions and potentials of Malaysian are declining, the community college programs' outcomes bring the bright side of the future entrepreneurship environment in Malaysia. Increment of students' enrollment yearly in community college programs and optimistic response regarding entrepreneurial intentions increases among the graduates. Community colleges have a significant ability to influence entrepreneurship environment in Malaysia by increasing the number of individuals with entrepreneurial intention and potentials. Entrepreneurship environment will be influenced by community college capability to sustain those individuals with entrepreneurial intention and potentials to the next level of entrepreneurial process.

Entrepreneurship Education Program in Community College

In 2010, entrepreneurship education program begins to emerge in community colleges as one of the most important agenda for the institution (Ministry of Higher Education 2012). This is in line with several plans and policies which were launched in the same year by the government to boost nation economic growth through community development not only by gaining knowledge (Sipon and Pihie 2013b) but at the same time by enabling students to be independent and to implement gained knowledge by becoming entrepreneurs (Che Hassan et al. 2013). In the same year as the reinforcement phase of community college, the Department of Community College Study designed an entrepreneurship strategic plan named Entrepreneurship Strengthening Plan in keeping with entrepreneurship development policies and other policies toward promoting entrepreneurship bringing to the establishment of Community College Entrepreneurship Development Center (PUSKOM is an abbreviation of Pusat Pembangunan Keusahawanan Kolej Komuniti). PUSKOM functions as a sole board to oversee entrepreneurship development program of community colleges, and entrepreneur center or e-Tech center was established at community

college level to implement approved program (Che Hassan et al. 2013, Department of Community College Study, Ministry of Higher Education 2010).

The establishment of PUSKOM and e-Tech center in 2010 directed community colleges to be more organized and focused in implementing entrepreneurship education programs to encourage students becoming independent as an entrepreneur. After 5 years, PUSKOM and e-Tech center show tremendous outcome with great numbers and increment of yearly participants in various short courses (Ministry of Higher Education 2015a). Yet, the number of participants is not equally indicating the same number of entrepreneurs produce yearly. Since 2011, more than half of the graduates reported to be employed, while the rest of the graduates are seeking further studies, upskilling, waiting for work placement, or unemployed (Ministry of Higher Education 2015a). A point of concern is among employed graduates with regard to how many of the graduates are self-employed. Despite the impressive number of students graduating and participating in full-time and short courses programs in community colleges (Ministry of Higher Education 2015a), just a small number of community college graduates become self-employed (Sipon and Pihie 2013b; Don et al. 2012).

Paya Besar Community College

An examination of Paya Besar Community College that is located in the state of Pahang illustrates the changing context for entrepreneurial education. The Malaysian Administrative Modernization and Management Planning Unit (MAMPU) 2015 reported that Paya Besar Community College graduates' employability status in 2015 is 68% employed, 28% is going into further studies, and only 4% is unemployed. While the number of unemployed graduates of Paya Besar Community College is small, the total entrepreneurs produced is relatively low (Table 1). A number of programs shown in Table 1 are programs held by Paya Besar Community College's e-Tech center with number of participants for the year 2012–2015. Even though the number of entrepreneurs has increased, the percentage shows that a number of entrepreneurs produced yearly are considered as low. Number of entrepreneur Global Entrepreneurship Monitor (GEM) 2013 reported only 41.8% of respondents in Malaysia regarding entrepreneurship as career of choice, indicating that Malaysians are likely to be wage earners and perhaps lack an entrepreneurial mindset (Economic Unit Plan 2015c). This figure has dropped to 39.3% in 2015 (Kelly et al. 2015).

Table 1 Number of entrepreneurs produced by Paya Besar Community College 2012–2015 (Source: Paya Besar Community College, 2012–2015)

Year	Number of program	Number of students participation	Total entrepreneur (%)	Total company
2012	48	928	0.5	1
2013	18	393	2.3	3
2014	33	753	1.2	2
2015	33	781	1.9	8

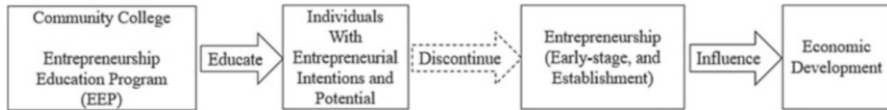


Fig. 8 Simplified diagram of present status of community college roles in contributing to economic development (Source: Authors)

Result and Discussion

Community colleges in Malaysia successfully function as lifelong learning hubs that provide an alternative option for the community through education and TVET. In maximizing the institutional roles for community development, community colleges are now facing challenges to encourage knowledgeable and skillful graduates to become independent as entrepreneurs. Community college graduates are reported with high intentions to consider entrepreneurship as career of choice, which is a sign that the emphasis on entrepreneurship has already started. However, as we indicated in Fig. 8, within the community college student population, there is a healthy supply of individuals with entrepreneurial intentions and potentials, but they are not achieving their interests. Statistically, the number of students' enrollment and graduates becomes saturated without being able to move forward to the next most important phase of entrepreneurial development. Curricular attention and outreach efforts are essential to keep intentional entrepreneurs from leaving the phase. The future goal is to expect incremental growth in the number of entrepreneurs from the community college. Literature widely discusses the factors that contribute to this phenomenon are that community college graduates have low self-confidence (Rasul et al. 2015; Don et al. 2014; Bekri Rahim et al. 2013) and lack skills in identifying entrepreneurial opportunities (Ooi and Nasiru 2015; Rasmuna and Othman 2014; Rizal et al. 2014; Buang and Awalludin 2011) and eventually community college programs appear to be as low-impact programs.

Conclusion

To boost Malaysia's economic growth, the TVET stereotype as bringing limited career prospects and as being the last choice of career path must be swiped away. For this reason, the community college that provides skills-related and entrepreneurship education will increasingly play a significant role in the economic growth in Malaysia. Malaysia is still too dependent on foreign workers, while the unemployment rate of Malaysians remains as an unsolved issue. New policies are being offered by the government to mainstream TVET and to promote lifelong learning. These policies signal that it is time for change. There are optimistic beliefs that education will bring opportunities for jobs with a stable salary. A change of mindset from being a wage earner to become a business owner is a skill to acquire. The

culture of appreciating the wage earner has made the community inactive and incapable of being able to seek opportunities for changes without proper guidance from a third party. The community has low intentions to seek challenges and prefers a stable career for living. It is even more challenging for disadvantages group to survive and compete with the rest of community groups. With the economic crisis which hit Malaysia in 1997, the mindset and culture have made efforts to revive the country's economy increasingly challenging. Community colleges as lifelong learning hubs offer opportunities for a better life by providing flexible courses to Malaysian citizen through TVET, upskilling programs, and entrepreneurship education programs, which previously have been considered to be less popular fields among Malaysians. Favorable circumstances provided by community college are not only providing new knowledge and skills but are also helping students to realize their potential and future intentions in entrepreneurship. Though entrepreneurship education programs are proven to positively influence entrepreneurial intentions, these programs have limitations with a big loss as a large number of graduates decide not to continue their intention into entrepreneurship phase.

Figure 9 shows the outcome trends in community college graduates' entrepreneurial intention and potentials. There is proof that that programs and short courses in community college are capable to counterbalance the negative entrepreneurship environment (Fig. 9) by taking the right remedial measures to overcome

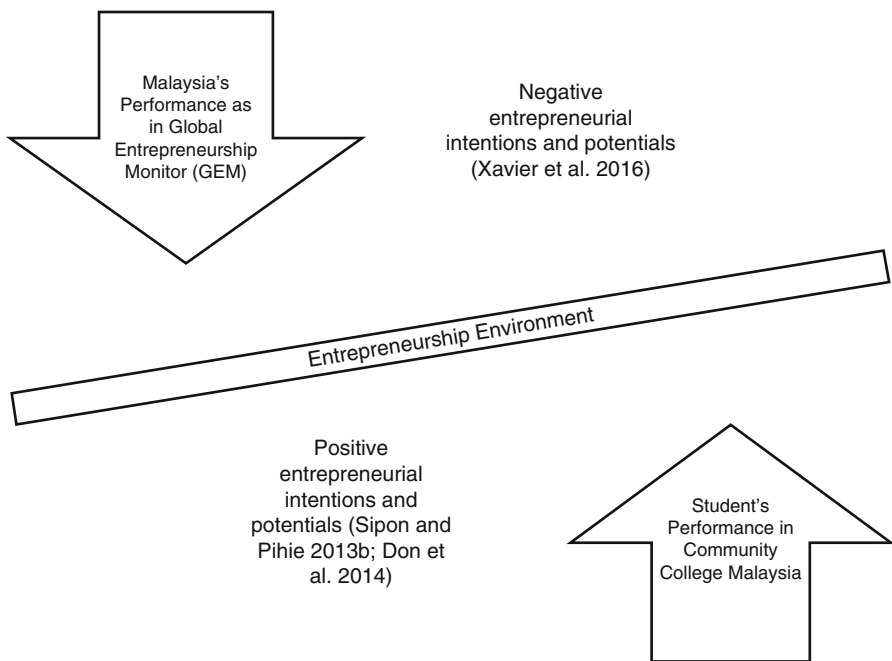


Fig. 9 Community college potentials in harmonizing entrepreneurial environment in Malaysia (Source: Authors)

discontinuity of community college graduates into entrepreneurship. Even though graduates' performance in community college in Fig. 9 shows rising movement toward balancing entrepreneurship environment in Malaysia, the movements are wandering at the same level without able to move ahead. This is where remedial action should take place by focusing on the effort of turning these knowledgeable and skillful graduates becoming courageous individuals to move forward.

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The Community College Branch Campus in Kuwait: Meeting Needs of the People and of Industry

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Carol Ross

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Abstract

Since early 2000, many private institutions have emerged in the Middle Eastern region (Ghabra and Arnold 2007). In Kuwait, the impetus of popularity for private postsecondary institutions was grounded in the ever-increasing higher education demands of the country and its flagship public university, Kuwait University. Although Kuwait embraced many Western models, the American model of higher education with branch campuses that award degrees in home institution's name or with affiliates that serve as consultant mentors or a hybrid mix was most often chosen. This case study examines one private group's attempt to meet Kuwait's strategic imperative of investing in its human capital by filling

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the educational and career preparation gap with an American model community college. With Broward College as the affiliate, the goal was to develop a post-secondary experience based upon a similar mission, policies and procedures, organizational and administrative structures, student programs and services, and faculty credentialing.

Keywords

Kuwait private education · International community colleges · Private institutions in Middle East · American model colleges in Middle East · New college development · Establishing private colleges/universities · American College affiliates · MOUs and international colleges

Introduction

After spending 14 years as a Chief Student Affairs Officer in United States Community Colleges in Tennessee, Virginia, and Florida, an opportunity took me to Kuwait to serve as the Founding Dean of Student Affairs for the American University of Kuwait (AUK). AUK is the first private liberal arts university in Kuwait. AUK is also the second private undergraduate institution to open its doors. My Community College experiences provided the foundation for the successful implementation of student affairs programs and services. It was readily apparent that many of the prospective and matriculated students, whether from private high schools or the government public schools, were not college ready, academically or within the social construct as defined by the American model of higher education. Many students needed to develop their English language and math skills. In addition, since Kuwait education uses examinations that are based on lectures and memorization, there was also a need to have students learn and adopt active student engagement. In that the American model of higher education was a new cultural phenomenon, students were challenged and struggled to assimilate in a student-centered model of learning grounded in critical thinking and active engagement in preparation for global citizenry and lifelong learning.

As I learned more about the students and adapted and implemented successful programs and services modeled from the US Community College, the more I believed what was missing from Kuwait's postsecondary environment was the Community College. If there was an American model Community College that could focus on college readiness, academic transfer, and career preparation, senior institutions could better utilize its resources more poignantly on collegiate rigor. After serving 11 years at the American University of Kuwait I joined the Al Jeel Al Jadeed Educational Institute as Founding President of Kuwait Community College.

The report "Studying the American way: An assessment of American-style higher education in Arab countries" (Ghabra and Arnold 2007) notes the growing popularity and challenges of American modeled higher education or Western-styled higher education in the Arab world. Kuwait politicians and those in higher education believed that an American education would open doors for a brighter future.

Whether in the form of branch campuses that award degrees in the name of the home institution or partner affiliates that serve as consultant mentors or a hybrid mix, the Middle Eastern American model institution was designed to mirror its aspirant by implementing or modeling the curriculum based upon the institution's licensure. The central focus of all American-modeled higher education in Kuwait was the use of English as the language of instruction, the hiring of the majority if not all faculty credentialed by United States accredited institutions, and the use of American textbooks. In addition to implementing American academic standards and policies, these institutions also model admission requirements, administrative structures, policies and procedures, and student programs and services.

Before 1953, only 14 public and private universities existed across the Arab world. Cahill (2016) refers to the Association of Arab Universities and shares that in the past 60 years, the number has grown to over 900 postsecondary institutions with more than 250 private Universities being established in the Middle East within the last 25 years (Cahill 2016). Many of these new institutions are for-profit, branch campus or affiliate private institutions that are intended to generate revenue for its owner/investors, alleviate the burdening enrollment demand on the public institutions, and keep students desiring the American collegiate experience but cannot travel abroad, home.

As the list of American private colleges and universities offering undergraduate, graduate and professional education grew in the Middle Eastern region, with such notables as New York University, Dartmouth College, Carnegie Mellon, Cornell Medical, Purdue University, University of Missouri, and Georgetown University to name a few, noticeably absent from the list are American Community Colleges. The omission of an American model Community College is critical because most students in Kuwait seeking matriculate postsecondary education are in need of English as a Second Language skills, College Level English and Math skills as well as College Readiness Skills such as time management, study skills, and critical thinking and analytical skills. Although college readiness is but one facet of the Community College mission, this is the facet most affiliated in Kuwait about American model Community Colleges.

This case study examines one private group's attempt to meet Kuwait's strategic imperative of investing in its human capital by filling the educational and career preparation gap with an American model Community College.

About Kuwait Public Higher Education

After benefiting from the oil prices over several years, the Kuwait government's strategic master plan was to reinvest in the state and in its people through improving its infrastructure and its human capital readiness. One of the key areas of focus in the 2014–2015 plan includes enhancing higher education to raise Kuwait competitiveness ranking among its GCC peers and other Organization of Economic Cooperation and Development (OECD) countries. Kuwait ranked third as an overall macroeconomic environment yet 81st in terms of postsecondary education and training

ranking the country lower than other GCC peers in terms of market efficiency, technical readiness, and innovation. The investment strategy for the state in educational expenditures grew from KD 1.43 billion in 2011 to KW 1.75 billion in 2013 with an expected annual compounded growth rate of 22% (KPMG 2015).

About Kuwait University

Until recently the majority of the population seeking higher education was served by the country's flagship Kuwait University. Established by Decree in 1966, the institution opened with the College of Science, the College of Arts, and the College of Women. During its 50 years of existence, Kuwait University has grown to include 17 colleges: Arts, Architecture, Allied Health Science, Computing Science and Engineering, Business Administration, Education, Dentistry, Law, Medicine, Public Health, Pharmacy, Science, Sharia and Islamic Studies, Social Science, Life Science, Engineering and Petroleum, and Graduate Studies. Kuwait University offers 76 undergraduate and 71 graduate/professional programs and in the most recent publicized census for academic year 2015/2016, Kuwait University admitted over 4900 new students for the Fall term and over 2,000 new students in Spring. Enrollment respectively was almost 36,000 and over 35,000 students (CSB 2016).

About Public Authority for Applied Education and Training (PAEET)

During the 1950s, to meet manpower needs manifested as a result of the oil industry boom, the State established training centers and subsequently specialized institutions to meet the skilled labor force demands. Under the auspices of the Ministry of Education, in 1972, the Technical and Vocational Education Department was created to supervise technical and vocation education offered by the specialized institutions. During that time, the Central Training Department was established to supervise the training center and institutes created by the various Ministries (Wikipedia 2017).

In the early 1980s the Kuwait government made the decision to consolidate all the education and training efforts of the various centers and institutes under one single entity known as the Public Authority of Applied Education and Training (PAEET). PAEET institutions were not in competition with Kuwait University since the purpose of PAEET was twofold: Applied Education and Research and Applied Education and Training. PAEET was initially comprised of five colleges that offered 2 or 3 year's degree programs and some bachelor's degrees in Basic Education, Business Studies, Technological Studies, Health Sciences, and Nursing. In addition to these five colleges were eight institutes that offered programs lasting weeks or months, awarded certificates of participation or attendance in the following programs: Telecommunication and Navigation, Energy, Nursing, Industrial Training, Constructional Training, Vocational Training, Tourism and Beauty, and Administrative Management. Census reporting for academic year 2014/2015 notes that PAEET

admitted in the Fall 9613 new students and Spring new admits totaled 3,613. Its institutional enrollment realized 36,236 students in the Fall and 35,353 were reported for the Spring (CSB 2017).

Why Postsecondary Private Institutions?

By Western standards, Kuwait University and the Public Authority for Applied Education and Training (PAEET) institutions would be considered large comprehensive institutions. With Kuwait University and PAEET large enrollments and Kuwait's compounded growth rate rapidly increasing and expected to reach 4.6 million by 2018, the need for postsecondary education alternatives was imperative. As noted in the feasibility report (KPMG 2015), based upon a study of the demographic age-progression, the demand for tertiary education potential markets show a steady increase from 3 million in 2014 to 35 million in 2025 and 38 million by 2030. Another compounding factor impacting postsecondary institutions is the sovereign state's guarantee to its citizens for employment in the public sector. The public sector job market, however, had become saturated. In an effort to address this phenomenon, the government-initiated incentive programs, designed to encourage new citizen entrants to the workforce to pursue private sector opportunities. These incentives included supplemental salary allowances. As a result of the incentive programs, the competition for private sector employment began to steepen which also led to the drive to increase postsecondary education options. The outcry for postsecondary education options in Kuwait was result of the public institutions inability to accommodate the growing demand of students, the competition of graduates for private sector employment, and the country's strategic objective to become a knowledge-driven economy.

Meeting the educational demands through private institutions is not a new strategy to Kuwait. Per the report from the Kuwait Central Statistical Bureau, in the academic year of 2014/2015, under the auspices of the Ministry of Education, there were 800 public schools more commonly referred to as "government" schools with a Kuwaiti curriculum based upon the sciences or the arts and 491 private Arabic and International primary and secondary schools, respectively, serving 363,235 and 257,405 students. The most common international school curricula are based upon models from the United States, Britain, France, and India. Government secondary enrollment was reported at 67,454 while private secondary was reported at 39,880 for the 2014/2015 academic school year (CSB 2016).

The state of education in Kuwait shows a well-defined educational pathway process. Students graduate from high school and can go to a postsecondary school based on examination ranking. There are multiple options for students including, KU, PAEET, a private university, or a private diploma (2 year) institution. However, none of these postsecondary institutions are based on an American model of higher education. Many of these options, excluding KU, are more vocationally intended. It is also difficult to articulate an American model into this system because, for example, they "clock hours" instead of "credits."

Kuwait Community College would be developed in an effort to meet the burgeoning demand for postsecondary education. Law No. 34 of 2000, enacted to provide a needed governmental structure to review application requests for establishing private educational institutions that offered postsecondary learning opportunities that lead to special licenses, diplomas, and degrees, would serve as the guideline for the institution's application. Institutions seeking to provide tertiary education could be private universities, colleges, or foreign university branches. Law No. 34 established a new regulatory agency, the Private Universities Council (PUC). Since then, the Ministry of Higher Education provides oversight for Kuwait University and the Public Authority for Applied Education and Training (PAEET) as well as all private colleges and universities. The PUC provides oversight as a subcouncil to all private postsecondary institutions. The PUC's responsibilities include:

1. Reviewing requests for the establishment of private educational institutions.
2. Determining the accreditation standing of educational establishments, the adoption of special programs, and review of institution performance requirements in an effort to verify that they comply with their decree of establishment.
3. Adopting standards and conditions to be met in the courses at private educational facilities and continuous review of these conditions and criteria.
4. Adopting and authenticating certificates issued by private educational facilities according to the rules and procedures prescribed for it.
5. Determining whether to repeal or stop the activity or the creation of special education facilities.

The Private Universities Council (PUC) is comprised of eight members and chaired by the Minister of Higher Education. These members, selected based upon their knowledge and experiences in higher education, serve 3-year renewable terms and are expected to abide by no conflict of interest ethics, having no direct or indirect relationship with the private institutions. Subcommittees of the Council comprise of members or others possessing the knowledge and expertise in specific areas to effectively address the subcommittee needs.

The Process of Establishing a Private Institution

Any group wishing to establish a postsecondary educational institution would be subject to the Private Universities Council's (PUC) standard application. Applications for licensure must include the following information to be reviewed by members of the PUC:

1. Proposed institution Name
2. The mission and goals of the institution
3. Pledge by the founder that the funding sources used to establish the institution are not subject to any natural or legal issues or have other objectives that are incompatible with the purpose and objectives of the institution

4. Identify all funding sources and/or the bodies responsible for branches of foreign universities as well as the names of the founders and their curricula vitae or resumes
5. Evidence the physical resources and human potential available to the facility
6. Evidence the capital allocated to the facility and including cash and in-kind revenue of the founders
7. Provide a technical and economic feasibility study for the project
8. Share a proposed organizational structure of the enterprise
9. Provide all associated policies for accepting students and the academic requirements for the granting of degrees and tuition fees and the system of grants
10. List prospective academic programs including academic policies and procedures, curricula and degree, certificates, and diplomas to be awarded
11. Provide the names of candidates for the presidency and the membership of the first Board of Trustees including the curricular vitae or resumes of each of them
12. Indicate the proposed date for the start of the study

Once the application is received, the PUC reviews the request ensuring that it satisfies the policies and procedures as it relates to the establishment of a post-secondary institution. In addition, the PUC determines whether the proposed institution has the potential to contribute to meeting the educational goals of the State. Within 3 months of submission of materials for review by the PUC, the petitioner is notified whether the application has been approved, rejected, or approved conditionally. From the time of approval, the applicant has 1 year to accept the approval in principle and to provide the PUC with an educational space plan and financial guarantees of a specified percentage of the value of the project as determined by the PUC. The guarantee of funds would be returned immediately after the completion of the project. Barring issues, the PUC will issue the decree that authorizes the establishment of the institution and assign the land where the institution is to be constructed, within 6 months of submission of the application documents. Institutions may only begin offering courses after the completion of the facilities as defined by the detailed plans that were approved by the PUC (2017).

Why a Community College

The United States is the preferred destination for Kuwaiti students studying abroad. From 2009/2010 to 2014/2015, the number of students studying abroad increased from 1,061 to 3,252 with 2,355 students studying in the United States during the 2014/2015 academic year. The United Kingdom was the second-most popular destination with 498 Kuwaiti students in 2014/2015 (KPMG 2015).

Largely based on the interest in United States education, within the state of Kuwait, it is most often the American model of education that serves as the framework from which private institutions operate. As of the Fall 2016 academic

year, of the 17 postsecondary institutions that are licensed by the PUC, 14 are operational and are offering classes and an additional 3 have yet to begin to offer classes. Of the 14 operational institutions, six are based upon the American model of education. One of these institutions, the American College of the Middle East (ACM), offers a 2-year applied diploma along with what would be considered a true collegiate experience, including Student Life. The American College of the Middle East (ACM) mission is to prepare students with applied skills in preparation for the workforce. It is the closest American model Community College experience offered in the State of Kuwait.

There are other postsecondary institutions licensed by the PUC that offer associate degree or diplomas that are founded on the Australian or Canadian postsecondary models. The Australian College of Kuwait is Kuwait's first private technical college that began offering programs leading to diplomas in Business, Engineering, and Aviation in 2004. Since 2010, the college was approved to offer bachelor's degree programs in Business and Engineering. Focused on providing students with practical skills for the workforce, the Australian College of Kuwait partners with Central Queensland University, Cape Breton University, and Kanga Institute. Another postsecondary institution, Algonquin College of Kuwait, was licensed in 2010 and began operations in the Fall of 2015. It operates as a branch of Canada's Algonquin College of Applied Arts and Technology and offers 2-year diplomas in Technology, Business, Media, and Design. Algonquin College of Kuwait degrees are granted by the home campus. In addition, Algonquin Kuwait has established articulation agreements with senior institutions in Kuwait, Australia, and Canada. Kuwait Technical College is the only college that has a for-profit institution serving as its partner. Kuwait Technical College started operations in 2014 and is licensed to offer applied associate degree programs in Information Systems and Technology and Business and Management. Kuwait Technical College is affiliated with Kaplan University of the United States.

As private institutions are tuition-driven entities, during the start-up phase, these institutions rely on the owner/investors and the Ministry of Higher Education, Private University Council Government Scholarship Program to provide the fiscal resources to drive and sustain operations. Each semester the private institution will request a number of scholarship seats based upon institutional capacity as defined by approved license and degree programs. The Private University Council (PUC) allocates a specified number of full scholarships to each private college or university for Kuwaiti students. Students applying for the scholarship declare a major and select up to three preferential institutions to attend and then the Council awards the scholarship to meriting students and assigns an institution. It is up to the student to matriculate at the institution where the scholarship was awarded. If a student does not receive his/her first choice, they can decline the scholarship and be a paying student. Under certain circumstances, after matriculation, students can apply to transfer to their preferred institution. Even though many of the privates have an outreach and recruitment program, many rely on the Private University Council Government scholarship program to meet enrollment goals.

The Rise of Kuwait Community College

Private institutions in Kuwait are generally owned by “Holding Groups” which are comprised of private citizens interested in investing in a particular enterprise, in this case education. This chapter profiles a particular Holding Group whose members belong to one of the oldest merchant families in Kuwait with a diverse portfolio of businesses and who created an education portfolio in 1972. For purposes of this chapter, we will refer to this group as the Holding Group. Since 1972, the Holding Group has operated primary and secondary schools: two Arabic, one American model, and one British model. In addition, within the portfolio is a training institute that has offered training courses for various ministries. With an interest in expanding its education portfolio, the Holding Group began discussions on creating a US style Community College. One of the Holding Group members used a prior experience at a Arizona Community College as the impetus for generating these discussions. As there was not a comprehensive American model Community College in Kuwait, establishing one had the potential to meet the educational and vocational needs of the Kuwait society without creating another baccalaureate degree granting institution. The Community College would be the Holding Group’s first postsecondary venture.

The American model Community College mission is multilayered, complex, and often conflicting, as noted by Dougherty and Townsend (2006). Its tenants: open admission, remediation, preparation for transfer, and preparation for career, community engagement, and opportunities for lifelong learning, as well as curricula and experiences that are responsive to the immediate needs of the communities served and industry. US Community College missions are shaped by public agencies that define the mission; internal decisions about institutional offerings; or outcomes of programs and services. External forces served as the impetus for defining the KCC Mission. Ranking lower than its counterparts in terms of tertiary education and training and the state’s strategic imperative that focuses on investment in human capital, for KCC, the Bailey and Morest (2004) three-dimensional model is the befitting framework from which the mission is derived:

1. KCC will offer remedial curricula with associate degree granting programs
2. KCC will cultivate vertical relationships with secondary and senior institutions, focusing curricula on accelerated programs and articulations agreements
3. KCC will develop horizontal learning experiences for professional development and community based lifelong learning programs

The Holding Group’s contention was that the US Community College model would be most appropriate for serving students who (a) failed to meet the admission requirements for Kuwait University; (b) had no desire to attend PAEET; (c) did not earn a scholarship to study in at the local private senior institutions; (d) could not study abroad for personal, academic, or financial reasons; and (e) could begin their college careers if they possessed a high school diploma, but not the appropriate grade point average. The Ministry of Higher Education has yet to embrace the ability to

benefit philosophy but will allow students to enroll in certain institutions with equivalent high school diplomas even if the grade point average is less than a 2.0.

A second argument for the creation of an American style Community College is the need to provide remediation in preparation for college level work. All Kuwait colleges and universities offer some form of a foundation program that consists of an English as a second language program and remedial college level English and Math courses. In addition, most colleges also offer some form of a college success skills course or first-year experience that focuses on college readiness skills such as time management, study skills, critical thinking skills, and institutional engagement. Rarely do students place directly into college level courses, requiring no remediation at all.

A third reason for embracing the American Community College model was its focus on workforce preparation and employability skills. According to the Organization of Economic Cooperation and Development (OECD), Kuwait's labor market efficiency, in 2014/2015, ranked 116 compared to its regional peers and the OECD countries. The United States ranked fourth, the UAE ranked eight, Qatar 10th, and the Kingdom of Saudi Arabia ranked 64th. In addition, when ranking human capital competitiveness which uses education as an indicator of quality, Kuwait ranked 81st compared to its regional peers, the UAE ranking 6th, Qatar at 38th, and the Kingdom of Saudi Arabia at 57th (KPMG 2015). As part of Kuwait's strategic plan, a second public University is currently under construction. However, even with the Public Authority for Applied Education and Training Institute reaching capacity, no explicit plans for its expansion have been publicized. The Private Universities Council has recently licensed other 2-year, diploma granting institutions: American College of the Middle East and Boxhill College. Currently, these institutions are the only available options to meet the projected workforce demands that require postsecondary training but less than a bachelor's degree and none of which are a comprehensive American model Community College.

Planning Kuwait Community College

In 2001, the Holding Group submitted an application to the Private University Council to open an American model Community College called the Community College in Kuwait (also known as Kuwait Community College and KCC). KCC was licensed by Amiri Decree No. (103) in March 2011. Per the articles, the role of KCC is to "enrich the intellectual and practical movement and training in the Kuwaiti society and to meet the professional market needs in scientific and technological field, and participation in community development and addressing its problems through scientific research and the preparation and development of human resources and provide scientific advice and services and take care of professional and technical incubators." KCC could award diplomas (degrees) in the fields of Trade (Commerce), Business Administration, Tourism, information technology, Hotels (Hospitality), Arts and Sciences, and the Arts. Admission would be granted to students with a high school diploma or equivalent. Per the Decree, KCC would establish a Board

of Trustees composed of at least five members experienced and competent in the area of higher applied education and training. Board members are to be identified by the institution and then recommended by the PUC to the Minister of Higher Education for approval. Board members are expected to serve as the highest authority in the College and be responsible for ensuring the integrity of the academic and operations of the College. Per the Decree, the Holding Group's guarantee amounted to six and a half million Kuwait Dinar (approximately 21 million dollars).

The Holding Group worked in tandem with the Private University Council (PUC) on the project. The PUC focus was on two basic requirements: (1) The PUC assessed the site, buildings, and infrastructure. Reviews included assessment of the size and number of classrooms and labs, number of parking spaces, student recreation and lounge spaces as well as eateries and administrative office spaces. (2) The PUC reviewed academic programs to be offered based upon the awarded license. In addition to approving the curriculum, the PUC also approved the selection of the affiliate, reviews the institution catalog, faculty, and their credentials as well as faculty and student handbooks.

Banking on the Holding Group's considerable experiences in the educational market in Kuwait, along with the countryman's preference for American model education, the vision of KCC was designed to specifically respond to the master plan strategic initiatives of the State of Kuwait:

1. Become a knowledge-driven economy through its general education curriculum and degree programs
2. Promote scientific disciplines by offering Associate in Science degree programs
3. Increase private sector readiness and employment through internships, career services, and counseling and volunteerism
4. Improve labor productivity by offering a comprehensive career services program
5. Enhance international academic linkages by providing opportunities for students and faculty to engage in international partnership like study abroad and faculty exchanges

Elements That Would Contribute Towards Success

There are several elements that were believed by the Holding Group that were essential to the future success of opening Kuwait Community College.

Mission. The Kuwait Community College mission highlighted elements similar to the American Community College model, in specific to create a learning community that offers academic and experiential programs to equip students with the knowledge and the skills required for successful transfer to a senior institution or transition to the workforce and offered lifelong learning opportunities. These are elements that were believed to be wanted by Kuwait students.

Branding. The success of the venture was predicated on establishing a brand name and an identity in the market amidst the significant competition of newly licensed institutions, the addition of another public University, and the possible

expansion of the Public Authority of Applied Education and Training Institute. By the time that KCC would begin operations, it would compete with five operational associate degree/diploma granting private institutions: Boxhill College, Australian College of Kuwait, American College of the Middle East, Kuwait Technical College, and Algonquin College of Kuwait, all of which are licensed to offer similar degree programs: Business, Technology, and the Arts and Sciences. The strategy for setting Kuwait Community College apart from these other institutions includes distinctive programs and services based upon Community Colleges best practices. In particular, KCC would implement promising practices as defined by the United States Center for Community College Student Engagement for Promoting Community College Student Success (CSCC 2017).

Branding is intended to evoke a sense of identity and affiliation with the community, a distinguishing factor that sets the institution apart from others. Branding was thought to be critical strategy that would positively impact Kuwait Community College's strategic enrollment management plan. The branding design reflected Kuwait's history and opportunities. KCC used the Sadu pattern and progressive shades of red in its images and primary colors. These three shades are symbolic of the following: honoring the past as reflected by the darker shade of red, denoting the historical significance of the red in the Kuwait flag and Red Fort, a symbol of the war of 1920 as well as the Arabic heritage; a transitional lighter shade of red symbolizing education in the present, and in preparation for a brighter future, the lightest shade of red is denoted on the logo.

Location. A critical factor to the planning of private institutions is the assigned location for the campus. The Ministry of Higher Education assigns land locations for all private institutions. Kuwait Community College was allocated land in Al Jahra, 20 miles west of Kuwait city on land adjacent to Algonquin College of Kuwait. With Algonquin being operational for 4–5 years before the start of KCC's operations, in that both institutions offered similar academic programs, KCC had to demonstrate the competitive advantage of the American model environment and curriculum versus the Canadian model of education. The location would play a key role in the design of the campus and the branding of the institution. The city of Al Jahra played a significant role in the history of Kuwait as it was the sight of the 1920 battle between Kuwait and Saudi. The reputation today is likened to that of a suppressed inner city. In order to encourage and restore pride, it was important that the campus design and institutional images that reflected the history and culture of Kuwait as well as give a sense of a promising future. KCC's philosophy intentionally sought ways to engage the community in the life of the campus.

Institutional Design. The institutional design of Kuwait Community College combined the concepts of traditional Kuwaiti homes, often built in a rectangular manner with an internal courtyard with the American concept of the quad campus design. The institutional design was created to support flexible learning strategies as well as engage students in intentional learning and developmental opportunities through extra and co-curricular activities. The buildings were also designed to protect the inhabitants from the extreme climate conditions. The campus design featured two academic buildings housing all academic programs, general learning,

and study spaces and faculty offices; a Student Commons with dining facilities, bookstore student services and support departments, the library, student life and recreational spaces. The Fitness and Wellness building would be where the gymnasium, fitness center, and health clinic are located. Outdoor facilities include an amphitheater, soccer pitch, and green spaces. The Administration building located at the campus entry would house the Admissions and Scholarship departments, and all administrative offices including the Office of the President and the Board of Trustees. The building would also feature an auditorium to engage the local community in cultural activities.

Remedial Programming. KCC was to highlight a defined remedial and support program. It is well known in Kuwait institutions that over 90% of students in postsecondary institutions begin in English as a second language programs or remedial college level courses, English and/or Math. KCC's strategy was to market a more refined and successful remediation program. That program would begin during the enrollment phase and accurate assessment and placement would be critical to student success. After matriculation, ensuring students would be registered in the developmental programs during their first term to ensure that they would have the requisite foundation needed for success in the college-level courses. The College Readiness Program consisted of four levels of English for Academic Purposes and two levels of developmental English and Math. All students would be required to register for the College Success Skills course and a computer literacy course unless the equivalent transfer credit was awarded. Accelerated or Fast Track developmental programs offered the alternative to the traditional 16 week, three levels for one topic course. English as second language as well as remedial English and Math were to be offered in the Emporium style learning communities with early warning initiatives and tutoring and supplemental instruction support to ensure that students were ready for the rigors of the undergraduate program. In an effort to positively impact the country's master plan initiative for preparing the workforce, experiential learning strategies such as internships, community-based projects, and co-op experiences would be implored as part of the curriculum. Table 1 lists the programs that were planned to be offered:

Faculty Recruitment. In addition to the requirements defined by the Ministry of Higher Education for private postsecondary institutions, the success of KCC also depended on the recruitment of talented faculty and staff in an environment where not only postsecondary institutions are competing for students but also for talented faculty. The intent was to have a combination of US faculty as well as local hires. The competition for talented faculty extends beyond Kuwait as regionally remuneration packages and lifestyle play a critical role when faculty are considering career options. Kuwait is a more conservative Muslim country where alcohol and parties are banned by law and foreigners cannot own property or businesses. A few opportunities for a cultural experience abound. Other countries such as United Arab Emirates offer a more entertaining and cultural Western-like lifestyle considered to be more attractive for faculty and administrators seeking an expatriate career. As such, securing faculty has proven to be a difficult process.

Table 1 Kuwait community college programs

AA programs	AS and subset certificate programs
Business: Accounting, Finance, International business, Marketing	Accounting technology: Accounting Technology Operations
International relations	Computer science/systems: Information tech support
Computer science	Computer and network security: Cyber security tech
English	Environmental science technology
Graphic design	Engineering technology: Alternative energy specialty
PR and organization communication	Marketing management: Marketing operations: Supply chain management operations; Digital media/ Multimedia technology; Digital media web production; Graphic design: Web development specialist
Mass communication	Technology support specialist: Support technician; Help desk specialist
	Networking systems
	Sports fitness and recreation management

Affiliation. As all private institutions are required to secure a Ministry of Higher Education approved affiliate to ensure institutional quality and serves as a mentor to the institution. KCC secured an affiliation that was designed to afford a competitive advantage. To this end, KCC established an affiliation agreement with Broward College (Florida, USA) in 2015. Broward is accredited by the US regional accrediting body, Commission on Colleges of the Southern Association of Schools and Colleges (SACS). KCC is not a branch campus, and as such does not automatically gain the SACS status of regional accreditation. However, KCC proposed to implement programs and services based upon the SACS standards of accreditation with intention of applying for regional accreditation in the future. As an affiliate, KCC would have privilege to varying kinds of support from Broward such as an assigned coordinator to serve as a liaison between colleges and who would oversee all the requisite reporting requirements as defined by the Private Universities Council (PUC). KCC would utilize Broward's catalog, recruit from their faculty and senior administrators, and gain support for other collegiate related issues. For the affiliation, Kuwait Community College would pay a nominal fee to Broward College annually as part of the agreement. To date, Broward College has provided consultancy, recommendations, and support on academic program development, academic lab design, position descriptions, organizational structure, information technology, space planning, and branding. KCC is implementing the Broward catalog.

Broward college administration did not have a role in planning KCC. They served as a resource only. Broward did share policies and procedures with the intent that I, in my capacity as director, would then modify those for KCC. For example, they gave me ideas about designing the KCC science labs and ESL program elements and what I would need to consider in developing a similar science lab and ESL program for KCC. Moreover, Broward did not have a final say on what was created programatically or curricular based. The finalized program design was my adaptation that would best serve KCC students. While I planned for articulation agreements with the

senior institutions in Kuwait, especially the American model ones, the finalization of those agreements encountered difficulty in implementation. Kuwait does not have dual enrollment or credit in escrow essential for a transfer type of an arrangement. The focus in the high schools is on the IB and AP courses and thus the articulation agreement planning was not a primary focus in the development of KCC.

Current Status of Kuwait Community College

Although the plan to establish the Kuwait Community College would fill a post-secondary educational gap, there were risk factors associated with the project. Founded by an investment group that had significant primary and secondary experiences in Kuwait, the Community College was their first attempt at postsecondary education. The projected investment was KD 27 million (approximately 90 million dollars), which is considered to be a significant financial investment. Potential investors were sought to ensure the availability of funds so as to minimize project delays even at the risk of changing the institution's mission. During late spring of 2016, the original Holding Group sold a majority share of the Kuwait Community College project to another Group. Since that time, all plans for the project have been put on hold, including a delay in the construction of the campus. Originally licensed with a goal to open its doors in Fall of 2017, providing access to and serving 2,500 students in need of remediation, language skills development, transfer preparation, career training, and lifelong learning opportunities as it also engages the surrounding community, plans are unclear as to whether its mission will remain the same or change under the new leadership. There has been no publicized schedule or plan update. No other applications to open an American model Community College have been received by the Private University Council.

It is now the responsibility of the new majority of the Holding Group to choose to continue or not, the Kuwait Community College project. There is no public information on how, or if, the project will continue as a community college or if the mission will change to that of serving as a bachelor degree granting institution.

Concluding Notes

Passion for the Community College is not enough for an institution to rise from the dust. Firsthand knowledge of the benefits that Community College experiences afford students and the local community is also not enough for an institution to rise from the dust. The American model Community College is a new paradigm in an environment where it is believed that the bachelor's degree is the prize undergraduate degree. The success of the Kuwait Community College project, and any development of a new institutional model, particularly one that involves a paradigm shift from the norm, is contingent upon a clear understanding of and a sustained commitment to the mission by those involved. All variables impacting the rise of the college, from addressing governmental regulations, securing finances, land

allocation, to evidencing demonstrable need and development of institutional infrastructure can be in place, yet if the ownership does not have the fundamental belief in the value of the mission, what has risen will certainly fall. As for the rise of Kuwait Community College, there is no public information on the status of the project. There has been no physical evidence at the land allocation site that supports the notion of progression. There is still a need in Kuwait to provide affordable, accessible academic and career readiness preparation for a significant portion of the population.

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Educational Reform Through Sponsored Projects in Curacao: Government-Sponsored Technical and Career Institutions, Postsecondary Education, and the Challenges of Workforce Development

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Rosita Tormala-Nita

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Abstract

Curacao and the Netherlands have a long history of sponsored projects and development funds to sustain the aftermath of continuous development, whether it is political, educational, social, or economic. This chapter examines educational reform through sponsored projects as the practical solution to workforce development, including the theoretical framework of sponsored projects as the vehicle that can strategically use the matching theory to transform a nation's educational system and economy. Findings suggest that the challenges of a workforce development funding opportunities are yet to be defined into sustainable projects by postsecondary vocational and higher education institutions. The chapter conceptualizes the current workforce development into a three-layers model. The first

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layer of workforce development is the basic model of highly vocational post-secondary institutions with strong apprenticeships and internships components. The second layer is a work/learn institution model not only for the immediate workforce development for the various industries, but with access to a specific career path into program of studies at the university level of importance to national development. The third layer is a more progressive curriculum within one institution with programs at the postsecondary vocational level and the higher education level. In thinking about what sponsored projects already accomplished for these institutions, the next level of reform should identify occupations not offered, and of those offered, an evaluation as to which should be at the certificate and/or the apprenticeship level, and which should be upgraded to the associate degree level curriculum with courses transferable into higher education as its global counterparts.

Keywords

Educational reform · Sponsored projects · Dutch development funds · Curacao Technical & Career Institutions · Workforce development · Matching

Introduction

Developing a new nation requires funding opportunities to strategically reform educational institutions and the economy simultaneously to impact job creation and stimulate a new generation of career and technical occupations. In this light, one must ask what sponsored projects are and how it could be used as a strategic tool to impact the workforce development of an island in transition. This chapter examines the framework of sponsored projects as the vehicle to transform Technical and Career Institutions into global counterparts of community college model (See models by Raby 2009, 3–15). In thinking about what sponsored projects have already accomplished for these institutions, the next level of reform should identify occupations not offered, and of those offered, an evaluation as to which should be at the certificate and/or the apprenticeship level, and which should be upgraded to the associate degree level curriculum with courses transferable into higher education. Strategic plans by each institution are necessary to plan the next level of funding opportunities to intentionally create new spaces for learning and transform the framework and curriculum of occupations especially at the associate degree level into including courses that would be recognized as tertiary as its global counterparts.

Historically in Curacao, educational reformers, academia, educators, politicians, the association of businesses, and labor unions have supported separate and stronger schools for the vocationally oriented students. Given this “unopposed” historical separation founded in the abandoned Mammoth Act of 1968, such context becomes meaningful by the thinking that in isolating vocational education as an educational experiment created innovative opportunities for continuous educational reform and sponsored projects through development funds (see Alders et al. 2015; USONA 2012; Van Dijk and Roggeveen 2007; Verton et al. 2007; Business and Government

Strategies International 2007). This thinking is evidenced in the projects funded for decades as a result of the political economic history of the island, the model educational institutions designed with a vocational purpose but limited in the required infrastructure, learning spaces, and resources to match the goals of preparing the cadre in an economy producing 1000–3000 new jobs a year (Central Bureau of Statistics 2015) as indicated in the data reported in the national development plan (Government of Curacao and UNDP 2015, 41). In this sense, education policy and reform have been both a moral and political tool for political parties seeking to gain and maintain power. At the brink of every political election, education is promoted as key to continuous national prosperity. The politically appointed minister of education becomes the educational reformer for the period of performance of 4 years or less. Technical and Career Institutions, especially postsecondary, and the economy are targeted as important components of everyone’s political agenda. This chapter starts by reconstructing the political economy of workforce development. This history sets the stage for the current framework authorizing funding for sponsored projects to stimulate the model workforce development in postsecondary institutions. Then, the gap in the matching theory in the design of funding opportunities for higher education and postsecondary institutions is discussed. The chapter concludes by recommending the transformed roles of higher education and postsecondary vocational institutions working together in designing the next level of funding opportunities.

Political Economy of Workforce Development and Education

The political economic history of the island is an important component in understanding development funds. It is fair to describe the social, political, and economic development of the postcolonial island of Curacao by its sustainable progress in becoming a stronger autonomous nation within the Kingdom of the Netherlands. Curacao and the Netherlands have a long history of sponsored projects and development funds to sustain the aftermath of continuous development, whether it is social, political, educational, or economic. The major pillars of Curacao economic development remain the oil refinery, the financial sector, commerce, the transshipment industry, and the hotel and tourism industry. In addition, all these industries must be supported by cadres of highly qualified technology-driven vocational preparation to support future development (Government of Curacao and UNDP 2015, 42; UNDP 2016).

At 100 years of development, new ownerships are in transition within the major pillars of the economy (Curacao Chronicle 2016). Training new workers and professionals for these new foreign investments places urgency on politicians and the system of education. Nevertheless, thinking back on the years of development is foundational to the educational policies and practices addressed in this chapter. Essential here is the review of the history of producing the local workmen and women and the dramatic developments that led to the current economy. In this history, foreign and European workers and professionals were brought in to assist

at the expense of the locals. The foreign investments created their own company schools and brought in their own faculty to prepare workers. It was not until after the labor disturbances of 1969 that education beyond elementary school became relevant to national development. In this process of educational policy development, advancing the ideology of trade schools became the political economic agenda in 1968 with the introduction of the Mammoth Act. The role of trade schools in training for jobs became the ideal for politicians seeking reelection. The work of two authors, a clergyman and a journalist/writer, both political activists of similar interests but of opposite walks of life, were identified to construct an overview of the economic, social, and political framework of the island. Dr. Fr. Amado Römer, a clergyman and a social economic reformer, described the political and economic development of Curacao from 1900 to 1970 within the context of the oil refinery (1915–1985) that at that time converted many in this small and poor population of 30,000 into laborers, thereby initiating the process of gradually eliminating small businesses and artisans from the market, and replacing the entrepreneurial spirit of the people with the desire to become workers. During this time, interests in agriculture and self-sufficiency were abandoned (Römer 1997, 7). Locally-owned small businesses were sold to wealthy immigrants who practically took over commerce and the Curacao population became internationalized and its population of 30,000 quadrupled by generations of new immigrants. Forty percent of the current population is noted as being descendants of immigrants (Central Bureau of Statistics). Currently, the proposed foreign investment in the oil refinery suggests a new layer of Chinese immigrants to the island composition (Curacao Chronicle 2016).

In the decade of the 1950s, the oil refinery company (European) as the major pillar of the economy indirectly inspired natives that could write to express their discontent about the injustices. One such native was Amador Paulo Nita, who used his writings to advocate for the right to equal treatment by law for all citizens of the Kingdom of the Netherlands regardless of birthplace location within the kingdom. As a lower-class islander, Nita coined the work, income, and living conditions in the island communities as “modern slavery” (Nita 1954, 2). In the 1960s, discontent and disequilibrium continued to progress. The economy did not enrich the people’s wages and benefits, and living conditions were segregated and below subsistence in comparison to European workers, no matter how hard one worked to make it. Labor abuses were a common aspect of work conditions, and even the unions were not effective in addressing the injustices. To the misfortune of everyone, labor protests escalated into strikes and disturbances that led to the political demand by Nita on the radio for the resignation of the government in power (Römer 1997, 143). The civil unrest of 1969 became known as the “30 di Mei (May),” which led to a new workers’ political party and a democratic election that elected into Parliament and the Prime Minister Cabinet members of a new class of politicians. A new agenda for education, labor, and economic development was established based on the negotiated government action plan *Akkoord van Kralendijk* (Amigoe 1969) (memorandum of understanding between political parties) and at the center of these negotiations Nita was appointed the Minister of Labor and Social Affairs for the Netherlands Antilles (Vrije Stem 1970). His greatest contribution to the new government of the

1969/70 was his petition to the Dutch Majesty for 500 million Dutch guilders in development funds to assist the islands with their social-economic development (Amigoe 1970a). The need to educate workers in the means of economic development and progress became as essential as the laws to protect their rights to subsistence. The Amigoe newspaper named Nita the “Minister of the People” at his passing (Amigoe 1970b). As noted by Römer (1997), the Netherlands disclosed millions in development funds to rebuild the nation (148). For the next generations, social formation of the Dutch Caribbean nation’s identity was targeted as a priority for the islands (Marcha and Verweel 2000).

In 2011, the Curacao historian, Paula (2011, 263–264) reflected back on the time and concluded that the political and educational leadership did indeed lead to a new government, promoted education, social formation of union leaders, and allocated funding to help transition Curacao to a new era of social renovation. Central to the development of the Curacao worker was the role of vocational education for training and the island’s native Papiamentu language within schools to develop the future workforce, wages, terms, and conditions of employment as delineated in the *Akkoord van Kralendijk* of 1969 (Amigoe 1969).

In years ahead, the political economy of education was clearly distinguished by the local political party promotion of its educational policy culture. At the brink of every election, the politically appointed minister of education becomes the educational reformer. The practice of adopted policies (See Steiner-Khamsi 2004) was institutionalized with the Mammoth Act of 1968 to industrialize secondary schools, which later on was deemed a failure in an economy during a time period when unemployment and the lack of qualified technical career teachers highly correlated. Nevertheless, the educational/economic reformer, Rozendal, continued to promote the mammoth experiment as an improvement to the economics of education and a way to address the needs of the community. The promises of more types of vocational, technical, and adult education supported the thinking that future labor issues would be addressed (Amigoe 1967, 1975). Economic development through trade schools for tourism, commerce, oil refinery workers, transshipment workers, construction, banking, and health services began and remained on the development funds political agenda for another decade. In the 1980s, the realization finally came that essential to the success of trade schools was the training of a new cadre of teachers (Amigoe 1982a). Development funds were requested by the educational reformer Lourens to acquire the technical expertise of D.A. Oddens from the Netherlands whose motto for workforce development was “We are not interested in educating people for unemployment” (Leeuwarder Courant 1981). The teacher union (SITEK) called this “misusing development funds for unnecessary evaluative studies of a need that was already known” (Amigoe 1982b). Regardless, as an educational leader, Oddens’ national goal for an employable workforce for the Netherlands and Curacao made him the right expert to educate teachers to become excellent at teaching the vocational-oriented.

The end of 1990s forward had several educational reformers. In the decades of 2000 and 2010, educational reformers Dijkhoff, Jackson, De Jong-Elhage, Alcalá-Wallé, and Leeftang engaged fully in educational innovations (Departement van

Onderwijs Nederlandse Antillen 2001). Sponsored projects and funding opportunities were organized into the independent foundations SONA *Stichting Ontwikkeling Nederlandse Antillen* and USONA *Uitvoeringorganisatie Stichting Ontwikkeling Nederlandse Antillen* as the sponsoring authorities of development funds (USONA and Berenschot). The elementary school system was reformed into a multiage school system (Foundation-Based Education), the Papiamentu language was promoted as the language of instruction, and by law the languages of Papiamentu, Dutch, and English became a choice of official languages of instruction in schools (Dijkhoff et al. 2007). The vocational education system at the secondary level was reorganized into *Voorbereidend Secundair Beroepsonderwijs* VSBO and *Secundair Beroepsonderwijs* SBO at the postsecondary vocational level (Ministerie OWCS/OW/UOW 2012), and the teacher training college was upgraded and became an academic department of the public university. In 2010, Curacao gained its autonomous status within the Kingdom of the Netherlands and the first educational reformer under this new status was Minister Rosalia and between 2014 and 2016, Irene Dick, an advocate of vocational education innovation served as the Minister of Education. Currently, it is unclear who the next political party educational reformer would be. Overall, changes in institutional orientation were several: Curacao's first public university began as a government-sponsored law school, and today this institution offers program of studies in law, engineering, general arts (education and language), social and behavioral sciences, business, and a music department. In 2008, the island's global counterpart in social work integrated into the university and became the Department of Social and Behavioral Sciences offering bachelor and the master program in social work. In 2009, the Curacao Institute for Social and Economic Studies *CURISES*, the continuing education outreach department of the public university, separated from the public university to transform into a private institution, Inter-Continental University of the Caribbean, to offer programs in public governance, education management, accounting & control, hospitality & tourism, and management & leadership. In 2011, when Curacao became autonomous within the Kingdom of the Netherlands, the public university was renamed University of Curacao. In 2016, a research office was launched to officially manage awarded projects. These changes in institutional orientation (Raby 2009, 27) although they expanded the program offerings of the public university, the impact of these changes on the postsecondary institutions (SBO programs) remains essential to workforce development efforts.

Defining the Gap in Matching Theory in Designing Funding Opportunities

The political agenda of development funds was to strategically assist the island in its transition into a new nation within the Kingdom of the Netherlands by organizing funding opportunities (See Fig. 1). Development funds were placed under the authority of the independent foundation SONA to account for all European development funds for a reported total of €141.9 million euro in funding opportunities to

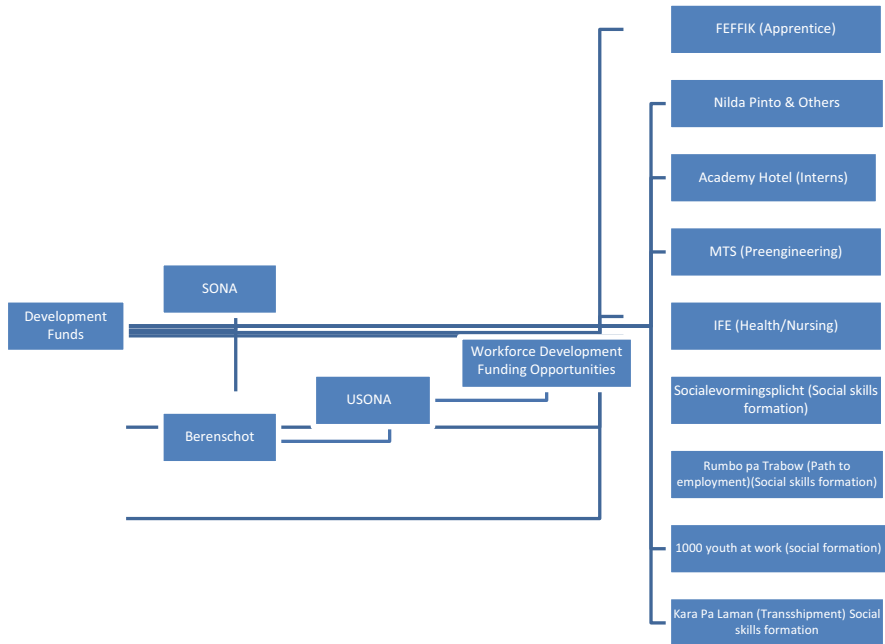


Fig. 1 Theoretical framework: workforce development funding opportunities

support institutional strengthening and administrative effectiveness; education and youth; national security; and social economic initiatives (Alders et al. 2015, 2). The administration of submitted proposals for funding was organized under the separate entity through the Dutch consulting group Berenschot Group BV, authorized foundation *USONA*, to function as an independent agency managing an annual budget of awarded sponsored projects (USONA 2012, 2013). The purpose was to enable the stewardship process to be aggressively “anti-bureaucratic, de-politicized and with limited involvement of Dutch and Antillean politicians” (Alders et al. 2015; USONA 2013; Van Dijk and Roggeveen 2007; Verton et al. 2007; BGSi 2007). Funding from the Netherlands for sponsored research and projects has had the successful purpose of awarding grants to support development funds projects in exchange for expertise, new knowledge, and understanding of the issues and challenges. Critical to this process are the final evaluations of sponsored projects completed by Dutch European expertise. Researchers such as Baez and Boyles (2009) inspired by the work of Dewey would classify this type of funding mechanism as “science as the savior” (67) or as configured by this chapter, although in a much broader context, the proposition of funded projects as the savior of educational reform.

The theoretical framework in this chapter discusses the impact question of funding opportunities by examining educational reform through sponsored projects as the practical solution to workforce development challenges. The interpretative scheme in Fig. 1 illustrates the critical roles of the independent entities responsible

for the administration of developments funds. Challenges of workforce development funding opportunities must be redefined with an eligibility clause as key component in channeling funds to specific institutions. By definition, funding opportunities should be public announcement of the intention to award through a competition for funds based on eligibility (See US government guidelines on funding opportunities standards as a model example). The intention to award would be addressed through matching theory. Educational reform through sponsored projects requires also the reciprocal use of matching theory to develop specific funding opportunities to impact workforce development. The thinking supporting this chapter is that of funding as a strategic tool allows nations to innovate continuously as economic growth is valued.

As projected in Fig. 1, the current framework indirectly targeted workforce development challenges. The period of 2000–2016 represents 15 years of attempts to find practical solutions to training from unemployment. Postsecondary vocational institutions were restructured to prepare four types of workers and professionals for the various industries, including the oil refinery, transshipments, hotel and tourism, commerce, government, business and financial market, the health career professionals, and the construction of a new hospital. Critical to these initiatives was the urgent problem of dropouts (Central Bureau of Statistics; Dare 2015) and the unemployed youth by targeting reform through the mandated compulsory education law and social formation through skills training program *Sociale Vormingsplicht (SVP)*, including the good intended but failed experiment *Ku Kara Pa Laman* to retrain for social and technical skills. Other sponsored projects such as *Rumbo Pa Trabou* (Path to work) and *1000 Youth at Work* targeted and readied the unemployed for work and/or to return them to postsecondary (SBO technical and careers institutions) for training (See Alders et al. 2015, 94 and for the list of sponsored projects). The ultimate purpose of these sponsored projects is for workforce development, but the argument of this chapter is that the process needs to be strengthened by designing a new generation of funding opportunities embedded with the matching theory (Niederle et al. 2007, for definition and analysis of the two-sided and one-sided matching markets, models, and the argument for a centralized stable match). This framework illustrates the current organization of legal authorities in charge of monitoring the stewardship of development funds and the workforce development funding opportunities proposed by this chapter in need of strategic reform.

Within our global political economy, in which every country (developed or in development) has a problem to solve, identifying (creating) problems is usually what politicians and reformers do well through educational systems as in the case of Curacao. In the world of funding, solving problems through sponsored projects has been adopted by academia, nonprofits, and for-profit entities in exchange for funding. In fact, engaged institutions that can successfully match projects to funding opportunities are rewarded for these collaborations. Lloyd Shapley and Alvin Roth won the 2012 Nobel Prize in economics for the matching theory and the consistent efforts for decades to finding practical solutions to problems (The Nobel Foundation 2012; See also Mortensen, Pissarides, Diamond 2010 Nobel Prize Winners on search/matching theory). The objective of funding as intervention is in finding

Table 1 Impact and sustainability sponsored projects: 2002–2014

Sponsored project	Impact	Sustainability
SBO labor market (work/learn models)	Not succeeded	Insufficient funding
Sustainable social formation projects	Partially succeeded	Sufficient funding
Rumbo pa Trabou (pathway to work projects)	Almost fully succeeded	Insufficient funding

Source: Alders et al. 2015

sustainable solutions, practical or theoretical, to problems. Perhaps the work of Jackson (2013) on the matching theory as having all sorts of hybrid theoretical problems derived from applications suggests that matching theory not necessarily guarantees that the funders or the recipients would reach goals. Rather, project outcomes serve as the determinant evidence to plan strategies to understand and take future actions. Three sponsored projects shown in Table 1 provide for such example of outcome based on impact and sustainability in which educational reform through sponsored projects did not succeed. This suggests the need to define the gap in matching theory within funding opportunities by the education and work development institutions and the business community.

A project to stimulate corporate engagement and institutional collaboration as essential to innovate Technical and Career Institutions into a solution incubator for workforce development was the *Kenniscentrum Bedrijfsonderwijs Bedrijfsleven* (KBB). Among the awarded projects obligated to KBB was to render certified mentors to guide interns at job sites; a concept supporting the work/learn model of the institutions. Despite the KBB efforts, and as noted in Table 1, the SBO labor market sponsored project did not succeed to impact workforce development. As the island moves further in its development, the model SONA-USONA-Sponsored Institutions-External evaluation suggests that each institution, organization, and/or corporation on the island should continue to organize for collaborative sponsored projects. Key in any model is the budget for each project. A thorough evaluation of budgets for older/closed projects is necessary to understand the issue of insufficient funding. This is essential because not meeting the approved budget may jeopardize the credibility of the SONA/USONA model.

Models of Workforce Development

Dutch curriculum theorists Wardekker et al. (2003) would categorize the fundamental distinction by type of these industry-oriented vocational training programs as the most important characteristic of the Dutch school model (p. 481). The programs of studies in these Dutch Caribbean institutions are designed with four qualification level: SBO1 (assistant), SBO2 (professional), SBO3 (skilled worker), and SBO4 (mid-level manager). In this chapter, the study of the Technical and Career Institutions was concerned primarily with categorizing these institutions into a three-layer model of workforce development to design rules and procedures to better understand the challenges and operation of these institutions. The first layer of work/learn

models the highly vocational postsecondary institutions (SBO1, SBO2) offering mostly apprentice and internship training qualification level. The second layer of the work/learn model institutions that not only prepare for the apprentice vocations (SBO1, SBO2, SBO3) but offer a few programs of studies with the SBO4 qualification level. In these institutions, the SBO4 qualifies for acceptance into higher education. It is important to note that SBO4 courses are not transferrable; it only provides the qualification for entrance into institutions designated as higher education institutions. The third layer model institutions such as the nursing school that offer program of studies at all qualification levels, at the higher education level, the bachelor degree, and some post-bachelor.

First Layer of Workforce Development: Apprenticeship Institution

The first model of a highly vocational postsecondary institution is FEFFIK *Fundashon pa Edukashon i Formashon di Fishi* (See <http://feffik.cw>). FEFFIK was founded in 1980 through the collaboration of the government, labor union, and business association to create careers at the certificate levels to prepare students in professions needed for the labor market. This work/learn institution has strong apprentice and internship program of studies. Although many more occupations are needed for the island, FEFFIK only prepares electricians, construction, automotive, textile, and beauty workers. This postsecondary institution has remained a highly vocational-technical institution for apprenticeship resembling the twentieth century practice of preparing students for work. Education is not free for students, although a proposal is in the works for free tuition. Programs prepare 16–24 years of age for apprenticeship careers. Program offerings are for 2 years maximum and mostly at the SBO qualification 1 and 2 certification level (basic qualification level for entry level jobs). The problem of FEFFIK, articulated by Willem (2014) from the Association of Contactors, is that of a mismatch of FEFFIK's curriculum and the labor market, noticeable especially among construction and ironworkers. The critique is that of an employability problem but also failure to have more opportunity for people to pursue a career of their choice.

A strategic plan is needed to thoroughly evaluate FEFFIK and to determine what would be required to transform the institution. At first glance, the FEFFIK curriculum offers limited range of courses leading to 1–2 year studies at the certificate level, resembling a junior college, but without transferable courses. For instance, program of studies include fashion retailing (SBO1, SBO2, SBO3), cosmetology (SBO1, SBO2), woodworking, welding, electrical construction (SBO1, SBO2), automotive maintenance and repair (SBO1, SBO2), nautical (SBO2, SBO3), metal and processing, mechanical engineering technicians (SBO1, SBO2), and construction (SBO1, SBO2). Adopting other occupations leading to boilermakers, carpenters, construction and building inspectors, construction equipment operators, construction laborers and helpers, drywall and ceiling, tile installers, tapers, electricians, elevator installers and repairers, flooring installers and tile marble setters, glaziers, hazardous materials removal workers, ironworkers, masonry workers, painters, construction

and maintenance, plumbers, pipefitters, and steamfitters, roofers, sheet metal workers, and solar PV installers would offer more opportunities. Changing the maximum age requirement of those who could attend is also needed; currently the limit is set at 16–24. The institution’s relevancy to the community must be assessed from differing angles. FEFFIK needs to strategically organize for sponsored projects to research funding sources for capital campaign, new program offerings, policy issues, program expansion, teacher training, and other areas of development that would transform the institution into global counterparts of a community college. FEFFIK should become an institution that is ready to train and educate more students. The first step in policy development requires that FEFFIK become an institution that can assess what is working and what is not for the purpose of understanding the nature of the workforce development problem. In addition, the business community has to step up and support FEFFIK through appropriate levels of funding to be part of the solution. New ideas and jobs require defining what people do and what companies need and FEFFIK has to be ready for the new economy. Using the matching theory in planning for the next level of funding opportunities is necessary. A taskforce with a broad institutional representation, policy decision leaders, credible spoke persons, and those individuals in charge of enforcing change is required to educate and engage the next generation of apprentices.

Specialized First Layer of Workforce Development: The Academy Hotel

A strong component of the first layer is the internship program at the Academy Hotel. Throughout the history of funding, the hotel and tourism industry has been a major pillar of the economy and probably one of the first to create a clear career path between educational institutions and the labor market. The design of an institutional hotel resembling all the details of the island historic culture and where students from all the institutions, including colleges and universities, can intern is simply phenomenal. The Academy Hotel was established in 2008 as a work/learn institution with the capacity to train students. The hotel and tourism industry made the academy a sustainable innovation with a strong collaborative component (BGSJ 2007, 14–15). Students are employees in all departments of the academy. The academy prepares students and others from the island, including the Netherlands. Internship is structured to teach and provide competencies to the intern through real work experience. The apprentice, depending on the position, is required to maintain and manage rooms and the restaurant of the hotel as an employee. In this setting, the clients are real customers, mostly tourists. Funding opportunities are intentionally designed to target workforce development needs of the hotel and tourism (See <http://curacaochronicle.com/local/prime-minister-ivar-asjes-visits-the-academy-hotel/>). Figure 2 illustrates the added sponsored projects through subawards or contracts with the business community. This model illustrates the innovative aspects of institutional practices adapted to the cultural context of the country and its education needs. For example, housekeeping

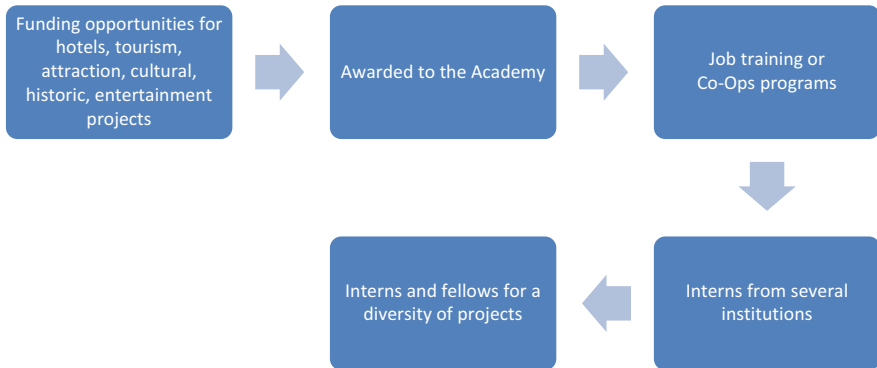


Fig. 2 Subaward or contract model

is an important component to hotel and tourism industry. Traditionally, housekeeping jobs were filled by immigrants: teaching the art of cleaning to natives who lack any sort of certification for employment became a policy issue the government saw to address. Sponsored project represents collaboration in the form of a subaward or contract between the academy, the government, and the industry to train those without credentials for jobs in the hospitality industry.

The workforce development design of the academy provides the job training needed. Another important aspect of running a hotel is the maintenance. For such purpose, the academy signed a memorandum of understanding with FEFFIK for maintenance student interns (See list of projects among institutions at <http://www.eso-cur.com/academy-hotel-i-feffik-huntu-pa-turismo/>). All these projects suggest an academy with a strategic plan, including a sponsored project staff on board that continuously seeks funding opportunities on behalf of the academy, therefore, allowing projects to be awarded by several funders. A renewed strategic plan would assist in determining what the next level of innovation for the Academy Hotel should be when the matching theory is applied.

Second Layer of Workforce Development: Multidisciplinary Careers

The second layer of workforce development includes those institutions offering programs in secretarial, administrative, hospitality and restaurant management, commercial, retailing, legal assistant, agriculture, and other areas in support of the business community. Currently, this layer consists of institutions offering first layer programs (SBO1, SBO2, SBO3) and a few SBO4 qualification level programs that would qualify students for access to higher education institutions. Institutions that model such coursework are Nilda Pinto SBO, a public institution offering SBO1, SBO2, SBO3 programs in bookkeeping, secretarial, commerce, retail, sales and the SBO4 in entrepreneurial, management, and facility management. Nonpublic government-sponsored Catholic institutions offer additional careers Fr. Aurelio SBO, which offers programs with SBO2 and SBO3 qualification level in secretarial and

administration and the SBO4 qualification in commercial banking and insurance, ICT administrator, legal, and financial administration. The Catholic institution, Marris Stella SBO, offers careers in culinary arts and restaurant management at the SBO1, SBO2, SBO3, and the SBO4 in food and beverage supervision. The College of Dutch Caribbean is not sponsored by the government but is a private institution offering programs in SBO3 and SBO4 in tourism management; restaurant management; and various other programs of studies with career path options into higher education. All these institutions contribute to workforce development. The next funding opportunities should advance these multidisciplinary programs and propose new areas of studies of importance to the future economy and economic growth. Policy development requires that these institutions assess for the purpose of understanding the nature of the workforce development challenges. A plan identifying the appropriate levels of funding must be part of the solution. As recommended to the institutions in the first layer, a taskforce with broad institutional representation is required to develop policy recommendations.

Highly Specialized Second Layer of Workforce Development: Pre-Engineering

Engineering is extremely important to national development. A specialized second layer of the work/learn institution model that has enormous potential for not only workforce development but also access for more students into the engineering program at the university level is the Mid-level Technical School (MTS). This model is that of a pre-engineering curriculum for construction, industrial, and electrical technique as programs of studies. MTS is a Catholic institution and offers a career path into higher education. It has a semester system and each year is denoted as a level. There are four levels of competencies, which suggest that students would receive the SBO4 at the end of the fourth year making the path to higher education a possibility. The institution also has a program that enables students to engage in several community service projects. Students learn construction skills within the work/learn model by attending classes in the first year, and in the second and third year a commitment half of the week in school and half in the field with a mentor. Figure 3 illustrates the educational apprentice agreement model, a component of the educational experience especially resembling international cooperative education (co-ops) models. The purpose is to train the student and at the same time provide a service to the company involved. Depending on the work/learn model, the option exists for 60% theoretical learning and 40% practical training or the mostly practical training model of 60% with 40% theoretical learning (Stichting Rooms-Katholieke Centraal Schoolbestuur MTS Jaarverslag 2007, 2008).

Growth as illustrated in the model in Fig. 3 would require forming a taskforce with broad representation of students, faculty, staff, administrators, and policy makers with the purpose of spearheading policy development. It suggests creating more access by building a wider career path into MTS for students from the highly vocational institutions and other public Technical and Career Institutions with

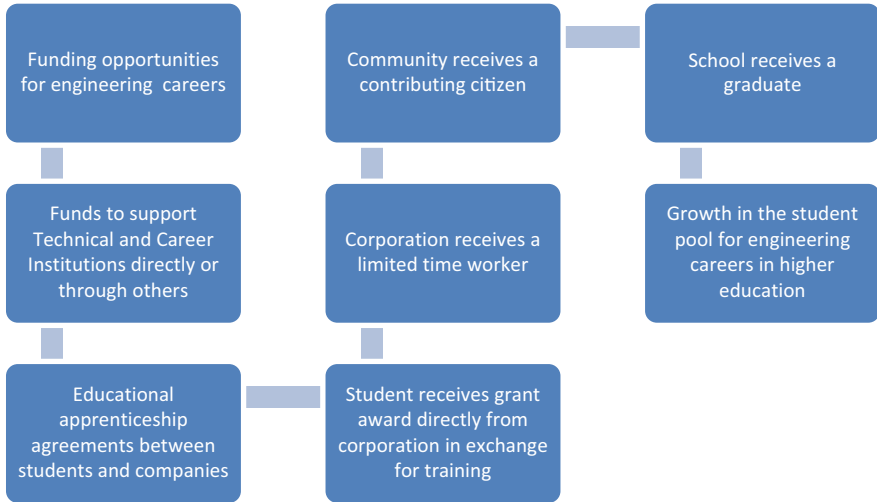


Fig. 3 Student agreement models

interest in the engineering careers. In addition, revamping the MTS curriculum with transferable courses into higher education and upgrading the facilities to resemble modern pre-engineering programs at associate-degree college level seems necessary to educate and engage. The possibility of open access to courses between institutions should be researched and the relevancy will determine the logical match among the needs of institutions.

Engineering programs are extremely important to nations, in particular nations in development. Exposure of students to the profession through educational agreements with the various industries would be extremely important to policy development and recommendation processes. A strategic plan to identify and assess for the next level of funding opportunities is necessary.

Third Layer of Workforce Development: School of Nursing

The nursing *Instituto pa Formashon den Enfermeria* (IFE) school models a more progressive curriculum expanding not only to SBO4 but beyond by offering courses at the higher education level in nursing education. The IFE was established in 1978 (See <https://www.facebook.com/IFECuracao/>). The institution started small and grew into an institution for healthcare workers with programs at SBO qualification levels, pre-bachelor/associate degree level, and bachelor and post-bachelor level, inclusive a brand new campus adjacent to the public university. This institution is the only program providing the educational opportunity to study at the post-secondary vocational and higher education level. It is an example of the global counterpart of a comprehensive model of careers in nursing (See also EP-NUFFIC 2015). Program of studies advertised include surgery assistant (associate degree

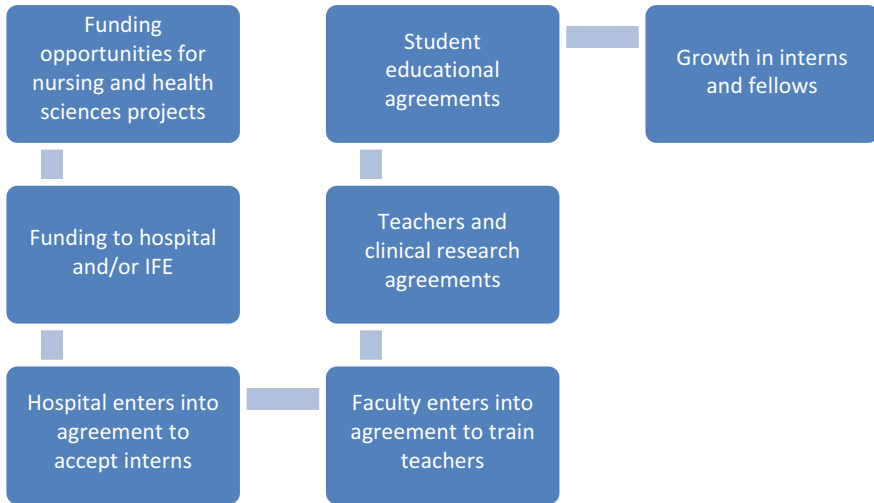


Fig. 4 Educational clinical student model

level, pre-bachelor), general nursing (SBO4, pre-associate), pharmacy assistant (SBO4, pre-associate), physician assistant (SBO4, pre-associate), and nursing assistant (SBO3, SBO2 certificates). Courses at the higher education level include cardiac care/neurological nursing, dialysis nursing, intensive care nursing, pediatric nursing, neonatology nursing, obstetrician and gynecological nursing, and diabetes nursing (IFE 2016). A new national hospital is being built (2019 completion date) with Dutch development funds, which represents an opportunity to continuously innovate the curriculum. Many scenarios could be derived for funding because a new hospital would require new demands in healthcare education and a pipeline for healthcare workers. The new hospital could become a teaching and research hospital for faculty and students at the local and international level. Figure 4 illustrates possible process of seeking and awarding projects. A taskforce with broad representation of students, faculty, staff, administrators at the secondary, postsecondary, and higher education level, including policy makers to spearhead and carry out the required nursing and health sciences project activities and policy development is a necessary strategy. Growth in interns and fellows will require assessing workforce development issues, including behavior, attitudes, and support among students, faculty, staff, administrators, and decision makers on the need for and benefits of the nursing and health sciences professions to a nation in development. A strategic plan would delineate funding opportunities and collaborative projects among institutions offering healthcare education training. Fellows, trainees, and interns should evolve from collaborations with the hospital, medical schools, and other health care institutions.

Together, these three layers of Technical and Career Institutions resemble the global counterpart of a full-fledged Community College (Raby 2009). As separate entities, these institutions offer the apprenticeship model; cooperative education

model; and four levels of qualifications: SBO1 (assistant), SBO2 (professional), SBO3 (skilled worker), and SBO4 (middle manager), the pre-bachelor and bachelor program of studies. Nevertheless, courses at the SBO qualification levels are not currently transferable into higher education (Alders et al. 2015, 92).

Throughout history of workforce development, Curacao politicians and educational reformers widely encouraged vocational training yet funded institutions lacking essential infrastructure, learning spaces, and resources to prepare such cadre. Currently, the adoption in process is that of the Technical and Vocational Education and Training (TVET) model. Globally, the growing mismatch in the supply and demand for skills led to the United Nations Education, Scientific, Cultural Organization (UNESCO) TVET strategy of promoting learning for the world of work (UNESCO). Today, the important role of the media in stimulating the youth by publicizing sponsored projects for political, economic, and social purposes continues, yet such stories of educational progress seems to remain at the apprentice diplomas (SBO1, 2) and certificates (SBO1, 2, 3) level. Although the policy of workforce development targeted areas of economic growth, resources devoted to such indirectly limited the opportunity and upper mobility of those who would want to pursue other options and perhaps higher education. The problem of workforce development was hereby problematized further. Further research must determine how to accomplish goals of workforce development without compromising educational development. In strategically finding solutions to workforce development, addressing occupation shortage, skill mismatch, or qualification issues (World Economic Forum 2014, 7) in all areas would require intentionally planning to explore uncharted occupations, understanding the funding sources, designing the funding opportunities, partnership options with government and industries, stipulating managerial aspects, delineating compliance, and costing every proposal for funding, and terms and conditions in disclosing the outcomes, and requiring a broader representation in taskforces. Nevertheless, the goal of government-sponsored institutions must be one of rejecting any policy that would prepare for unemployment.

Funding Opportunities of Higher Education and Postsecondary Vocational Institutions

Access to funding is extremely important to national development. The evaluation report on developments funds by the Business and Government Strategies International (BGSi 2007, 18) recommended policy for clearer criteria in the process of proposing and awarding sponsored projects. The stronger role of higher education and postsecondary institutions in the world of funding opportunities as eligible and authorized applicants for developments funds is essential to the advancement of knowledge and national development. Eligibility for funding opportunities authorized not only for higher education but also for postsecondary vocational institutions, so they can work together at producing the necessary workforce needed by a new nation in development.

As noted by Salmi (2011), each type of institution has an important role to play in achieving a balanced development (p. 225). Public disclosure, transparency, and open access to funding opportunities require organizing and authorizing higher education and postsecondary vocational institutions as eligible to directly seek and receive funding from the SONA-USONA. Reforming the only public university as the driver of reforms and innovation has been a relatively slow process, but the recent announcement to become a blue economy institution suggests new perspectives and opportunities for education, the economy, and workforce development. Curacao's small-scale-economy has traditionally been blamed for the limited engagement. The tradition has been to think of the institution as a teaching institution and sometimes as a community engagement type of institution, but seldom as a research institution (Tormala-Nita 2003). Nevertheless, a deeper contribution of higher education in general into the system of education remains critical (Government of Curacao and UNDP 2015, 13; Government of Curacao and UNDP 2016).

As the invited speaker at the public higher education *Educational Vision Kick-off*, Minister of Education, Irene Dick encouraged a platform of all universities in Curacao to collaborate on planning the future. Including postsecondary vocational institutions to this platform would be essential to the career path for the vocationally oriented to obtain higher level skills. Efforts to establish university research centers have been initiated and perhaps a sign of increased commitment to be transformed into the community sponsoring institutions on behalf of the government. The role of higher education is critical to the process of guiding this new nation in its funding opportunities and workforce development. So far, the focus has been on teaching those who can reach higher education; however, planning for the needed workforce development of the future remains an urgent matter. Collaborations between faculties of different institutions should be promoted to find sustainable solutions. Currently, a collaborative model combining postsecondary and higher education is offered at private institutions such as the College of Dutch Caribbean and the University of the Dutch Caribbean. Faculty and staff from all higher education institutions in Curacao ought to collaborate, and in some cases with regional, and overseas institutions everywhere on finding solutions to problems of advancing knowledge, providing service, and engaging the higher education community in thinking more options. New guidelines would encourage the public university and private higher education institutions to compete for open access to funding opportunities through the government or directly to SONA/USONA for development funds, or by collaborating with international institutions. Higher education and Technical and Career Institutions must be organized to be accountable for the outcomes of sponsored projects and the goals of funding within appropriate budgets. Funding opportunities must be interpreted as a continuous possibility in the Dutch Kingdom that would require organized efforts of higher education institutions in collaboration with technical and occupational institutions and the local government to plan, propose, be awarded the necessary funds to innovate, and create more opportunities for the population. The best proposal idea should be entertained from one institution, a few, or all institutions (private and public).

Conclusion and Future Directions

Each institution analyzed in this chapter specializes in its own areas of studies. When compared to models of the Community Colleges, becoming a full-fledged global counterpart requires many steps into a future of innovating institutions willing to work together to meet the community workforce development needs. Findings suggest the development of strategic plans by each institution re-envisioning their role as educational institutions responsible for workforce development. Future students should have their choices of educational institutions with an expanded program of studies and the transfer option of qualified courses to other institutions or into higher education. The collective aim should target a curriculum of over 120 programs of studies among the institutions as in global counterparts. In addition, maximum age limit for students should be lifted. The work/learn model should be innovated to reflect program of studies that are hands-on learning for those with interest in the highest level of practicum, but offer also honors program of studies for students willing to focus on the highest level of learning and access to higher education. Academic programs should be fully accredited, and faculty should be experienced men and women from all ages. Individual advising and mentors should be available to guide those who need guidance. The student to teacher ratio in classrooms should have a good range. Online education should be a collaboration of offering in Technical and Career Institutions on the island and/or through Dutch and international institutions.

In the world of funding opportunities, analyzing how to use sponsored project models as a strategic tool to continuously raise funds for growth of the island's economy is important. In the next round of funding opportunities, priority projects and the island history of borrowed international models (Steiner-Khamsi 2004; Tormala-Nita 2007) suggest the need to carefully utilize matching theory to strategically organize sponsored projects. For Curacao, a solution articulated previously is that of modernizing Technical and Career Institutions (SBO) into associate-degree colleges (Tormala-Nita and Cijntje 2009), including expansion into more career opportunities. The challenges of workforce development by the technical career institutions and higher education must be addressed for sustainable solutions. The historically narrow offering of prescribed careers deserves innovation to stimulate participation. Educational reform through sponsored projects approach would require collaboration between institutions for practical purposes and policy formulation involving those who these policies would impact.

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Upgrading Polytechnic in Namibia to the Namibia University of Science and Technology and the Post-secondary Education Niche in Namibia

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Sarala Krishnamurthy and Charl C. Wolhuter

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Abstract

The main objective of the chapter is to reflect on the two tertiary institutions in Namibia. The chapter begins with a description of post-secondary education and what it means in the Namibian context. Next, an overview of the educational system is provided describing the local pressures which necessitated the transformation of the Polytechnic of Namibia into the Namibia University of Science and Technology. Finally, the chapter evaluates the processes by which this transformation took place altering the education landscape, aligning itself to the needs of the country and expanding access to post-secondary school leavers with the view to contributing to the economy.

Keywords

Post-secondary education · Tertiary institution · Access · Equity · University · Science and technology

Introduction

On 1 January 2016, the Namibia University of Science and Technology (NUST) came into being as the second University in the country. Namibia is a young country, and its employment of education to address particular societal issues is noteworthy for the international community, especially other nations in the Global South. Namibia is a newly independent country, with a developing economy, and burgeoning numbers of secondary school leavers, with but one other public institution of higher education (University of Namibia). As such, it offers an interesting case study of the post-secondary education niche.

The aim of this chapter is to determine the value of the NUST – which came into being on 1 January 2016 by upgrading the Polytechnic of Namibia to a Technical University – in the post-secondary education niche in Namibia. The chapter commences with a clarification of the concept of post-secondary education. Subsequently, the national contextual forces shaping education in Namibia are surveyed. The education system and the higher education system of the country are then portrayed, followed by an investigation of NUST. In conclusion, the value of this institution in the post-secondary school education landscape of Namibia is assessed. NUST can be regarded as a counterpart to the Community Colleges as it offers first (bachelor's) degree programs of a decidedly vocational-technical bent.

The Post-secondary Education Niche

The United Nations Educational, Scientific and Cultural Organisation's (UNESCO) International Standard Classification of Education (ISCED) distinguishes between eight levels of education (UNESCO 2012). Level 4 of this Classification is entitled post-secondary non-tertiary education. This level is defined as post-secondary

non-tertiary education which provides learning experiences building on secondary education, preparing for labor market entry as well as tertiary education. It aims at the individual acquisition of knowledge, skills, and competencies lower than the level of complexity characteristic of tertiary education (UNESCO 2012, 43). Over the past decades, there has been a substantial increase in post-secondary education participation in most Organisation for Economic Co-operation and Development (OECD) and European Union countries (Cetai et al. 2016). Post-secondary education has increased in importance as the world's economies become more knowledge-based (Odo et al. 2012). Even before, but especially after having been upgraded to a university, NUST clearly falls outside the perimeters of a level 4 institution, defining itself outside this post-secondary education niche.

Thus NUST has increased opportunities for higher education in Namibia but has left barren the landscape of post-secondary education below degree level: the other niche filled by Community Colleges worldwide. In this respect Namibia shares a feature common to education systems in Africa: the post-secondary and higher education levels are very poorly differentiated, with respect to the needs of twenty-first century society and economies (Teferra and Altbach 2004, 22). For decades, since at the least the early 1970s to the mid-1990s, basic education was emphasized in Africa, and higher levels of education neglected (Samoff and Carrol 2003). The detrimental effect of poorly developed and deteriorating systems of education above basic education levels, on national development, resulted in new attention (by policy makers and the scholarly community alike) to these levels above the basic levels, the past two decades (ibid.). Public universities in sub-Saharan Africa have been criticized for being unable to produce a cadre of technical personnel required by developing economies (Kapur and Crowley 2008, 79).

Methodology

This chapter follows a comparative educational perspective, in investigating the upgrading of the Polytechnic of Namibia to NUST, within the Namibian post-secondary and higher education systems. Comparative education entails a three-in-one perspective on education and training (Van der Walt and Wolhuter 2016, 1019; Bray et al. 2014, 26). In the first instance, comparative education focuses on the education *system*. Thus the education system perspective constitutes the first perspective. The second perspective, the contextual perspective, is a two-way perspective: education systems are regarded as the outcome of contextual forces (such as economy, social system, politics, and demography), and on the other hand, the effect of education on society (such as the effect of education on economic growth) is studied. According to the comparative perspective, the third perspective, different education systems are studied within their societal contexts, in order to attain a better understanding of the interrelationships between education system and societal context.

Namibian Societal Context

Geography

Namibia covers 825 418 square kilometers (318 696 square miles). It is bordered by the Atlantic Ocean in the west, Botswana in the east, South Africa in the south, and Angola and Zambia in the north. The country has four major natural regions: a desert (Namib desert) in the west, a semiarid high plateau in the center, a second desert in the east (Kalahari), and a savannah region in the north. Only two major roads and two railway lines transverse the territory: from South Africa in the south through Windhoek (capital) to Grootfontein in the north and from Walvis Bay (main port) in the west through Windhoek and Gobabis to Botswana in the east.

Demography

The population of Namibia totals 2.5 million (Country Meters 2016). It has a swift, though declining rate of population increases: the current annual rate of increase is 2.28%. In 1991, the annual rate of increase was 3.1% (World Bank 2004, 257). Such a high rate of growth results in a young population profile, with growing numbers of secondary school leavers demanding access to post-secondary education opportunities.

Social System

Namibia was populated by a succession of immigration waves. Rock paintings suggest that the progenitors of the San people arrived as far back as 29,000 years ago. In later centuries, people known in anthropological nomenclature as Bantu or Negroid arrived. Then, in the eighteenth and nineteenth centuries, people of mixed racial descent migrated from the south into the territory. From the end of the nineteenth century, a White element (people from European descent) was added, first immigrants from Germany since 1884 as the territory became a German territory, followed by Whites from South Africa after South Africa took over the administration of the territory after the First World War (Wallace 2011, 103–271).

English is the official language, but Namibia's relatively small population is extraordinarily diverse in language and culture. People commonly speak two or three languages, and more than 49% of the population speaks Oshiwambo, 11% Nama/Damara, 10% Afrikaans, and 9% Kavango (Government of Namibia 2016). Due to the country's colonial history, Afrikaans, the language of the previous South African occupiers, is still widely spoken and functions as the *lingua franca* in Namibia (ibid.).

Economy

The annual *per capita* gross national income in Namibia is US\$ 5 210 (World Bank 2016b). This places the country in the World Bank category of upper middle-income

countries. Inequality is high: the Gini Index, standing at 61, is the second highest in the world (World Bank 2016b). Similarly, there is a high incidence of unemployment. The unemployment for the entire population of working age is 17% in the case of males and 20% in the case of females (World Bank 2016b). Among the youth these rates are even higher: 35% in the case of males and 43% in the case of females (World Bank 2016b). Poverty is rife. 31.5% of the population survives on less than US\$1.90 per day (World Bank 2016a). The distribution of employment among the various economic sectors is as follows: 32% in agriculture, 24% in manufacturing, and 45% in services (ibid.).

Political System

After having been administered by South Africa since the end of the First World War, Namibia became an independent Republic on 21 March 1990. It has a liberal democratic constitution, based on the Western European model, buttressed by a Bill of Human Rights. While it is a multiparty democracy, politics are dominated by the ruling party, South West African People's Organisation (SWAPO), which enjoys a massive majority in the two legislative houses. In the most recent elections, 2014, SWAPO polled 80% of all votes. In the presidential elections, SWAPO candidate Hage Geingob got 87% of all votes.

That Namibia is an overregulated, bureaucracy-swollen country is clear from the fact that, according to the World Bank, it takes 66.0 days to register a new business in Namibia; the comparable figures for the United Kingdom, the United States, and Australia are, respectively, 4.5, 5.6, and 2.5 (World Bank 2016a).

Religion and Philosophy

Article 21 of the Constitution of Namibia guarantees, i.e., freedom of religion, meaning the freedom to practice any religion (Republic of Namibia 1990). The majority of Namibians belong to the Lutheran and Roman Catholic denominations. There are, however, also several Pentecostal churches, the majority of their members being Black. Although most Namibians consider themselves to be Christians, a significant number combine cultural practices (such as ancestral worshipping) with Christianity. Another interesting feature is the spread of Islam in post-independent Namibia, which is visible in the rise of mosques in parts of the country, but comparatively speaking, followers of this religion still are a minority.

On a secular level, the modern Western, liberal, individualistic, and materialistic philosophy, with its attendant value system, has taken root among Namibians of all population groups, existing side by side with:

- Traditional cultures and philosophical systems
- Religious groups with their philosophical systems
- Political groups with philosophical overtones (Likando and Wolhuter 2013, 149)

The Namibian Education System

Objectives

The post-independent government accorded great priority to education which was one of the rallying points in the sociopolitical mobilization of the population in the run-up to independence. In direction-giving documents, the four goals of education in Namibia are specified as:

- Access: Article 20(1) of the Constitution of Namibia declares that all people shall have the right to education. Primary school education has been declared a rights, i.e. every Namibian child is entitled to primary school education supplied by the state (Angula and Lewis 1997, 136).
- Equity: Given the historical legacy of 1990 – the existence of racially segregated systems of education, with schools for White children much better resourced than schools for Black children – a very important objective of education is the provision of equal education opportunities and chances for all. While no de jure segregated school systems exist, considerable de facto segregation remains, with the majority of Black students attending schools in residential and rural areas which were, in pre-1990 times, designated for Blacks. These schools were historically poorly resourced in terms of physical infrastructure and personnel resources.
- Quality: It includes a high level of teacher education and competence, good physical resources, and high achievement levels of all students.
- Democracy: Students should become acquainted with the ways in which democratic societies operate and with the obligations and rights of citizens (Likando and Wolhuter 2013, 150–151).

The Namibian Government's 2004 plan (Republic of Namibia 2004), spelling out a vision for development to 2030, provides important pointers for education. In this document, the Namibian Government commits itself to quality of life for all people in Namibia. The supply of high-quality education is viewed as the way to supply human resources responsive to the demands of the labor market in the country. Thus education is taken to be pivotal in the realization of strategic national development goals and to facilitate the transition to the knowledge-based economy as envisioned by Vision 2030 (Republic of Namibia 2004).

Organization and Administration

Education is managed and administered at three levels: national, regional, and institutional. At national level, two ministries exist, namely, the Ministry of Basic Education and the Ministry of Higher Education, Training and Employment Creation. The brief of the Ministry of Basic Education is to formulate policy on basic education and to coordinate, implement, and monitor all formal education activities.

The administration of education in the country is divided into 13 education regions. Each region has a Regional Education Forum. This Forum advises the Minister, the Regional Council (second tier political structures) and Local Authority Councils on educational matters. Regarding the institutional-level structures, every state school has a School Board. Such a Board develops the mission of the school, advises the Regional Director as to the needs of the school, and recommends the appointment of teachers and other staff members at the school. While these Boards are in theory integrated racially and gender-wise, the composition of the Boards of the historically White schools and historically Black schools remains skewed, reflecting the persistence of historical forces of inequality.

Structure for Teaching and Learning

At independence, Namibia inherited the South African institutional pattern which, in turn, was modeled on the Scottish system. After independence, Namibia adopted the American model, a 12-year school ladder, consisting of Grades I to XII. A huge difference exists between enrolment ratios from secondary to tertiary education. According to the latest available figures, the gross enrolment ratios at primary, secondary, and tertiary levels are, respectively, 111.43%, 64.84%, and 9.33% (UNESCO 2016). The difference between primary and secondary enrolment ratios is indicative of a massive problem of students dropping out of the system before finishing the secondary school cycle.

Turning to the curriculum, the following school subjects are prescribed at the various levels:

- Lower Primary Cycle (Grades I–IV): Literacy, Numeracy, Environmental Studies, Religion and Moral Studies, Arts, and Physical Education.
- Upper Primary Cycle (Grades V–VII): Languages, Mathematics, Natural Sciences and Health Education, Life Skills, Social Studies, Agriculture, Design and Technology, Home Ecology, Arts, Physical Education, and Basic Information Studies.
- Junior Secondary Cycle (Grades VIII–X): Languages, Mathematics, Life Sciences, Physical Sciences, Life Skills, Design and Technology, History and Geography, Economic and Management Sciences, Religious and Moral Education, Agriculture, Needlework and Clothing, Home Economics, Computer Studies, Physical Education, Basic Information Studies, and Arts and Culture.
- Senior Secondary Cycle (Grades XI–XII): Languages, Mathematics, Physical Science, Design and Technology, History, Geography, Economic and Management Sciences, Biology, Development Studies, Agriculture, Fashion and Fabrics, Home Economics, Computer Studies, and Arts and Design (Likando and Wolhuter 2013, 155–156). Schools have an overly academic character, while the technical subjects (such as Design and Technology, Arts and Design, etc.) are electives; they are available at a very tiny minority of schools only, mainly the historically privileged (historically White) schools.

Higher Education

University of Namibia

Prior to the creation of NUST, the sole university in Namibia was the University of Namibia. This University came into being in 1992, 2 years after independence, its main campus located in the capital of Namibia, Windhoek. Besides the University of Namibia, the higher education sector consisted of the Polytechnic of Namibia and four teacher training colleges. In 2010, these colleges were incorporated into the Faculty of Education of the University of Namibia: the Windhoek College of Education became known as Khomasdal Campus, Ongwediva College of Education became Hifikepunye Pohamba Campus, Rundu College of Education became Rundu Campus, and Caprivi College of Education became Katima Mulilo Campus.

Currently, the University has 13 campuses: the main campus located in Pionierspark, Windhoek, the Faculty of Health Sciences Campus in another suburban part of Windhoek, Hifikepunye Pohamba Campus in Ongwediva, José Eduardo dos Santos Campus in Ongwediva, Katima Mulilo Campus, Rundu Campus, Khomasdal Campus, Neudamm Campus (40 km east of Windhoek), Oshakati Campus, Ongongo Campus (50 km west of Oshakati), Sam Nujoma Campus north of Henties Bay, and the Southern Campus at Keetmanshoop. The University's academic programs are organized into eight faculties: Agriculture and Natural Resources, Economic and Management Sciences, Education, Engineering, Health Sciences, Humanities and Social Sciences, Law, and Science.

Currently, the University of Namibia has enrolled 24,000 students. The academic staff complement consists of 36 professors and 288 lecturers (i.e., academics below the rank of professor) (University of Namibia 2016). "Webometrics Ranking of World Universities," an initiative of the Cybermetrics Lab, a research group belonging to the Consejo Superior de Investigaciones Científicas (CSIC), the largest public research body in Spain, ranks all 26,355 universities in the world, based on their web presence and the scholarly impact of publications by faculty (Consejo Superior de Investigaciones Científicas 2017). According to this ranking, the University of Namibia occupies rank number 2,759, thus comfortably placing it in the top quintile in the world.

One of the criticisms against this institution is that as a conventional university, it offers to the 18–24-year age-group education of a once-off nature and that it is ill suited to provide lifelong learning (Dodds 2001). Higher education in Namibia is suffering from high dropout rates (Adongo 2010, p. 140). Physically challenged students are affected disproportionately – while access to higher education is commendably equitable, these students are not provided with support structures during their time of study (Haihambo 2010). Hopson (2001) also argues that vestiges of cultural hegemony in curricula work against the majority of students attending the two institutions of higher education in Namibia. Assié-Lumumba (2006) makes the claim that the inherited (Western) systems of higher education in Africa work against the ideal of gender equality. On the other hand, Kirby-Harris (2003) found that the University (in its ethos and institutional culture) has absorbed the ideals and values of (the post-independence) government and is operationally strong enough to put these into practice.

Namibia University of Science and Technology

The predecessor of NUST was the Polytechnic of Namibia. This institution was created by an Act of Parliament, Act 33 of 1994. The brief of this institution was to provide higher education of a technical-vocational bent. While in the beginning years, the Polytechnic only provided education with National Certificates, Higher Certificates, and Diplomas, in 2004 the very first bachelor's programs in the Engineering school were introduced. The institution grew in leaps and bounds from a small number of enrolments of 2,000 students in 2000 to nearly 13,000 in 2016. All the schools introduced the bachelor of technology programs. In 2008, the Harold Pukewitz Graduate School of Business opened with the Masters in International Business being offered to Namibians. The next school to deliver a Masters program was the School of Natural Resources and Tourism. This was a Masters in Integrated Land Management. It was felt that this program would address land issues that benefit not only Namibia but also several countries in the Southern African region. The School of Information Technology also started offering Masters program soon after. There were several features that made the programs offered at Polytechnic very popular to the Namibian people: the programs were hands on, career oriented, and work related. All programs were developed in response to the stakeholder's needs through a mechanism of engagement with them in a Curriculum Advisory Committee; therefore, they were responsive to the needs of the nation.

It was in 2008 that the 4-year bachelor of technology programs were phased out to give way to 3-year bachelor's programs with 1-year honours programs in most subject areas. The 3-year programs were pegged at the National Qualifications level of seven as prescribed by the National Qualifications Authority which articulated a National Qualifications Framework with nine levels of which the last three were expected to be offered at tertiary institutions. These were level seven bachelors, level eight honours, and level nine for both masters and Ph.Ds. The National Qualifications Framework clearly stated that Honours level would be considered to be a postgraduate qualification in Namibia unlike South Africa, where it is only the master's programs and Ph.D. programs which are regarded as postgraduate qualifications.

For several years, the Polytechnic of Namibia attempted to change its name and be upgraded to the status of a university. The main argument to support this request was that the Polytechnic was already a university because it offered both bachelor's and master's programs. Further, its status as a Polytechnic was detrimental to its development because many foreign universities did not want to sign memorandum of understanding with a Polytechnic. Also, the international universities equated Polytechnic of Namibia to Polytechnics elsewhere which offered only certificates and diplomas to their students. It was only when professors from international universities visited the institution did they realize that it was functioning like a university already and it was offering higher degrees. To change to a University required an Act of Parliament. A new Act providing for this change was passed in 2015 (Act 7 of 2015, the University of Science and Technology Bill), and on 1 January 2016, NUST came into being. Hence while offering higher education of a

technical-vocational nature, in contrast to the more academically inclined programs of the University of Namibia, the programs are pegged on same level as that of the University: bachelor's and master's level. Associate degrees are unknown in Southern Africa, and the post-secondary niche (the other niche catered for by Community Colleges and their counterparts globally) is left unattended in Namibia. Thus NUST will focus on programs on the ISCED Level 5 and higher, leaving Level 4 unattended to in the Namibian context.

The University of Science and Technology Act defines the objectives of the NUST institution as follows:

- (a) To contribute to knowledge creation and advance knowledge through teaching, research, and scientific investigation, with an emphasis on applied research
- (b) To support and contribute to economic and social development through globally relevant, professional, technological, and career-focused higher education and effective community engagement, with an emphasis on industry involvement
- (c) To drive, promote, and facilitate technology development and technology transfer and innovation and diffusion
- (d) To engage in national and international partnerships and cooperation with other universities, organizations, and institutions
- (e) To preserve and promote the traditional and constitutional principles of institutional autonomy and academic freedom in the conduct of its internal and external affairs subject to this Act and other laws (Republic of Namibia 2015)

NUST therefore provides higher education of a technical-vocational bent. It has a total enrolment of nearly 13,000 students. The institution consists of six academic faculties and offers undergraduate as well as postgraduate degrees in the areas of business and management, engineering, information technology, criminal justice, public management, journalism, English, communication, hospitality, natural resource, and management. According to Webometrics Ranking of the Universities of the World, NUST occupies number 3,911, thus placing it in the top quartile of universities in the world. It is interesting to note that even though the largest number of students is enrolled in the Management and Human Sciences faculties, the largest number of programs that are offered is from the science, technology, engineering, and mathematics (STEM) faculties. Even though many STEM programs are offered, the enrolment does not match those of Management Sciences and Human Sciences. This can be attributed to a weak schooling system with very few science, mathematics, and English teachers. With the result, a larger number of students enroll in the non-STEM areas. NUST has addressed this challenge by introducing a bridging year called IN-STEM to bring more students into the science and technology. This is a bridging course from secondary to higher education, i.e., providing academic support in terms of instruction in STEM subjects, to students hailing from schools where the teaching of mathematics and science is weak.

The realignment of schools into faculties was necessary for rationalization of resources; therefore, 36 departments were collapsed into 20 and some academic programs were phased out in order to introduce new ones. For instance, all the

bachelor of technology programs were phased out, and 3-year bachelor's programs were introduced with an honours to strengthen the academic component of the degrees.

The business process review also resulted in changes in administrative departments. For instance, the Department of International Relations and Planning was split into two departments: (1) International Relations and (2) Planning, with clearly articulated responsibilities. The conversion of the Renewable Energy and Energy Efficiency Institute to the Namibia Energy Institute is a testament to the broad national interest in this particular aspect. Energy is very important to Namibia and it finds mention in the National Development Plan 4 as a priority. Energy is not an end in itself. Today, more than ever before, it is at the center of all development that takes place in Namibia. Access to modern energy is necessary for the provision of clean water, sanitation, and decent health care for the people of Namibia. Also, energy is crucial for the provision of reliable, efficient, and effective lighting, heating, mechanical power, and telecommunication services.

A Project Services Unit was established to source funding for research and work closely with the National Commission for Research in Science and Technology attracting a lot of funding from the German and the European agencies. There has been a rapid growth in research and innovation since the Polytechnic became NUST with the first prototype of a solar car which was exhibited to the public in the Windhoek Show in October 2016. This car is a result of collaborative work of students from several faculties such as Engineering, Computer Science and Informatics, and the Management Sciences. The second prototype is now being developed as a refinement of the first, and mass production and commercialization of this car are also being explored.

Research has become a vital component in the transformation agenda of the institution, and it includes applied, interdisciplinary, and multidisciplinary research. What is significant is that all research that is done in the institution is for the betterment of the Namibian society. NUST researchers have set up collaborative partnerships with several German and South African Universities attracting a lot of funding contributing to the third stream income for the University. Such partnerships enable NUST to gain access to sources of funding in South Africa and Europe.

The Harold Pupkewitz Graduate School of Business has brought customer service to the center stage by introducing the Customer Service Award. Customer service in Namibia is characterized by apathy and indifference. The customers also have reconciled themselves to this attitude and do not make any demands from the service providers. The issue of poor customer service affects not only businesses but also government and communities becoming a matter of national concern since it impacts the delivery of basic services such as housing, water, electricity, and sewerage. The HP-GSB introduced the Customer Service Award presented to agencies through a conducted survey all across the country to raise awareness about customer service. This survey has been running since 2014 and has proven to be a huge success drawing attention of the Namibian people to agencies that work and who deservedly receive the award. This is also the means of conscientizing all service providers to improve their services.

The Namibia University of Science and Technology has been consistently receiving the Professional Management Review awards for the past 7 years, and in 2015, it received the Diamond Arrow Award as well as the most innovative organization/institution in Namibia.

Namibia's industrialization has not taken off as expected despite the macroeconomic situation in the country being at a decent level. Poverty, unemployment, underemployment, and HIV/AIDS continue to plague the country. In such a scenario, it is imperative to explore innovation through knowledge development and research. NUST has set up the Namibian Business Innovation Institute to address multi-sectoral challenges as well as become a hub of business incubation. The NBII increased its contribution in the innovation value chain by setting up a FAB lab with a funding of N\$ 7 million and N\$ 2 million from the Ministry of Trade and Industry and the German Government, respectively, for a state-of-the-art lab and a container. The FAB lab creates and collaborates with stakeholders to harness research, science, technology, and innovation.

Research has demonstrated unequivocally that higher education is a strong catalyst of economic growth, in the African context in particular (Bloom et al. 2006). Attempts to upgrade the higher education sector therefore have to be commended. Indeed, some of the most problematic aspects of higher education in Africa are quality and low graduation rates (Materu 2007). A World Bank's study on higher education reported that there are indications that raising the quality of higher education has a positive effect on employability of graduates and in linking the world of education with the world of work (Materu 2007, 57–58). However, mindful of the goals of education in Namibia, as outlined above, it is difficult to understand how the reforms in the institutional fabric of higher education will equalize access to higher education in Namibia, more so in view of the obvious upward missionary drift brought about by the reforms. Even before the creation of NUST, the introduction of Recognition of Prior Learning admission policies to both the University and the Polytechnic could not facilitate or broaden access to higher education (Shaketange and Kanyimba 2016).

Conclusion

While the creation of NUST offers expanded access to higher education and the promise of education more relevant to the needs of a developing economy and an employment seeking youth, persistent inequalities and inadequacies in access to higher education, as well as problems of low survival and graduation rates, and of aligning education with the needs of the economy and the employment market, should be investigated and rectified. NUST is an example of upward mission drift of a higher education institution: the institution and its predecessor have been, during the past decade, moving in the direction of bachelor's and lately also master's programs but have phased out diplomas and certificates below the bachelor's level. So while it corresponds with the global Community College model in offering bachelor's degrees, it differs in that post-secondary education below degree level

has been discarded. Namibia still has a massive unemployment problem, not alleviated by this upward mission drift.

Thus the biggest cause for concern remains that of securing employment for the masses of school leavers. The rate of population expansion and the constitutional guarantee of primary education will increase the mass of young people who do not find space in the two universities in the countries. Then there is also those who do not qualify by virtue of having successfully completed the secondary school cycle, but also those who have dropped out before the end of Grade XII, who are also in need of education and training. This mass, together with the bottleneck of students leaving Grade XII, who cannot get access to the very thinly developed higher education sector (Adongo 2010, 135), means there is an urgent need for expanding the post-secondary sector. NUST has drifted upward to become a university. While there is a need for the expansion of higher education in Namibia, this movement has been at the expense of post-secondary education opportunities below degree level, which have now been decimated. Being a national institution with the brief of a university, the nexus with the local community, typical of the global Community College model, is not salient. In Namibia an institution akin to the Community College in offering post-secondary education programs below degree level does not exist. A strong post-secondary education system, aligned to the needs of the Namibian economy, needs to be built.

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Part VIII

Pathways Post-completion: Career Advancement, University Transfer, and Baccalaureate Degrees



Developing a Skilled Workforce Through Technical and Vocational Education and Training in the Philippines

39

Kiran S. Budhrani, Mark M. D’Amico, and Jose Lloyd D. Espiritu

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Abstract

One of the major development challenges for the Philippines is to prepare the youth (ages 15–24) for the workforce. The country is still facing low education, high dropouts, and unemployment, particularly among the youth. Technical and Vocational Education and Training (TVET) is the postsecondary education sector, providing noncredit, technical middle-level skills training to produce skilled workers. The Technical Education and Skills Development Authority (TESDA) provides national leadership for the TVET system by implementing competency-based curriculum standards, training regulations, and assessment and certification processes to ensure a high-quality TVET delivery throughout the country. With the country's recent shift to K-12 compulsory education, TVET education is integrated into senior high school to produce high school graduates with employable skills. Those who do not choose to enter higher education after high school often choose TVET to earn a National Certificate (NC) from TESDA. NCs are well recognized as nationwide employment credentials and are often required during the recruitment of skilled workers locally and abroad, but are not applied or transferrable to higher education. The most prevalent connection seen between TVET in the Philippines and US Community Colleges is through noncredit education. One of the primary differences is TVET's exclusive focus on workforce development programs leading to government-based certifications or credentials. While the majority of noncredit education in US Community Colleges is for workforce training, it is not the only focus, and the function allows colleges to use this flexible delivery method to meet a variety of community needs. While the conditions and educational configurations may differ between the Philippines and the United States, the strong connection made between education and employment is both undeniable and a national priority in each country.

Keywords

TVET · Technical · Vocational · Training · workforce · Technical education · Noncredit · Community college · Philippines · United States · TESDA · Technical education and skills development authority · Competency-based education · Post-secondary · Education · Policy · Job-skills mismatch · K-12 · Senior high school · Employment

Introduction

Technical and Vocational Education and Training (TVET) prepares people for the world of work. It has had a special role to play in providing young people and adults with the knowledge, skills, and competencies toward an improved quality of life (Maclean 2006). Attention to TVET is increasing worldwide as it can increase the productivity and income of the poor, enhance employability for the unemployed, and facilitate transfer to new occupations for those currently employed (Orbeta and Esguerra 2016; UNESCO 2016).

In the Philippines, the Technical Education and Skills Development Authority (TESDA) is the national government agency managing and supervising the TVET system. It provides national leadership for developing a skilled workforce. It is particularly focused on middle-level skills development (semi-skills, skills, craft, and technician training). TESDA has evolved into an organization that is responsive, effective, and efficient in delivering myriad services nationwide for TVET such as standards development, program implementation, assessment, certification, registration, and accreditation. The roots of TVET in the Philippines were established more than 80 years ago, but it has evolved primarily to provide postsecondary and noncredit technical vocational education and training. Those who do not choose to enter higher education often choose TVET to earn a National Certificate (NC) from TESDA, which leads to employment. The certifications are well recognized as nationwide employment credentials and are often required during the recruitment of skilled workers. However, NCs are noncredit and not transferrable to higher education. Additionally, with the country's recent shift to K-12 compulsory education, TVET education was integrated into senior high school through a TVET track in grades 11 and 12 to produce high school graduates with employable skills recognized in the workforce.

Just as TVET is much focused on the workforce development needs of the Philippines, Community Colleges most closely reflect the same goal as compared with other US educational systems, but with key similarities and differences in the governance, credentialing policies, and practices. Since offerings through TVET do not lead to credit-based certificates or degrees, the most prevalent connection seen between TVET in the Philippines and US Community Colleges is through noncredit education. According to the National Center for Education Statistics (2016), noncredit courses in the United States result in “no credit applicable toward a degree, diploma, certificate, or other formal award” (p. 22). While there is some connection, the more narrowly focused TVET system in the Philippines and the Community Colleges are largely different due to the comprehensive nature of the US educational sector.

The purpose of this chapter is to offer a background of the economic and workforce conditions in Philippines with a discussion of economic drivers and demands, an overview of the Philippine trifocalized formal education system and K-12 reform, focused on the vocationalization of TVET in upper-secondary education, a discussion of the impact of postsecondary TVET on the workforce, and conclusions and future direction for this educational delivery mechanism, which most closely resembles aspects of the American Community College.

Country Profile

The Philippines, located in Southeast Asia, is an archipelago of 7,107 islands. The capital city, Metro Manila (Manila), is in the National Capital Region (NCR) and is the center of culture, the economy, education, and government. The Philippines was a Spanish colony for over 300 years, after which it was a colony of the United States for nearly five decades. The influence of both cultures is strongly evident in the education system, such as Spanish names, Catholic educational institutions, and English as primary medium of instruction. The country has Filipino and English as official languages. With a growing population of 102 million (as of April 2016), it is the seventh most-populated country in Asia and the 12th most populous country in the world (DCR Workforce 2015).

Workforce Conditions

According to the Philippine Statistics Authority (2016a, f), the country has a workforce population (15 years and older) of 65.5 million persons, as of April 2016. The labor force participation rate is 63.7%. Persons declared not in the labor force are individuals who work in the home, students, persons with a disability, and retirees. Seven out of ten persons not in the labor force are female. The employment rate is pegged at 93.9% with approximately 40 million persons employed. Of the persons employed, three in five are males. The unemployment rate is 6.10% with approximately 2.5 million persons unemployed, and the underemployment rate is 18.2% or about 7 million persons underemployed (Table 1).

The population is estimated to reach 118 million by 2025 (Philippine Statistics Authority 2015). The fast growing population adds pressure on the Philippine economy since the amount of workplaces generated is lower than the rate of increase in labor force (DCR Workforce 2015). The Philippine economy is one of the fastest growing in the past decade among ASEAN (Association of Southeast Asian Nations) economies, impacted by overseas Filipinos' remittances, inflow of foreign direct investment (FDI), and the booming business process outsourcing (BPO) sector (OECD 2016).

Despite the economic growth in the Philippines in recent years, its unemployment rate remains the highest in Southeast Asia at about 6.10%. Global Employment Trends indicate that the country has the worst unemployment rate among the 10 member countries of the ASEAN namely: Cambodia (0.3%), Thailand (0.8%), Laos (1.4%), Singapore (3.1%), Malaysia (3.2%), Myanmar (3.5%), Brunei (3.7%), Vietnam (1.9%), and Indonesia (6%) (Adalia 2014). The country is most concerned about the high unemployment rate of those 15–24 years old (Samans et al. 2015). Almost half of those not in the workforce are between the age of 15–24; more than half of the unemployed are also within the age of 15–24, and 70% of the unemployed are aged 15–34 (Philippine Statistics Authority 2016a).

Table 1 Key employment indicators, Philippines: April 2016 (Philippine Statistics Authority 2016a, c, f)

Population	102,965,300
Total 15 years old and over	65,498,000
Labor force participation rate ^a	63.7%
Employment	
Total employed ^b	39,916,000
Employment rate ^c	93.9%
Total employed persons by major industry group	
Services sector	56.7%
Agriculture sector	25.0%
Industry sector	18.3%
Unemployment	
Total unemployed ^d	2,594,000
Unemployment rate ^e	6.1%
Underemployment	
Total underemployed ^f	7,351,000
Underemployment rate ^g	18.2%

Note

^aLabor force participation rate is the proportion of total labor force to the total household population 15 years and over

^bEmployed persons are those who, during the reference period, are 15 years old and over as of their last birthday and are reported either as at work or with a job or business although not at work

^cEmployment rate refers to the proportion of the total employed to the total labor force

^dUnemployed persons are those who are 15 years old and reported as: (1) without work; (2) currently available for work; (3) seeking work or not seeking work due to the following reasons: (i) belief that no work is available, (ii) awaiting results of previous job application, (iii) because of temporary illness or disability, (iv) bad weather, or (v) waiting for rehire or job recall

^eUnemployment rate is the proportion of unemployed persons to the total labor force

^fUnderemployed persons refers to employed persons who express the desire to have additional hours of work in their present job or an additional job, or have a new job with longer working hours

^gUnderemployment rate refers to the proportion of underemployed persons to total employed persons

Employment Drivers and Demands

The Service Sector Drives the Economy

The three major business sectors in the Philippines are agriculture, industry, and services. The Philippine labor market was once driven by agriculture as the leading industry in 1995, but has shifted to services and outsourcing in the recent years (Orbeta and Esguerra 2016; DCR Workforce 2015; Abdelkarim 1997). The majority of the workforce (56.7%) is employed by the large service sector (e.g., wholesale and retail trade, motor vehicle and motorcycle repair, transportation and storage, accommodation and food services, information technology and business outsourcing), followed by the agriculture sector (e.g., agriculture, hunting, forestry,

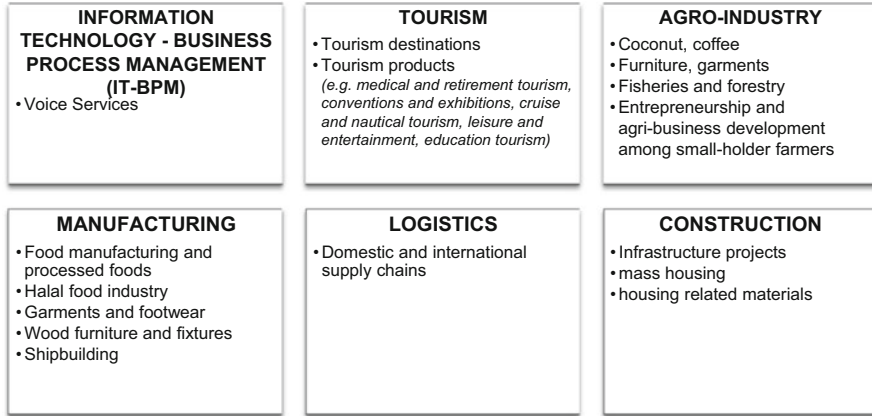


Fig. 1 Key Philippine employment generating sectors

fishing) employing 25% and the industry sector (e.g., manufacturing, construction, mining) employing 18.3% (Philippine Statistics Authority 2016d, e).

Government-Mandated Employment Generation Sectors

Specific interventions to improve the business climate in the country are set forth by the government's Philippine Development Plan (PDP) for 2011–2016. The PDP targets developing the six key employment generating sectors (Fig. 1), each having priority projects or industries to grow (National Economic and Development Authority 2014; TESDA 2013b). Economic growth is predicted to be driven by the services and industry sectors, resulting in additional employment and additional demand for skilled workers. The current economic and workforce conditions in the Philippines show that the service industry drives employment, particularly with the robust IT-BPM sector, but with evolving business strategies and global needs, the manufacturing and agriculture sectors are showing emerging jobs in areas that would historically be perceived as unusual (OECD 2016).

Job-Skills Mismatch and Unemployment

The two most significant development challenges for the Philippines are “adequately preparing students for the workforce with skills, knowledge and abilities that improve employability, and establishing conditions to stimulate job creation” (Casanova et al. 2016, p. 9). The Philippine Department of Labor and Employment (DOLE) urges youth to learn the job markets, considering “easy-to-fill,” “hard-to-fill,” and “in demand” job vacancies, as well as the emerging key employment generation sectors.

A recent DOLE report for 2013 to 2020 identified some “in-demand” or jobs with a high turnover rate to be: abaca pulp processor, programmer, banana growing worker, bangus (i.e., milkfish) diver, banquet supervisor, bamboo materials craftsman, fish cage caretaker, groundskeeper, multilingual service crew, mussel grower, pointman, reefman, and whale shark interaction officer (Perez 2016).

The report also defined some “hard-to-fill” occupations such as 2-D digital animator, agricultural designer, bioinformatics analyst, clean-up artist, cosmetic dentist, cosmetic surgeon, cuisine chef, ethanol machine processing operator, multilingual tour guide, in-between artist (animation), in-between checker (animation), and mechatronics engineer (Perez 2016). TESDA also recognizes that the top three “in-demand” and “hard-to-fill” occupations are in the IT-BPM, infrastructure/construction, and tourism sectors (TESDA 2013b). Given this, the largest projected need for TVET programs is for call center agents, welding and carpentry, tourism, and food and beverage services.

While the Philippine government and DOLE have identified key employment generation and jobs to watch, there still exists a job-skills mismatch (Jaymalin 2016). The Trade Union Congress of the Philippines (TUCP) claims that the job-skills mismatch has been ongoing and has worsened in 2016; new graduates will have difficulty finding immediate employment due to additional hiring requirements and demanding additional qualifications that would require additional training for job applicants (Jaymalin 2016). This situation can discourage graduates seeking employment for the first time. Those who can manage to pay for the cost of additional training and continue to persevere may likely join the 40 million person workforce sooner rather than later. For others who cannot afford further training, there is risk of the unemployment or underemployment. Statistics show that of the 2.5 million unemployed, 23.1% are college graduates and more than 50% have either attended some high school, finished high school, or attended some college (Philippine Statistics Authority 2015).

The Philippine Trifocalized Formal Education System and Reforms

Trifocalized Formal Education System

The Philippine government mandates the enhancement of human capital and increasing employability of the workforce by encouraging the local agencies in charge of education and training to provide the knowledge and skills relevant to the needs of the key employment generating sectors (National Economic and Development Authority 2014). The Philippine formal education system (Fig. 2) is managed by three agencies: the Department of Education (DepEd), TESDA, and the Commission on Higher Education (CHED).

DepEd manages elementary and secondary education institutions, providing formal K-12 curricula organized as kindergarten, grade school (6 years), junior high school (4 years), and senior high school (2 years). The 12 years of basic education is compulsory and starts at the age of five.

LEVEL	BASIC EDUCATION (K-12)				TVET	HIGHER EDUCATION	
	Elementary Education		Secondary Education		Post-Secondary Education		
	Kindergarten	Grade School	Junior High School	Senior High School	Middle-Skills Training	Undergraduate	Graduate
YEARS	K	1 – 6 (6 years)	7 – 10 (4 years)	11 – 12 (2 years)	--	1 – 4 (4 years)	--
AGENCY	DepEd	DepEd	DepEd	DepEd, TESDA	TESDA	CHED	CHED
CREDENTIAL	--	Grade School Diploma	--	High School Diploma	National Certificate (NC)	Bachelor's Degree	Masters Degree, Doctorate
AGE	5	6 - 12	13 - 16	17 - 18	Ages vary	19 - 22	Ages vary

Fig. 2 The Philippine trifocalized formal education system

TESDA manages TVET, providing postsecondary, noncredit, technical middle-level skills training to produce skilled workers. TESDA implements a competency-based curriculum for vocational programs that vary from a few weeks to several months, depending on the level of competency. It was only in 2013 when the Philippine K-12 education reform allowed students to choose a career track in senior high school, one of which was a TVET track to produce high school graduates with employable skills, ready for the workforce by 18 years old (adult age).

The Commission on Higher Education (CHED) oversees all higher education institutions providing undergraduate (bachelor) and graduate (masters, doctorate) programs. Most undergraduate programs span 4 years; master's programs take 2 years with at least 30 credits; and doctoral programs vary in duration depending on the number of credits required.

K to 12 Education Reform

The Philippines education system is in the middle of an on-going reform to increase quality and re-align with ASEAN and global nations' 12-year basic education cycle. The Enhanced Basic Education Act of 2013 (Republic Act 10533), or the K-12 Law, institutionalized the implementation of the K-12 program, making kindergarten compulsory and increasing the number of years of basic education from 10 years to 12 years. As a result, secondary education now includes grades 11 and 12 as senior high school and reclassified grades 7 to 10 as junior high school. This law took effect in School Year 2012–2013. Before the K-12 shift, the Philippines had been one of only three remaining countries in the world (i.e., Djibouti and Angola) to have a 10-year basic education cycle. Moving to the K-12 model “presents a once-in-a-generation window of opportunity for the reform of country's entire education landscape” (Higher Education Development Center [n.d.](#), para. 2). Former DepEd Secretary, Br. Armin Luistro, explains that the imperative for K-12 is to “(1) decongest the curriculum to improve mastery of basic competencies; (2) ensure seamlessness of primary,

secondary, and postsecondary competencies; (3) improve teaching through the use of enhanced pedagogies [e.g. spiral progression in Science and Math] and medium of instruction; and (4) expand job opportunities by reducing job-skills mismatch and providing better preparation for higher learning” (Luistro 2012, p. 26).

The Philippine education system has long needed reforms. Educating the youth has remained a challenge with high dropout rates and low school participation (Raya 2007). For School Year 2012–2013, elementary education participation rate was at 95.24%, while that for secondary education was at 64.61% (TESDA n.d.). Historical data (before the K-12 reform) show that for every 100 students that start Grade 1, 54 complete junior high school (grade 10), 46 go on to college, and only 23 finish college (ADB n.d.; Cardíño and Yee 2016). The integration of vocational courses into the secondary school K-12 curriculum shows potential, not only to expand access to TVET, but also to help retain youth in school (Pavlova and Maclean 2013).

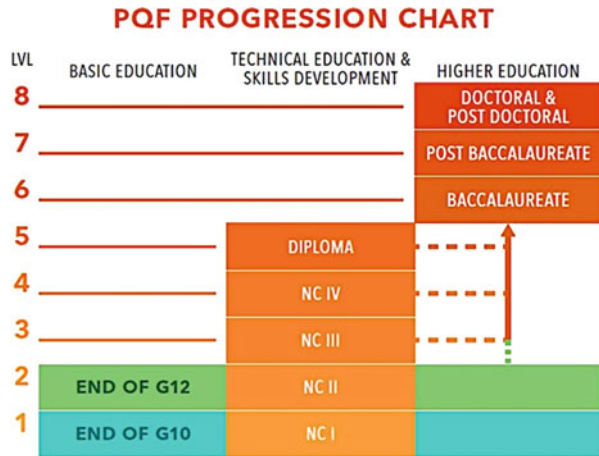
TVET Integration into Senior High School

With full implementation of K-12 in 2016, Grade 11 students first stepped into classrooms for School Year 2016–2017 and Grade 12 students begin in School Year 2017–2018. Students in Grades 11 and 12 have the option to choose one of four tracks: (1) an academic track (Business, Accountancy, Management [BAM]; Humanities, Education, Social Sciences [HESS]; and Science, Technology, Engineering, Mathematics [STEM]), (2) a TVET track (Agri-Fishery, Home Economics, ICT, Industrial Arts, Maritime), (3) a sports track (Coaching, Fitness Testing & Exercise Prescription, Sports/Recreation/Fitness Management), or (4) an arts and design track (Music, Theater, Visual Arts, Media Arts, Dance) (Department of Education n.d.; Tuguinayo n.d.). Senior high school tracks were established to help young students define an area of specialization as they complete secondary school relevant to their intended career path. According to the Department of Education (n.d.), these tracks “complete” a student’s basic education and high school graduates will be equipped for work, entrepreneurship, or higher education.

TESDA’s Role in Secondary Education TVET

TESDA led the institutionalization of the 8-level Philippine Qualifications Framework (PQF) dedicated to TVET (Fig. 3) in 2012, as part of the on-going education reform to adopt national standards and levels for outcomes of education, to support the development of educational pathways, and to increase mobility between the education and training sectors and the labor market; the PQF, in effect, addresses the education problem, mismatch in jobs and skills, and the need to generate employment (GOVPH 2012). The curriculum for careers identified in the K-12 TVET track (Agri-Fishery, Home Economics, ICT, Industrial Arts, Maritime) was adapted from the TESDA’s existing National Certificate (NC) I and II qualification standards, portrayed as level 1 and 2 in the PQF.

Fig. 3 The Philippine Qualifications Framework. Source: Department of Education 2014



This begs the question: Can a high school graduate be considered a skilled worker? Are they part of the skilled workforce? The answer is *not yet*. High school diplomas are not equivalent to national certificates (NCs) issued by TESDA. However, upon completion of senior high school, students who intend to apply directly for vocational jobs must take the TESDA assessment to officially earn a TESDA NC. With this, they are now part of the skilled workforce. To note, the NC is noncredit and not transferrable to higher education (Fig. 3).

Recent policy movements to expand compulsory education through the 12th grade demonstrate how the K-12 system shows similarities with the educational system in the United States (see, US Department of Education 2005) with education from ages 5 to 18, representing grades Kindergarten through 12 and yielding a high school diploma. Additionally, the role of higher education in the Philippines provides similar comparison. The Higher Education system seen in Fig. 2 provides opportunities for baccalaureate, master’s, and doctoral degrees, also similar to that of the United States (U.S. Department of Education 2005). However, the parallels stop short in comparing the TVET system with American Community Colleges, which is not unexpected, as Cohen et al. (2014) indicated that “No other countries but the United States (and to some extent Canada) have formed comprehensive Community Colleges” (p. 32).

Impact of the Vocationalization of Secondary Education on the Workforce

There is a global need to strengthen, upgrade, and re-think the role and importance of secondary education in preparing the youth for the world of work, not just as preparation for higher education studies (Lauglo and Maclean 2005; Maclean 2002). This strategy to vocationalize secondary education means creating a curriculum where most subjects are general or academic by nature, and a minor portion are

vocational subjects (Laugio 2005). This also reflects a prevocational education structure (Laugio 2005), where education is especially designed to be preparatory for students who intend to enter vocational career after high school or pursue postsecondary TVET.

The Philippines is not alone in its feat to improve secondary education, reduce dropouts, and develop employability skills among the youth. The Philippines joins 22 other countries in the Asia-Pacific region that have vocationalized secondary education at the upper-secondary level (Pavlova and Maclean 2013). In fact, the Philippine TVET career tracks selected for the grades 11 and 12 on agri-fishery, home economics, ICT, industrial arts, and maritime, share commonalities with Malaysia's five high school TVET career tracks including engineering services, construction, home economics, agriculture and computer applications (Pavlova and Maclean 2013). Furthermore, the United States has offered formal TVET (commonly known as Career and Technical Education) programs in secondary education for almost 100 years, advanced with the passing of the Smith-Hughes Act of 1917. US high schools offer elective courses in these five TVET career tracks: agricultural education, business education, family and consumer sciences education, health occupations education, marketing education and trade and industrial education, few of which overlap with the Philippine TVET career tracks in secondary education. However, as an optional form of education in the United States, students are not required to take TVET courses to earn a high school diploma (Zirkle and Martin 2012).

Expansion of TVET in the Philippines

The roots of TVET in the Philippines were established more than 80 years ago. TVET began in 1927, when the government recognized the need to provide the youth skills to make them employable should they decide to quit school early. By the 1960s, TVET was addressing the perceived need for skills in agriculture, industry, trade, fishery, and other vocational programs. From the 1970s to the 1980s, the government recognized that skill development was key to national economic development. TVET had evolved into a formal education system where training was conducted in technical high schools and regional and provincial training centers. Several agencies began to handle different aspects of TVET education (Table 2): School-based TVET was formally managed by the Bureau of Technical and Vocational Education (BTVE); center-based TVET was managed by the National Manpower and Youth Council (NMYC); and apprenticeship was managed by the Department of Labor and Employment (DOLE).

In 1990, the Congressional Commission on Education (EDCOM) conducted a national review of the state of Philippine education and workforce development. They recommended the merging of BTVE and NYMC into a single unit to reduce overlap in skills development and to better focus management and policy formulation for the country's TVET system, as well as to further develop of each educational subsector (Di Gropello et al. 2010; Biervliet 1996). In 1994, these reforms resulted in the creation of DepEd and CHED. By Republic Act (R.A.) No. 7794, TESDA was

Table 2 Agencies handling TVET in the Philippines before TESDA (Biervliet 1996)

Agency	Role in TVET
NMYC <i>National Manpower and Youth Council</i>	Center-Based TVET: non-formal vocational training to out-of school youth
BTVE/DECS <i>Bureau of Technical and Vocational Education of the Department of Education, Culture and Sports</i>	School-Based TVET: technical and vocational education at secondary and postsecondary level
The Office for Apprenticeship of DOLE <i>Department of Labour and Employment</i>	Apprenticeship

created as the national TVET agency. After 20 years, the Enhanced Basic Education Act of 2013 (Republic Act 10533), or the K-12 Law, required a TVET track to be offered in senior high school, vocationalizing upper-secondary education in the country. With K-12 in implementation, students may choose the TVET track in grades 11 and 12 to pursue a vocational career path related to agri-fishery, home economics, ICT, industrial arts, or maritime. Thus, high school students are expected to graduate with employability skills that will make them productive citizens even if they are not able to or choose not to proceed to postsecondary or higher education (TESDA 2016). In the case that they decide to pursue postsecondary TVET, a high school diploma is required during application.

Note that while TVET shares curriculum space with secondary education, TVET programs are still primarily designed to provide middle-level skills development (e. g., semi-skills, skills, craft, technician training) in postsecondary education to earn a national certificate (NC) for employment.

TESDA's Role in Postsecondary TVET

TESDA is globally known as the authority of Philippine TVET. It has evolved into an organization that is responsive, effective, and efficient in delivering myriad services nationwide, but its primary role is defined in four areas (Fig. 4).

TVET Policy and Plans Formulation

TESDA is mandated to “provide relevant, accessible, high quality and efficient technical education and skills development in support of the development of high quality Filipino middle level manpower responsive to and in accordance with the Philippine development goals and priorities” (Syjucu 2005, p. 3). To provide a clear sense of direction, TESDA develops policies and plans for TVET, generates research and studies, and disseminates TVET information for stakeholders and the public. The most recent policy and planning document developed is the National Technical Education Skills Development Plan (NTESDP) for 2011–2016, which serves as a blueprint for all TVET institutions.

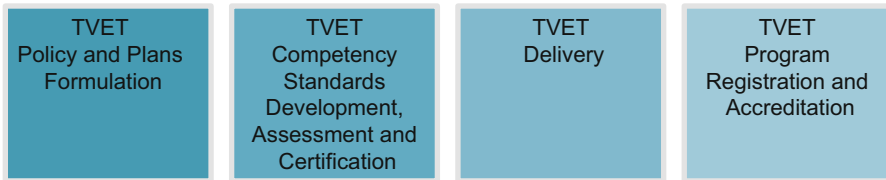


Fig. 4 TESDA's role in TVET

TVET Competency Standards Development, Assessment, and Certification

The TVET system is competency-based and assessment driven. TESDA has developed competency standards, qualifications, and training regulations for 17 sectors, implemented through a competency-based curriculum, and assessed with national certificates of competency.

The National Certificate (NC) is awarded to those who pass an assessment, demonstrating competence on all units of the competency standards. However, a Certificate of Competency (COC) is issued to individuals who satisfactorily demonstrate competence on some units (TESDA 2016a). NCs are issued according to the qualification level (i.e., NC I, NC II, NC III, NC IV) for which the individual is being assessed (Fig. 5).

TESDA has the sole authority to issue NCs in the country, as noted in the TESDA Act: “All certificates relating to national trade skills testing and certification system shall be issued by the Authority through the TESDA Secretariat” (Section 22, para. 3). The NC and COC are valid for 5 years. Individuals who wish to renew their certificates must undergo a new competency assessment. Individuals who intend to get certified or renewed must request for an assessment at any TESDA-accredited assessment center and pay an assessment fee (TESDA 2016b). The assessment process determines whether the student can perform to the standards expected in the workplace as defined in the competency standards. Assessment is conducted by a TESDA-accredited competency assessor who may use several methods (e.g., skill demonstration, observation with oral questioning, written test, interview, third party reports, portfolios, work projects) to gather evidence that students can perform according to standard. The TESDA website maintains an Online Registry of Certified Workers, allowing anyone to search or verify certified skilled workers by name, certificate number, or competency standard.

TVET Program Delivery

TESDA delivers TVET training programs in various modes: institution-based, enterprise-based, community-based, mobile training, and online training. Institution-based programs (also referred to as school-based or center-based programs) are TESDA-registered postsecondary TVET programs of varying duration offered by

Level / Qualification Type	Knowledge, Skills, and Work Values	Application	Degree of Independence
NATIONAL CERTIFICATE I	Knowledge and skills that are manual or concrete or practical and/or operational in focus.	Applied in activities that are set in a limited range of highly familiar and predictable contexts; involve straightforward, routine issues which are addressed by following set rules, guidelines or procedures.	In condition where there is very close support, guidance or supervision; minimum judgment or discretion is needed.
NATIONAL CERTIFICATE II	Knowledge and skills that are manual, practical and/or operational in focus with a variety of options.	Applied in activities that are set in a range of familiar and predictable contexts; involve routine issues which are identified and addressed by selecting from and following a number of set rules, guidelines or procedures.	In condition where there is substantial support, guidance or supervision; minimum judgment or discretion is needed.
NATIONAL CERTIFICATE III	Knowledge and skills that are a balance of theoretical and/or technical and practical. Work involves understanding the work process, contributing to problem solving, and making decisions to determine the process, equipment and materials to be used.	Applied in activities that are set in contexts with some unfamiliar or unpredictable aspects; involve routine and non-routine issues which are identified and addressed by interpreting and/or applying established guidelines or procedures with some variations.	Application at this level may involve individual responsibility or autonomy, and/or may involve some responsibility for others. Participation in teams including team or group coordination may be involved.
NATIONAL CERTIFICATE IV	Knowledge and skills that are mainly theoretical and/or abstract with significant depth in one or more areas; contributing to technical solutions or a non-routine or contingency nature; evaluation and analysis of current practices and the development of new criteria and procedures.	Applied in activities that are set in range of contexts, most of which involve a number of unfamiliar and/or unpredictable aspects; involve largely non-routine issues which are addressed using guidelines or procedures which require interpretation and/or adaptation.	Work involves some leadership and guidance when organizing activities of self and others.

Fig. 5 TESDA educational qualifications descriptors (TESDA 2012, p. 2)

public and private TVET institutions. Data from TESDA (2016d) shows that TVET delivery in the country is 90% private. As of June 2016, there are 4,315 private and 429 public institutions offering TESDA-registered programs. Among the 10% of institutions that are public, 122 are TESDA-owned.

Enterprise-based are training programs implemented within companies/enterprises as apprenticeship programs (i.e., work-based learning period between 3 and 6 months), learnership programs (i.e., on-the-job training not exceeding 3 months), and company-based training (i.e., training conducted in company owned training centers). A dual training system, supported by the Republic Act 7686 or the Dual Training System Act, allows learning to take place alternately in two venues: the school or training center and the company. TESDA lists 421 companies offering 1,208 TVET programs in 2014 and 2015 (Orbeta and Esguerra 2016).

Community-based TVET programs are training programs conducted to address poor and marginalized groups, particularly those who cannot access or are not accessible by formal training provisions. To provide greater reach and access to TVET education, mobile training and online TVET programs are offered. Mobile programs reach the clients through mobile buses or vans that bring the facilities, equipment, and trainers to people in the community. TESDA online programs are delivered as free, job-centered microcourses designed to follow a “Learn-Practice-Certify-Employ” hybrid approach (Budhrani and Espiritu 2013).

TESDA offers financial assistance as scholarship programs to address equity and access to TVET (TESDA 2016c). The TESDA-PESFA (Private Education Student Financial Assistance) program, otherwise known as the Expanded Government Assistance to Students and Teachers in Private Education Act, covers full training cost for a noncredit technical vocational course and provides student allowance and book allowance. Scholars also benefit from general support services provided to the TVET system by TESDA, including: (a) free career profiling and (b) employment referral. Furthermore, the Training for Work Scholarship Program (TWSP) was introduced to meet the needs of highly critical skills determined by the Department of Labor and Employment (DOLE) every year. This program subsequently addresses the critical skills shortages in priority sectors, particularly the business process outsourcing, metals and engineering, construction, tourism, and others.

TVET Registration and Accreditation

To ensure quality of TVET in the country, TESDA requires all institutions, training centers and schools offering TVET programs to register themselves with TESDA prior to offering any program, ensuring they are in compliance with the TESDA policies and training requirements such as curricular programs, faculty and staff qualifications, physical sites and facilities, tools, equipment, supplies, and materials. Upon completion of all requirements, an institution is issued a Certificate of Program Registration (CoPR) and the program is officially listed in the TESDA Compendium of Registered Programs online.

Additionally, TESDA participates in the process of compliance audits and accreditation of TVET institutions and assessment centers nationwide as a form of quality assurance. Especially since TVET is provided mainly by the private sector, effective quality control and governance is needed (Orbeta and Esguerra 2016). In 2015, 3,223 programs were closed after a compliance audit (TESDA 2016d). To earn TESDA accreditation, the institution must undergo self-assessment and an external review by a TESDA-recognized accrediting body. Institutions that meet the standards of TESDA and go beyond minimum requirements earn right to boast as a “TESDA-accredited” institution.

TESDA guidelines (2016e) explain that institutions caught offering unregistered TVET programs or those in noncompliance with TESDA requirements will be sanctioned with fines, closure, and/or imprisonment, by discretion of the court. Already-registered TVET institutions caught of fraudulently offering unregistered TVET programs may risk their certificate of registration being revoked.

Impact of Postsecondary TVET on the Workforce

Those who enter TVET want training to get a job. The most cited reasons for choosing TVET are to gain employment/get a job (45%) and to gain skills (38%). A smaller number of individuals (7%) state that TVET is for skills enhancement or upgrading. Only 1% of individuals seek promotion or increase in income. In 20 years, the number of graduates in TVET has risen from 200,000 to 2 million. In 2015, there were 2,129,758 graduates and over 2 million enrolled in TVET programs (Fig. 6). The employment of TVET graduates is on the rise as well, with an employment rate of 45% in 2005 to 65.5% in 2014 (TESDA 2016). While 36% of college graduates are unemployed, only 7.5% TVET graduates are unemployed. It is expected that 75–85% of TVET graduates will find jobs within 6 months, 30% of graduates find a job in less than a month, 56% in less than 3 months, and 73% within 6 months. According to TESDA reports, the key employment sectors (Table 3) that contributed to the absorption of TVET graduates in the labor market include agri-fishery, construction, processed foods and beverages, decorative crafts, metals and

Fig. 6 Graduates of TVET, Philippines: 1996–2015

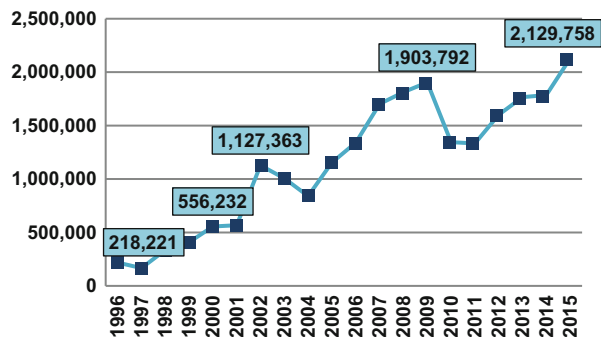


Table 3 PDP priorities versus TESDA priority sectors and number of persons certified, 2012 (TESDA 2013b, p. 14)

PDP Priorities	TESDA Priority Sectors	TESDA Certified
1. Tourism	Tourism	247,104
2. BPO	ICT-BPO	50,419
3. Electronics	Electronics	29,516
4. Mining	–	–
5. Housing	Construction	50,651
6. Agribusiness/Forest-based products	Agri-fishery	11,933
7. Logistics	–	–
8. Shipbuilding	Metals and engineering	46,738
9. Infrastructure	Construction, utilities, HVAC/R	56,149
10. Other high-potential industries		
Homestyle products	Furniture and fixtures	124
Wearables	Decorative crafts, Footwear, leather goods	–
Motor vehicle parts and components	Automotive and land transport	80,755
Garments and textiles	Garments	7,317
Total		530,055

Note: Adapted from Technical Education and Skills Development Authority (2013b)

engineering, and IT-BPM (TESDA 2016). Majority of employers find their TVET graduates performing well in the workplace and expressed their willingness to continue hiring TVET graduates.

The employability of TVET graduates proves that TVET programs are in line with the needs of the industry. TESDA facilitates jobs for TVET graduates by developing training regulations, competency standards, and training programs that align to middle-level skill qualifications for emerging industries. Among the ten emerging industries declared in the Philippine Development Plan of 2011–2016 (Table 3), TESDA has programs that support TVET education for most (except mining and logistics), which have yielded graduate over 500,000 graduates. As of 2012, the top 5 programs that resulted in TESDA-certified skilled workers included tourism followed by IT-BPO, construction, automotive, metals and engineering, and electronics. Data from TESDA's Impact Evaluation Study (IES) in 2009 reveal that 27.7% of TVET graduates were earning high salaries (\$200 to \$400 per month); 40% were earning average salaries (between \$100 to \$200); and 21.5% were earning low salaries (less than \$100 per month) (TESDA 2011). The IES study also showed that a larger percentage of employed graduates earned higher salaries in the ICT and HVAC/R sectors; average salaries were received among graduates in tourism, electronics, construction, metals and engineering, and garments; low salaries were seen among graduates in the agri-fishery, cottage and handicrafts, and automotive (TESDA 2011).

There were an estimated 753,000 job vacancies between 2013 and 2014; 82.5% were “easy-to-fill” and 17.5% were “hard-to-fill.” Hard-to-fill vacancies are defined as vacancies for which establishments found difficulties in recruitment. About 40% of the hard-to-fill jobs were related to TVET job roles, including technicians and associate professionals (e.g., technical sales representatives, mechanical engineering technicians), service workers, shop salespersons, service crew, market sales workers, craft and trade workers (e.g., sewers, embroiderers), and plant and machine operators. Reasons for difficulties in recruitment include the lack of skills and competencies (29.9%) as the top reason, few applicants, inadequate work experience, applicants’ expectations for higher salary, and the lack of professional/TESDA certification (Philippine Statistics Authority 2016b).

TESDAs greatest challenge is to respond to the needs of the country, especially the youth seeking employment. The potential beneficiaries of TVET include: high school graduates, college undergraduates and graduates, and self-employed or unemployed persons who want to acquire competencies in different occupational fields. Displaced workers who lost their jobs and returning overseas Filipino workers who discontinue working abroad are also clients of TVET (Syjuco 2005). While TVET’s purpose is to provide these individuals employable skills as means to transition individuals towards the world of work and out of poverty, training alone does not create jobs or eradicate poverty. There are other factors that have to be in place for TVET to directly impact poverty alleviation such as having a strong labor market that can absorb TVET graduates and provide decent working income (Holander and Mar 2009).

Parallels and Differences Between Postsecondary TVET and US Community Colleges

While TVET is expressly focused on the workforce development needs of the Philippines, in comparison to US Community Colleges, it most closely reflects similar purposes. There are key similarities and differences between these educational entities. As described in previous sections, TVET is a government-run vehicle for workforce preparation which occurs through training delivery, training through third party educators, and a national system of workforce certifications. While situated between the K-12 and higher education sectors, TVET is not designed as a college parallel educational system; thus, TVET credit does not transfer to the university toward the earning of baccalaureate degrees. In contrast, comprehensive Community Colleges in the United States are typically organized at the state and/or local level and deliver an array of credit-based educational offerings, including work leading toward an Associate or Arts or Associate of Science that articulates toward baccalaureate degrees (Ignash and Townsend 2000), applied associate degrees that intend to prepare individuals in occupational areas (Cohen et al. 2014), and noncredit offerings for occupational training, personal interest learning, and elements of precollege remediation and adult high school completion (D’Amico et al. 2014). While the majority of noncredit education in US Community Colleges is for

workforce training, it is not the only focus and the function allows colleges to use this flexible delivery method to meet a variety of community needs.

Thus, one of the key differences is that the majority of Community College delivery yields academic credit, while TVET is credential-based. TVET graduates are not able to apply or transfer TVET certifications to higher education. Cohen et al. (2014) noted that systems in most other countries do not include provisions for credits to transfer to universities, which demonstrates similarity between the Philippines and technical training in other countries. From a curriculum and credential point of view, TVET in the Philippines is most like noncredit Community College education in the United States. However, one key difference is that TVET delivery in the Philippines is most often (90%) through the private, for-profit sector. In the United States, according to the National Center for Education Statistics (2015), 95% of higher education enrollment in two-year colleges occurs in the public sector. While this national figure is specific to credit-based enrollment, it provides a point to demonstrate the prevalence of public higher education versus private not-for-profit and private for-profit education in the United States.

Additionally, while US Community Colleges offer training, credentials other than higher education-based degrees or certificates are offered through third-parties through industry-recognized credentials (National Network n.d.). Perhaps one parallel in terms of industry certifications is the registered apprenticeship, which includes on the job training and related instruction leading to a certification through the US Department of Labor (n.d.).

The most prevalent connection between TVET in the Philippines and US Community Colleges is through noncredit education. While there is growing discussion of articulating noncredit into credit-based education in US Community Colleges (Van Noy et al. 2008), according to the National Center for Education Statistics (2016), noncredit courses result in “no credit applicable toward a degree, diploma, certificate, or other formal award” (p. 22). By definition, TVET and noncredit Community College education in the United States are very similar. One of the primary differences, however, is TVET’s exclusive focus on workforce development programs for middle-skills training at the postsecondary level, leading to government-based certifications or credentials. In fact, TESDA-issued certificates expire after 5 years and consequently, cannot be transferred to higher education.

Still, Philippine TVET and noncredit Community College education are prevalent in terms of their enrollment. It is estimated that noncredit headcount enrollment reaches five million students per year in US Community Colleges (AACC 2016). By comparison, TVET has more than two million completers every year, which for a country not quite one third the size of the United States is significant in terms of enrollment as well as addressing workforce needs of the Philippines.

Recent data in the United States show that since the Great Recession, 99% of new jobs have gone to people who completed at least some college (Carnevale et al. 2016). While the conditions and educational configurations may differ between the Philippines and the United States, the strong connection made between education

and employment is both undeniable and a national priority in each country. Due to lacking and insufficient datasets maintained on noncredit workforce education in US Community Colleges, strong connections have not been widely documented on the labor market outcomes from noncredit course and program completion. However, there is a strong link to employers through two avenues. The first is with credentials. Unlike the Philippines, where TVET credentials are earned through TESDA, the model in the United States, except for apprenticeships registered through the US Department of Labor, is more focused on industry-based standards. Noncredit programs in US Community Colleges can potentially lead to industry-recognized credentials, which are “endorsed by a nationally recognized trade association or organization representing a significant part of the industry or sector” (Association for Career and Technical Education 2015, p. 2). In addition to involvement of industry groups in setting credential standards, much of the noncredit education in American Community Colleges is contract training directly for employers. According to D’Amico et al. (2016), approximately 28% of noncredit Community College education is sponsored occupational training for employers. Thus, between involvement in the setting of standards and contract training, the connection between employers and noncredit Community College education is strong.

Conclusions and Future Directions

TESDA’s vision of serving as the leading partner in the development of the Filipino workforce is highly evident in its large role managing and supervising TVET in the Philippines. It has taken 20 years for this agency to develop a quality-assured, ISO-certified system to ensure it can continue to provide direction, policies, programs, and standards toward technical education and skill development. One of the key differences that uniquely identifies TVET in the Philippines is its competency-based curriculum, which implements competency standards, training regulations, and assessment and certification processes to ensure a high-quality, industry-ready workforce. It is not surprising that employers of skilled workers seek TESDA NCs upon recruitment.

The current economic and workforce condition in the Philippines shows that the service industry drives employment, but with evolving business strategies and global directions, the industry and agriculture sectors are predicted to grow. Nevertheless, the country is still facing low education, high dropouts, and unemployment, particularly among the youth. Issues on low school participation, affordability, and access to education are related to these problems.

With the shift to K-12 compulsory education and the vocationalization of upper-secondary education, TVET is highly prioritized as a means to prepare the youth with the competencies required to be part of the skilled workforce. Evidently, the role and importance of secondary education is no longer limited as preparation for higher education, but as preparation for work. There is strong hope that more students will stay in school and graduate high school with employable skills that

will make them productive citizens even if they are not able to proceed to post-secondary or higher education.

Postsecondary TVET is a strong alternative for high school graduates, college undergraduates and graduates, the self-employed or unemployed, displaced workers, or returning overseas Filipino workers who want to acquire competencies in different occupational fields.

Affordable TVET is provided through multiple delivery modes (i.e., institution-based, enterprise-based, community-based, mobile training, and online training), supported by scholarship programs (i.e., TESDA-PESFA, TWSP) and a flexible competency-based approach. TESDA is highly responsive to the needs of the local and international industries, ensuring TVET competency standards and training programs are aligned to priority job sectors, in-demand jobs, and hard-to-fill jobs.

“With increasing connectivity and integration of world economies, the Philippines’ economic growth is greatly dependent on the technical competence of its people” (TESDA 2016c, p. i). TESDA has taken initiatives that align toward a more global TVET agenda, particularly to UNESCO-UNEVOC’s 2030 agenda for sustainable development and strategic plan for TVET 2016–2021 (UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training 2016). UNESCO’s recent report has identified three priority areas for enhancing the relevance of countries implementing TVET systems, including: (1) fostering youth employment and entrepreneurship; (2) promoting equity and gender equality; and (3) facilitating transition to green economies and sustainable societies (UNESCO Executive Board 2016).

TESDA has already begun work on innovation projects such as green skills competency development, online learning for TVET, programs for women in TVET, career guidance, and local and international TVET skills competitions (TESDA 2016). Additional TVET strategies, policies, and reform programs (TESDA 2016e, f) are expected to be in place to reduce poverty, expand access, and provide skills training for the urban and rural poor, farmers, fisher folks, indigenous people (IPs), women, rebel returnees/combatants, drug dependents, inmates and their families, repatriated overseas Filipino workers (OFWs), out-of-school youths (OSYs), micro, small and medium enterprises (MSMEs), and family enterprises. These initiatives are something to look forward to in the next few years.

Undeniably, challenges are expected with constant changing labor market requirements, industry demands, and structure of work, especially with technological advancements shifting manual labor to machines. Issues on expanding access to TVET among the youth, unemployed, and marginalized groups, improving quality of TVET, and making TVET responsive to local and international demands continue to require attention (TESDA 2016d). Future directions for developing a skilled workforce through TVET will strongly depend on the policies and plans on education, poverty alleviation, and employment generation (i.e., Philippine Development Plan, National Technical Education Skills Development Plan) that will be put forth by the new government administration and newly appointed TESDA officials in 2016.

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Fostering Creative, Practical, and Professional Engineers: National Institute of Technology (KOSEN) in Japan

40

Asami Shimoda and Takayoshi Maki

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Abstract

National Institute of Technology (KOSENs) are unique colleges of higher education in Japan, which provide students a 5-year engineering education program and accept students from the age of 15 years old or older. In 2012, about half a century has passed since its establishment and KOSENs are now well known among manufacturing and development companies which support Japan as a top country for science and engineering in the world. Furthermore, the international reputation of KOSENs is expanding as well.

This chapter identifies the factors for the expansion of the field by asking: (1) Why has the KOSEN system continued and been maintained during such a long period? (2) Why has KOSEN attracted international attention in recent years? and what is the KOSENs strategy under the engineering industry that responds rapidly to global changes?

The factor of the first question was founded (1) KOSENs' fixable transformation of major field to respond the industry demands, (2) the important role which contributes the higher education access to wide ranges of people especially comes from lower socio-economic families and lives the remote area, and (3) unique institution's competition to promote the students' motivation of creating something new. Apart from that, the assured quality of facility, curriculum, and teaching force of KOSEN were also founded. The factor of second question was founded (1) systematical system to accept international students and (2) the expansion of international networking.

Keywords

Higher education · Vocational education · Engineering · Technology

Introduction

National Institute of Technology (KOSENs) are unique colleges of higher education in Japan, which provide students a 5-year engineering education program and accepts students from the age of 15 years old or older. According to Raby (2009, p. 8), all Community College models are postcompulsory and most models are postsecondary. KOSEN is one of unique Community College model, which is postcompulsory, but serves the part of an upper secondary system (3 years) and provides a 5-year course of study, including 2 years of postsecondary. "KOSEN" is named from the abbreviation of "Koutou (Superior)," "Senmon (Professional)," and "Gakkou (School)" (KOSEN 2010, p. 1). The mission of the KOSEN is to foster creative and practical technical engineers as serves as a response to a strong demand

from industry. Throughout Japan, there are 51 KOSENs. They are organized by the Institute of National Colleges of Technology.

In the year of 2012, KOSENs celebrated its 50th year's anniversary. About half a century has passed since its establishment and today, KOSENs are well known among manufacturing and development companies which support Japan as a top country for science and engineering in the world. These institutions are not only well known domestically, but also in recent years, their international reputation is growing as evidenced by the following quotes.

They are widely admired internationally, not only for the quality of the high-level vocational training they offer, but also for their degree of responsiveness to the needs of Japanese industry, especially the manufacturing sector. (OECD 2009, p. 16)

With workplace training, Japan's Kosen colleges bridge skills gap. (Harden 2011, Washington Post Web Version)

Employers are eager to recruit KOSEN students because of their trust of KOSEN graduates. (McKinsey and Mourshed 2012, p. 79)

This chapter focuses on why the KOSEN system has been maintained for such a long period and why KOSEN has attracted international attention in recent years. The first part of this chapter is an overview of KOSEN. This part will review the background of KOSEN emergence and the functions of KOSEN which include a focus on Major Fields, Facilities, Qualification of KOSEN Teaching force, Quality of Curriculum, and Students' career path. The second part of this chapter will analyze unique strategies of KOSEN in a globalized world.

Overview of KOSEN

Establishment of KOSEN

After World War II, Japan was devastated. In all the large cities (except Kyoto), the industries and the transportation networks were severely damaged. However, Japan recovered from those damages rapidly. According to the Annual Report on the Japanese Economy 1956 (Minister of State Economic Planning Agency 1956), 11 years from the end of the war, the national income increased about 50% and the industrial production became doubled compared with before the war. There were some contributing factors that aided in the recovery. For example, Tokyo city was officially selected as the 1964 Summer Olympics in 1959 and Tokyo Olympic Game was successfully held as the first Olympic in Asia in 1964.

Under the rapid economic growth, industrial structures changed and were upgraded as shown in Fig. 1. Following the change, human resource demand changed and the situation exposed the shortages of engineers in industry. During the period, to respond to a strong demand from industry, KOSENs were incorporated into a system of 5-year higher educational institutions with the revision of the School

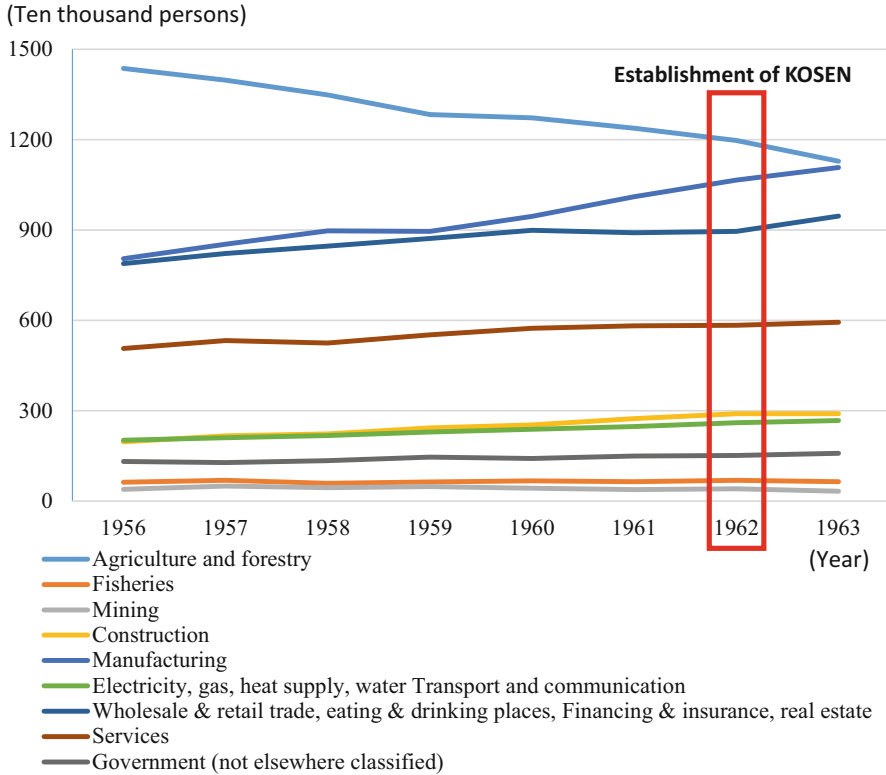


Fig. 1 Employed person by industry in Japan (Source: Statistics Bureau of Japan, <http://www.stat.go.jp/data/roudou/longtime/03roudou.htm>)

Education Law in 1961. In 1962, the first 12 national KOSENs were established (Hakodate, Asahikawa, Fukushima, Gunma, Nagaoka, Numazu, Suzuka, Akashi, Ube, Takamatsu, Niihama, and Sasebo).

The initial mission of KOSEN was “to teach special knowledge deeply and to foster necessary ability for their occupation skill” in field of engineering. In that moment, KOSEN did not have the mission of research and was thus different from the University which did have the mission of education and research by the law. KOSEN put emphasis on student guidance, extracurricular activity, and lifestyle guidance in dormitories since philosophically, education in KOSEN was intended for occupational life after the students graduated. After the first 12 national KOSENs were established, an additional 31 national KOSENs were established within 3 years.

After the initial development of new KOSEN establishments, the Maritime Technology Council of Ministry of Transport and the sea transportation industry requested an expansion of the KOSEN to include the teaching of maritime technology. There was a perceived need for this expansion since the sea transportation

industry needed highly equipped maritime officers. In 1967, the field of maritime technology was included with the revision of the School Education Law. In addition, five maritime senior high schools were rehabilitated to the modernized facility as KOSENs with field of maritime technology and the curriculum was revised to accommodate the update.

Similar to the field of maritime technology, in 1971, in order to catch up with new technology and improve the contents of education, three radio wave senior high schools were also rehabilitated and revised curriculum as KOSENs. By 1981, there were 52 national KOSENs including 44 in the engineering field, five in the maritime technology field, and three in the radio wave field.

The University Council of Japan Ministry of Education, Culture, Sports, Science and Technology (MEXT) “Improvement of National Colleges of Technology report” in 1991 highlighted the necessity to advance courses in KOSEN. The report said that the number of KOSEN graduates who hoped to continue to study and to conduct research on their specialty was needed to make their knowledge and skill in alignment with the sophistication of scientific technology in industry. Therefore, there was a need to establish a new system of advanced courses to teach higher knowledge, skill, and research and help to respond to the graduate expectations and the needs of industry. It was also suggested that these advanced courses can be effective for KOSEN graduate or engineers who already work in the industry to upgrade their knowledge and skills and to strength KOSENs’ research function. After this, there was another revision of the School Education Law and it became possible to establish a system of advanced courses and to expand the fields of study beyond industrial and maritime technologies. This advanced course (2 years) is for the graduates of KOSEN (5 years) who seek for more advanced and higher education regarding their own studies. All the national KOSENs established these advanced courses by 2009.

In 2003, the final report of the Committee on the Future of National Colleges of Technology was published and in next year, The National Institute of Technology was established. The institute coordinates the quality assurance, innovative pedagogy, etc., among 51 KOSENs that are spread in nationwide. As of April 2016, 48,748 students (male: 80.8%, female: 19.2%) are studying in Regular Course, and 2,818 students (male: 87.3%, female: 12.7%) are studying in Advanced Course in 51 KOSENs (National Institute of Technology 2016a, p. 33).

System of KOSEN

KOSENs provide practical and professional engineering education based on a 5-year integrated system. This system is like a hybrid of upper secondary school and lower-division college and is called “Regular Course.” After graduating from the regular course, the students can obtain an associate degree. KOSENs also have “Advanced Course” which is top-up 2-year course after the regular course and can obtain a full degree (see Fig. 2).

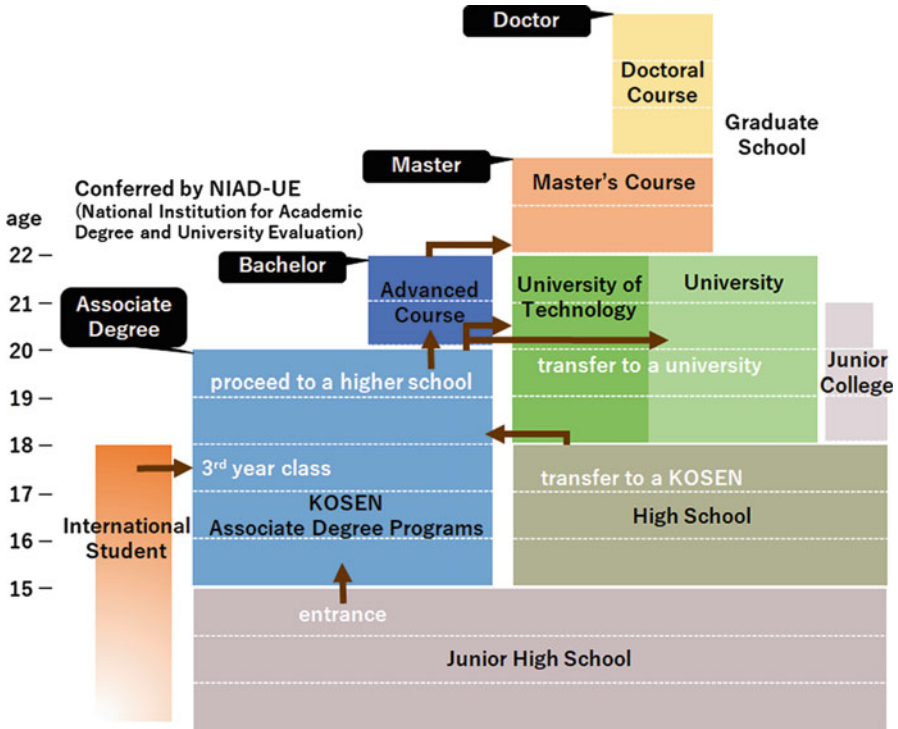


Fig. 2 System of KOSEN and about careers (Source: KOSEN 2010, p. 6)

Major Fields of KOSEN

As of 2016, there are 51 national KOSENs in Japan and 8 major academic fields as shown below (National Institute of Technology 2016a, pp. 15–18; National Institute of Technology 2016b, p. 3). It is usual for one national KOSEN to have 3–7 departments.

Regular Course

Mechanical & Material Engineering: Students systematically learn about the Mechanical Design which are foundation of Monozukuri (Japanese Manufacturing Style) and the essential subject for the Material Development department. “Monozukuri” is the duplication of design data into a material (Fujimoto 2004).

Electrical & Electronic Engineering: Students acquire broader knowledge of necessary electrical and electronic engineering subjects to deal with rapid progress and the diffusion of information and communication technology, such as sensor information gathering, action/control by motors, wireless communication, and power generation.

Information Technology: Students learn about the foundation of information society such as computer systems, software, programming, information processing, and network technologies.

Biological & Chemical Engineering: Students learn about the basic theory and applied technologies of biology and chemistry, such as chemical technology and biotechnology, to develop and produce functional material for industry medical care and daily life, as well as recycling and environmental improvement technologies.

Civil Engineering: Students learn about space design and management including the construction structures such as bridges, rivers, underground space, railways and water infrastructure, urban planning, and landscape design.

Architectural Engineering: Students learn about housing and urban development that serve as the basis of human life with the perspective of coexisting with nature and better comfort and convenience extracting the factors such as environment, urban structure, scenery, history, culture.

Maritime Technology: Students acquire the knowledge and skills necessary for maritime officers and marine transportation-related areas.

Others: To flexibly respond to the needs of industry and society, as well as the change in industrial structure and the diversified development of today's scientific technologies, new departments other than those related to industry were established. Those departments are related with human resources who can play active roles internationally and create new business models such as Business Communication, International Business, Business Administration, Distribution and Information Engineering.

Advanced Course

The purpose of the advanced course is to foster engineers who have the knowledge and the ability beyond the normal or traditional level of their special field and to guide them with a more academic and sophisticated composite and fusional curriculum. To be precise, this course of study is designed to enhance not only advanced academic knowledge and skills but also the capacity for technological development and ability of problem solving to contribute to the wide ranges of industry development.

If the student completes this advanced course and covers the all requirement of National Institution for Academic Degrees and Quality Enhancement of Higher Education (NIAD-QE), he/she can obtain the bachelor degree of engendering. And they can continue their study in graduate school, if they wish.

Facilities of KOSEN

In most of the cases, KOSENs are equipped with the same level of facilities as a university. It is usual for the area of KOSEN to have a broader number of facilities when compared with those offered in a regular upper secondary school.

The Standards for Establishment of National Institute of Technology dictates that the facilities of KOSEN is decided as following (MEXT 2016) (School Buildings, etc.)

Article 23. A national institute of technology is equipped with the minimum of the following for its exclusive facilities, provided, however, that this shall not apply if there are special circumstances and if it is deemed that the education would not be impeded:

- (i) A president's room, staff rooms, meeting rooms, office rooms
- (ii) Classrooms (such as lecture rooms, seminar rooms, experiment rooms, and practical training rooms) and laboratories
- (iii) Libraries, medical treatment rooms, and students' common rooms

1. School buildings shall be equipped with facilities for information processing and for learning languages, to the extent possible, in addition to the facilities listed in above.
2. In addition to school buildings, a national institute of technology shall have a gymnasium, an auditorium, dormitories, facilities for extracurricular activities, and other facilities for welfare and guidance, to the extent possible.

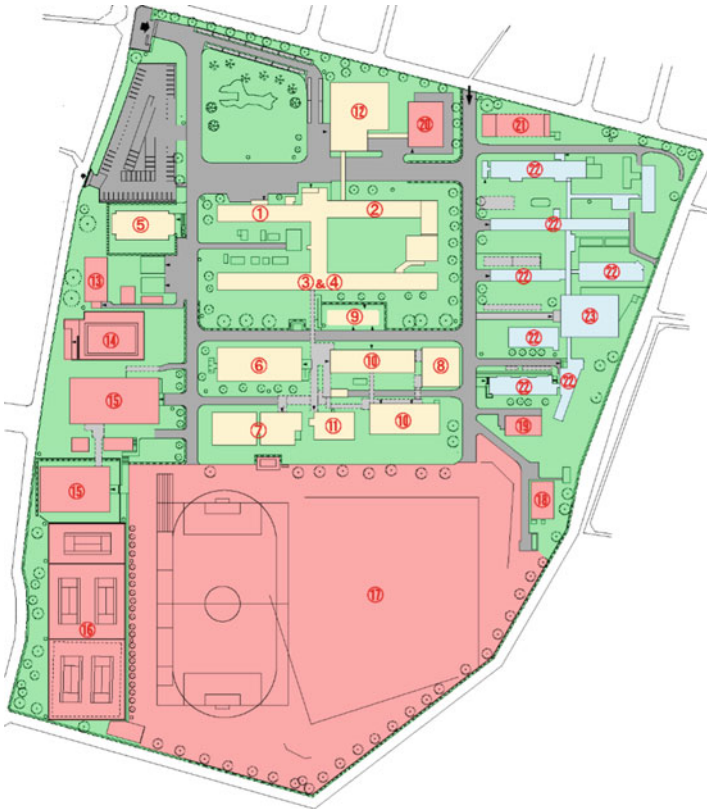
There are currently 51 KOSENs in Japan and 55 campuses are managed. The average of the area of school sites of 55 campuses is 112,046 m². Figure 3 shows about the average KOSEN site such as National Institute of Technology, Nagano College. Nagano College's the area of school site is about 112,573 m² and it has five departments and one advances program.

Qualification of KOSEN Teaching Force

The KOSEN brochure (National Institute of Technology 2016a, p. 3) mentioned, "More than 80% of faculty members hold the highest degree in their research field." Figure 4 shows the allocation of the faculty members in 55 KOSENs campuses (3,743) by qualification except the presidents. Chapter III "Qualifications of Teachers" in the Standards for Establishment of National Institute of Technology as below, its qualification levels are very similar to Chap. IV "Qualifications of Teachers" in the Standards for Establishment of Universities (MEXT 1956, 2016). To be a teacher in KOSEN needs high qualification almost same as a university standard.

Qualifications of Professors

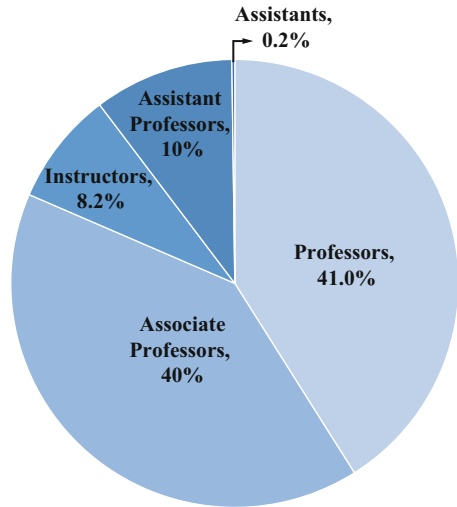
Article 11 A person who is permitted to be a professor shall be a person falling under any of the following items who is recognized to have the educational



School Buildings:		Sports facilities etc.;	
①	Administration & General Education	⑬	Martial Arts Gymnasium
②	General Education	⑭	Swimming Pool
③	Department of Electrical and Electronic Engineering	⑮	Gymnasium 1 & 2
④	Department of Mechanical Engineering	⑯	Tennis Court
⑤	Department of Electronics and Computer Science	⑰	Athletic Field
⑥	Department Civil Engineering	⑱	Accommodation Facility
⑦	Department of Electronics and Control Engineering	⑲	Multiuse Facility
⑧	Advanced Engineering Programs	⑳	Welfare Facilities
⑨	Technology Center Regional Cooperative	㉑	Kyudo Training Gymnasium
⑩	Technology Education Center- Workshop-	Dormitories etc.;	
⑪	Information Technology Education Center	㉒	Dormitory
⑫	Library	㉓	Canteen

Fig. 3 A KOSEN’s campus map (Source: Based on National Institute of Technology, Nagano College 2013; National Institute of Technology, Nagano College 2016, p. 44, author rearranged.)

Fig. 4 Allocation of KOSEN faculty members by qualification (Source: Based on the National Institute of Technology 2016a, p. 37)



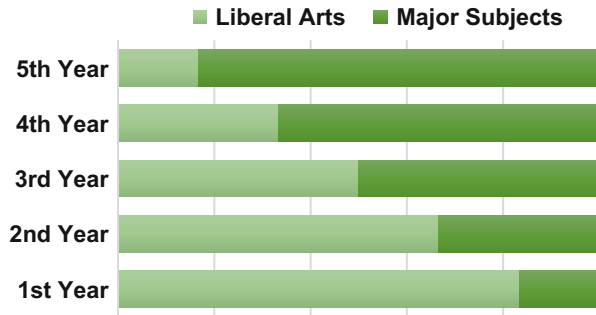
abilities suitable for taking charge of the education offered by a national institute of technology:

- (i) A person who has a doctor's degree (including degrees equivalent thereto that have been conferred in foreign countries)
- (ii) A person who has a professional degree prescribed in Article 5-2 of the Degree Regulations (Ordinance of the Ministry of Education, Science and Culture No. 9 of 1953) (including degrees equivalent thereto that have been conferred in foreign countries) and who has practical achievement in the major of said professional degree
- (iii) A person who has a career working as a professor, associate professor, or full-time instructor at a university (including a junior college) (including a career working as a teacher equivalent to these in foreign countries)
- (iv) A person who works for a school, research institute, laboratory, survey institute, or the like and who has education or research achievement, or a person who works for a factory or office the like and who has working experience in technology
- (v) A person who is recognized to have excellent knowledge and experience, in specific field
- (vi) A person who is deemed to have abilities equivalent or more to those of the person set forth in the preceding item by the minister of MEXT

Qualifications of Associate Professors

Article 12 A person who is permitted to be an associate professor shall be a person falling under any of the following items who is recognized to have the educational abilities suitable for taking charge of the education offered by a national institute of technology:

Fig. 5 The image of wedge-shaped education (Source: National Institute of Technology 2016b, p. 2)



- (i) A person falling under any of the items of the preceding Article
- (ii) A person who has a career working as an assistant professor or an official equivalent thereto at a university or national institute of technology (including a career working as an official equivalent to these in foreign countries)
- (iii) A person who has a master's degree or a professional degree prescribed in Article 5-2 of the Degree Regulations (including degrees equivalent thereto that have been conferred in foreign countries)
- (iv) A person who is recognized to have excellent knowledge and experience, in specific field
- (v) A person who is deemed to have abilities equivalent or more to those of the person set forth in the preceding item by the minister of MEXT

Quality of Curriculum

One of the characteristics of KOSEN is “Wedge-shaped Education” which means education is designed to generate an upward spiral of knowledge and ability (National Institute of Technology 2016b, p. 2). Figure 5 shows the image of “Wedge-shaped Education.” This education style is one of the ways to teach major subjects (professional knowledge and skills, experiments, graduation research, etc.) from 1st year and to increase its portion year by year. Applying this education style, students can learn the liberal arts subjects such as Japanese language and literature, Mathematics, History, Economics, English language, Chemistry, Physics, Physical Education, Philosophy and major subjects well balanced and the students obtain the almost same level of major subjects’ knowledge as a university student when KOSEN student graduate (National Institute of Technology 2016a, p. 13, 2016b, p. 2).

To help the student to improve their learning skills, KOSEN uses “Spiral Curriculum,” which is three steps such as Lecture Phase, Experiment Phase, and Practice Phase as you can see Fig. 6.

Figure 7 shows the timetable of the Department of Mechanical Engineering in Nara KOSEN (National Institute of Technology Nara College) as a concrete sample of above mentioned. The white parts are the liberal arts subjects and the orange parts are the major subjects. The balance between the liberal arts subjects and the major

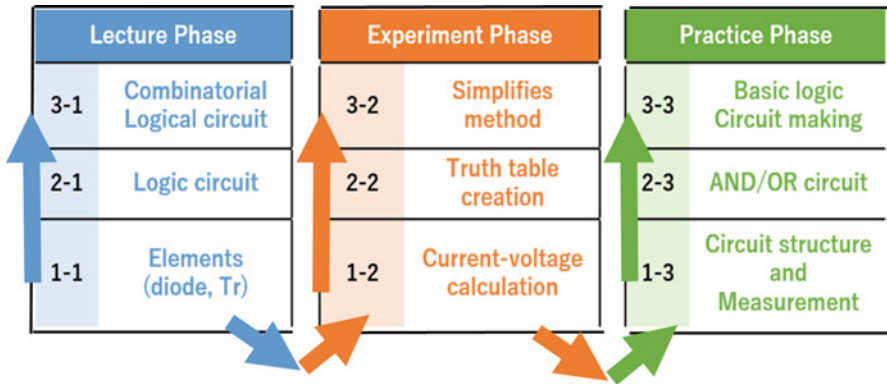


Fig. 6 Spiral curriculum (example of electronic/digital circuit course) (Source: National Institute of Technology 2016b, p. 2)

subjects changes by year. The curriculum keeps the certain period for practice or experiment based on the idea that the machine cannot be developed without the practical with the hands. The period of these practical classes is twice as long as the program for those students who attend a University (National Institute of Technology 2012b, p. 5). For example, from 1st year, the students take the class of practice such as “Workshop Practice,” “Machine Design and Drawing.” For instance, “Work Practice” is to learn the machining process of the machine’s parts and the basic operation of the machine tools. “Experiment in Mechanical Engineering” is to conduct the experiment by the students with the theme which is not in the textbook. Moreover, in the class of “Mechanical Design and Production,” the students start from having the idea of machine, draw the design for the idea, and produce the machine (National Institute of Technology 2012b, pp. 5–7).

Students’ Career Path

There are two main career paths for KOSEN graduates after the completion of the regular course. First is to get a job as an engineer and second is to go on to higher education to make the academic knowledge and skill more advance. Table 1 shows the career path of KOSEN graduates (Regular course) from JFY (Japan fiscal year) 2011 to 2015. About 57.3% of the graduates were employed and about 39.8% of the graduates go on the higher education.

Finding an Employment

Almost 100% of the KOSEN graduates who wish to have a job can get the job (Table 2). This means the KOSEN graduate respond the demands of the industry and highly evaluated.

	1st Year	2nd Year	3rd Year	4th Year	5th Year	
M O N	1	English	English	Engineering Materials	Applied Mathematics α	
	2					
	3	Japanese	Machine Design and Drawing	Calculus	Electronics Engineering	[Elective Subject] Engineering Mathematics
	4					
	5	Physics	Japanese	Information Processing	Design Engineering Exercises	[Elective Subject] Laws
	6					
	7	Introduction to Mechanical Engineering		Mechanical Design and Production		Philosophy
	8					
T U E	1	English	Calculus	History		[Elective Subject] Foreign Language
	2				Experiment in Mechanical Engineering	
	3	Music	Intensive English	Algebra and Geometry		Design Engineering Exercises
	4					
	5	Mathβ	Engineering Materials	Intensive English	Thermodynamics	Manufacturing Systems Engineering
	6				German	
	7	Information Literacy	Workshop Practice	Machine Design and Drawing	Intensive English	[Elective Subject] Applied Control Engineering
	8					
W E D	1	Geography	Calculus	Mechanical Technology	Mechanics of Materials	Mechanics of Fluids
	2					
	3	Health and Physical Education	Physics	Electric Engineering	Physical Education	Thermodynamics
	4					
	5	Workshop Practice	Mechanical Technology	English	Mechanics of Fluids	[Elective Subject] Economics
	6					
	7			Health and Physical Education		Physical Education
	8					
T H U	1	Chemistry	History	Advanced Physics	Advanced Physics	Research for Graduation Thesis
	2					
	3	Mathα	Health and Physical Education	Calculus	German	
	4	English	Physics			
	5	Japanese	Japanese	Politics and Economics		
	6	Home Room	Home Room	Home Room		
	7			Class for International Student		
	8	Supplemental Class				
F R I	1	Mathα	Chemistry	Basic Mechanics	Machine Design	Energy Engineering
	2					
	3	Machine Design and Drawing	English			
	4		Information Processing	Mechanics of Materials	Applied Mathematics β	Control Engineering
	5	Chemistry	Algebra and Geometry	Japanese	English	[E.S.]Mechanical Engineering
	6					Experiment of Mechanical Engineering
	7					
	8					

Fig. 7 Timetable of Department of Mechanical Engineering in Nara KOSEN (Source: National Institute of Technology 2012b, p. 7)

Table 1 Percentage and number of the graduate career path (JFY 2011–2015)

	2011	2012	2013	2014	2015
No. of graduates	9,093	9,050	9,276	8,798	8,076
% of employed graduates	57.16%	57.09%	57.02%	57.69%	57.57%
# of employed graduates	5,198	5,167	5,289	5,076	5,012
% of graduates who go onto higher education	39.77%	39.69%	39.89%	39.58%	39.98%
# of graduates who go onto higher education	3,616	3,592	3,700	3,482	3,481
% of others	3.07%	3.22%	3.09%	2.73%	2.45%
# of others	279	291	287	240	213

Source: National Institute of Technology 2016a, pp. 21–22

Table 2 Percentage of graduates who got a job (JFY 2011–2015)

	2011	2012	2013	2014	2015
# of graduates who wish to get jobs	5,250	5,226	5,320	5,107	5,044
# of Employed graduates	5,198	5,167	5,289	5,076	5,012
% of Employed graduates	99.0%	98.9%	99.4%	99.4%	99.4%

Source: National Institute of Technology 2016a, p. 21

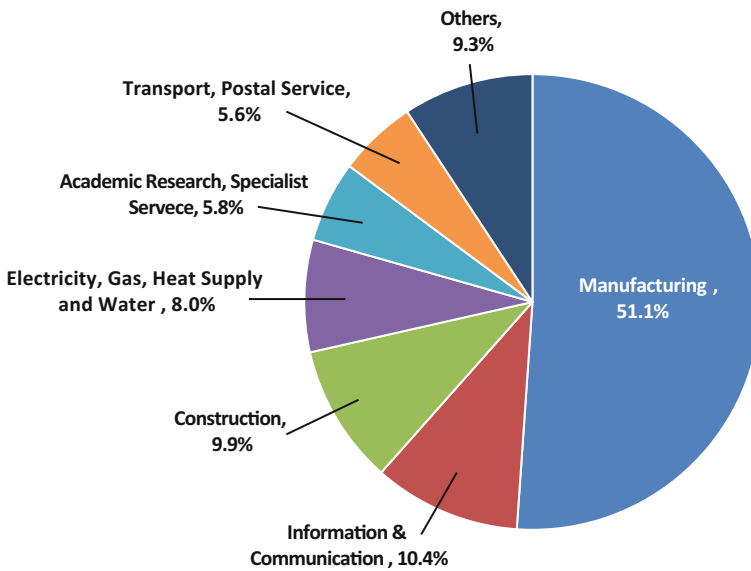


Fig. 8 Ratios of industrial categories the graduates employed (JFY 2015) (Source: National Institute of Technology 2016a, p. 21)

Figure 8 shows the ratios of the industrial categories the KOSEN graduates employed in JFY 2015. About half of the graduates were employed in the manufacturing. The second biggest percentage is Information/Communication, Construction, and Electricity. Also from this chart, it can be said that the KOSEN graduates contribute to the industry as precious human resource. In fact, in JFY 2014, 93% of the graduates were employed as an engineer (special skilled profession) (Council for the Research of KOSEN Enhancement Cooperation 2016, p. 43).

Continuation to Higher Education

The ratio of the KOSEN graduates who continue to study in the higher education is increasing. In 1985 (after 25 years later of KOSEN establishment), only 9% of the graduates went on to the higher education. But in 1995, about 24% of the graduates went to higher education (Council for the Research of KOSEN Enhancement

Cooperation 2016, p. 41). In JFY2015, the ratio became 40%, and 1,368 graduates entered the advanced course of KOSEN out of 3,481 graduate.

Strategies of KOSEN

In the first half, of this chapter, we examined KOSEN and understood why the KOSEN system was established and how they function. Now, in this latter half part of the chapter, we examine how the KOSEN system has survived for such a long time. KOSEN was established in response to a strong demand from industry in Japan during the years of high economic growth. Since inception, the economic social structure has changed dramatically and the technology which KOSEN mainly deal with is rapidly advancing. Apart from that, similar institutions, such as faculty of engineering in universities and technical high schools, have similar organization. Under those situations, the first question comes from the issue of what kind of the strategies KOSEN found out and implemented to last long. Moreover, the international situation has been changed dramatically as well. Therefore, in the second question, we focus on how KOSENs find the way to transform from domestic to international institute of technology under such a globalization age.

Why Has KOSEN System Been Continued and Maintained During Such a Long Period?

Respond to the Transformed Demands by the Industry

Following the progress of technology, the contents of the engineering field also advanced and became more diverse. Therefore, the expectation towards to KOSEN graduates is advanced and diverse as well. Figure 9 shows the change of the major field between 1962 and 2015. In 1962, the first 12 national KOSENs had only three major fields and in 2015, there were eight major fields, in fact each major field is not

Category in 1962 (12 KOSENs)	No. of Major Fields		Category in 2015 (51 KOSENs)	No. of Major Fields	
Mechanical Engineering	12	▶	Engineering	Mechanical & Material	42
Electrical Engineering	12	▶		Electrical & Electronic	54
Civil Engineering	7	▶		Information Technology	33
				Biological & Chemical	24
				Civil & Architectural	30
				Integrated	10
			Maritime Technology	5	
			Others	3	
Total	31		Total	201	

Fig. 9 Change of the major field between 1962 and 2015 (Source: Based on National Institute of Technology 2016a, p. 33; National Institute of Technology 2012a, pp. 118–128, author formed.)

exactly same as in 1962. For example, in Mechanical and Material Engineering, there are nine different majors: (1) Mechanical Engineering, (2) Mechanical System Engineering, (3) Mechanical & Electrical Engineering, (4) Environmental Materials Engineering, (5) Materials Engineering, (6) Electro-Mechanical System Engineering, (7) Intelligent Mechanical Engineering, (8) Materials and Environmental Engineering, and (9) Mechanical and Intelligent Systems Engineering.

The changes of major fields are exemplified by one of the first KOSENs, Hakodate College. Figure 10 shows the history of the major fields in Hakodate College. In 1962, Hakodate College started with three major fields. Within about 50 years, its reorganization of the major fields was conducted six times. In 2013, innovative reorganization was conducted with new perspective to create integrated course on three fields of machines, electric and electronics, and computers in order to train engineers who are capable to contribute to people and the environment by

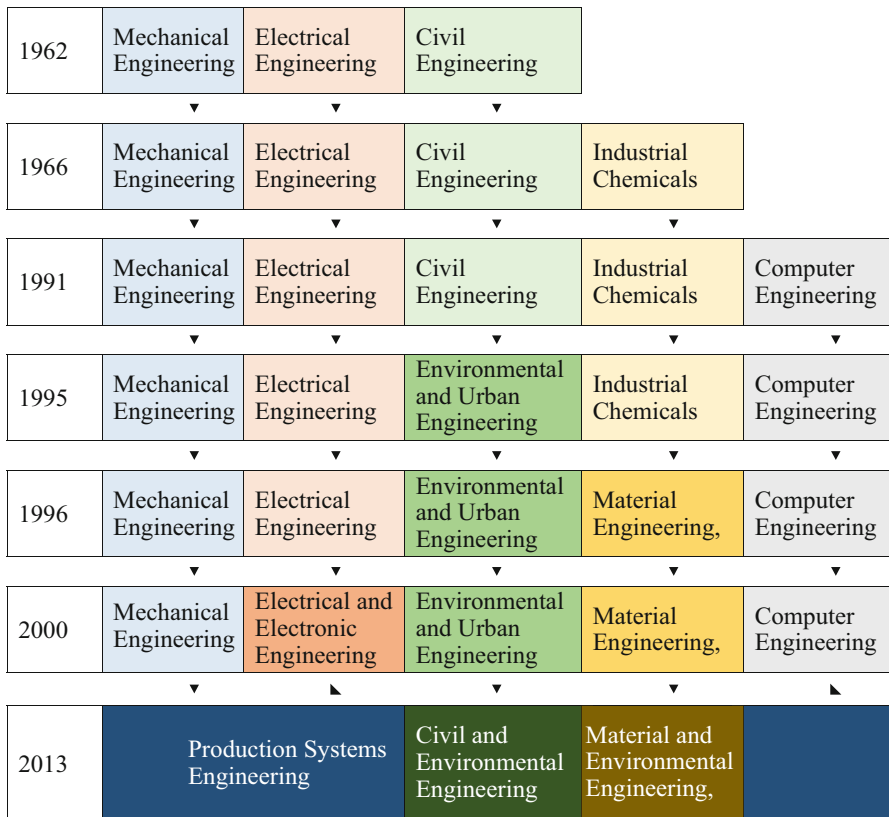


Fig. 10 History of the major fields in Hakodate College (Source: Based on National Institute of Technology, Hakodate College 2017, pp. 4-5; National Institute of Technology 2012a, pp. 118-119, author formed.)

combining knowledge on machines, electronics, and electronics and information (National Institute of Technology, Hakodate College 2017, p. 10).

Provide the Opportunity to Access to Higher Education to Wide Rages of People

According to OECD Review of Tertiary Education, JAPAN (2009, p. 25), KOSENs provide access to tertiary education for families whose children have traditionally been underrepresented – those from lower socio-economic groups, from rural areas, etc. A total of 80% of KOSENs are located in the cities which are not prefectural capital. In most cases, the selection of the KOSENs' location was made where no previous faculty of engineering of national university or industrial manufacturing were active. As a result, KOSENs contributed to increase the number of students who attend higher education and function to provide the opportunity to attend higher education all over the prefecture. Moreover, since KOSENs have dormitory facilities, KOSENs provide higher education to the students who come from lower socio-economic families (National Institute of Technology 2012a, p. 31). Table 3 shows the difference of admission and tuition fee among different institution of upper secondary and higher education. National KOSEN fee is lowest compared with other options.

Unique School Life Activities

KOSENs have several educational contests and competition events such as KOSEN Robot Contest, KOSEN Programming Contest, KOSEN Design Competition, and the Annual English Presentation Contest. Those contests and competition are attended by KOSEN students from all over Japan and compete with each other to compare students' skills learned and practiced in the KOSEN. Those events allow

Table 3 Difference of admission and tuition fee among different institutions of upper secondary and higher education (Japanese Yen)

Institutions	Admission fee	Tuition fee	Total
National KOSEN Regular Course	84,600	816,600	1,455,000
National KOSEN Advanced Course	84,600	469,200	
National KOSEN Regular Course	84,600	816,600	2,254,800
National University (Major in math & science)	282,000	1,071,600	
Public High School	5,650	0	2,430,850
National University (Major in math & science)	282,000	2,143,200	
Public High School	5,650	0	5,771,120
Private University (Major in math & science)	272,500	5,492,970	

*The Fee of Public High School is approximate figure

*Regarding admission and tuition fee, national and public school and institution are based on their regulation, and private institution is based on sampling data

*The miscellaneous expense such as learning material, fee of study tour is not included

*High school tuition support fund started in JFY 2010 by MEXT is reflected

*Source: National Institute of Technology 2012b, p. 15

the students to express or apply what they learned and practiced in KOSEN, as well as to feel the joy of creating something.

Why has KOSEN Attracted the International Attention in Recent Years?

Open the KOSEN's Door to International Students Systematically

KOSEN started to accept international students from 1983 as a part of international cooperation. In the beginning, 6 KOSENs accepted 11 students in 3rd year of KOSEN. Under Japan's policy for accepting foreign students up to 100,000 by 2000 for the purpose of "Education," "Friendship," and "International Cooperation" which was started in 1983 (MEXT 2002), the number of international students increased in KOSENs as well as at Universities. Moreover, in 2008, "Plan for 300,000 Exchange Students" policy as an intellectual international contribution was accepted. The government will try to boost the number of foreign students to 300,000 by 2020 (Prime Minister of Japan and His Cabinet 2008) and the average of last 5 years of international students in KOSENs became about 400. In 2015, 51 KOSENs accepted 443 international students from 22 countries. The ratio of international students is 0.89% in regular course and 0.28% in advanced course in 51 KOSENs. Most of the international students are Japanese Government (MEXT) Scholarships Students and Malaysia Government Scholarship Students. In detail, 191 international students received the Japanese Government Scholarships, 207 are Malaysia Government Sponsored students, six are Mongolia Government Sponsored students, and 39 students came as privately sponsored. Japanese Government (MEXT) Scholarships Students receive 1-year Japanese training at Tokyo Japanese Language Education Centers, Japan Student Services Organization (JASSO) soon after the students arrived at Tokyo. After the Japanese training, those students are transferred into 3rd year of KOSEN. Malaysia Government Scholarship students receive the pretraining at INTEC Education College, Universiti Teknologi MARA (UiTM) for 2 years before coming to Japan and after the pretraining they are transfers into 3rd year of KOSEN. Also for private sponsored students, National Institute of Technology organize national KOSEN standard examination (National Institute of Technology 2016a, p. 34).

Expanding the International Networking

Under the recent rapid globalization, KOSENs curricular focus changed to not only focus on the advanced or sophisticated technological engineers, but also on the development of the global engineer who can correspond to globalized industry. In order to foster such engineers, KOSENs promote active international exchange of students, faculty, and staff all over world. In fact, National Institute of Technology and 51 KOSENs have 232 agreements with the institution of higher education and governments in over 30 countries and regions as below (Table 4). Also through those agreements, exchange of scientific materials, publication, and information are exchanged. Moreover, the joint research, international symposium is implemented

Table 4 List of agreements with international partner and KOSEN

Europe		East Asia		North America	
France	13	China	32	United State of America	14
Finland	8	Korea	22		
Germany	7	Mongolia	10	Canada	4
Russia	4	Taiwan	10	South America	
Uzbekistan	3	Southeast and South Asia		Mexico	4
Hungary	3	Thailand	25	Brazil	2
Belgium	2	Vietnam	13	Oceania	
Ireland	1	Singapore	12	Australia	6
Sweden	1	Malaysia	11	New Zealand	5
Spain	1	Philippines	9		
Slovenia	1	India	5		
Norway	1	Middle East			
England	1	Turkey	1		

Source: National Institute of Technology 2016a, p. 35

such as International Symposium on Advances in Technology Education, International Symposium on Technology for Sustainability.

Case Study of Kure College

In order to understand KOSEN more specifically, this section illustrates a case of Kure College following the same topics mentioned above such as background, a focus on Major Fields, Facilities, Qualification of teaching force, Quality of Curriculum, and Students' career path with documents review and interview.

Background of Kure College

Kure city is located southwest in Hiroshima Prefecture with over 229,000 people and is the third largest city. Before Meiji period, the city was only one of many minor rice farming and fishing communities along the coast. But in 1986, the city was designated as a strategic location to base a modern naval fleet. Alongside the naval base, ship building became an important industry in Kure city. After the world war, this industry continues to build and today became a major international supplier of large cargo ships. Along with the industry of shipbuilding, steel industry, machinery and metal, pulp industry are developed and become industrial city. In 1964, Kure College was established. As of April 2016, 848 students (male: 81.1%, female: 18.9%) are studying in regular course and 49 students (male: 91.9%, female: 8.1%) are studying in advanced course. In addition, totally eight are international students (National Institute of Technology Kure College 2016, p. 48).

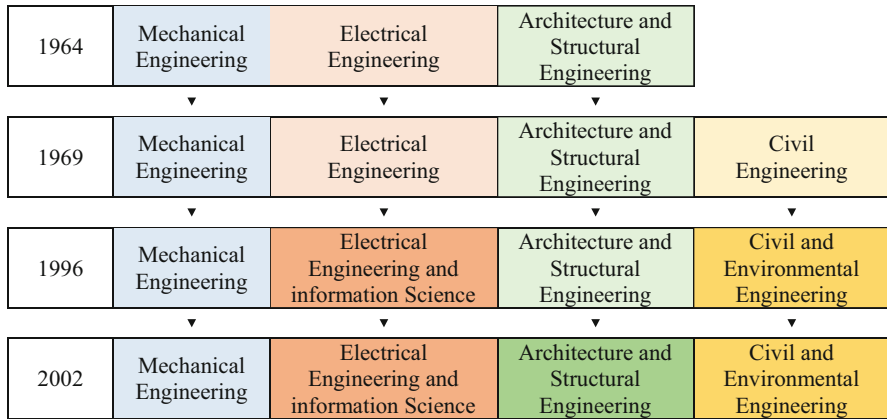


Fig. 11 History of major field of Kure College (Source: National Institute of Technology, Kure College 2016, p. 4; National Institute of Technology 2012a, p. 124)

Major Field of Kure College

Kure College has been started with three major fields (Fig. 11) and conducted the reorganization of major field three times by 2002.

Facilities

The campus of Kure College is approximately 100,000m² and equipped with various facilities such as workshop for practical training, a library, an electronic computer room, and so on except the department buildings. The Library building also contains a large reading room, an audio-visual room, a lounge, seminar rooms, and an information processing laboratory, and those facilities are used not only the class but also students' studies, experiments, and graduate research as well. Also, there are facilities for supports such as gymnasiums, a martial arts hall, a swimming pool, an athletic sports ground, a baseball field, a soccer and rugby ground, and tennis courts. (See Fig. 12)

Similar to other KOSENS, Kure College has a dormitory called Reiyō-ryō. Japanese tutors are appointed to help foreign students with their studies and their daily life. Each private room is furnished with a bed, a locker, a desk, and a chair. As of April 2016, totally 321 students (Regular Course 308, Advanced Course 13) are living at the dormitory. The fee for the dormitory is showed in Table 5.

Qualification of Kure College Teaching Force

Table 6 shows the all staff of Kure College. A total of 59 faculty members (91%) have Ph.D. Degree in their research field out of 65 total members including the president.



A	Administration Building	L	Welfare Building
B	General Education Building	M	Cafeteria
C	Building for Civil and Environmental Engineering	N	Dormitory
D	Building for Architecture and Structural Engineering	O	Tennis Courts
E	Building for Electrical Engineering and Information Science	P	Baseball/Soccer Field
F	Building for Mechanical Engineering	Q	Athletic Sports Ground
G	Building for Factory Practice Workshop	R	Swimming Pool
H	Laboratory for Fundamental Engineering	S	Sports Club Facility
I	Library	T	Computer Laboratory
J	Gymnasium	U	Advanced Course Building
K	Martial Arts Hall	V	Parking Lot

Fig. 12 Campus map of Kure College (Source: National Institute of Technology. Kure College. 2011, National Institute of Technology. Kure College 2016, p. 55)

Table 5 Dormitory fee (Japanese Yen)

Accommodation fee		700/month for double use 800/month for single use
Dormitory fee	Admission fee	3000 (only for the entrance)
	Maintenance fee	10,000/month
Meal fee		About 30,200 (case of 30 days in a month)

Source: National Institute of Technology, Kure College 2016, p. 39

Quality of Curriculum

As a sample, we can look at the curriculum of Civil and Environmental Engineering in Kure College, and the curriculum is conducted as “Wedge-shaped Education” which is explained in above (See Fig. 13).

Table 6 No. of all staff of Kure College

	President	Professors	Associate professors	Instructors	Assistant professors	Total	Adom. staff	Total
No.	1	22	32	5	5	65	40	105

Source: National Institute of Technology, Kure College 2016, p. 42

Fig. 13 The curriculum of civil and environmental engineering (Source: National Institute of Technology, Kure College 2016, p. 13)

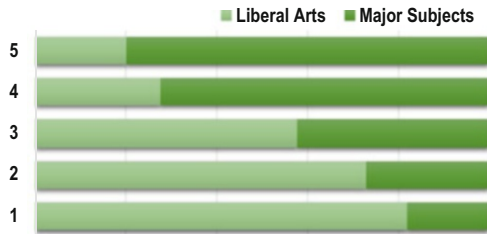


Table 7 Details of the graduate numbers

	No. of graduates	No. of graduates who go on higher education	No. of employed graduates
Mechanical engineering	39	14	24
Electrical engineering and information science	40	5	35
Civil and environmental engineering	37	8	29
Architecture and structural engineering	34	13	21

Source: National Institute of Technology. Kure College 2016, p. 50

Students' Career Path

In 2015, 150 students graduated from regular course in Kure College. A total of 40 students (26.7%) continue to go on the higher education and 139 students (72.7%) were employed. Table 7 shows the details of the graduate numbers.

Table 8 shows the number of job offers in Kure College in 2015. In total, 2,181 job offers were given to 109 graduates who wished to get a job and the ratio of job offer is 20%. From this ratio, it is clear that the expectation or trust is very high by the industry.

Conclusion

At the beginning of this chapter, we introduced a unique education system “KOSEN.” The KOSEN history and system, including major field, facility, teaching force, curriculum, students’ career path, was defined. Two questions were explored: (1) Why has the KOSEN system continued over such a long period? and 2) why has

Table 8 Ratio of the recruits sought at Kure College in 2015

	No. of graduates who wish to get job	No. of job offers	Job offers rate
Mechanical Engineering	24	656	27.3
Electrical Engineering and Information Science	35	731	20.9
Civil and Environmental Engineering	29	412	14.2
Architecture and Structural Engineering	21	382	18.2

Source: National Institute of Technology. Kure College 2016, p. 50

the KOSEN attracted international attention in recent years and why has the KOSENs strategy, in regards to industry, continued to change rapidly and globally.

To answer the first question, factors are explained by the fact that KOSENs respond to the industry demands through a transformation of major field. Almost 100% of the graduate employment is evidence to prove why this system remains so successful. KOSENs play important role as provider of higher education access to wide variety of people especially those who come from lower socio-economic families as KOSENs have a low tuition fee and are located in remote areas as well as include the facility of dormitory. Finally, the KOSEN curriculum allows students to apply what they learned and practiced in school life through the contest or competition process that functions well to motivate the students to learn more and to experience the fascination of creating or designing something from zero. Apart from above mentioned, the quality of teaching force and curriculum are assured.

To answer the second question, factors are explained by the formulated system that accepts international students and the expansion of international networking. Through sending back KOSENs graduates to their countries since 1983, those graduates contribute to the high international reputation gradually.

However, there are also challenges, as we can see the ratio of the graduates continue to higher education are increasing. With this point, it will have the possibility that KOSENs become one of the academic pass to higher education instead of fostering the practical engineers, especially under the tendency of academic career-based society. Therefore, under such the change society, KOSENs need to seek for their particular function in higher education in future.

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The Community College Concept and Youth Unemployment in the Middle East and North Africa (MENA)

41

Shahrzad Kamyab

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Abstract

This chapter introduces the reader to the dire situation of youth unemployment in the Middle East and North Africa (MENA) and explores the possibility of adopting some features of the Community College concept in an effort to alleviate the overwhelming youth unemployment in the region. To do this, the initiative to adopt the Community College concept in Tunisia is examined. Other options to counter youth unemployment include reforming the educational systems and introducing entrepreneurial startups to employ youth in a digital sector. An example of the entrepreneurial option is presented in Iran. The MENA countries in general, and particularly Tunisia in this case, can benefit from adopting some features of the US Community College concept into their higher education systems to prepare youth for the world of work. Features specific to a community

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college model such as counseling, community service, connection to the industry and internships/apprenticeships, can easily be built into the existing MENA technical/vocational schools at the post secondary level.

Keywords

Community college · Youth unemployment · Middle east · North Africa · Tunisia · Iran · Start up · Soft skills · AMAL · MENA · Lebanon · NCA · TCCSP · World bank · US embassy · Youth bulge

Introduction

The purpose of this chapter is to examine the possibility of adopting some features of the American Community College model into the MENA (Middle East and North Africa) higher education systems. The adoption aims at alleviating the overwhelming youth unemployment by providing a short cycle education experience that can produce skilled labors, teach soft skills, and connect with the industry and the community. To do this, examples from throughout the MENA region are given, and in particular, the Tunisian case is examined to find out whether the efforts to import the US Community College concept was successful. This analysis provides insight into the possible adoption of the American Community College model to counter the deep-rooted youth unemployment problems throughout the MENA region.

The reason Tunisia is selected is because in 2011, the former government of Zine el Abidine Ben Ali was overthrown as a result of intense protests due to high levels of unemployment, vast poverty, and deep economic inequalities, especially among its young and mostly educated populous. In an effort to alleviate this high unemployment, in 2012, the US Embassy in Tunis, Tunisia, initiated a university collaboration between the United States and Tunisia with the purpose of providing training for Tunisian educators on the building of a comprehensive Community College model for the possible adoption in the future (Hagedorn and Mezghani 2013).

This chapter combines examples from contemporary journalism, literature review, governmental policy sources, and international agencies addressing the youth unemployment in MENA along with my own personal experiences with the education systems of the Middle East and North Africa. I have studied educational institutions in the MENA region for multiple decades and I spent a portion of 2016 visiting several countries in the region to gain a stronger understanding of the efforts being made to counter youth unemployment. This chapter shares my findings and analysis of what is occurring in the region.

Youth Unemployment Status in MENA: A Background

The Middle East and North Africa is facing a fundamental challenge to provide its overwhelming young population with job opportunities. A large number of youth is often referred to as the “youth bulge” (Dhillon and Yousef 2009), and youth as

defined by the United Nations (2016) encompasses the ages between 15 and 24. According to Mottaghi (2014), the unemployment rates in Egypt, Iran, Jordan, Libya, Lebanon, Tunisia, and Yemen (the Mena 7) have remained stubbornly high. Youth unemployment is at an average rate of 22% for young males and 39% for young females in this region. According to the statistical center of Iran, youth unemployment averaged 25.16% from 2011 until 2016 (Trading Economics 2016).

Except for Lebanon, the gender gap in unemployment in MENA is large. The female youth unemployment rate is almost three times the male youth unemployment rates in Egypt and double in Iran, Jordan, and Yemen. Female youth unemployment rates in Egypt remains at 65%, 50% in Jordan and Yemen, and 40% in Iran (Mottaghi 2014).

Young people in Morocco are particularly vulnerable to chronic unemployment. One out of three youth between the ages 15 and 24 in Morocco's urban areas are unemployed, but the highest unemployment figures are found among college graduates, reaching a rate of nearly 60%. In 2011, nearly eight out of 10 youth, ages 15–24, who were seeking employment, had never worked or have been out of work for a year or longer (Al-Monitor 2013). Critical to this discussion is that the longer the youth remain outside the workforce, the harder it is for them to break out of this vicious unemployment cycle (AMIDEAST 2011).

Although it is recognized that the more education one has, the more it provides the skills needed for employment, however, in MENA countries one reason for the unemployment of the college educated is that many youth are waiting for new jobs to open in the public sector. Public sector jobs are popular because they offer higher salaries, job security, and attractive benefits. According to a Gallop survey in 2011, more than half of the unemployed young people in Egypt, Tunisia, and Jordan were seeking a government job and only 10% were looking for a private sector job. Public sector employment continues to constitute a large share of total formal employment in Egypt, Iran, Yemen, Libya, and Jordan (Mottaghi 2014).

The youth unemployment in Tunisia is too severe. According to the Organization for Economic Cooperation and Development (OECD 2016), in 2015 the rate was as high as 40% and it is described by the OECD report, as “a true social tragedy that urgently needs to be addressed.” The report reveals that about two out of five young Tunisians are unemployed. Tunisia is still suffering from a very high unemployment rate, the highest in the Mediterranean basin (Carnegie Endowment 2016).

Why Youth Unemployment?

There are numerous reasons for youth unemployment in the MENA countries. One of the major issues is the lack of sound human development strategies and investment in human capital. Education is an important component of human development in part because it enhances an individual's opportunity to gain employment. The problem is that to the extent that education fails to equip a person with the skills needed for productive employment, its main purpose to advance human development is compromised. Education is often suggested as a solution to unemployment,

but in the Middle East and North Africa, educated youth are often less likely to be employed than the less educated. In Iran, for example, they have achieved impressive advances in education, especially for women, but the labor market is unable to absorb the university graduates. University educated young men and women have higher unemployment rates than those with less education. Although the government has slowly liberalized the formal labor markets but youth still face huge challenges in finding a job after graduation (Salehi 2010).

There are many educational deficiencies within the higher education systems in most MENA countries. The lack of connection or alignment between what students learn in universities and what industry expects them to know upon graduation has created a huge unemployment dilemma and a serious loss of opportunity. In addition, the higher education system in most MENA countries does not prepare youth for skills that will allow them to work in the global economy as most universities in MENA are theoretical based and are not designed to prepare the students for the world of work. An example of this disconnect with industry is in Jordan where the major challenge for the education system is to produce “employable” workers with a spectrum of skills and proficiencies that are sound and flexible enough to close the gap between the competencies that the industry expects and what the Jordanian labor force can offer (Kamyab 2013).

In Lebanon, the inconsistencies between the structure of the higher education programs and the real needs of the job market has contributed to youth unemployment and intensified the rate of youth migration. The Egyptian labor market suffered from a substantial gap between supply and demand as millions of graduates seek job opportunities. This paradox stems from a severe mismatch between the skills and training actively sought by the labor market and the quality of the graduates. That imbalance, in turn, is the result of an education system that fails to meet the needs of the job market. Therefore, it can be predicted that the youth unemployment will continue to increase as long as education policies and the higher education quality remain the same (Kamyab 2013).

Complicating the situation is that the more educated tend to be the more unemployed throughout MENA countries (Mottaghi 2014). Many youth choose to attend universities in the hope to be able to find employment after graduation. In this context, the university becomes a “wait time.” Yet, by the time the university graduates are ready for the workplace, the competition for the few jobs increases (El-Hamidi and Wahba 2006). Those weaknesses and deficiencies are exacerbated by the rigidities and resistance to change exerted by the higher education officials such as Ministries of education that emphasize the strong centralized management and control over policies, budgets, and institutional operations, just to name a few.

Can a Community College Concept Alleviate the Youth Unemployment Crisis in the MENA Region?

The quality and relevance of education for workforce development is a serious challenge throughout the Middle East and North Africa region. Millions of young people leave school with a few marketable skills. In addition, the levels of economic

growth in the MENA region are well below world averages. Facing acute unemployment among the young, increasing poverty, and underemployment of semi-skilled and skilled workers, there is a need to expand job opportunities to keep pace with rapidly expanding populations and to ensure regional prosperity and stability. There is also a need to link technical and vocational education programs with the needs of the private sector. Many Community Colleges and Technical/Vocational Institutions in the United States have programs and centers that are actively linked to industry, corporations, and local businesses; and graduates of Community Colleges often are more quickly employed due to their relevant studies and links to business (USAID 2013).

Although it is not realistic to view the full scale of Community College exportation to MENA as a panacea to remedy the youth unemployment, there nonetheless exists many aspects of the US Community College model that are clearly relevant to the needs of the MENA region (Shumaker 2013). As such, this postsecondary educational model is uniquely positioned to help the postrevolutionary MENA governments to respond to the needs of their young population for appropriate education that leads to employment and to serve the needs of the industries in their respective countries.

There's a great evidence that the US Community College concept has gained popularity in many MENA countries through partnership with American Community Colleges, nongovernmental agencies, and international development projects.

Exporting the Community College Concept: Tunisian Experiment

The Tunisian uprising in 2011 was the direct result of economic failure to provide the Tunisian youth with employment opportunities. As the studies reveal, the protest participants were mostly unemployed educated citizens with a youth unemployed majority who were frustrated by a lack of employment opportunity (Kamyab 2013). Since the Arab Spring uprising, the concept of the US Community College has been seriously considered in Tunisia (Hagedorn and Mezghani 2013).

Prior to Arab Spring and the Tunisian revolution (December 17, 2010 – January 14, 2011), the youth unemployment received little attention from the country's policy makers in the public sectors. But when the suicide of an educated unemployed young man, Mohamed Bouazizi who sold vegetables from a pushcart on the streets exposed the deep-rooted issue of the massive youth unemployment in the country, the incident prompted people to scrutinize the critical massive unemployment situation in the country (Abouzeid 2011).

Public demonstrations led to the collapse of the then repressive government of Tunisia and later in the October of 2011 official elections held for the National Constituent Assembly (NCA) which brought the Tunisia's Islamic Ennahda party to power. The NCA drafted a new constitution and the new coalition faced many socioeconomic challenges of rebuilding the country. Considerable efforts were placed in the recovery of the economy and the employment of youth (World Bank 2012). Thereafter, the transitional government initiated a new program called AMAL

(in Arabic, it means hope) to provide limited training to college graduates to help them become more marketable. In addition, the AMAI program offers medical insurance and a modest pay. Despite its noble goal of making the graduates marketable, the future of such program remains unknown as it is highly costly for the new government (Hagedorn and Mezghani 2013).

The high unemployment rate in Tunisia raises many question about what actually contributes to such a crisis in the country. There are a number of factors contributing to this unfortunate situation. These factors range from a simple lack of jobs, to cronyism and anticompetitive practices, the imbalance or mismatch between the workers' training and industries' demands for well-trained workers, and an over-emphasize on high level and specialized education.

Adding to the factors contributing to the high unemployment rate, the phenomenon of seeking highly advanced degrees especially in medicine and engineering is a social issue that is rampant in MENA countries and especially in Tunisia. The people – especially parents – highly value jobs related to those two fields and encourage their children to become doctors or engineers. One reason being that those fields are highly respected and are highly paid in the respective countries (Hagedorn and Mezghani 2013). Despite the popularity of the highly trained professions such as medicine and engineering, there are insufficient jobs for those fields in Tunisia (Haouas et al. 2012).

In addition, in Tunisia, similar to other MENA nations, there is a lack of career counseling. To assist youth to find jobs, youth are not taught the art of building a network, how to search for a job, and how to self-market to their advantage (Hagedorn and Mezghani 2013). In April of 2012, the US Embassy in Tunis, Tunisia, initiated a collaboration effort to use a comprehensive Community College concept in an effort to alleviate the youth unemployment and to create a program for further development to produce mid-level manpower (US Embassy 2016a). The Tunisian Higher Institutes of Technological studies, also known as ISETs, partnered with the project to have a linkage to an American Community College (US Embassy 2016b). The goal of the project was to provide experiential learning for Tunisians to familiarize them with the US Community College concept in the hope that the relationship will provide future support. To this end, the Tunisian educators arrived in the USA to learn about the Community College operations in the United States (Hagedorn and Mezghani 2013). In spite of the efforts and initiations to export the Community College concept to Tunisia, the transplantation of the model did not take place even though the idea remained popular. Here are some of the reasons the effort to export the idea remains unfulfilled.

First, the higher education systems of MENA countries in general and Tunisia in particular are highly centralized management practices. In these countries, the ministries of higher education control all the aspects of education from stipulating the content of the textbooks to budgets and institutional operations. The admissions systems are rigidly hierarchical in structure and strictly merit based. This centrally controlled governance system is a major challenge to a successful implementation of the Community College concept which is characterized by open access and flexibility within the US Community College model to change once the student gets in. Moreover, such a practice is contrary to the decentralized practices of higher

education system in the USA in general and Community Colleges in particular, where all aspects of education are decided upon by the states and some local control within the varied districts.

Secondly, entering existing Technical Colleges and Universities require taking a national exam. The exam to enter higher education institutions is called baccalaureate in Tunisia (Hagedorn and Mezghani 2013). The national exams are stringent and only those with the highest scores get in. The main reasons to require an entrance exam is that the seats and other resources are limited to accept a large number of applicants into the higher education systems in the Middle East and North African countries (Kamyab 2013). On the contrary, entrance to US Community Colleges requires no exam as they have an “open-door” policy. This practice is to make higher education accessible to all.

Thirdly, there’s still no recognition by the countries’ stakeholders and policy makers in MENA that adding a new model of higher education such as a Community College could solve the deep-rooted youth unemployment issues in the region and especially in Tunisia.

Finally, the most important element in the successful implementation of a new higher education model is culture. The Tunisian culture needs to embrace the benefits of lifelong learning, the need for retraining of mid-level manpower, and the merit of attending a 2-year college (Hagedorn and Mezghani 2013). Overall, there is a lack of technical/vocational popularity in the MENA region as these programs are still heavily stigmatized as the destination for those rejected by the formal schooling systems, and as a result, vocational/technical institutions are not viewed as prestigious as the 4-year universities (Kamyab 2013).

Current Practices in Tunisia

Although there’s no evidence that Community College concept was erected in Tunisia after the proposal made by the US embassy in Tunis in 2012, there has been ongoing communication and collaboration between the two countries. In 2013, The Tunisia Community College Scholarship Program (TCCSP) was funded by the US Department of States’ Bureau of Educational and Cultural Affairs and implemented by IREX in the same year. Since the inception of the TCCSP in 2013, nearly 150 Tunisians have gone to the United States for a fully funded year of study. Currently, there are 103 students from 19 Tunisian governorates studying at 58 different educational institutions throughout the United States. This program aims to promote economic development in Tunisia by providing talented Tunisian students with marketable skills to compete in the global economy (US embassy in Tunis-Unisia application for TCCSP 2016–2017). According to IREX (2016) the goals of the Tunisia Community College Scholarship Program are:

- (a) Participants strengthen their capacity to meet key workforce needs in Tunisia through certification coursework, academic skill-building, personal development plans, and professional internships.

- (b) Participants develop the skills and perspectives of twenty-first-century community leaders through cultural programs, community service and engagement, and leadership skills building.
- (c) Participants create sustainable links with Americans and increase their understanding of each other's culture and values, supporting people-to-people diplomacy for a more stable future.
- (d) US Community Colleges strengthen their ability to cultivate global leaders and internationalize their campus through collaboratively supporting participants and sharing lessons learned.

The TCCSP Community College scholarship also provides opportunities for students to pursue professional certificates in selected technical fields of study at a US Community College. According to the application for 2016–2017, students eligible for the TCCSP must currently be enrolled in one of the following Tunisian educational institutions: (a) any of the 24 ISETs (Tunisia's Higher Technology Schools); (b) any of the seven ISSATs (Tunisia's Higher Institutes of Applied Sciences and Technology); or (c) the IHET (Tunisian Higher Institute of Tourism). Eligible fields of study for the 2016–2017 academic year are: business administration and management, information technology, tourism and hospitality management, and applied technology. Participants in the TCCSP will also engage in community service and internships to gain valuable practical and professional experiences. Participants represent communities across Tunisia, with more than 70% coming from outside of the capital area, and more than 30% from the interior governorates along the Algerian and Libyan borders (US Embassy 2016a).

There have been notable changes as a result of TCCSP. Employers acknowledge the link between Community College education and the gaining of a series of key competencies in young employees. Nearly 100% of students completing the program express they've developed such "soft skills" as job search skills, problem-solving skills, time and stress management, and teamwork. More than 75% of alumni report that they have served in a leadership role, and 58% of TCCSP alumni from the first cohort of participants report that they have started an initiative in Tunisia (IREX 2016). Finally, The Tunisia Community College Scholarship Program is beginning to challenge the culturally held belief that quality higher education can only be obtained in the limited fields of study and in 4-year universities.

Options to Remedy Youth Unemployment Dilemma

This chapter has introduced the dire issue of youth unemployment in the Middle East and North Africa and explored options to help remedy the dilemma of youth unemployment. One of the options is to export the US Community College concept. To do this, the adoption of a Community College concept in Tunisia was examined. Other options to counter youth unemployment include reforming the educational systems and introducing entrepreneurial startups to employ youth in a digital sector. An example of the entrepreneurial option is presented in Iran.

The MENA countries in general, and particularly Tunisia in this case, can benefit from adopting some features of the US Community College concept into their higher education systems to prepare youth for the world of work. Features specific to a community college model such as counseling, community service, and connection to the industry and internships/apprenticeships, can easily be built into the existing MENA technical/vocational schools at the postsecondary level. Almost all MENA countries already have 2-year vocational/Technical postsecondary schools which offer short-term vocational/technical programs that can easily be modified into a Community College construct.

Nonetheless, the whole transplantation of the US Community College concept needs careful consideration as the higher education in that part of the world is too bureaucratic, highly centralized and admissions to the universities remain merit based using a stringent entrance exam (Kamyab 2008). Until the system allows for much flexibility, there will be limited ability to embrace and adopt a new idea such as the US Community College model.

Moreover, while the Community College concept can open opportunities and provides a curriculum that connects employer needs to what students are learning, there is still not a cultural or social acceptance of this type of education. In particular, an American commodity may not be fully accepted by the educational authorities, policy makers, and the general public in MENA as the recognition and understanding of the countries' history, geopolitics, and culture/tradition must play a major role. Hagedorn and Mezghani (2013) involvement with the exportation of the Community College concept to Tunisia suggests that while the US Community College concept can be instructive, the concept must be wholly Tunisian and should be developed only after a careful needs assessment and market analyses are conducted. Also, creating a Tunisian style of higher education which carries the same features of the US Community College concept is only one tool or avenue among others to help remedy the overwhelming issue of youth unemployment in Tunisia. Central in this discussion is the role of public perception and acceptance of alternative higher educational constructs.

Since bringing about some flexibility in the MENA's higher education systems and change in the nations' attitude toward a Community College concept to be fully implemented may take years to come to fruition, a good option for the present time is to develop partnerships with the US Community Colleges for the exchange of faculty, administrators, and students to allow for the learning of the US Community College system and the gradual adoption of its features. It is noteworthy to mention here that in addition to adopting the Community College concept, the policy makers across the region have over time explored options to alleviate the pressing issue of youth unemployment in MENA by introducing educational reforms and initiatives.

While specific solutions may differ from country to country, the educational initiative objectives have proven to be relevant across the whole region. Those initiatives, such as Education for Employment (e4e) (Bjarnason 2011), have a common theme which is to reform the education systems in MENA so that students gain relevant skills. The Education for Employment (e4e) is an initiative headed by

the International Finance Corporation, a member of the World Bank Group, and the Islamic Development Bank and its objective is focused on positioning education as a major priority to drive improved employment prospects. To reach this goal, the e4e initiative's recommendations call upon universities to assume leadership in collaborating and partnering with the industry. This collaboration would culminate in practicum elements that would characterize university degree programs. Furthermore, this calls upon a new generation of faculty members who would have an appropriate mix of academic theory and practitioner skills. As for students, they would have access to internships facilitated by the universities. The initiative also encourages universities to consider offering both part-time and online programs through evenings and weekends in order to expand their reach (Kamyab 2013).

Another potential solution is newly developed entrepreneurial projects throughout the Middle East and North Africa. One such project is found in Iran with startups as an alternative to help with youth unemployment. Iran has the highest number of educated individuals in the MENA region as well as the highest mobile penetration rate in the region at 120%. The political situation in Iran is quite different from other MENA countries as the country enjoys relative political stability after the war with Iraq ended in 1988 (1980–1988). But the Western countries' sanctions on Iran crippled the economy, and as a result, the youth unemployment was exacerbated by the harsh economic sanctions. In dealing with the high youth unemployment (25%), in the last few years, many startup companies sprang up in Iran. The current government of Iran is quite supportive of those ideas and the minister of labor encourages its creation. During the decade-long implementation of sanctions on Iran to cripple the \$400 billion economy on multiple levels, Iranian startups have had to operate without access to foreign markets, finances, and social media channels. Many used this to their advantage by creating their localized versions of international startups and building startups according to local needs, including the Amazon-inspired marketplace Digikala (<http://www.digikala.com/>) – now valued at up to \$500 million. Digikala employs about 900 people (The Guardian 2016). In terms of human talent, considering the high percentage of university graduates and a high youth unemployment rate at 25%, there is a myriad of candidates for any open positions. It is also worth mentioning that there are noticeably more female entrepreneurs in Iran than in other MENA ecosystems, which may be due to the fact that 70% of technology, science, and engineering students in Iran are women. The lifting of the sanctions will benefit the Iranian startup ecosystem by providing more opportunities for employment and access to different markets, causing them to thrive and mature, as well as raise competition with both local and global players.

Conclusion

It is clear that the MENA countries are considering different options to effectively counter youth unemployment. Some of those options include importing the US Community College model to provide the type of education that enhances employability. Another option is by adopting initiatives, such as e4e, to reform the education

systems for the students to gain relevant skills for employment. In addition, supporting the business ventures such as startups have been instrumental in hiring the youth and has helped with changing the dire situation of youth unemployment. As Alghanim (2015), suggests, instead of looking for a future in jobs that already exist, youth in MENA region should be encouraged to create their own opportunities through entrepreneurship.

While such initiatives may demonstrate real achievements, still no country in MENA can claim to have sufficiently addressed the fundamental challenges facing its young citizens as education systems are traditional in nature not allowing for much creativity and innovativeness to prepare the students for the world of work. The education systems in MENA need to anticipate what the future skill-sets need to be and then create curricular around those needs. With this in mind, a Community College concept can offer the most innovative and practical curricular possibilities to the higher education institutions in MENA. As a result, a Community College concept with its nontraditional nature and philosophy is better equipped than traditional universities to respond to the needs of the labor market by providing youth with the relevant skills and training demanded by the employers throughout the MENA region.

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When the Walls Come Tumbling Down: A Case Study of Community Colleges Within a Canadian High Mobility Postsecondary System

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Abstract

For more than 50 years British Columbia has worked to develop and implement a postsecondary system with high levels of mobility for students. This has proven generally successful, though not without unanticipated consequences for some of the stakeholders, including community colleges. This chapter describes and analyses the policies put in place and the effects they have had upon postsecondary education in a high mobility environment.

Keywords

Mobility · British Columbia · Canada · Universities · Transfer · Admissions

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Introduction

Community colleges in British Columbia (BC), Canada, operate in a context with a number of unique features. Each of the ten provinces and three territories in Canada has control over its own education system, from kindergarten to postsecondary. The commitment in BC over the last 25–30 years has been to create an integrated system with high levels of access for students and easy mobility between institutions. The origins of this philosophy lie in the perceived shift from primary resources to a high-skill economy in the early 1960s, with a concomitant need to make obtaining those skills as barrier-free as possible. This approach – radical in both conception and practice – has deeply shaped all the institutions in BC. It has also linked them together tightly, to the extent that it is difficult to analyze one type of institution without reference to the other forms. To a large extent, the ambition of building an integrated system has been achieved, though not without positive and negative unanticipated results.

The authors of this chapter have broad experience in the British Columbia postsecondary system. We are currently all associated with the British Columbia Council on Admissions and Transfer (BCCAT), an organization that plays an important role in the BC system and will be described more fully later. Our experience as administrators, researchers, and instructors, in the province and beyond, has helped to illuminate the complexities of the BC system and the transformative effects upon the institutions involved. Community colleges, in particular, have had their role deeply altered by political and structural decisions.

In this discussion, we set out to describe the BC postsecondary system with a central emphasis on student transitions through that system. We believe that this illustrates very clearly how the transformation of the system plays out in the lives of the individuals who study within it. In addition, we offer our reflections on the implications this transformation has had on institutions and what lessons may be drawn from it. Twenty-five years into BC's great experiment with system integration and barrier-free transfer, it seems apparent to us that emphasizing access (bringing the walls tumbling down!) has both deeper and broader effects than could have been anticipated, as we summarize in our conclusion. It offers significant challenges to each type of institution and, to some extent, to the system as a whole. Integration is not only a matter of ensuring that mechanisms permitting movement are in place; it involves examination of the values and priorities that hold sway across a provincial system of diverse and self-governing organizations.

It is useful to clarify terms before we begin to describe our province. “College” in Canada is not interchangeable with a 4-year university. College, or community college, refers to an institution that primarily bestows qualifications below degree level (except in the case of a few specific “applied degrees”). For readers familiar with the ISCED levels, colleges operate almost exclusively at levels 4 and 5, with only universities operating at level 6 (UNESCO 2012). Throughout this discussion, the term “college” will always be used in this sense.

“Student mobility” refers very simply to students changing the institution at which they study, irrespective of the conditions of that change. “Transfer” refers to

the ability to receive credit at one institution for courses completed at another (BCCAT 2015). This may be at the level of specific courses, entire qualifications (also referred to as block transfer), or some other unit. Typically, the receiving institution will assess the student's accumulated courses to evaluate their equivalence. "Articulation" can be considered as the mechanics of transfer. "Through the process of articulation, institutions assess courses offered at other institutions to determine whether to grant course credit toward their own programs or credentials" (BCCAT n.d.-a). Both of these aspects of mobility will be discussed in this chapter.

The History of the BC Postsecondary System

In Canada, education is constitutionally lodged within the ten provinces and three territories even though a great deal of funding is federal. This creates a number of effects, the most relevant to this discussion being the high degree of regionalism in postsecondary education across the country. Philosophies and practices vary significantly between jurisdictions, often reflecting specific economic and demographic circumstances. British Columbia has fewer than 5 million people within an area 2.2 times the size of California or 3.9 times the size of the United Kingdom. Over half the population lives in the urban South West of the province, especially the Greater Vancouver area, leaving nearly half thinly spread across the rest of the area. The economy follows this pattern, with almost three-quarters of activity based in the service sector of the urban areas and most of the rest centered on resource-extraction in the vast rural and wilderness areas. Politically, BC has historically been somewhat left-leaning with a strong union presence. It is also important to bear in mind the youth of the province; it was brought into Canada in 1871, with the majority of nonindigenous settlements and institutions less than 100 years old.

The modern history of higher education in BC begins in 1962 with the publication of the Macdonald report (Macdonald 1962). John Macdonald was the President of the University of British Columbia and believed that with the modernization of the BC economy, it would be helpful to consider the future of higher education systematically. He established a committee and encouraged submissions from many stakeholders throughout the province (UBC archives 2012). The resulting document of 100 pages or so was well received by the provincial government of the time and continues to be highly influential in thinking regarding our system. Basing his observations on the University of California system, Macdonald stated:

Two requirements are fundamental to the promotion of excellence in British Columbia's higher education. These are first, diversification of opportunity, both in respect to the kinds of educational experience available and the places where it can be obtained. The second requirement is self-government of individual institutions in respect to setting objectives, standards, admissions, selection of staff, curricula, personnel policies, administrative structure, and all the other things that go to make up the operation of a college. These two elements — diversification and self-government — together will not insure excellence, but in their absence an excellent system of higher education in British Columbia would be unattainable. (1962, p. 19–20)

In contemporary terms, Macdonald is arguing for a network of independent institutions serving the specific needs of their regions. He quotes with approval Russell (1958, p. 110):

The first important principle is that a state's program of higher education is strong only as the individual institutions are strong and maintain services of high quality in the programs that are offered. The primary purpose of a state system of control and co-ordination should be to encourage the development of the greatest possible strength in the individual institutions of the system.

On a more systemic level, Macdonald sees a need for two main types of post-secondary institution:

1. Universities and 4-year colleges offering degree programs and advanced training for those students who have the necessary ability and aptitude.
2. Two-year colleges offering a variety of programs of 1 or 2 years of education beyond Grade XII (p. 50)

The two dimensions of autonomy and differentiation are reflected in today's public postsecondary system in BC, as laid out in the supporting legislation (British Columbia 2016a, b). The Macdonald report assumes the value of mobility "upwards" through ever more selective and specialized institutions; there is an expectation that the 2-year colleges will feed into the 4-year colleges and universities. This traditional view of mobility, featuring one-way student flows "upwards" through hierarchically layered institutions, appears to be derived from the California system of the time. In BC, this traditional view of mobility has evolved over a number of decades into a more complex, more nuanced, and more interesting tapestry.

Currently, there are 5 research intensive universities, 7 teaching intensive universities, 11 community colleges, and 3 specialized institutes, each of which is self-governing and has a distinct mission. The research intensive universities have a teaching and research mission and tend to have higher proportions of graduate students than teaching intensive universities. They are also considerably bigger; the University of British Columbia is the largest with around 50,000 undergraduate and 10,000 graduate students. Teaching intensive universities are more focused on first degrees, may have a more vocational focus, and often do not offer a PhD. They are smaller and serve specific regions of the province more directly than the research intensive institutions; Vancouver Island University has an enrolment of around 16,000. The colleges are more regional still and offer directly vocational courses along with a range of university transfer courses. These courses allow a student to start studying for an engineering degree at a college and then move into a university, for example. Some colleges offer applied degrees. Okanagan College has around 7000 full-time equivalent students in 181 programs. Finally, the institutes specialize in vocational training within specific sectors. The Justice Institute focuses on law and public safety careers and works with 3000 full-time equivalent students each year (mostly in part-time and short courses). These four types of institution generally work together cooperatively despite these variances in mission.

Since the Macdonald report, the amount of activity regarding the structure of the postsecondary system has been considerable. The extent to which Macdonald's recommendations regarding the autonomy of institutions have been implemented is questionable. The major funder of the system is the provincial government, and the sustained activism of succeeding governments irrespective of their political stripe has created a context where sensitivity to politics is an essential attribute for a postsecondary institution. In BC, postsecondary provision has been aggressively managed and grown to meet the perceived needs of a population that is expanding, becoming more sophisticated, and increasingly complex (Fisher et al. 2014).

For the first four decades or so following the Macdonald report, the central issue for the postsecondary system was capacity. The economy of BC has always been underpinned by resource extraction, but new forms of economic activity were starting to emerge over this period, requiring a workforce with more academic preparation (Fisher et al. 2014). The resource extraction methods themselves were changing from logging and mining towards more technical methods, again adding pressure for an educated workforce. This led to political and economic expectations of vastly expanded system capacity, both in the more applied areas that had long been the remit of the colleges and in the academic and professional areas typically lodged within universities.

From the 1960s to the 1990s, the postsecondary sector fell into two distinct halves (Fisher et al. 2014). The colleges provided vocational and technical preparation, adult academic upgrading, and university transfer programs, while the universities focused on academic (and some professional) programs. The provincial government discovered that demand for academic and professional education was growing strongly and had to respond quickly. Late in the 1980s, three colleges were transformed into university-colleges, creating a new category of college that could deliver bachelor degrees, and two more were added in the 1990s. In the early- to mid-1990s, institutes emerged as a new category of institution under the same legislative framework as colleges; fulfilling the function of "special-purpose colleges," the institutes have had varying success within the system. There were also new universities emerging during the same period. Some of these were experimental and proved not to be sustainable while others, such as Royal Roads University, have shown themselves a valuable part of the provincial picture.

By the late 1990s, the BC system contained the current four types of institutions, albeit under different names. Each type of institution reflected attempts to expand the reach of postsecondary education while maintaining control of costs and trying not to undermine existing institutions. In practice, the effect can be considered as market segmentation within postsecondary education, and it did respond to the need for a mass system with greatly expanded access. Between 1985 and 1995, for example, participation in postsecondary education of all types grew from 26% to 37% of 18–24 year olds, a cohort which increased in absolute numbers (Fisher et al. 2014). It should be noted that this increase occurred alongside real reductions in resources available across the postsecondary sector (Fisher et al. 2009).

In the mid-2000s, the emphasis changed from access to management of postsecondary education as a scarce resource, and there was an attempt by the province

to bring some coherence to the pattern of provision. The university-colleges were collapsed into the category of teaching universities alongside the surviving “new” universities. While this made good sense in terms of the systemic profile, it represented a clear example of what has been called “academic drift” – the tendency of institutions to orient themselves towards academic programs that are perceived to be of higher status than more applied or vocational programs. There is evidence that perceptions of status differences between institutional and program types continue in BC and have affected attempts by programs and institutions to position themselves to advantage (Schuetze and Day 2001). In the case of the university-colleges, five institutions which originally had a more vocational and applied focus morphed into universities – albeit teaching universities. It is hard to see why some form of academic drift would not continue in the future, and the applied degrees offered by many colleges are examples of the continuing trend.

Alongside the simplification of the sector came efforts by the provincial government to nudge the postsecondary system as a whole more firmly in the direction of “useful” qualifications. There have been attempts to centralize the system more strongly, to require universities to react to skills shortages (sometimes based on dubious short-term data), and to tie funding to employment outcomes (Fisher et al. 2014). This does, of course, provide a countervailing force to academic drift, but it is not yet clear to what extent this can balance the desire of students to gain academic/professional qualifications and the institutional pressure to move towards high-status fields. One example of this tendency is Okanagan College’s Bachelor of Business Administration, which reflects both the need for employability that lies at the center of the colleges’ mission and also the college’s desire to move towards degree-level rather than subdegree-level programs.

There is, as in many jurisdictions, a question around who gets access to what kinds of education. If there is a perception that elites have access to university degrees while working class, at-risk learners, and indigenous learners attend college to gain certificates and diplomas in semiskilled occupations, this can easily lead to challenging questions regarding the extent to which access has truly been expanded (Carver and Harrison 2015). The geographical dimension can also be critical for a large land mass with a small population and intersects with ensuring rural indigenous learners have access to education.

Since the early 1960s, British Columbia has attempted to manage mobility in the system positively. In some cases, this has had the potential to impinge upon the self-governance of institutions, but generally, the system has attempted to move collectively towards a transparent and equitable a set of mechanisms for transfer and articulation. In 1966, the first students from colleges were accepted at universities under informal transfer agreements. In 1968, a body called the Academic Board recommended the establishment of what became known as “articulation committees,” and universities began to publish transfer guides listing courses for which incoming students could claim credit (Gaber 2010). The articulation committees, organized by the Academic Board with subject representation from a range of institutions, examine courses and programs within an area of academic interest and define the pathways that are open to students. For example, a student wanting to

study English might complete an English course at a College – if the student then moves into a university there is a need to have an agreed value for that course in university credits. Standardizing these equivalencies (up to and including block transfer) may mean that students are not required to pay for assessment of their credit history on an individual basis. In practice, there remain many instances of fees being charged, sometimes disguised within “application fees.”

In 1974, a Postsecondary Articulation Coordinating Committee was formed and soon after began to develop principles for transfer. In 1988, “Access to advanced education and job training in British Columbia” was released by the Provincial Access Committee and recommended the creation of a better resourced body able to bring consistency to transfer across the province (Gaber 2010). This was the BC Council on Admissions and Transfer (BCCAT), which continues in 2016 as a stable point over several decades of system upheaval. “Within the college and institute sector, the . . . [BCCAT] has been instrumental in ensuring articulation and transferability of credits within the postsecondary system” (Fisher et al. 2014, p. 48) “and has been a major success story” (Fisher et al. 2014, p. 299).

BCCAT has largely continued the work laid out in the Macdonald report, aiming at easing mobility for students while respecting the autonomy of institutions and the degree of diversity within the BC system. The membership of the council includes academics, registrars, deans, and students who are nominated by stakeholder groups (see <http://www.bccat.ca/about/council>). In 2016, there are 68 articulation committees that meet annually to review arrangements and discuss any issues arising (BCCAT n.d.-b), covering a very significant proportion of post-secondary subject areas. The BCCAT coordinates its activities with other provincial and territorial bodies and publishes a single transfer guide that brings together information about the options throughout the province. It also leads an educational planner website that permits potential students to learn about programs and apply for entry to them directly from the website – the intention is to create a “one stop shop” opportunity to increase the fluidity of the system and promote awareness of opportunities for students. The website is currently being developed to include a single application form that will capture the common information needed by all 25 public institutions and allow students to use this information for multiple program applications.

This system, complex and expensive as it is, has some limitations in the view of the authors. The first is that the power to accept or reject equivalency between college and university courses remains strongly vested in the universities. This is less detrimental than it could be, as the articulation committees do evidence good faith efforts to make transfer as seamless as possible (interested readers are recommended to visit the BCCAT website and review the public minutes of these committees). Second, and more complex, is that there are different levels of articulation between programs. In some cases, the student experience is seamless, but in others, there may be costs associated with credit transfer, or limits on how many external credits can be accepted within an institution. It would be misleading to present the system as completely barrier-free, but it is reasonable to assert that the province has moved strongly and consistently towards reducing barriers.

From the perspective of the colleges, the BC context has both positive and negative aspects. There is, necessarily, a concern about academic drift and what this might mean for their future. Colleges have open admission policies, and they span a range of attainment from basic education to advanced technological and applied qualifications. This can make college education expensive to deliver, yet these institutions tend not to receive the recognition or the resources of universities. More positively, colleges can be very successful at supporting students towards vocational success or further study and can be economically responsive in a way that universities may not. As articulation work continues, college courses are more frequently seen as being equally rigorous and academically strong as the university equivalents. To understand these issues more deeply, it is helpful to look at the data regarding our provincial approach.

A Methodological Approach to Understanding the BC System

The focus of our analysis is the postsecondary system in BC rather than any particular institution or location, though we do pay special attention to community colleges. By the postsecondary system, we are referring to the publicly-funded institutions offering formal education beyond high school graduation. There are a considerable number of private postsecondary institutions in BC, but we are not considering them in this discussion for two reasons. The first is that they respond to different imperatives than the public institutions; while policy permits them to operate, it does not shape their operation to the same degree as is found in the public institutions. The second reason is that there is little publicly available data on their work beyond general numbers.

Our first question is empirical. How much mobility is there within the BC postsecondary system and what form does that mobility take? Luckily, we have a great deal of data on this question. Every student in BC has a unique Personal Education Number from first entry to the school system onwards, making it relatively straightforward to track educational trajectories. The Student Transitions Project (STP) is a collaborative endeavor by BC's postsecondary institutions and a number of governmental organizations to collect and analyze the data on these trajectories. Before 2008, understanding pathways involved collecting data at an institutional level, but since the founding of STP in 2009, there has been a shared primary data set available (Heslop 2016).

The STP data set covers 13 years, comprising around 11 million enrolment records. For student mobility studies, these are reduced to 5.6 million registration records (because students enrolled in multiple programs at a single institution are collapsed into one record). As with many large datasets, the biggest challenge is not reliability (though some data cleaning is always needed) but finding insightful ways to interrogate the data and represent the findings. Approaching the dataset from the perspective of student mobility and the pathways students follow in traversing the system provides a useful framework for analysis. In addition, the BC dataset is one of the few in the world where it is possible to track individuals so comprehensively

and build a picture that is both informative on a large scale and fine-grained where necessary. Theoretically, it would be possible to ask, “How did people from this high school who attended college do when they transferred to a teaching intensive university?” though such questions are not the focus of the current study. In practice, the subcommittees of BCCAT are able to frame queries to inform their work. The authors of the current chapter were able to define questions reflecting our specific interests and use STP data to answer them in some detail.

We believe that STP data, or some similarly detailed information system, is necessary in a high mobility postsecondary system. It is essential that student pathways can be identified both for planning and to identify which aspects of the mobility system are working and which are not. If, for example, a particular degree program consistently showed more success with certain types of entrants, this could be crucial information for projection and planning purposes but also, potentially, for equity.

The second question driving our discussion is the extent and form of differentiation within the BC system and how it affects – and is affected by – mobility within the system. Clark (1978) argues that differentiation within a higher education system can be considered along two dimensions. The first is horizontal and represents the extent to which different disciplines and institutions are separated from each other; for example, how clearly computer science stands apart from engineering. Working across institutions, the questions would concern how different computer science at a particular location would be from the nominally equivalent program at another location. This would consider the degree to which the engineering technician curriculum and outcomes at Camosun College differ from that of North Island College, for example.

The question of horizontal differentiation is significant when considering student transfer and articulation, and fundamentally affects the manner, and even the viability, of creating a high mobility system. Movement of students will be a challenge if North Island College offers a technician program that requires a certain level of calculus but is more focused on demonstration of pragmatic skills while Camosun College is strongly theoretical and math oriented. Entering second year at one institution after completing first year at the other would not be easy, as the student would lack critical aspects of either curriculum. A further difficulty arises when students wish to move to an engineering degree. The university offering the degree may not be able to offer identical block credit transfer for an engineering technician diploma if the content varies among the colleges and would have to move to case-by-case credit recognition or a bridging program. From the perspective of mobility, there is little doubt that less horizontal differentiation is better.

Clark’s (1978) second dimension is vertical, and concerns differences in the level of study offered in different institutions and, to a significant extent, the status of those institutions. Macdonald’s (1962) original proposal for BC had three levels, with colleges feeding into teaching intensive universities and those feeding into research intensive universities. The number of students accommodated at each level would get smaller. This approach tends to reinforce a status

hierarchy in terms of the type of institution – increasing with the “level” of study and selectiveness. An alternative approach is to have a range of “thinner, deeper” institutions, each of which offers a full range of programs but possibly in a narrower range of fields.

One of the areas where the hierarchy most clearly varies across the world is professional training. In North America, it is almost universally double tier, with an undergraduate degree completed before entry to professional training. One side effect of this arrangement is that students (and sometimes institutions) refer to the undergraduate programs in ways that try to claim the status of the ultimate profession, such as “Pre-Med” rather than “BSc Kinesiology.”

Vertical differentiation makes a big difference to transfer and articulation. For a student to complete 2 years at a college, two more at a teaching university, then a 2-year master’s degree requires at least two institutional transitions. The culture of each institution will be significantly different, raising questions about the extent to which students from nontraditional backgrounds will be comfortable following this path. The necessary corollary of having institutions become smaller as they rise in status is that people have to be filtered out and being more or less “friendly” to nontraditional students is one way institutions do this (Carver and Harrison 2015). The alternative, once more, is narrower and deeper institutions where the interests of the institution are served by retaining students as they move up into higher levels of study.

One aspect of vertical differentiation that remains challenging is the difference between vocational or applied and academic study. Whether this is construed as a continuum or as a binary division, academic study tends to have greater status. It is feasible that this alleged difference may be more about the context of study rather than actual process or content. There is charisma attached to courses in research universities, for example, that is not based on careful consideration of the students’ abilities and skills (Fisher et al. 2009). If we imagine a program at a university where students can enter third year either after 2 years of college or after completing 2 years at the same university, our experience suggests that it is not unusual for university staff to see 2 years at the university as an intrinsically better preparation. There can be suspicion regarding the quality of college education.

Taking these two dimensions together, it is possible to define systems with varying levels of differentiation. On one hand, a system could consist of a carefully arranged network of highly differentiated institutions. This is where the Macdonald report (1962) would lead if followed to its logical conclusion. On the other hand, a system could include a flat structure of many institutions with very little differentiation. The second would find transfer and articulation far easier to operate and support. We approach differentiation and mobility as complementary aspects of the postsecondary system – our working hypothesis is that as one goes up the other tends to go down.

The next section describes the extent and pathways of mobility in BC. Once this picture is clarified, we will return in the following section to questions of differentiation with particular focus on colleges.

Mobility in BC

The single strongest message that we present in this section is that there is a remarkable degree of mobility within the British Columbia postsecondary system. Probably, the clearest indicator of the mobility within the system is that 44.6% of individuals who completed a bachelor's degree in 2013–2014 attended more than one institution. If the types of institutions are considered, 42.7% of completers attended only a research-intensive university (RIU), a further 23.5% attended a college or institute and an RIU, and 13.2% attended only a teaching-intensive university. These figures indicate that only around half of the people who obtained a degree in 2013–2014 did so through the traditional “attend one university until graduation” model. Overall, the average number of institutions attended by bachelor's recipients was 1.24 (Heslop 2015).

Putting the “type” versus “number” of institutions together suggests that there was a substantial group of people who switched between institutions of the same type, and further analysis suggests that this was the case for about 40% of people who moved. One explanation for this would be a geographical relocation, but there could also be a degree of movement for specific programs. Across the sector 40% of individuals who changed institution did not change the program area in which they were studying. This suggests that there was some intended and designed flow between institutions as people became more specialized in their interests.

Considering bachelor's degree completers tends to emphasize the role of universities at the cost of colleges. However, 18% of completers who started to study at a college obtained their bachelor's degree at a college, suggesting that bachelor's degree delivery is not a marginal activity within the community college sector. There is a changing pattern of delivery of bachelor's degrees, within the context of a 29.4% increase in the number of such degrees between 2002–2003 and 2014–2015. The share delivered by RIUs has fallen from 81% to 73%, while colleges have doubled their share to 4% and institutes have tripled their contribution to 3%. A second aspect of this trend is that the numbers of students moving from a college, institute, or teaching-intensive university to a research-intensive university are dropping considerably, even within an expanding system. In the case of colleges, the number is down by 10% from the high of a decade ago (Unpublished STP data).

The flow of students is not as it was envisaged when the BC system was created; there is little evidence that there is a consistent and dominant “upward” flow through the institutional levels. Only 43% of mobile students in 2014–2015 moved to a higher-level institution. Table 1 shows the flow of students in and out of colleges to

Table 1 College inflow and outflow 2014–2015 (does not include transfers between colleges)

Colleges	From	To
Institutes	4300	5100
Research-intensive universities	3800	6000
Teaching-intensive universities	4900	4700
Total (unique headcounts)	12,500	15,300

Table 2 Odds of mobility among 2013–2014 bachelor’s degree completers

Bachelor degree completers 2013–2014 who were mobile						
First entry PSI type	Attended 1 PSI	Attended > 1 PSI	Total number of students	Odds of attending 1 PSI	Odds of attending > 1 PSI	Odds ratio for > 1 PSI
College	501	4108	4609	0.12	8.20	27.34
Institute	225	473	698	0.48	2.10	7.00
TIU	2581	2788	5369	0.93	1.08	3.60
RIU	9232	2743	11,975	3.37	0.30	1.00
Total	12,539	10,112	22,651	1.24	0.81	

and from other types of institutions in 2014–2015. The striking feature of this data is that the 15,300 who left were almost balanced by the 12,500 who moved into colleges (these totals represent unique headcounts – students may attend and move from multiple institution types) (Unpublished STP data). The same sort of figures applies to other types of institution, with the RIUs continuing to show the largest net gain. The big picture across the system is that mobility is strongly – and increasingly – multidirectional. This is also true on a geographical basis. There is some movement between different regions of BC, but it tends to be relatively well-balanced.

Another way to understand the picture in BC is to look at the relative likelihood that student will pursue certain options as they move through the system. Table 2 is an attempt to answer the question of how mobile a student is likely to be as they progress depending on where they start to study. For a student starting to study at a research-intensive university, the odds of changing institution are 0.30 for those who end up with a bachelor’s degree (in other words, the probability is that for every ten students starting their degree at a research university, three will change institution at least once). For those who start at a college and end up with a degree, the odds of changing institution are 8.2 to 1 (for every nine who start at college, about one will finish there). Combining these two numbers, if you start at a college and want to get a degree, the odds you will have to change institution are around 27 times higher than somebody who starts at a research university.

This result can be interpreted in different ways. In a retrospective sense, it demonstrates that individuals can and do move from colleges throughout the post-secondary sector. Because this is a report on people who have completed a bachelor’s degree, it is possible to conclude that the option of mobility in order to attain a bachelor’s qualification is realistic and that the “traditional” mobility enshrined in the Macdonald report is an option for people. It also suggests that colleges are doing the job that was imagined by Macdonald, in the sense that they are passing the most ambitious students “upwards” towards a successful outcome. If mobility, in the sense of a change of institution, is seen as a good thing, then this result is good news.

However, it is still possible to turn the question around and ask why, in general terms, it is 27 times more necessary for bachelor’s degree seekers who start in a college to move institutions than those who start at universities. Given the wider geographic spread of the colleges compared to the relative concentration of the

universities, this often works against the ability of students to progress if they cannot afford to relocate for school, or if they have family or other commitments. Given the potential attendees of each type of institution, a case can be made that university students are more likely to be young, single, and available to move than those who attend college. Coming to a consensus about questions such as this will require deep understanding of the student flows within different types of institutions as well as between them.

The extraordinary level of mobility in BC does appear to come at some cost in completion time. Returning to the data on bachelor's degree completers, the average time to complete a nominally 4-year degree in BC is now 5.5 years, and it has been growing over time (Heslop 2015). The average completion period consistently increases with the number of institutions attended, to 6.7 years if attending two and 7.6 years if attending three. Part of this phenomenon is due to the frequency with which students do not register for one or more terms. Among bachelor's degree completers, 70% stop out for between one and five terms, with only 3% not skipping a term of registration (Heslop 2015). It may be that the tendency to change institution and the tendency to skip terms are mutually reinforcing – a gap in study might be an ideal time to change locale.

One further and significant data point is the reduced difference in academic history between those who start to study at a college or institute versus those who start at a university. The traditional expectation was that students would start at a college if they lacked the qualifications to get into a university and build towards University entry. This is no longer universally true. Comparing bachelor's completers who start postsecondary within a year of high school, there used to be a significant differential in high school results (in percentages) between those who chose to attend a college, institute, or teaching university and those who attended a research university. As recently as 2009–2010, this was 7 percentage points. In 2014–2015, the gap was 4 percentage points (86% vs. 82%), suggesting that the nonresearch-intensive route may not be chosen due to inability to access a research university (Unpublished STP data). It is hard to know exactly what is resulting in this situation, but press lauding the wisdom of starting postsecondary study at a college can only support the development of less traditional pathways (Sherlock 2016).

Overall, the data from BC suggest that the mobility picture is increasingly complex and far less predictable than suggested at the beginning of this endeavor. Mobility pathways are not linear, leading inevitably “upwards” through institutional types of increasing status. Instead, a number of more unexpected features begin to emerge. Some of these are produced by governmental decisions, such as the formation of certain colleges into university colleges and then teaching-intensive universities, but many appear to emerge as individuals take advantage of the postsecondary structures to find creative ways to reach their goals. As much as the institutional structures affect student pathways, it is possible to discern ways in which the pathways are affecting the structures and raising questions about what it means to be an institution of a particular type. In the following section, we turn to the systemic consequences of mobility, both intended and unanticipated.

The Meaning of Mobility

The first thing to acknowledge about mobility mechanisms is that they will be used. When almost half of bachelor's degree completers are changing institution during their degree, and this proportion is showing long-term growth, then it is hard to deny the profound effects on the postsecondary system. Perhaps even more importantly, it potentially changes the nature of a qualification from a single experience in a single location to a basket of experiences gained in multiple institutions. The central implication of this change is that the experiences must be equivalent and exchangeable; in most cases, this means that courses have to match each other as closely as possible.

The multidirectionality of mobility is a striking, and somewhat unexpected, outcome of supporting movement for students. Macdonald (1962) assumed unidirectional mobility and to a large extent, the common-sense view of mobility still reflects this assumption. When around 80% as many people transfer into Colleges as transfer out, however, this assumption is no longer credible. The province does not have data on why people are choosing to finish their qualifications at colleges after starting at universities, but it does represent a significant pathway. Potential reasons could include geographical relocation, employment opportunities, and family situation. Whatever the motivation, the multidirectionality creates a further requirement for the learning components to show symmetry in their transferability – it's not just a case of ensuring that college courses are accepted by teaching-intensive universities, the university courses must be relevant to college studies.

In terms of the two system dimensions of differentiation identified by Clark (1978), the high-mobility context reduces vertical differentiation (between types of institution). It seems clear that when courses at college and university offer symmetrical substitution, there is less differentiation between the institution types. There still are a few aspects of delivery that maintain some degree of vertical differentiation, and these are mainly to do with the level of study. For example, most degrees are still attained at university, and graduate work tends to be a university specialty. Even here, however, colleges are starting to partner with universities to deliver graduate degrees. Many college staffs now have qualifications that enable them to teach graduate courses, and institutions are beginning to take advantage of this potential pool of instructors. Overall, vertical differentiation is still present in the BC system but is less of a dominant characteristic than it may once have been.

This raises the question of academic drift once more, and whether the concept is helpful in the BC context. It seems clear to the authors that a high mobility system requires less protectiveness around different types of study than is often traditionally the case; it is clear, for example, that the arguments of locality and accessibility apply to academic and vocational areas of study alike. The countervailing force arises from the expense of increasing the number of programs in any area, irrespective of its nature. The small total population of the province can lead to the conclusion that it is more efficient to have a few concentrated locations for specialized study. Overall, we continue to use the term, but underline we do not mean a problematic boundary crossing, but a specific form of expanded provision reflecting both students' interests

in easy progression and institutional interests in engaging with the full spectrum of postsecondary provision.

At the same time, horizontal differentiation (between subjects) has not been deeply affected by efforts to increase mobility. While articulation committees have worked hard to ensure that student flow through their area is seamless, there have been few efforts by the committees to support flow between areas of study. There appears to be a strong commitment to the coherence of academic areas that maintains horizontal differentiation, as might be the intuitive assumption.

As we hypothesized earlier in this chapter, mobility offers a set of philosophical and pragmatic challenges to differentiation. If a pre-baccalaureate course is the same regardless of institution, the source of “specialness” for a university must come either from graduate study or from subject areas that are not taught in other institutions. There is a need for some caution here – the areas that are not shared among institutional types and are unique to universities might be regarded as less vocational areas. A provincial government dedicated to employment-centered outcomes might ask why resources are being provided to universities to support “irrelevant” subject areas. It would be ironic if academic drift led to loss of breadth in the province’s academic capacity.

Macdonald’s (1962) other important source of strength is institutional autonomy. Our observation is that there is a considerable difference between espoused autonomy and the degree actually experienced by institutions. While university senates and college boards have responsibility for managing their own programs, this is a bounded freedom. The Provincial Ministry of Advanced Education (and quasi-independent agencies) act as active stakeholders and are able to do so due to the considerable proportion of the costs of postsecondary education that they bear. Issues such as seat utilization are considered as important considerations in the approval of programs coming forward from institutions to the province.

The articulation committees also have a subtle effect on autonomy. When groups of academics working in an area get together to investigate equivalency, it inevitably supports a degree of convergence of thinking and practice. This could potentially make it difficult for a single institution to transform (or stop delivering) a course or a program. Similarly, if offering a new course, it would make sense to ensure that gaining equivalence would be straightforward. While it would be going too far to say that a commitment to mobility undermines a commitment to autonomy, it does appear reasonable to suggest that autonomy could be difficult to maintain in a high mobility environment.

There are three overarching factors that support increasing mobility despite these complexities. We perceive, based on our work with BCCAT and within our individual institutions, that there is a widely shared belief across BC institutions that the benefits to students make the whole mobility system worthwhile. In our experience, it is rare to come across educators who are strongly opposed to the principle of mobility. This represents a strong cross-sectoral value that ties together institutions despite their differentiation and leads to a commitment to negotiation and compromise. Articulation committees have not always found their work smooth sailing, but they have shown admirable persistence in their support of mobility. In BC, the idea

of postsecondary education as a linked system rather than as an activity undertaken by dozens of institutions is taken very seriously.

The second factor is political will across a number of different provincial administrations and institutions. Despite their philosophical and political differences, they have continued to hold high expectations of the postsecondary sector to collaborate in support of students. There is a manifestation of belief in education as a key contributor to individual and regional success, one aspect of which is the governmental support for BCCAT and the articulation committees. The creation of BCCAT as a hub for mobility, for educational planning, and for system research has been supportive for institutions and a key driver of the successes attained so far.

Finally, we observe a new form of relationship between institutions emerging in our province. This maintains a necessary degree of institutional autonomy while recognizing the interwoven nature of the postsecondary system. We summarize this in the idea of an embedded structure, where institutions are joined in their support of a set of values around postsecondary education. The commitment to diverse student pathways is one of the values influencing the emergence of this relationship. In Macdonald (1962), the colleges were to be the feeders to “higher” institutions; in practice, they are partners in a far wider and deeper notion of postsecondary education.

Conclusion

The aim of this chapter has been to describe the context and effects of a deliberately constructed high mobility postsecondary system. Our analysis suggests that all institutions share the benefits associated with high levels of student mobility, and that colleges should not be concerned that higher levels of mobility will create negative pressure on their registrations or their ability to contribute in significant ways to the success of students. In the BC case, mobility has contributed to new opportunities for colleges, such as bachelor’s degrees and partnerships around graduate education. Academic drift has not been significant enough to distort the system, but it has expanded the reach of certain institution types.

Our analysis has led us to think about the future of mobility in our province in different ways. Specifically, we have begun to think about what it would mean to promote mobility of learning rather than mobility of students. The data shows that individuals who complete a bachelor’s degree after starting their study at a college are 27 times as likely to move institution as those who start at a university. We wonder how the system would respond to an ambition to equalize those figures, meaning that wherever the student started in the system they would be equally able to remain in the same institution to finish a degree or other qualification. There would be great benefits for students outside the South West corner of the province, including indigenous students living in smaller communities. This approach would further challenge assumptions about qualifications

and institutions and the ways in which they can respond to the needs of residents of our province.

British Columbia has achieved a great deal in terms of crafting its postsecondary system in the last few decades, and colleges have played a central role in those achievements. The reach of the changes has been wide and the transformation in the system profound. We look forward to further progress in mobility, and the institutional effects it entails, as the walls come tumbling down.

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Dimensions of Collaboration Between Community Colleges and Universities in Facilitating Attainment of Baccalaureate Degrees in Career and Technical Education

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Michael L. Skolnik

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Abstract

Within the past two decades, many jurisdictions have tried to make the baccalaureate degree more attainable for a student who begins postsecondary education in a career or technical program in a community college. Two different strategies have been employed for achieving this goal: developing collaborative arrangements between community colleges and universities and allowing community colleges to award baccalaureate degrees. This chapter focuses on the first of these strategies and describes the approaches that have been developed for combining the contributions of community colleges and universities in the delivery of baccalaureate level vocational education. Finding existing typologies of models of collaboration between community colleges and universities deficient, this chapter instead identifies dimensions of collaboration which can be combined in different ways to create alternative models. This chapter draws particularly upon the experience of Canada. Among OECD member countries, Canada has

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the highest proportion of adults whose highest level of education is a community college credential. In order to facilitate baccalaureate degree attainment for those graduates, recently it has developed some innovative forms of collaboration between community colleges and universities. The author's conclusion is that while the new arrangements offer valuable opportunities for students to combine the learning resources of the two types of postsecondary institutions, their usefulness is constrained by two problems: inflated admission requirements and inadequate amounts of transfer credit. Accordingly, there is still a need to increase access to the baccalaureate degrees that community colleges themselves offer.

Keywords

Transfer · Collaboration · Partnerships · Baccalaureate degree attainment · Applied degree

Introduction

While community colleges have grown adept at responding to a seemingly limitless variety of societal needs and provide an ever-expanding range of services, the most fundamental defining characteristic of the community college has been that it performs one or both of two major functions. Historically, one of these functions required a close connection with the university, while the other tended to separate the community college from the university. The first of these functions is offering the first 2 years of university-equivalent arts and sciences courses after which students may transfer to a university to complete the third and fourth years and obtain a bachelor's degree. This activity could be called the junior college function. The other function is offering vocational programs of at least 2 years' duration at a level that normally requires that entrants have completed secondary school, to prepare graduates for specific roles in the workforce. This could be called the technical college or technical institute function.

Until well after the middle of the twentieth century, vocational programs in community colleges were not viewed as being at the level of a baccalaureate degree. However, as attaining a baccalaureate degree gradually became more important, so too did the project of enabling persons who begin postsecondary education in career and technical programs in a community college to obtain a baccalaureate degree. Two quite different strategies emerged for achieving this goal: developing collaborative arrangements between community colleges and universities that enable graduates of sub-baccalaureate vocational programs to continue their education in a university and allowing community colleges to award baccalaureate degrees in applied fields of study. This chapter focuses on the first of these strategies and describes the models that have been developed for collaboration between community colleges and universities in the delivery of baccalaureate level vocational education.

This chapter draws particularly upon the experience of community colleges and universities in Canada and more particularly in the province of Ontario. Besides the author's familiarity with the Canadian experience, there are two reasons why Canada

is an interesting country for studying the relationship between community colleges and universities. One is the prominence of community colleges in Canada. In Canada, there are 26% more community colleges than universities, whereas in the United States, for example, there are 41% fewer community colleges than universities. In 2014, Canada had the highest percentage of adults who had completed a community college program of any OECD member country (OECD 2015). The percentage of adults whose highest level of education was the type of tertiary education program typically found in a community college was 25% for Canada, compared to an OECD average of 8%.

The second reason why Canada is particularly a fertile ground for studying the relationship between community colleges and universities is that most provincial governments have encouraged community colleges and universities to form partnerships, often providing financial incentives to do so, and some innovative partnerships between community colleges and universities have emerged in Canada. In addition to relating relevant Canadian experience, for comparative purposes, this chapter will draw also upon examples from a few other countries for which information about relationships between the two types of postsecondary institutions was available.

Where this chapter refers to the relationship between types of postsecondary institutions, the word “relationship” is used synonymously with connection. There are several different ways in which institutions may be connected. One way is through a formal agreement to coordinate certain actions or policies, and this chapter will describe a variety of different types of agreements through which institutions coordinate their behavior. In some cases coordination can be achieved by implicit understanding without the need for a formal agreement. Another form of connection is where one or both institutions take knowledge or perceptions of the other institution’s behavior into account when making decisions about their own behavior. For example, one institution may base its curriculum or staffing decisions in part on expectations of how another institution would perceive its courses.

The first section of this chapter provides a brief discussion of the problem of defining a community college, particularly in an international context, and it identifies key characteristics of the institutions that are treated as community colleges in this chapter. The section also explains how the terms community college and university are used in this chapter. The second section describes changes in the role of the community college and in its relationship with universities that have occurred since the attainment of a baccalaureate degree in career and technical fields has become so important, a development that occurred at different times in different jurisdictions during the last third of the twentieth century. This is followed by a section on models of collaboration between community colleges and universities in the provision of vocationally oriented education that results in the awarding of a baccalaureate degree. The focus of the section is on the component dimensions of collaboration which can be combined together in different ways to create alternative models. The final section offers concluding comments. While collaboration between community colleges and universities may occur in other areas than the design and delivery of instructional programs, for example, in research, this

chapter concentrates on collaboration in instructional programs that lead to the baccalaureate degree.

Community Colleges and Universities

While it is possible to find single-sentence definitions of a community college, these are not entirely satisfactory for the purposes of this chapter for three reasons. One is that different authors define the term differently. Another is that it is difficult to adequately convey what a community college is in a single sentence. Thus, in the most substantial book about Canadian community colleges, rather than providing a single definition of a community college, Dennison and Gallagher (1986) identify and elaborate on ten defining characteristics of a community college.

A third problem is that existing definitions of the community college usually pertain to specific national contexts and thus reflect the history, conventions, and structures of particular countries – a quality that limits their usefulness in cross-national studies. A related problem is that the term community college is used relatively in few countries, yet other countries have postsecondary institutions that share characteristics with institutions in the countries that do use the term. Even in Canada, a country where the term community college was once widely used, that term now appears in the names of only a handful of institutions, and the national organization of which these institutions are members no longer uses that term in its name. The national context of definitions of the community college is suggested by the titles of the books in which the definitions are contained, e.g., *The American Community College* (Cohen et al. 2014) or *Community Colleges in Canada* (Campbell 1971). In the *American Community College*, a community college is defined as “any not-for-profit institution regionally accredited to award the associate in arts or the associate in science as its highest degree” (Cohen et al. 2014, 5). This definition would exclude institutions that are similar to American community colleges but are in jurisdictions that do not use associate degrees and/or regional accreditation.

Another problem with the Cohen et al. definition is that it refers to only one characteristic of a community college, the credential that it awards. Campbell’s (1971, 7) definition goes one better by referring to two characteristics: duration of program (“1, 2, or 3 years”) and the type of program (“vocational or university-parallel studies or both”). While it is not necessary to construct a long list of defining characteristics of a community college as Dennison and Gallagher’s list, Campbell’s definition warrants updating in a few respects. Since most community colleges now tend to perform the technical college function either by itself or in combination with the junior college function, another defining characteristic of the community college could be said to be the applied orientation of all or many of its programs. The applied orientation is manifested in both the emphasis on preparation for specific roles in the workforce and in the curricular emphasis on experiential learning, learning by doing, and integration of work experience with classroom learning.

Another defining feature of the community college is its emphasis on teaching. In contrast to universities where all or most faculty members are expected (more accurately, required) to devote a substantial portion of their time to research, the principal job of a community college professor is to teach. A third additional defining feature is relatively open admission. While denying admission to applicants who appear to have “no reasonable chance of succeeding in the program of their choice” (Dennison and Gallagher 1986, 74), community colleges try to be as accommodating as possible when considering applicants. Accommodation includes vigorous use of prior learning assessment and remedial courses that prepare applicants for entry into the programs of their choice. As a consequence of their relatively open admission practices, substantial proportions of community college students are from groups that historically have been underrepresented in universities, e.g., aboriginal people and other minorities, persons from lower-income groups, single parents, and persons with disabilities (Chase 2011; Colleges Ontario 2015).

Their entry into awarding baccalaureate degrees has complicated the task of defining a community college. Cohen et al. definition would exclude an institution that displays all the characteristics of a community college but offers even a single baccalaureate program. Their rationale is that “both the National Center for Education Statistics (NCES) and most of the regional accrediting agencies have moved these institutions [that offer any baccalaureate programs] to their four-year public categories” (Cohen et al. 2014, 5). The convenience of statistical agencies aside is it is reasonable to exclude from the definition of a community college an institution that devotes the vast bulk of its effort and resources to carrying out the functions traditionally associated with a community college but offers a few baccalaureate programs? It might be more helpful to adopt the approach suggested by Wheelahan et al. (2009) of defining single-sector institutions as those that have more than 97% of their enrolment in the programs associated with one sector and introducing the concept of a “dual-sector institution” for those that span the “divide” between sectors (Garrod and Macfarlane 2009, 6).

A more difficult case for classification is that of a postsecondary institution the majority of whose programs are those associated with a community college but which has been formally designated as a university. This situation has arisen in two Canadian provinces. In 2008, five former community colleges in British Columbia were designated “special purpose, teaching Universities” (British Columbia 2008). The idea was that while becoming universities, these institutions would continue to offer the programs that they did as community colleges, and they would concentrate more on teaching than do the older universities in the province. An examination of the web site of one of these institutions in May, 2016 revealed that while it was offering 50 bachelor’s and six master’s programs, it was also offering 101 certificate, diploma, advanced diploma, and associate degree programs. Adding to the classification conundrum, the institution was a member of both Universities Canada (the national association of Universities) and Colleges and Institutes Canada (the national association of Community Colleges). In the Wheelahan et al. typology, this institution would be considered a “dual-sector” institution (Wheelahan et al. 2009).

Another difficult case is that of an institution that is not (exactly) regarded as a university in its own jurisdiction but whose educational programs are predominantly or exclusively at the baccalaureate and higher levels. This is a common pattern in many European countries where the postsecondary systems consist of one set of traditional universities and one set of institutions that offer vocationally oriented programs at the baccalaureate, and in some countries at the master's and doctoral levels as well, and have the other defining characteristics of a community college suggested earlier. Examples of vocationally oriented postsecondary institutions in European countries are Fachhochschulen in Germany, Austria, and Switzerland; Hogescholen in the Netherlands; polytechnics in Finland; and institutes of technology in Ireland. These institutional types and many similar ones in other countries were included by Raby (2009) in her list of community college models. This type of institution was described as a "nonuniversity higher education" institution by Taylor et al. (2008).

However, a recent development makes it more difficult to view these institutions as community colleges. Even though they share the defining characteristics of a community college noted earlier, in many countries institutions of the type just described have taken to call themselves "universities of applied sciences." At one time, institutions in some continental European countries were allowed to use this name only in English translation and when advertising themselves outside the home nation. Now in some countries, the term has been adopted by government ministries and national statistics agencies, and there is an international association of universities of applied sciences.

While the emphasis in this section has been on defining the term community college, the word university is not unambiguous either. In Canada, any postsecondary institution that has broad statutory authority to award baccalaureate degrees is called a university, while the comparable generic term in the United States is 4-year institution – and not all 4-year institutions there are called universities. An examination of web sites of government ministries responsible for higher education and national statistics agencies that report on higher education indicates that many other countries follow the same approach as Canada, and that is the approach of this chapter. The term university is used to refer to institutions that have broad statutory authority to award baccalaureate and higher degrees and in which baccalaureate and higher degrees constitute the vast bulk of their awards. This chapter also follows the practice in Canada and many other countries of using the term college without a modifier interchangeably with community college.

Relationship Between Community Colleges and Universities in Baccalaureate Level Education

The roots of the contemporary community college lie in vocational institutions, which date back to the nineteenth century, and junior colleges which first appeared in the United States and Canada in the early twentieth century. Although the first junior college in Canada was founded at about the same time as the first one in the United

States, the junior college never became as prevalent in Canada as in the United States. From the 1920s to the 1960s, institutions in the United States that had begun as junior colleges started to add vocational education to their repertoire until it became the dominant function of community colleges by the 1980s (Dougherty 1994; Townsend 2001). When community college systems were established in Canada in the 1960s, the major design decision was whether to include both vocational and liberal education or to offer only vocational education (Campbell 1971). Three provinces chose to have colleges that did both, while the other seven chose to have their colleges do only vocational education (Dennison and Gallagher 1986).

At the time that community college systems were being developed in Canada – and expanded in the United States – during the 1960s, there was no expectation that graduates of their vocational programs would need, be interested in, or be qualified for subsequent attendance at a university. Consequently, when colleges whose mandate was limited to offering vocational programs developed their curriculum, they had no reason to enter into agreements with, or even consider how their courses might be perceived by, Universities.

In contrast, it was essential for colleges whose mandate included the junior college function to have at least a tacit relationship with universities. The demands of that relationship were straightforward. Colleges identified a selection of first and second year university arts and sciences courses that they also would offer. Since the courses offered by the colleges mimicked the courses offered by the university, the only issue in awarding transfer credit was the quality of the college courses. Colleges had to show that the syllabus of the college course was sufficiently similar to that of the corresponding university course and that the college teacher was qualified to teach the course. All the adaptation necessary to make the transfer function work was done by the college. This situation persisted for more than two decades, until new developments pertaining to baccalaureate degree attainment led to pressure for change in the relationship between colleges and universities.

The developments that gave rise to this pressure included changes in the importance attached to attainment of a baccalaureate degree that resulted from globalization, the shift toward a knowledge economy, and changes in the workplace; increased concern about inequality of opportunity for educational advancement; and changes in the way that vocational education was viewed. These developments proceeded at a different pace in different jurisdictions, generally becoming noticeable in Canada and the United States in the late 1980s and picking up momentum through the 1990s. Some of the developments had manifested in Europe much earlier.

One consequence of globalization is that many countries have set a goal of increasing the proportion of their population with higher educational credentials in order to remain internationally competitive (Wheelahan et al. 2009). Given the substantial proportions of students whose first entry into postsecondary education is at a community college, enabling more of these students to obtain a baccalaureate degree is one way of raising baccalaureate degree attainment rates. Because disproportionate numbers of people in groups that historically have had lower than average

baccalaureate degree attainment rates are found in community colleges, improving the baccalaureate degree attainment rate for persons in vulnerable groups could both reduce inequality and raise the overall baccalaureate degree attainment rate. Just as nations view increasing educational attainment as a means to competitiveness, many individuals also look upon the attainment of a higher educational credential as a means of improving their competitive position in the labor market (Capelli 2015). In the United States, about 80% of incoming college students say that their goal is to obtain a baccalaureate degree (Community College Research Center 2015). While there are no data of this type for Canada, some surveys in Ontario suggest that the comparable figure for that province is in the range of 30% to 50% (Decock 2006; Colleges Ontario 2009).

As a consequence of both global trends and the impacts of advances in knowledge and technology, educational requirements have increased in many occupations for which colleges have traditionally provided workforce preparation, e.g., nurses, management accountants, technologists, social service workers, and para-legals. A study of job postings in the United States revealed that 65% of postings for executive secretary and executive assistant positions contain a requirement for a bachelor's degree, whereas only 19% of people currently employed in these positions have such a degree (Burning Glass Technologies 2014). Some other types of jobs in which there have been similar trends in educational requirements are credit checkers, insurance claims processing clerks, transportation managers, and construction supervisors (Burning Glass Technologies 2014). Similar increases in requirements for degrees have been observed in Ontario (Malatest and Associates 2010).

Partly in response to the developments just noted, but in part also independently of them, changes have occurred in many jurisdictions in the way that vocational education is viewed. Whereas throughout much of history, vocational education was looked upon as something quite distinct from higher education, that view began to change, at least in some quarters, in the last third of the twentieth century. Before that the idea that a vocational education program could be taught at a level that warranted the awarding of a baccalaureate degree would have been unthinkable. Of course, many applied fields that were once thought inappropriate for university level study eventually came to be accepted in the university. In his classic treatise on universities first published in 1930, Flexner was adamant that business, journalism, domestic science, and library science had no place in the university (Flexner 1968).

The change in how the relationship between vocational education and higher education is seen, which occurred earlier in Europe than in North America, is well illustrated in a statement in the manual for accreditation of bachelor's, master's, and doctoral programs of the former Fachhochschule Council in Austria: "The FH (Fachhochschule) degree programs offer scientifically sound vocational training at the higher education level" (Fachhochschule Council 2013, 4). This view of the relationship between vocational and higher education provided the conceptual underpinning of reforms in many European countries that saw the creation of a system of vocationally oriented postsecondary institutions with a degree structure that paralleled that of the university sector (Taylor et al. 2008). One of the major effects of these reforms was to extend into the postsecondary realm the streaming

between academic and vocational education that had long existed in the secondary schools (Slantcheva-Durst 2010).

While the corresponding rethinking of the relationship between vocational and higher education in the United States and Canada has not been as substantial or as profound as in Europe, there have been some attempts to conceptualize an applied baccalaureate degree (Skolnik 2013). Townsend et al. (2009) offered the following definition of an applied baccalaureate degree:

a bachelor's degree designed to incorporate applied associate courses and degrees – once considered as terminal or non-baccalaureate level – while providing students with higher-order thinking skills and advanced technical knowledge and skills. (Townsend et al. 2009, 693).

There has been a major difference on the two sides of the Atlantic in the approach to the provision of applied degrees. In most European countries, the newer vocationally oriented degree programs are offered primarily by colleges themselves rather than through transfer arrangements with universities. Although some Canadian provinces and American states have enabled colleges to award baccalaureate degrees, the predominant emphasis has been on improving transfer opportunities for college students. Thus, 18 years after polytechnics in Finland were authorized to award degrees, these institutions accounted for over 60% of baccalaureate degrees in Finland, while 16 years after colleges in Ontario got such authorization, their degrees accounted for only 2% of the baccalaureate degrees in Ontario (Skolnik 2016a).

Elsewhere the author has speculated on the reasons for this difference in approach (Skolnik 2016a). One of the major factors is that while most European countries did not have a tradition of or infrastructure for college-to-university transfer, not only were both present in the United States and to a lesser extent in Canada, but transfer was an important element of college identity. However, when colleges in the United States and Canada tried to extend the transfer model to vocational programs, there was insufficient appreciation of the differences between transfer from academic programs and transfer from career education programs. A key difference is that in designing career education programs, colleges could not simply replicate courses that were commonly offered to first and second year university students. Many of the courses in college career education programs have no counterpart in university curricula. Moreover, the would-be transfer student from a college career program will have taken many quite specialized courses during the 2 years at a college, whereas in the normal progression through an undergraduate curriculum, the more specialized courses aren't taken until the third and fourth years (Townsend et al. 2009). While the research by Townsend et al. was done in the United States, Baker (2002) observed the same phenomenon in Canada. He noted that the curriculum of college career programs doesn't mesh with the curriculum of universities because the college career programs are designed to prepare graduates for the labor market.

As a consequence of the lack of an efficient fit between the curricula of the two institutions, researchers in the United States have found that students who transfer

from a vocational program in a college to a university have great difficulty getting full credit for the studies they have done in a college (Monaghan and Attewell 2015; Chase 2011; Karandjeff and Schiorring 2011; Ruud and Bragg 2011; Bragg 2002). Ruud and Bragg report that they have “found instances in which graduates of associate of applied science (AAS) programs would have been required to ‘restart’ their degrees at the freshman level because their applied associate course work did not transfer to the baccalaureate level” (Ruud and Bragg 2011, 4–5).

Although there has been less research on college-to-university transfer in Canada than in the United States, numerous reports since the early 1990s, particularly in Ontario, have noted similar difficulties with transfer credit. A provincial task force that investigated this issue in the 1990s found that nearly half of the transfer students studied received no transfer credit at all, more than a quarter received only 1–3 credits and only 8% received six or more credits (Pitman 1993). In 1998, the organization which represented the colleges complained to the government about the “lack of recognition from Ontario Universities for skills and knowledge attained” in the colleges (Association of Colleges of Applied Arts and Technology of Ontario 1998, 9). Although the situation is widely perceived to have improved in recent years, by 2013 almost two-thirds of graduates of a 2-year program in a college still received 1 year or less transfer credit when transferring to a university (Decock et al. 2016).

Unlike the situation with academic programs, colleges face constraints in adjusting their vocational programs to fit the requirements of the university because these programs have to prepare graduates for direct entry into the workforce after just 2 years of study. Thus, in order to get a fit between a 2-year vocational program in a college and a 4-year university program with which there is some affinity, it will usually be necessary for there to be a mutual adaptation between the respective programs of the two institutions that requires “collaboration in the planning and delivery of programs” (Lang 2009, 368). This need is avoided when a college offers the entire baccalaureate program, in which case the college either designs the third and fourth years to fit the first two or creates a whole 4-year applied program from scratch. However, the demand for applied baccalaureate programs in Canada cannot be met by this approach because of all the conditions, limits, and restrictions that have been placed on college baccalaureate granting (Skolnik 2016a).

Dimensions of College-University Collaboration in Baccalaureate Programming

Several typologies of models have emerged for collaboration between colleges and universities in the provision of baccalaureate degree programs in applied fields. A characteristic of all these typologies is a significant overlap between models. For example, in one typology suggested in the United States, two of the models are “articulation and coordination” and “on-site upper division course offerings” (Prather and Carlson 1993, 5–6). The problem with posing these as two distinct models is that the second model is simply a geographic variant of the first. In one

Table 1 Dimensions of collaboration between colleges and universities in facilitating attainment of baccalaureate degrees in career and technical education

Dimension		
Organizational relationship	Course sequence relationship	Geographic relationship
Bilateral articulation	College courses precede university courses	Collaboration with nearest institution
Dual-sector institution	Concurrent course delivery	University offers upper year undergraduate courses on college campus
Joint venture	University courses precede college courses	Virtual degree completion
Joint program		University partnership center on college campus
Multiple discipline-specific relationship		
Cross-border articulation		

Canadian example, the same actual case that one study classifies as a “bilateral partnership,” another study presents as an example of a “concurrent use partnership.” In fact it is a bilateral partnership between two institutions that share a campus. These examples illustrate the difficulty of producing a mutually exclusive list of models because most models have more than one component or dimension.

This chapter uses a different approach. It identifies three different dimensions of collaboration between colleges and universities and different combinations of which could be used to define different models if one were so inclined. These dimensions, and the key variants of each dimension, are shown in Table 1. The dimensions are organizational relationship, course sequence relationship, and geographic relationship. Although this approach greatly reduces the problem of overlap among categories, it doesn’t eliminate it. For example, cross-border articulation (column 1) is a specific type of bilateral articulation, but it may be worth drawing attention to because of its mobility and political implications.

In this section, examples of the different dimensions of collaboration are provided. In most cases the source of information for an example is the web site of one or more of the partner institutions. The reliance on institutional web sites is a limitation of this chapter, since programmatic information on institutional web sites may be out-of-date or incomplete – particularly in regard to amount of credit transfer, which often can be determined only on an application-by-application basis.

Organizational Relationships

Table 1 identifies six different kinds of organizational relationships. The first, bilateral articulation is the oldest and most common relationship between colleges and universities. Some of the main issues that arise in this type of relationship were discussed in the previous section. A type of relationship that has received much less attention in the literature on college-university relationships is the dual-sector institution, where a single organization has both a substantial technical college function and a substantial university function. In this type of organization, the

vocational education may be provided by a community or technical college that is a constituent entity of a university; on a particular campus of a multicampus institution that is devoted to vocational education; or in a set of programs that comprise the institution's vocational education offerings.

The dual-sector institution provides a potentially supportive framework for collaboration between vocational and higher education in the form of common policies, budgetary frameworks, and administrative practices. However, the fact that one often hears academics complain about the barriers to student mobility between departments on the same campus suggests that the opportunities for collaboration that exist in the dual-sector institution may often go unexploited.

There were five dual-sector universities in Australia in 2009 (Moodie 2009), and a sixth was created in 2014 with the merger of Central Queensland TAFE with Central Queensland university. Moodie defined a dual-sector university as one that has "a substantial student load" in vocational education and "undertake[s] substantial research and award[s] research doctorates" (Moodie 2009, 59). Wheelahan et al. operationalize "substantial" by suggesting that a dual-sector institution should have at least 20% but not more than 80% of their student load in each sector (Wheelahan et al. 2009). Rather than having a distinct Technical and Further Education College (TAFE) within the university, vocational education programs in these institutions may simply be listed within each university's total offerings. One of these institutions, Victoria University in Melbourne, offers a "guaranteed diploma to degree" in which a student who completes a diploma is offered admission into a related bachelor's degree program without having to apply to the degree program (Victoria University 2016). In many cases, students can complete a baccalaureate degree in the same length of time as if they had gone directly into the bachelor's program. For example, upon completion of a 1-year diploma of business enterprise in Victoria University, the student would be able to go directly into the second year of a bachelor of business administration in marketing, international trade, management and innovation, or event management. In some fields the graduate of a diploma program might have to do an additional semester.

Dual-sector universities are found also in the United States, where they have been in existence for quite some time, and in Canada where they are a relatively new development. In several American states, the flagship state university has some campuses that concentrate on offering 2-year programs, e.g., in Arkansas, New Mexico, Pennsylvania, and South Carolina. Such institutions often provide opportunities for efficient transfer from applied associate to bachelor's degree programs, such as the 2 + 2 programs at Penn State University (2016).

The dual-sector institutions in Canada include former community colleges in Alberta and British Columbia that have been redesignated as universities and the community colleges across the country that now award baccalaureate degrees. Some of the new universities offer 2 + 2 arrangements between their diploma and degree programs in a limited number of fields. For example, at both MacEwan University in Edmonton, Alberta, and Vancouver Island University in Nanaimo, British Columbia, students who wish to do a 2-year diploma in child and youth care must apply to the bachelor's program in child and youth care; they may leave after 2 years with a

diploma or continue on for 4 years and obtain a bachelor's degree (MacEwan University 2016; Vancouver Island University 2016). In Ontario, students who transfer from a diploma to a baccalaureate program within a college may be required to spend one more year to obtain the degree than would a student who enrolls directly in a baccalaureate program.

The next type of organizational relationship listed in Table 1 is where an independent community college and an independent university collaborate in a joint venture. Perhaps the best example of this arrangement is the University of Guelph-Humber, an offspring of the University of Guelph, based in Guelph, Ontario, about 100 km from Toronto, and Humber College in Toronto. The University of Guelph-Humber (UGH) was established in 2002 and offers a curriculum "that provides the advanced theoretical education of a University degree integrated with the professional knowledge of a college diploma" (University of Guelph-Humber 2016, 2). UGH has its own building on the campus of Humber College and operates at arm's length from its parent institutions.

Each of the seven UGH programs were designed from scratch by teams of faculty from the two institutions and went through the program approval processes in each institution (Ellis 2005). Some of the courses are taught by university faculty and others by college faculty, and all courses count toward both credentials. Upon completion of a program, a graduate earns a bachelor's degree from the university partner and a diploma from the college partner in the same length of time as would be required to earn just the university degree. All students are registered for funding purposes as university of Guelph students and come under Guelph's academic policies (Hanna 2016). As such, in order to be admitted to UGH, students must meet the admission requirements of the university.

There are no other college-university partnerships in Canada which involve the extent of integration of programs, planning, and administrative and academic services as UGH. However, there are a number of programs that are commonly referred to as "joint" programs and have at least two features in common with the UGH programs. One feature is that students must meet university admission requirements in order to be admitted to the program. In Canada, the academic requirements for admission to a university are normally more demanding than the requirements for admission to a college, in terms of grades and types of courses taken in secondary school. Thus, joint programs do not provide a direct pathway to the baccalaureate degree for students who, coming out of secondary school, do not meet university admission requirements.

The other feature that joint programs may share with UGH pertains to the temporal relationship between college courses and university courses. As shown in the second column of Table 1, there are three possible variants in the temporal relationship between college and university courses in any type of collaboration: the college courses precede the university courses, as is the case with traditional college-to-university transfer arrangements; college courses and university courses may be taken concurrently, as is the case in the university of Guelph-Humber; or most or all of the university courses may precede the college courses. Some of the programs in the list of joint college-university programs compiled by the Ontario Universities'

Application Centre appear to be of the latter type (Ontario Universities' Application Centre 2016). University courses are taken in the first 2 years, and the third and fourth years consist predominantly of occupationally focused college courses.

Joint college-university programs in which the university courses precede, or are concurrent with, the college courses provide an efficient and convenient way of enabling university-bound students to reap the benefits of reverse transfer. Reverse transfer refers to the phenomenon of university graduates, or persons who had attended but not graduated from a university, subsequently attending a community college in order to obtain marketable occupational knowledge and skills. Reverse transfer is believed to be quite prevalent across Canada and the United States (Wilson 2009). In Ontario, the number of students with university experience who attend a college is greater than the number with college experience who attend a university (Clark et al. 2009). In 2007–2008, 8.5% of students in Ontario colleges had a university degree, and another 8.0% had previously attended a university (Colleges Ontario 2009).

Though reverse transfer and joint programs both contribute to the same end, taking occupationally focused college courses within the framework of a joint program may be more attractive for a university-bound student than waiting until after completion of a bachelor's degree in a university to search for college courses that would enhance the graduate's marketability. The former approach saves time both in studies and in searches, possibly ensures a better fit between the university and college courses, and ensures that the college courses that are selected have the imprimatur of a university.

In some disciplines or fields of study, relationships have been developed that focus on programs in the same field of study at multiple institutions. Lakehead University in Thunder Bay, Ontario offers post-diploma degree programs in engineering that are designed specifically for graduates of technologist programs of colleges across Canada. A graduate of a 3-year technology program in an Ontario college can earn a bachelor's degree in engineering at the university by completing a summer session followed by 2 years of coursework (Lakehead University 2016).

While Lakehead's college transfer program in engineering involves one university with many colleges, there is a discipline-specific arrangement in nursing education in Ontario that involves multiple colleges and multiple universities. During the late twentieth and early twenty-first centuries, in Ontario, as in all except one other Canadian province, a bachelor's degree in nursing came to be a requirement for becoming a registered nurse. Prior to 2001, there was both a diploma and a degree route to qualify as a registered nurse, and a large majority of new nurses graduated from college programs. Not enamored of the idea of closing college nursing programs or giving colleges the authority to award baccalaureate degrees in nursing, the Ontario government opted instead for collaboration between colleges and universities as the main vehicle for producing baccalaureate trained nurses. Most of the colleges and universities in the province became partners in collaborative nursing arrangements in which the university partner awards the degree. In some partnerships, the courses are offered in a concurrent mode, while others use the 2 + 2 transfer mode, but even in the latter, university admission requirements prevail.

While many colleges seem content with their partnerships, a 2013 study reported that about 40% of the colleges in partnerships with universities would prefer to offer a stand-alone bachelor of nursing program and are preparing for that eventuality (Malatest and Associates 2013).

The final variant in the organizational relationship dimension is cross-border relationships. A substantial proportion of the transfer agreements that some colleges in Canada have are with universities in other countries – most frequently the United States but also Australia and some European countries. Most Ontario colleges have transfer agreements with universities in the neighboring states of Michigan and/or New York, and one of their major reasons for negotiating those agreements is the desire to obtain more transfer credit from American universities than Ontario colleges can obtain from Ontario universities. Some American universities regularly recruit transfer students at Ontario colleges. A study on this subject (Brunett et al. 2012) speculated that these cross-border agreements might put pressure on Ontario universities near the border to offer comparable terms of transfer. Cross-border articulation agreements could contribute to a brain drain if some of the individuals who go to another country in order to continue their education end up staying in that country.

Geographic Relationships Between Colleges and Universities

Distance from the nearest college or university can limit participation in post-secondary education, especially for persons in lower-income groups (Frenette 2003) and for students who are place-bound due to work or family responsibilities (Shields 2004). In many cases students who complete a technical program in a college may be unable to travel the necessary distance or relocate their residence in order to continue their education at a university (Floyd 2005). In Ontario, over 80% of transfer between provincial colleges and universities is between institutions that are within commuting distance (Lennon et al. 2016). Several strategies for addressing possible problems posed by the distance between a college and a university have been employed (and are shown in the third column of Table 1).

The first and often the easiest is for a college (university) to take full advantage of the opportunity to collaborate with the nearest university (college). The 35-year-old partnership between York University and Seneca College, both in the northern part of Toronto, has resulted in the largest transfer flow between a college and a university in Ontario, 14,700 students (moving in both directions) between 2000 and 2012 (Smith et al. 2016). Seneca College sends the largest number of students to university of any Ontario college, and York University receives the largest number of college transfers of any university.

Another example involves Ontario's newest university, the University of Ontario Institute of Technology (UOIT), which was established in 2002 on the site of an existing institution, Durham College. The new university was given a charter that is unique in Canada in having as its special mission "to provide career-oriented University programs and to design and offer programs with a view to creating

opportunities for College graduates to complete a University degree” (UOIT Act 2002). Pursuant to its mission, the UOIT has developed special arrangements for transfer with Durham College with which it shares some facilities and services and receives the fourth largest number of transfer students overall of any university in the province (Lennon et al. 2016; Boggs and Trick 2009).

The next level of activity in addressing distance barriers is for a university to offer upper year courses on the campus of a community college. An example of such an arrangement is the one between Nicola Valley Institute of Technology, an aboriginal governed postsecondary institution with a campus in Vancouver, British Columbia, and the University of the Fraser Valley (UFV), a special mission, teaching-focused University in Abbotsford, about 60 km away. Under this arrangement graduates of Nicola Valley’s 3-year chemical addiction worker advanced diploma can do 1 additional year of UFV courses to obtain a bachelor of general studies degree. Instructors from UFV travel to the Nicola Valley campus and offer the courses in eight condensed 6-day blocs (Russell 2014).

An alternative to having a university offer upper year courses onsite is use of the virtual approach (Lorenzo 2005). At the University of South Carolina, a graduate at one of the university’s four 2-year campuses may complete the third and fourth years of a baccalaureate program online (University of South Carolina 2016). In Canada, Athabasca University, an online/open University in Alberta, attracts more transfer students from Ontario colleges than all except one Ontario university (Steffler et al. 2015).

While the above examples involve bilateral relationships between a college and a university, a variant which is quite common in the United States is that of the university partnership center in which several universities offer their courses on the campus of a community college. Lorenzo identified six different versions of the university partnership center, the differences pertaining to the respective roles of the college and the universities in course planning, management, and student recruitment and in how different types of learning activities are combined (Lorenzo 2005). Besides offering upper years of baccalaureate programs, it is common for university partners in these centers to offer also 4-year baccalaureate programs and master’s programs. When a university partner offers its own 4-year program on a college campus, there may be a fine line between whether it is adding to the educational capacity of the community or competing with the college for first and second year enrolment.

An example of a university partnership center is the one at Lorain County Community College (LCCC) in Elyria, Ohio, about 40 km west of Cleveland. LCCC has ten university partners offering a combined total of 31 bachelor’s and 8 master’s programs (Ballinger and Crooks 2013). Prior to the establishment of the center in 1996, only about 12% of the county’s population had attained a baccalaureate or higher degree. After a little more than a decade of the center’s operation, the percentage of the county population with a degree had increased to nearly 20% (Ballinger and Crooks 2013). Though several Ontario community colleges from time to time have one or a few universities offering upper year courses on their campus, there is only one formally designated university partnership center in Ontario.

Concluding Comments

The preceding section has provided diverse examples of how students are able to combine career-focused education in a college with studies in a university in the attainment of a baccalaureate degree. While some of the examples enable the student to complete a baccalaureate degree in the same duration of time as if they had done a degree wholly in a university, in most cases longer time is required for the student who combines studies in a college with studies in a university than for the person who does a baccalaureate degree in a university or in a college. Because of the complexity and decentralization of arrangements for credit transfer, there is a lack of system-wide data on the amount of credit received by transfer students (Lennon et al. 2016). However, one Ontario study based on self-reports of transfer students showed that about two-thirds of graduates of 2-year diploma programs received 1 year or less credit toward a 4-year baccalaureate degree in a university (Decock and McCloy 2015). This means that a large majority of students who start postsecondary education in a college must spend 5 or more years to obtain a 4-year degree.

Credit transfer has been identified as one of the most important factors in facilitating transfer between colleges and universities. A national longitudinal study of 13,000 students in the United States concluded that the odds of completing a baccalaureate degree for students who were able to transfer most or all their college credits were 2.5 times greater than the odds for those who could only transfer less than half of their college credits (Monaghan and Attewell 2015).

While other factors such as funding arrangements (Lennon et al. 2016) may militate against the awarding of transfer credit, probably the major barrier is the lack of fit between the curriculum of career-focused diploma programs in colleges and the curriculum of university baccalaureate programs. It was suggested earlier that poor curriculum fit is a consequence of the fact that the two types of programs were developed by institutions with quite different missions, to serve quite different purposes. That being the case, effective collaboration between colleges and universities requires a reengineering of curriculum in which accommodations are made by both parties. The ultimate example of such reengineering is the University of Guelph-Humber, where faculty from the two institutions worked together to develop all new courses for integrated programs. However, anything close to that level of partnering between two institutions requires a degree of commitment, trust, and sharing of potential risks and benefits that is difficult for most institutions to muster and sustain. Ironically, the institution that has the most to gain financially from improved pathways from college to university, the university, is generally less willing than the institution that has the least to gain financially, the college, to make a commitment to collaboration in the planning and delivery of programs. Moreover, some of the collaborative options that provide the most credit for courses taught by colleges are not open to students who do not qualify for university admission out of secondary school.

Given the limitations of relying on collaboration between colleges and universities to enable students who begin postsecondary education in a career program in a

college to obtain a baccalaureate degree, it is not surprising that many who believe in the value of vocationally oriented higher education, both for individuals and for society, have advocated for colleges to be given the authority to award degrees. Accordingly, in many countries – particularly in Europe – colleges provide applied baccalaureate degrees on their own, and transfer from college to university is limited or nonexistent. Some of the countries in which colleges are substantial providers of baccalaureate degrees have among the highest and/or most rapidly increasing rates of baccalaureate degree attainment in the world, for example, Norway, the Netherlands, and Finland, whereas countries like the United States and Canada that have been heavily committed to the transfer model have seen their international ranking in baccalaureate degree attainment decline (Skolnik 2016b).

Both approaches to the production of vocationally oriented baccalaureate degrees have strengths and weaknesses. One of the strengths of the collaborative model is the opportunity to take advantage of the intellectual and research resources of the university, and one of the weaknesses of the college degree-awarding model is the possible decline of short-cycle vocational education at the postsecondary level as institutions give more attention to baccalaureate programming, as has occurred in some European countries that employ this approach (OECD 2014). The decline of this core function of the community college reduces educational opportunities for school leavers and deprives national economies of what has been an important part of their educated workforce. However, such a decline is not inevitable, and thus far, colleges in Canada and the United States that award baccalaureate degrees have maintained substantial offerings of diploma, certificate, and trades programs.

It is understandable that jurisdictions which traditionally have relied primarily on collaboration between colleges and universities for baccalaureate degrees in career and technical fields will continue to promote this approach. Hopefully, the production of more information on the issues in and on alternative models for college-university collaboration – such as those described in this chapter – will be of assistance in this endeavor. However, it is important for these jurisdictions to appreciate both the difficulty of establishing the kinds of partnerships between colleges and universities that will result in the development of coherent pathways that do not penalize students for combining studies in two different types of postsecondary institutions, and the contribution that expansion of college baccalaureate programming can make to the advancement of applied higher education.

Finally, it should be noted that while the awarding of baccalaureate degrees by colleges has been viewed as an alternative to collaboration between colleges and universities, this need not always be the case. Just as the two types of institutions may collaborate in programs for which the university awards the degree, they might collaborate also in programs for which the college awards the degree. For example, a college could arrange for a university to provide some of the core liberal arts and sciences courses in its baccalaureate programs – on the college campus, virtually, or for institutions in close proximity by having college students visit the campus of the university.

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Concluding Chapter



Community Colleges and Global Counterparts as Evolving Forms

44

Edward J. Valeau and Rosalind Latiner Raby

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Abstract

Community Colleges and Global Counterparts have emerged over time as educational pathways for the traditionally disenfranchised often described as racial and ethnic groups, women, poor people and the undereducated. They are talked about for their role in preparing an educated citizenry for participation in their community generally and the society specifically, training the workforce for participation in a globally dependent society, and in many communities as the last opportunity for people to improve their lives for a better standard of living for themselves and their families. Yet, many of these institutions are unable to meet their full potential because of underfunding, perceived low status, and inadequate staffing and leadership. To maximize their potential nationally and internationally, educational leaders, policy makers, and governments must employ sustained and measurable changes in the areas mentioned above to ensure student access, success and relevance in program offerings, policy development, and enforcement. This chapter focuses on the challenges, opportunities, and recommended strategies to elevate Community College and Counterparts to help them maximize their greater potential in form and substance that makes a difference in the world's greatest asset, people.

Keywords

Community College · Global Counterpart · Global narratives · Student access · Policy development · Funding · Government bureaucracies · Governance · Conversions · Structural composition · Curriculum relevance · Student development · Career readiness · Standards · Accreditation · Faculty preparedness · Trans-national educational borrowing · Low status · NGO reforms

Within this two-edited volume, contributors offer a comprehensive look at the Community College and Global Counterpart sector in several countries ranging from the United States to China from Israel to Brazil, to West Francophone Africa to Italy, and from Vietnam to Australia. The two volumes elevate the voices of educational researchers studying the Community College and Global Counterpart sector from English as well as from non-English speaking countries. Emerging global narratives secure a sustainable and longitudinal review of the immense popularity of community college and global counterparts as they accommodate the educational needs of the communities they serve thus affecting millions of engaged learners worldwide. The authors examine and explain the development, purpose, challenges, and philosophies of these institutions now and going forward. At the same time, they reveal distinct similarities in how organizations in this sector relate to student access, policy development, government bureaucracies, governance, conversions, structural composition, curriculum relevance, student development and protests, career readiness, and faculty preparedness. They explore the complexities of transnational educational borrowing found within and between these institutions and the universal stresses they encounter due to public and government perception which often describes them as low status. The book is relevant at a time when such institutions have taken center stage as nations

respond to access, education, and training in a globally dependent society ever changing due to knowledge explosion, technology, and citizen demands. Significantly, the authors in this book are the voices of those working in the sector who recognize their institutions as being transformative while they continue to evolve and expand.

Formation in the Twenty-First Century

Defining a Community College and a Global Counterpart remains a primary question among academics and policy makers. For some, there is a belief that adoption of the North American community college, complete with multiple missions, including transfer, has had limited impact. Many point to the fact that a few countries sustain a transfer pathway which eliminates the possibility of being a US community college model. Nonetheless, as noted by the authors, unique transfer pathways exist and identity does not need to take on an US-centric criterion. Global Counterparts have evolved and some changes respond to local, societal, and economic needs. Some were not influenced by institutions around the world but rather emerged because of academic drift and or specific needs. While change is at the core of this sector, there remains a common foundation that delineates the distinct contribution these institutions make to higher education as they are unique from universities. Telling is that that NGOs, like World Bank, CIDA, and USAID, have financially spearheaded international development projects to create institutions in this sector for decades.

All organizations within the Community College and Global Counterpart sector exist within the tertiary construct, and embody a mission, structure, and philosophy that is distinct from the University. Most, focus on how to get more students into higher education with a purpose of servicing societal, and economic needs through a range of career options. A common thread is that they lean toward educating nontraditional postsecondary students, focus on student learning, and are flexible by design to link the curriculum to local environmental needs. While some institutions needed short-cycle programming in the 1960s and through the 1980s, that type of education is no longer supportive of today's economic needs. With flexible academic programming, now these same institutions offer a combination of options that include short-term singular focused study, multiyear semi- and professional programs, terminal certificates, and practical and academic associate degrees and baccalaureate degrees in arts or sciences that pose its own set of challenges in areas of access and success. Some also provide pathways to transfer to 4-year institutions, but for many, the reasonable baccalaureate degree makes transfer less attractive. Importantly, they demonstrate in a practical way how a new generation can receive skills and training to help ensure employment, prosperity, and facilitate social mobility.

Changes Influenced by Governmental Action

In many countries, the National government is a pivotal player in creating new Community Colleges and Global Counterparts. In Vietnam, a generation of

community colleges emerged because of the Doi Moi or “renovation” economic plan that included a range of postsecondary opportunities as a catalyst for economic growth. The South African National Congress, in 1994, spelled out an education policy based on its ideals and principles of Desegregation, Democratization, Decentralization, Equal educational opportunities, and Multicultural Education through its National Education Policy Act, Act 27 of 1996. It gave authority to determine national norms and standards for education planning. In the United Kingdom, the 2010 election impacted Further Education as a new Coalition government gave employers, including colleges, greater freedom over employment practices, and cut public funding in the process. In Portugal, Polytechnics were established in 1973 and augmented in 1997 by the Law of the Basis of the Educational System as higher education of short duration with the objective to prepare technicians of average level. In 1979, they were designated as “Polytechnic Higher Education” and remain so today.

Changes Influenced by NGOs and Individual Reformers

NGOs have continuously worked to shape the direction and focus of Community Colleges and Global Counterparts. The World Bank supports projects based on the belief that countries neglecting tertiary education jeopardize seriously longer-term socioeconomic growth and hinder the progress of the Millennium Development Goals which require tertiary-level training to implement. The World Bank played a role in Columbia’s expansion and organization of Technical Institutes into Technical Colleges to serve as a source for the production and commercialization of knowledge. The World Bank was also instrumental in assisting Nepal’s poverty reduction strategy by developing localized postsecondary educational options. In Afghanistan, Academic programs offered at ATVI are supported by USAID’s long-term goals of supporting the economy and small businesses, increasing the employability of Afghan youth, and developing a competitive Afghan workforce. Over the previous 10 years, Afghanistan worked to develop a network of Community Colleges under the auspices of the World Bank. The primary purpose of these schools is to provide graduates with immediate, important skills that ensure employability in the workforce. Other NGOs also give specific funding to create community colleges (Australian Agency for International Development (AusAID), Canadian International Development Agency (CIDA), United Kingdom Department for International Development (UK-DFID), and US Agency for International Development (USAID).

Individuals who have played a key role in the introduction of Community Colleges and Global Counterparts worldwide are visionaries committed to challenging the status quo and a few are discussed within this section. The educational/economic reformer, Rozendale, is credited with promoting the mammoth experiment in the Curacao to address the needs of the community by using Vocational, Technical, and Adult education to respond to labor issues. Dr. Xavier Alphonse, a Jesuit Priest, largely shaped early Indian Community College efforts. With funding from

the UK and the local Archdiocese, he created the Indian Centre for Research and Development of Community Education (ICRDCE) to coordinate Community College development in 1999. The Macdonald Report in 1962 designed a network of independent institutions to serve the specific needs of their regions on a systemic level and offered a variety of programs of different lengths in British Columbia, Canada. Finally, in Afghanistan, Prince Abdur Rahman established the Ministry of Education and developed the Afghanistan National Development Strategy to define education outcomes and to accelerate human capital accumulation. Aware of the rising importance of human capital in the modern, global economy, educational policy makers have realized the contribution education can make in promoting the civic values and attitudes needed for the development of a socially, cohesive nation.

Changes to Meet Local Needs: A Matter of Geography

A hallmark of Community Colleges and Global Counterparts is that they are designed to meet local needs. It is in advancing access by serving students in their geographic regions, by linking educational content to specific jobs and careers, Community College and Global Counterpart purposefully address local and national needs. In Japan, the KOSENs provide access to tertiary education for families whose children traditionally are underrepresented by being in cities which are not a prefectural capital. While in Thailand, the government plans to increase higher education access resulted in the strategic building of Community Colleges in each region in Thailand. Like Austria and Germany, many European countries have designed explicit binary higher education systems (such as Belgium, the Netherlands, Finland, and Switzerland) to strengthen the vocational dimension in tertiary education. In this context, a wider diversification of student population is enabled, accompanied by geographic proximity to home, or in the case of the UK, low tuition fees and open access policies. In the United States, Community Colleges are established in a pattern so that all students within a 50-mile radius of one can have access. Throughout the world, policy makers, governments, industry leaders, educators, and local leaders are increasingly sensitive in defining Community Colleges and Global Counterparts as being part of the solution to expand postsecondary educational access. Thus, some have situated themselves in geographically peripheral locations that serve rural areas and the urban poor.

Changes to Develop Economic Knowledge to Serve Developing Countries

Many believe that higher education graduates bring knowledge and skills that can have a social and economic impact on society including the reduction of poverty worldwide. For developing economies, this then becomes an investment in the future. The more highly educated, the more these individuals can add to the productivity of society. In the Philippines, the TVET system allows the country to

be a net exporter of a high-level technical and professional workforce while in Brazil, the Federal Institute of Education, Science, and Technology meets the vocational and academic needs of the country's states. Malaysian Community Colleges were introduced to provide training and skills and are now focusing on emerging entrepreneurship programs to respond to the country's slowing economy. In British Columbia Canada, every student has a unique Personal Education Number from first entry to the school system onwards to facilitate tracking educational trajectories. Its strengths lie in a collaboration of BC's postsecondary institutions and governmental organizations to collect and analyze the data on these trajectories thus resulting in timely decisions for planning and offering programs and services targeted to student needs. In South Africa, the TVET Colleges or Technical and Vocational Education and Training Colleges (formerly known as the Further Education and Training Colleges) offer postsecondary education of a vocational-technical nature. Internationally, countries are revamping their education systems to better perform in a free-market economy. Despite the challenges, increasingly they adopt a Community College or Global Counterpart as part of their national strategies for economic development and global integration.

An important dimension related to serving the needs of developing countries is the internationalization of the campus and increased emphasis on faculty and student mobility. For instance, in Portugal a higher education quality indicator is an institutions internationalization level of the percentage of international students enrolled, percentage of students in mobility Out, and percentage of foreign lectures. In Brazil, the Federal Institutes have a commitment to enhancing teaching and learning and are doing so via faculty collaboration with colleges around the world to ensure that all students graduate with global competencies. In French-speaking Quebec, transfers with all its attendant challenges are an integral part of the HES and in 2002, the Ministry of Education elaborated a "National Strategy to Succeed in Internationalizing Quebec Education," and one of the five policy goals was to increase the international presence of Quebec internationally and to promote its distinctive character.

Changes to Standards and Accreditation

Throughout the world, institutional change links to an increasing demand for attention to quality assurances and accountability. Similarly, measures are required to make teaching and training relevant. While the authors in this book reveal the range of care given to standards and accreditation, it also appears the adage "inspect what you expect" is very much at play. In the past two decades, a range of national qualification frameworks (NQF) has developed to set standards for each learning level to be achieved. Some are on the national level, such as the Scottish Credit and Qualifications Framework (SCQF), the Thai Office of National Education Standards, and Quality Assurance (ONESQA). Others are on the continental level, such as the European Qualifications Framework (EQF) and the Australian Qualifications Framework (AQF). While NQF has a purpose of accountability to institutional systems,

many also lay a foundation for interstate collaboration that facilitates academic mobility, credit transfer, and degree attainment. In some contexts, NQF is pushing lower status higher education, such as technical and technological institutions, in the direction of universities. Given the many conversions of establishments in the Community College and Global Counterpart sector, this certainly demands more watching and examination.

Changes Among Student Stakeholders

Student Stakeholders are using the widening and broad base swath of social media to share their opinions about cost, quality, equity, and value of higher education within the discussion of social injustice. Notable examples include the Arab Spring that began in 2010 in Tunisia that spread throughout Arab countries and the Indignados Movement in Spain in May 2011 which protested antiausterity policies. The US Occupy Wall Street protest in 2011 highlighted economic inequalities and the US Black Lives Matter protest in 2013 highlighted institutional and systematic racism toward Black and Brown people, while the Umbrella Movement in China in 2014 targeted universal suffrage. Lastly, in South Africa, 2015 # Fees Must Fall activists responded to a 10.5% increase in college costs by marching on campuses throughout South Africa.

Changes that Match Education to Career

Access to higher education, while important, has less impact if the education received does not lead to a suitable level of employment. Authors in this book note that there is constant discussion for the Community College and Global Counterpart sector in terms of the appropriateness of the curriculum taught, the availability of jobs, and the link that academic studies must connect to it if they are to serve and meet labor market needs. Addressing the mismatch in the supply and demand chain for work skills not only responds to jobs that currently exist, but to new and emerging careers. In Afghanistan, new educational programs are designed to provide graduates with immediate and critical skills to enhance employability. Likewise, the quality and relevance of education for workforce development is a serious challenge throughout in the Middle East and North Africa as postsecondary success hinges on the challenge to provide its overwhelmingly young population with job opportunities.

Institutional Conversions

Inconsistent funding and low status are a common reason for academic drift and eventual transformation. In many cases, this has turned Community College and Global Counterparts into variations of a University College or even University. Academic drift is occurring at greater intervals and the consequences are unknown. Likewise, the increasing number of institutions offering practical baccalaureate

degrees is again redefining these institutions. It is visible in China, Finland, Vietnam, Israel, and with the recent re-branding of the Association of Canadian Community Colleges as Colleges and Institutes Canada.

Name Changes

Educational organizations change to meet evolving needs as they attempt to respond to social, economic, and/or political pressure and when they are perceived not to be meeting identified need. Often it begins with name changes that do not translate precisely from country to country. In Nepal, the terms colleges and campuses are synonymous as they are both a satellite campus affiliated with a university, namely Tribhuvan University for examination and degree granting purposes. The Higher Professional and Technical Colleges (HPTC) in mainland China are often viewed as community-college-like institutions but do not hold the name “community college.” In contrast, a group of schools in China with an actual title of “community college” was built upon a well-established system of Radio and Television Universities that ranks first in size among the world’s top megauniversities and play a significant role in China’s online and adult higher education. Technical Education in Colombia divided into technical and technological programs provided by Technical Institutions, Technological Institutions, and University Institutions. Notwithstanding their different names, they have similar functions of specific training and bridging access to the Universities.

Changes Linked to Economic Development

Australia’s TAFE emerged through the National Training Reform Agenda of 1989 to empower the individual by offering training around what industries identified as useful knowledge and qualifications aligned with the job market. In Vietnam, the conversion of TVET into Community Colleges helped them to support the changing economy in which it is on its way to becoming the factory of China, which itself is the factory of the world. The Open University of Hong Kong was created as a response to the globalization of knowledge economies. In India, there is a transition of TVET into Polytechnics and now again into Community Colleges. Here, community colleges and their counterparts continue to be a strategy to reduce poverty and improve the economic conditions of a country and its people.

Changes Linked to Overcoming Low Status

Despite dramatic increases in the number of Community Colleges and Global Counterparts, top research universities continue to receive priority funding because of the perception that the University is the symbol of educational status and meritorious achievement. Throughout Canada, in the mid-2000s, institutions with

vocational and applied focus morphed into teaching universities. In Namibia, the Polytechnic of Namibia was upgraded to the status of a university because officials claimed that many foreign universities did not want to sign memorandum of understanding with a Polytechnic which only offered certificates and diplomas to their students. NUST (Namibia University of Science and Technology) is an example of upward mission drift as it eventually phased out diplomas and certificates below the bachelors level which left many students in Namibia stranded. The niche catered for by Community Colleges and Global Counterparts in South Africa now is left unattended because the TVET Colleges or Technical and Vocational Education and Training Colleges (formerly known as the Further Education and Training Colleges) were upgraded to offer baccalaureate level education with a vocational-technical bent. Finally, in Hong Kong, in 2014, a traditional well-operated Community College was sold to an Australian university (University of Wollongong) which aspires to turn the college into a private university.

A response against conversions may be observed in Vietnam where MOET officials in recent years have declined to approve many proposals by provincial authorities to transition local Community Colleges into local universities. In 2014, for example, the People Committee's officials in Lao Cai Province wanted to merge its community college with a nearby teacher education junior college to create a local university but its efforts were unsuccessful. Still evidence show that among Vietnams' Community Colleges at least three have become universities with the push driven by status and market demand to convert more.

Changes Resulting from the Community

Students, their families, and employers also play a role in academic drift as they typically have a stereotypic view of this sector considering them as low status and the last choice of a career path with a limited career prospect. Governments labeling directly or indirectly who see the university as the only signature system for education are principal actors in the run up to organizational changes. Consequences include graduates being perceived to be less competitive than those who attend 4-year universities. As an example, in Malaysia, the Malaysia Engineer Board does not recognize TVET leavers and practitioners as professionals. This limit their opportunity in demanding higher salary as well as career improvement. Rightfully, some fear that the move into university status will block access as well as limit the opportunity for a flexible curriculum that responds to as well as creates market economies.

Despite the academic drift, there is potential for Community Colleges and Global Counterparts to effect needed change that is not always possible at the university level. At least one Survey in 2010 by associations linked to the Vietnamese government showed not only that Vietnamese universities are not producing "the educated workforce that Vietnam's economy and society demand" but that "as many as 50% of Vietnamese university graduates are unable to find jobs in their area of specialization."

Funding Challenges

Revealed throughout the two volumes are fine but worrisome visible threads engulfing the Community College and the Global Counterpart sector. These institutions are recognized as valued and valid means to create an educated citizenry, provide for a competent workforce, serve the traditionally disenfranchised, including women, racial, ethnic groups, and economically weak. However, these institutions throughout the world are poorly staffed, woefully underfunded, and mired in bureaucracy that is often stifling.

In too many, there is a high student-teacher ratio and an imbalance in the development of programs. Faculty wages are low which is discouraging. Limited voice of teachers and students is part of the overall college governance and there remain limited teacher development programs. Programmatic development often is tied to government and industry needs and less and less to student needs, interest, and desire. Hierarchical reporting systems abound and often serve to cripple or stifle faculty creativity resulting in gridlock and massive duplication of effort. Frequently, much of teaching that takes place is governed by rote learning and passing the test. There is too little interest in students developing critical thinking skills needed for interaction with others in the global community, though change is happening. Movement, as demonstrated earlier toward accountability and systems for measuring standards, quality management exists and is having an impact.

A universal phenomenon for this sector is under financing as these institutions receive a smaller share of a countries national higher education funding. Small budgets impact faculty salary, student-faculty ratio, less student support services, facilities maintenance, all which affect student achievement. Sometimes funding decisions relate to poor executive leadership, inadequate monitoring, lax accountability, and layers of bureaucracy across all sectors along with corruption that results in the waste of precious resources. No matter the rationale, the results are the same and lead to deteriorating infrastructure, a little or no use of technology, stifled long or short-range planning, student unrest, and perhaps increased tuition. A good demonstration is English FE colleges, Australian TAFE colleges, and US Community Colleges. These institutions are subject to frenetic policy initiatives that in recent years have caused them to change their focus due to the fragile state of receiving less money and budget cuts in operations. Many, for decades, have seen a steady erosion of state funding and support for community colleges. The financing of TVET in Francophone Africa comes predominantly from the national budget, international cooperation projects, from parents, and in some cases, from self-financing. A small part of funds comes from the private sector in the form of apprenticeship tax whose objective is to finance TVET and learning. In almost all countries, public funding provided by an allocation formula based on the number of students enrolled in each level of education is inadequate to meet identified needs.

Internationally bureaucracy shaped by policies lean toward control through strict accountability measures that are often duplicative and ineffective. The behavior supports a hierarchy in which elite students choose universities while lower-ability and lower-economic students choose community colleges and global counterparts. Even at some level there are perhaps demeaning names to define community college

and their counterparts beginning with regarding them as places of “cool out,” “second chance,” “Cinderella sector,” or “the choice of the last resort.” Lost talent, a decreasing workforce to compete internationally, and undereducated population to grow communities could be a legacy for such actions. It is common knowledge that an educated and skilled population is vital to the economic, political, social prosperity, and development of a society which goes beyond the education of the individual. For example, as indicated by UNESCO and GEM if all adults completed secondary school, the global poverty rate would be more than halved. Finally, equity, class, race, and gender inequalities are challenges that are being addressed in a variety of ways and serve to act as a major challenge in the success of students attending community colleges and counterparts and their impact on global opportunities.

Moving Forward and Beyond

Despite its many changes, challenges, and opportunities, Community College and Global Counterparts while evolving are having a tremendous impact on creating access for the citizens they serve whether they are economically poor, religiously outcasts, lowly in status, women, or racially or ethnic minorities. Some by necessity have become entrepreneurial creating exciting partnerships to address community and student needs. Creative curriculum design and programming have allowed others to see considerable progress in their student successes. New models ensuring the success for these colleges is continuous, and governments are realizing that their economic prosperity, growth, and a better life for their citizenry hinges to the massification of education and that they are the vehicles to get them there. Monitoring and evaluations systems and standards of educational and institutional excellence are emerging slowly to assure relevance and competitiveness. Unfortunately, worldwide they suffer from low status, bloated, cumbersome bureaucracies, weak governance structures, and economic deprivation that further hinders their effectiveness. Through expansion, student voices will increase as they throw off their uninformed, elitist, attitudes regarding these institutions as low status and start to see them as opportunities for change and right. Facing the reality of rapidly changing technology, interconnected global markets, and shifting demographic and political changes worldwide, these systems will continue to emerge as the “little engines that could” toward making a difference in the lives of millions. Thus, some recommendations are relevant and emanate from important reading of the authors in these two volumes.

Expanded Directions and Recommendations

1. Postsecondary education is linked to economic competitiveness and raised standards of living. The expansion is continuous, but is uneven. Central is maintaining access without the impediment associated with low status.

2. Systems of monitoring to assess the comparative relevance, standards, and accountability begin with an acknowledgment of the Community College and Global Counterpart sector.
3. Governments and policymakers need to design and expand a synergistic approach to strengthening this higher educational sector by valuing and improving their management and governance practices, developing quality teaching and learning, helping them increase their responsiveness to local labor market needs, improving student support services, and developing their infrastructure.
4. Refrain from converting community colleges and their counterparts to universities for the sake of prestige and status either on the state, national, or international levels. The masses need educational opportunities to expand their knowledge, gain skills, transfer to universities, and contribute to the growth and development of their nations.
5. Lend emphasis and direction to strengthening partnerships with employers, both at the system level and that of individual colleges to create sustainable pathways for students to reach their goals.
6. Give credence to the emerging and strong voice of student consumers who are organized and prepared to change the status quo. Involving them in the discussion should be a major focus of educational leaders and policy maker as they strategically plan for higher education.

The authors of this two-volume have created a wealth of information for government and policy makers, NGOs, private foundations, educational leaders, and private industries to employ in their search for effective responses to meeting country needs, dreams, and aspirations. In the discussion of the community college and their global counterparts, their voices are raised to point the way to an educated and trained citizenry and how to address existing and ongoing challenges in the process. The editors believe that what decision makers can do is to expand their enlightenment, take bold steps, and give the voices in this book credence, an acute ear, and sustainable support. In the end, everyone wins.

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Erratum to: Developing a Skilled Workforce Through Technical and Vocational Education and Training in the Philippines

Kiran S. Budhrani, Mark M. D'Amico, and Jose Lloyd D. Espiritu

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