

Joseph Zajda
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Globalisation and Higher Education Reforms

Globalisation, Comparative Education and Policy Research

Volume 15

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Aims & Scope

The *Globalisation, Comparative Education and Policy Research* series (volumes 13–24) aims to present a global overview of strategic comparative and international education policy statements on recent reforms and shifts in education globally, and offers new approaches to further exploration, development and improvement of comparative education and policy research globally. In general, the book Series seeks to address the nexus between comparative education, policy, reforms and forces of globalisation.

The Series will present up-to date scholarly research on global trends in comparative education and policy research. The idea is to advance research and scholarship by providing an easily accessible, practical yet scholarly source of information for researchers, policy-makers, college academics, and practitioners in the field. Different volumes will provide substantive contributions to knowledge and understanding of comparative education and policy research globally. This new book series will offer major disciplinary perspectives from all world regions.

More information about this series at <http://www.springer.com/series/6932>

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Globalisation and Higher Education Reforms

 Springer

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*To Rea, Nikolai, Sophie, Imogen, Belinda
and Dorothy*

Foreword

Globalisation and Higher Education Reforms, the fifteenth book in the 24-volume book series *Globalisation, Comparative Education and Policy Research*, explores the interrelationship between ideology, the state and higher education reforms, setting it in a global context. By examining some of the major higher education reforms and policy issues in a global culture, particularly in the light of recent shifts in quality and standards-driven education and policy research, the book aims to provide a comprehensive picture of the intersecting and diverse discourses of globalisation and policy-driven reforms in higher education. With this as its focus, the chapters represent hand-picked scholarly research on major discourses in the field of higher education reforms. The book draws upon recent studies in the areas of globalisation, higher education transformations and the role of the state in higher education reforms. It critiques the neo-liberal ideological imperatives of current higher education and policy reforms, and illustrates the way that shifts in the relationship between the state and higher education policy affect current trends in higher education reforms. Individual chapters critically assess the dominant discourses and debates on higher education and policy reforms. Using diverse comparative education paradigms from critical theory to historical-comparative research, the authors focus on globalisation, ideology and higher education reforms, and examine both the reasons and outcomes of higher education reforms and policy change. They provide a more informed critique of models of standards-driven higher education reforms, leagues tables of universities and entrepreneurial universities that are defined and informed by Western dominant ideologies and social values. The book also draws upon recent studies in the areas of equity, cultural capital and dominant models of universities rankings globally.

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Preface

Globalisation and Higher Education Reforms (volume 15) in the 24-volume book series *Globalisation, Comparative Education and Policy Research* examines the nexus between ideology, culture and higher education reforms globally. Globalisation and the competitive market forces have generated a massive growth in the knowledge industries that are having profound effects on society and higher educational institutions. One of the effects of globalisation is that the higher education sector is compelled to embrace the corporate ethos of the efficiency, performance and profit-driven managerialism. As such, new entrepreneurial universities in the global culture succumb to the economic gains offered by the neoliberal ideology, and university governance defined fundamentally by economic factors.

Both governments, and universities, in their quest for global competitiveness, excellence, quality and accountability in education, increasingly turn to international and comparative education data analysis. All agree that the major goal of education is to enhance the individual's social and economic prospects. This can only be achieved by providing quality education for *all*.

Clearly, these new phenomena of globalisation have in different ways affected current developments in education and policy around the world. First, globalisation of policy, trade and finance has some profound implications for education and reform implementation. On the one hand, the periodic economic crises (e.g. the 1980s, the financial crisis of 2007–2008, also known as the Global Financial Crisis, or GEC in 2008) coupled with the prioritised policies of the International Monetary Fund (IMF) and the World Bank (e.g. SAPs) have seriously affected some developing nations and transitional economies in delivering quality education for all. Second, the policies of the Organisation for Economic and Cooperative Development (OECD), UNESCO, the World Trade Organisation (WTO) and the General Agreement on Trade and Services (GATS) operate as powerful forces, which, as supranational organisation, shape and influence education and policy around the world.

By examining some of the major higher education reforms and policy developments in a global culture, particularly in the light of recent shifts in higher education

reforms and policy research, the volume provides a comprehensive picture of the intersecting and diverse discourses of globalisation, higher education and global competition-driven reforms.

Melbourne, VIC, Australia

Joseph Zajda

Editorial by Series Editor

Volume 15 is a further publication in the Springer Series of books on *Globalisation, Comparative Education and Policy Research*, edited by Joseph Zajda.

Globalisation and Higher Education Reforms (volume 15) in the 24-volume book series *Globalisation, Comparative Education and Policy Research* examines critically social, economic and political transformations affecting the higher education sector. Globalisation and the competitive market forces have generated a massive growth in the knowledge industries that are having profound effects on society and higher educational institutions. One of the effects of globalisation is that the higher education sector is compelled to embrace the corporate ethos of the efficiency, performance and profit-driven managerialism. As such, new entrepreneurial universities in the global culture, embrace visible and beneficial economic gains offered by the neoliberal ideology.

By examining some of the major higher education reforms and policy issues in a global culture, particularly in the light of recent shifts in higher education and policy research, the volume aims to provide a comprehensive picture of the intersecting and diverse discourses of globalisation, higher education and policy-driven reforms.

The impact of globalisation on higher education policy and reforms is a strategically significant issue for us all. Kogan and Teichler (2007) have suggested the three new emphases and directions in higher education: relevance, internationalisation and management. On the other hand, *Understanding Tomorrow: A Research Report on Trends in Higher Education and Their Impact on UK* (2014), which examines recent changes in higher education, suggests nine broad trends, which cover accountability, funding sources, mission, internationalisation and curriculum reforms.

The volume presents an up-to-date scholarly research on *global* trends in higher education reforms and policy research. It provides an easily accessible, practical yet scholarly source of information about the international concerns in the field of globalisation, higher education and policy research. The volume, as a sourcebook of ideas for researchers, practitioners and policy makers in globalisation and higher education researchers, provides a timely overview of current trends in higher education reforms.

We thank the anonymous international reviewers who have reviewed and assessed the proposal for the continuation of the series (volumes 13–24) and other anonymous reviewers who reviewed the chapters in the final manuscript.

Globalisation, Comparative Education and Policy Research Series Volumes 13–24

Series Editor

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<http://www.jamesnicholaspublishers.com.au/journals/es/>; Editor, *Education and Society*, volume 33, 2016.

<http://www.jamesnicholaspublishers.com.au/journals/wse/> Editor, *World Studies in Education*, volume 16, 2016

His works are found in 265 publications in four languages and 8,502 university library holdings globally.

He is the recipient of the 2012 Excellence in Research Award, the Faculty of Education, the Australian Catholic University. The award recognises the high quality of research activities, and particularly celebrates sustained research that has had a substantive impact nationally and internationally. He was also a recipient of the Australian Awards for University Teaching in 2011 (Citation for Outstanding Contributions to Student Learning, for an innovative, influential and sustained contribution to teacher education through scholarship and publication). He received the Vice Chancellor's Excellence in Teaching Award in April 2004, at the Australian Catholic University (Melbourne Campus). He was awarded an ARC Discovery Grant (with T. Taylor, Monash University) for 2011–2013 for a comparative analysis of history national curriculum implementation in Russia and Australia (\$315,000). Elected as Fellow of the Australian College of Educators (June 2013).

Completed (with Professor Fred Dervin, University of Helsinki) the UNESCO report: *Governance in education: Diversity and effectiveness. BRICS countries*. Paris: UNESCO (2016).

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Chapter 1

Current Research Trends in Globalisation and Neo-Liberalism in Higher Education

Joseph Zajda and Val Rust

Abstract The chapter focuses on current research trends in higher education. The chapter analyses and evaluates the ascent of a neo-liberal and neoconservative higher education policy, globalisation and practices of governance education, global university rankings, internationalization, quality assurance, entrepreneurial and competitive ways of competition for international students among universities, both locally and globally.

Keywords Globalisation • Higher education • Higher education policy • Governance • Neo-liberal higher education policy • Social stratification • Global university rankings • Internationalization • Quality

1.1 The Changing Nature of Higher Education Globally

It is difficult to imagine another time in history when globalisation has had a greater cultural, economic, and political impact. The increased importance of the knowledge industry, innovations in information and communication technologies, a strong orientation toward the market economy, and growth in regional and international governance systems, all contribute to an accelerated flow of people, ideas, culture, technology, goods and services in our globalized world. The impact of globalisation has been neither neutral nor uniform. It affects countries, cultures, and systems in different ways—some in positive ways, others in more negative

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ways. All sectors of society are affected; higher education is no exception (Knight 2008; Rust and Kim 2015).

The effects of globalisation are so profound that many of the basic assumptions of higher education are being called into question. The basic assumption continues to hold that we are living in learning societies. The notion of life-long learning is now deeply embedded in our consciousness and is part of our professional and career consciousness. In spite of this, some of the basic assumptions about how educational institutions are structured and how education is delivered are being called into question. We are no longer able to define clearly what and who students are. Likewise, we can no longer rely on the traditional definition of what or who a teacher is. In fact, the distinction between students and teachers is even becoming blurred. And we are unclear what a curriculum is. The knowledge revolution demands that educators move away from detailed teaching plans and begin to define broad, thematic goals for education. Likewise, textbooks are no longer seen as fundamental to the educational process. Everyone now has access to the entire spectrum of knowledge, and a textbook is increasingly seen as a depository of outdated information. We no longer know what a classroom is. With technological innovations such as computers, iPads, iBooks, and other electronic devices, the classroom is expanding so that it becomes a community without walls. In fact, we are no longer certain what a university is so any discussion about university reform is problematic. However, ICTs, with virtual and blended learning environments offers a new direction for pedagogy of tomorrow:

Alongside classes taught wholly online, technology is also influencing traditional campus-based teaching and learning. Virtual learning environments, flipped classrooms and blended learning have all become an accepted part of the classroom lexicon over the past few years. All three offer new approaches to traditional campus-based teaching, with virtual learning environments such as Blackboard and Moodle primarily used for course administration, storage of course content and additional resources, while flipped classrooms have influenced pedagogical methodology by offering a way to blend online and class learning. (*International trends in higher education*, p. 16, 2015)

The changing nature of higher education and the changing mission of the university was discussed by Sabour (2015). He argues that both 'institutionally and intellectually, the contemporary university has its roots in the Middle Ages and the Enlightenment' (Sabour 2015, p. 246). However, he also points out, the university's role shifted to being a producer of new knowledge and skills, which were necessary for social progress and well being:

...as far as its practice of interpreting and applying culture and knowledge is concerned, this is largely swallowed up in the flow of the project of modernity. In other words, the production and elaboration of knowledge was seen as a means of achieving social progress and the well being of society, and the university became the epicentre and dominant field for the production and channelling of this knowledge. (Sabour, p. 246)

1.1.1 Globalisation and Research Trends in Higher Education Reforms

The most recent report *International trends in higher education (2015)* discusses recent changes in higher education, with reference to political, economic and demographic factors, which continue to shape and direct international student mobility globally:

As the broad outline of student mobility slowly changes, political and demographic changes continue to shape government policies towards international students. In Asia, for example, ASEAN states are working to encourage domestic students to study in Asia rather than heading to western universities, and to this end, have established a 'Common Space of Higher Education' to encourage cross-border student mobility and academic integration across Southeast Asia.¹¹ Influenced by Europe's successful development of the Bologna Process and European Higher Education Area, a credit transfer protocol is already underway learning. (*International trends in higher education*, p. 6, 2015)

The past decade has seen major changes in higher education. One of them is an increasingly aggressive, more entrepreneurial and competitive ways of competition for international students among universities, both locally and globally:

Once a barometer of both university internationalisation and internationalisation of the broader economy, the presence of international students is now a core part of the student body for the world's leading universities. (*International trends in higher education*, p. 5, 2015)

With reference to entrepreneurial universities, Clark (2004), when examining a selected group of US higher education institutions, asked two fundamental questions: How are entrepreneurial universities formed? How do they sustain themselves? In discussing these questions, Clark emphasized, according to Fumasoli and Stensaker (2013), that such universities are 'constructed through a combination of structural and cultural factors providing these universities with a distinctive identity that also enables them to maintain a steady and adequate state of change in a shifting environment' (Fumasoli and Stensaker 2013). This debate on the nature of entrepreneurial universities, and global university rankings, is continued by Bagley and Portnoi (2015), who argue that global competition in the higher education sector, has emerged during an era of increased globalisation—a multidimensional phenomenon involving a conglomeration of social, economic, political, and cultural processes that affected international students and their search for places in prestigious universities. Universities are not immune to the changes globalisation generates; indeed, it is no longer possible for HEIs to operate in completely insular ways. Various trends and developments in the higher education sector, especially the development of global university rankings, and corresponding university league tables, have led to a heightened emphasis on international benchmarking and being globally competitive.

Furthermore, external drivers, according to Locke et al. (2011), are characterized by accountability, efficiency, a greater reliance on technology in teaching, and privatization:

But many academics perceive these changes to be imposed from above with little consultation and an inadequate consideration of the beliefs and values that have traditionally guided academic work. The tensions between academic beliefs and contemporary drivers is more evident in certain national systems than in others, and within each system the tension raises particular issues. (Locke et al. 2011)

In the *Understanding Tomorrow: A Research Report on Trends in Higher Education and Their Impact on UK (2014)*, which examines recent changes in higher education, nine broad trends were identified:

1. *Changing Finances and Sustainability of Funding Sources* (as traditional sources of support at the state and federal levels have declined, other revenues, from tuition, private giving, large competitive grant, among others, have taken on more importance)
2. *Redefining the Purpose of Public Higher Education* (Against that backdrop of changing financial support, many in the academy, and outside of it, are asking tough questions about the purpose and governance of higher education)
3. *Greater Accountability* (All of us in higher education are being scrutinized more closely, in terms of accountability, efficiency, academic standards, and outcomes)
4. *Increased Use of Technology* (Technology holds great promise in teaching and research, in teaching and outreach to students. But how do we maximize its impact in a positive way, without compromising the level of quality we expect in all that we do?)
5. *Increased Internationalization* (Our students compete in an increasingly complex global and interdependent economy. The numbers of international students we serve and educate have grown significantly in recent years)
6. *Changing Undergraduate Population and Curriculum* (Some populations of students are growing; others are declining in terms of the numbers who attend institutions of higher learning. What do those changing demographics mean for how we teach and serve and the access and affordability we offer?)
7. *Challenges in Graduate Education: Ph.D., Master's, and Professional Degrees* (The demand for some degree programs is growing at a rapid rate; for others it is declining. How should those changing dynamics influence our strategies in providing the highest-quality possible of graduate and professional programs on a campus that prides itself for its depth and breadth)
8. *Changes in Research Funding* (The largest source of research funding for UK and other institutions, federal dollars, has been flat or declining in recent years. How do we ensure that we maximize research funding and create programs and research initiatives responsive to both that funding climate and the needs of our universities and the government?)
9. *The Changing Professoriate* (Our faculty population is aging. What strategies should we develop going forward to address the changing dynamics in ways that honor our mission of education, research and service?).

(Adapted from: *Understanding Tomorrow: A Research Report on Trends in Higher Education and Their Impact on UK 2014*).

To these we can add three more trends: changing patterns of governance models in higher education, equity, social justice and quality education, and dominant ideologies.

1.1.1.1 Globalisation and Neo-liberalism in Higher Education Reforms

The ascent of a neo-liberal and neoconservative higher education policy, which has redefined education and training as an investment in human capital and human resource development, has dominated higher education reforms since the 1980s (Zajda 2012). The literature relating to human capital theory demonstrates that education consistently emerges as the prime human capital investment. Human capital refers to “the productive capacities of human beings as income producing agents in the economy” (Zajda 2008, p. 45). Human capital research has found that education and training raises the productivity of workers by imparting useful knowledge and skills; improves a worker’s socio-economic status, career opportunities and income (Becker 1964, 1994; Schultz 1971; Levin 1987; Carnoy 1999; Saha 2005; Zajda 2007, 2015) and plays a significant role in driving overall economic performance. In general, neo-liberalism in higher education policy reforms focuses on “meeting the needs of the market, technical education and job training, and revenue generation” (Saunders 2010, p. 54).

Globalisation, policy and the politics of current higher education reforms suggest new economic and political dimensions of neo-liberalism, and a new dimension of cultural imperialism. As the UNESCO’s humanistic model for education, so influential in the 1960s, was weakening, “the economic and techno-determinist paradigm of the International Monetary Fund (IMF), the World Bank and the Organisation for Economic Cooperation and Development (OECD) was gaining in prominence” (Zajda 2010, p. xvi). Such hegemonic shifts in ideology and policy were likely to have significant economic and cultural implications for the Australian higher education system, reforms and policy implementations. Forces of globalisation, manifesting themselves as a neo-liberal and bourgeois hegemony, tended to legitimate an “exploitative system” (McLaren and Farahmandpur 2005), and have contributed to the ongoing neo-liberal globalisation of the higher education sector in Australia. This is characterized by a relentless drive towards performance, global standards of excellence and quality, globalisation of academic assessment (OECD, PISA), global academic achievement syndrome (OECD, World Bank), global academic elitism and league tables for the universities (Zajda 2008, p. 3, 2015). The latter signifies both ascribed and achieved status, the positioning of distinction, privilege, excellence and exclusivity. In higher education policy documents in the OECD, the World Bank, and Australia, policy reforms appear to be presented as a given, and as a necessary response to economic globalisation and global competitiveness.

Globally, neo-liberalism in higher education policy reforms has been characteristic of capitalist societies. The politics of higher education reforms both locally and globally, reflect this new emerging paradigm of accountability, globalisation and academic capitalism, performance indicators and standards-driven policy change.

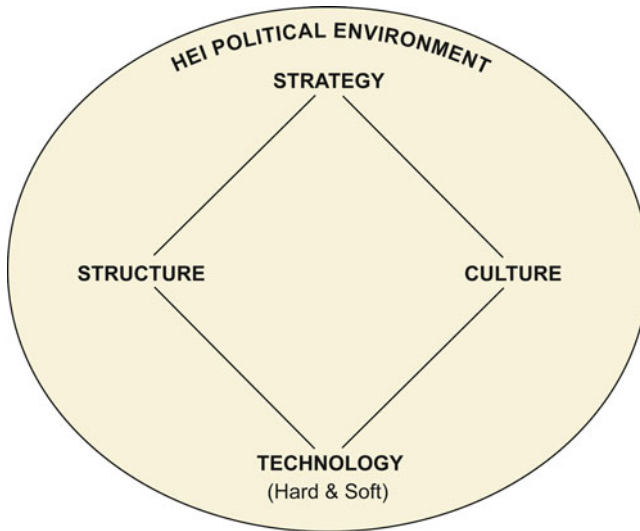


Fig. 1.1 HEI political environment (Source: Jacob 2015)

The divided and highly elitist and stratified higher education sector, by means of their hegemonic structures, legitimises social inequality. Hence, equity-driven policy reforms in higher education are unlikely to succeed. Furthermore, national economic priorities, aligned with a knowledge economy, human capital and global competitiveness, compel increasingly entrepreneurial universities to reward high-level over low-level knowledge, skills and training.

One of the effects of globalisation is that the higher education sector, having modelled its goals and strategies on the market-oriented and *entrepreneurial* business model, is compelled to embrace the corporate ethos of the efficiency, accountability and profit-driven **managerialism**.

Recent changes in the world economy have resulted in at least *four* responses of the higher education sector to market forces and increased competitiveness:

- Competitiveness-driven reforms (reforms due to shifting demands for skills, commodities and markets)
- Finance-driven reforms (reforms in public/private sectors, budgets, company income, cuts in education spending)
- Market force-driven reforms for dominance globally
- Equity-driven reforms (reforms to improve the quality of education and its role as source of upward social mobility) to increase equality of *economic opportunity*.

As Jacob (2015) explains in his concept map below (Fig. 1.1), higher education political environment is defined and shaped by four core dimensions: structure, culture, strategy and technology. I would add here ideology as well. It is this dominant ideology which is responsible for accountability, academic standards, competitiveness-driven reforms, and global university rankings.

1.1.1.2 Governance in Education

In order to deal with the multidimensional complexity of governance in education one needs to clarify its meaning. Governance is an unstable notion which can be approached from different levels: ideologies, discourses and situated practices. These three aspects do not always match, which makes dealing with governance within a political and geographical space difficult and potentially generalizing. As governance includes multiple stakeholders—besides the State, e.g. think tanks, policy-makers, private foundations, and unions, to name a few. This makes governance in education even more multifaceted and thus difficult to grasp fully. Apart from the political dimensions of governance in education, the social nature of education adds another dimension of complexity. As stated in the EFA Global Monitoring Report *Overcoming inequality: Why governance matters* (2009), educational governance, apart from dealing with administration and management, also involves both formal and informal processes affecting policy formulation and implementation, and is ultimately promoting the ‘distribution of power in decision-making at all levels’:

Education governance is not simply the system of administration and management of education in a country. In its broadest sense, it is concerned with the formal and informal processes by which policies are formulated, priorities identified, resources allocated and reforms implemented and monitored... It is ultimately concerned with the distribution of power in decision-making at all levels. (EFA GMR 2009, 129)

Recent education quality and standards-based reforms in higher education are influenced by forces of globalisation, and, in particular, by the World Bank, OECD and PISA indicators. Education reforms, targeting academic achievement, skills and standards have resulted in a significant expansion of the monitoring of educational outcomes both locally and globally. Current trends in governance in education indicate that education and policy reforms are accountability, performance and output driven.

The prominence given to the nexus between globalisation and practices of governance education, reflect changing dynamics in the governance in education, and education policy reforms. The impact of globalisation on education policy and reforms around the world has become a strategically significant issue, for it expresses one of the most ubiquitous, yet poorly understood phenomena of modernity, and associated politico-economic and cultural transformations. Furthermore, there is sufficient evidence to suggest that forces of globalisation have contributed to a new dimension of socio-economic stratification, which offers immense gains to the very few of the economic elite in developed nations and in the emerging economies, especially in the BRICS countries (Brazil, the Russian Federation, India, China, and South Africa). At the same time, this emerging socio-economic stratification creates a growing divide between the rich and the poor globally, thus planting seeds of discontent and conflict for the future.

1.1.1.3 Global University Rankings

One of the outcomes of higher education policy reforms both locally and globally, and demands for accountability and transparency, is world university rankings and *university league tables*. The USA and several European countries have used national HEI rankings or league tables for a number of years. However, the first *Academic Ranking of World Universities (ARWU)* was published by the Shanghai Jiao Tong University Institute of Higher Education in 2003. It was a significant higher education policy and research move, because higher education rankings became a global endeavor at this point (Hazelkorn 2014).

Current major and global university ranking models include the Shanghai Jiao Tong University's (2003) *Academic Ranking of World Universities (ARWU)*, the *Times Higher Education (THE) World University Rankings (powered by Thompson Reuters, 2010)*, *QS World University Rankings (2010)*, and the *European Commission's U-Multirank (2010)*.

The global ranking of universities by the *QS World University Rankings 2012–2013*, the *Times Higher Education World University Rankings 2012–2013*, and Shanghai Jiao Tong University's *2011 Academic Ranking of World Universities* dominate higher education drive for excellence and quality in education.

Higher education reforms represent policy responses to a globalized market ideology, which focuses on increasing global competitiveness, accountability, efficiency, quality, standards-driven policy reforms, and higher education stratification. They reflect aspects of a dominant ideology of neo-liberalism and neo-conservatism. Neo-liberal policies are largely based on dominant market-oriented ideologies, rather than democratic policy reforms. The commodification of higher education, with its focus on value-added education and labour market prospects for highly skilled and competent graduates, is a vivid outcome of market-driven economic imperatives of neo-liberal ideology.

Mok (2015) argues the pressure of globalisation and the imperatives of a knowledge economy led to a series of higher educational reforms. The focus of these policy reforms was the promotion of quality education, massification of higher education and global competitiveness:

Confronted with increasing pressure for global university ranking, governments and universities in Asia have tried to adopt different strategies in terms of special funding schemes, and different forms of measures in shaping teaching, learning and research activities to enhance their global ranking. (Mok 2015, p. 1)

The latest higher education reforms focus more on economic competitiveness, academic elitism, and quality and standards, rather than on addressing access and equity, in order to solve serious educational inequalities in the higher education sector.

1.1.2 Continuing Trend Toward Internationalization

Even though globalisation is gaining the spotlight in higher education developments, these institutions remain lodged in national infrastructures, and many of the changes they have undertaken throughout the world might be characterized as international in nature. There is a long tradition of internationalization in higher education, featuring cooperation and harmony between countries. This feature of internationalization addresses an increase in university partnerships, flow of ideas, and exchanges of students and scholars:

...today's global trends, with their emphasis on knowledge production and information flow, play an increasingly important role in the push towards the internationalisation of higher education. The international mobility of students and staff has grown, new technologies connect scholarly communities around the world, and English has become the new lingua franca of the international community. (Kogan and Teichler 2007)

Likely the most obvious continuing indicator of internationalization is the degree to which higher education institutions actively and successfully recruit students and scholars from abroad into their programs of study. Such a tendency is difficult for institutions in countries that do not have a traditional foreign student presence. According to the Organisation for Economic Co-operation and Development (OECD 2014), approximately three-fourths of all foreign students are located in the United States, the UK, Germany, France, Australia, and Japan; however, universities from all over the world now aspire to attract international students and scholars to their campus. One recruiting mechanism universities have adopted is to offer courses in the English language, so that students are not forced to speak Dutch, Arabic, Mandarin, or Spanish in order to attend.

A second indicator of internationalization is Study Abroad, which involves short-term exchanges of students in immersion or travel study. Immersion studies genuinely expose students to a local country and its higher education, while travel study is somewhat akin to tourism, although some of the programs are more rigorous and beneficial than others.

A third indicator is foreign language instruction. There are a number of ways to make a judgment about this. How many students are enrolled in foreign language courses? How many different languages are taught at the institution? Are the languages restricted to a certain region of the world?

A fourth indicator is curriculum content and degrees. One means of measuring internationalization is to assess the level of information those engaged in higher education disseminate about other countries, people, events, and places. It is difficult to measure international content or even to define what we mean by international content. Of course, foreign languages, area studies, comparative government and comparative literature are inherently international in scope. However, some universities are designing international programs where the international content is not obvious. Duisburg University in Germany has an international degree in Computer Science and Communications Engineering, intended to be more meaningful not only for foreign students coming to Germany but to prepare German students to function more easily in a global environment (Schwarz et al. 2003).

Finally, we might look at the international scope of the teaching faculty. Where do the faculty members come from? Where did they receive their academic degrees? Where do they publish their research findings? The academic environment the teaching faculty and administrators create ensures students and faculty have the tools necessary to cope with an increasingly globalized world. Students must learn to grasp the critical elements of the global change. Cultural globalisation points toward a 24-h “information world” where people not only consume information every minute of the day, but up to 75 % of the workforce of the developed countries is now employed for the purposes of information production and distribution. Students must learn to live in a world where knowledge grows exponentially; they must learn to be continuously vigilant about new ways of thinking and how to cope with innovation (Rust 2003, pp. 305–308).

We have identified the above conventional features as internationalization, because they have long stressed cooperation, harmony, and interdependence but more and more we are finding these internationalization features begin to meld with globalisation, which focuses more on competition, trade, and commodification in higher education, rather than being seen as a broad public good. Even internationalization efforts by nation states are often undertaken with the aim of gaining a competitive edge in the global arena. In other words internationalization is often overwhelmed by global imperatives.

1.2 Globalisation Beginning to Overwhelm Internationalization

Today, we find that university documents and mission statements everywhere indicate the importance of higher education in the global arena. Competition is closely connected with a global free-market economy. Combined with the impact of globalisation and the development of the global “knowledge economy,” these competitive forces have resulted in the *global competition phenomenon*.

1.2.1 Shifting Higher Education Delivery Systems

Many developments characterize the shifting types of institutions that are part of the global competition phenomenon in higher education, and in this volume we intend to touch on some of these developments: the increasing reliance of nation states on private higher education, innovative developments in distance learning, the decline in the importance of libraries on university campuses, the development of satellite and branch campuses.

One of the remarkable recent developments in higher education is the increase in private higher education. Today, approximately one third of all global enrollments

are found in private institutions. While many private institutions are sponsored by religious and humanitarian groups, a growing number are for-profit or quasi-profit institutions. Their sponsors view higher education as a business and want to sell their educational product like they might sell soap, automobiles, or tooth paste. Commodification commands increasing attention and institutions are run on a business model, with almost all the power resting with executive boards or top administrators. Such a model is not uniformly found throughout the world, but it is coming to dominate higher education in Latin America and the Middle East.

Innovative distance learning arrangements are revolutionizing the way in which higher education is being delivered. While distance learning, in the form of extension programs, has been a part of higher education for more than a century, in the form of extension and correspondence courses, technology has enabled universities to create a remarkable array of online delivery possibilities. In the United States, many of the best universities offer courses, on-line, to anyone in the world, who is willing to pay for the course, and institutions, such as Phoenix University, enroll close to half a million students in on-line degree programs. Great Britain set the pattern for open universities, which are public research universities that enroll large numbers of students in full- and part-time programs that provide multiple instructional formats to students. Most of the former British colonies have followed suit. In India, for example, Indira Gandhi National Open University website claims that the university enrolls more than three million students. Many other nations not identified with the British colonial tradition have followed this pattern. National Autonomous University of Mexico (UNAM) enrolls almost 400,000 students in its national and international satellites. And China's Open University of China claims to enroll 2.7 million students.

Likely, the most important instructional delivery innovation is Massive Open Online Courses, or MOOCs, which have suddenly taken center stage. Since 2012, more than 20 million students have enrolled in such courses. They are generally free or low-cost online courses, sometimes developed by leading figures in a field. They are available to anyone, who has access to the Internet.

The library is one institution at universities around the world that is undergoing dramatic transformation. It has long been the centerpiece of the best universities. Harvard takes great pride in proclaiming that it has more than 16 million volumes in its library system, and the library remains for many a center of knowledge production and dissemination. However, such a focus is rapidly shifting. Digitization is changing the library, so that many of the best scholars rarely, if ever, enter the library. The traditional resources the library has made available are now more easily available through the internet, suggesting to many that a beautiful and well-stocked library may eventually become redundant.

The emergence of cross-border institutions and satellite campuses pose another threat to the traditional university. Branch campuses were originally intended to extend the reach of the university, so that students would have the university available to them within so that family responsibilities, jobs, lack of resources, and other issues would not prevent them from taking advantage of higher education.

Today, this trend has gone international. Satellite campuses of a home institution now extend beyond national borders. Australia has been particularly aggressive in establishing branch campuses not only in Southeast Asia, but as far away as South Africa. Many United States universities have branch campuses in East Asia, the Middle East, India and other places in the world.

1.2.2 The Extension of Global Rankings

In 2003, the first international ranking system was undertaken by Shanghai Jiao Tong University Institute of Higher Education with the title: *Academic Ranking of World Universities* (SJTUIHE 2008). A year later the *London Times World University Rankings* was initiated (Times 2008). The Times project differed from China in that it aimed to put a British stamp on universities (Rust and Kim 2015). The British claimed that the Shanghai reports did not give the British the recognition they deserved. Both of these annual reports have stimulated the development of additional ranking systems, all of which have “triggered the transformation of world higher education” (Marginson 2010).

At the turn of this century, little more than a decade ago, there were no global rankings. Some nations maintained internal comparisons of performance, but little had developed globally, but things have since taken a dramatic turn. When the Shanghai rankings appeared, higher education specialists, the media, and the general public took notice, and these rankings began to influence university administrators, political leaders, students and the media. In fact, national leaders in China, Taiwan, Germany, France, and Russia quickly initiated Research and Development (R&D) policies that aimed to increase their higher education stature and rankings have continued to influence attitudes and behaviors to the point that every nation is now conscious of its global standing in higher education.

Higher education leaders and policy makers responded so readily to the international ranking phenomenon, because they were so concerned about the international status of their higher education institutions. According to Altbach (2003), every country “wants a world-class university. No country feels it can do without one. The problem is that no one knows what a world-class university is, and no one has figured out how to get one. Everyone, however, refers to the concept”.

The one thing we know is that among the tens of thousands of universities in the world, only a very few are world-class. And the most elite universities are located in a small number of countries, including the United States, Japan, and the United Kingdom. In most countries universities are stratified and differentiated, and those that are world class represent a tiny pinnacle of institutions. Even in the United States, of more than 4,400 academic institutions, very few have managed to make their way to the top echelons. In other countries that maintain top-ranked institutions, the number of top-tier universities is even more limited. And in countries that do not have top-ranked institutions, they are finding it difficult to break into that elite group.

China's government policy is to create "world class" institutions by pouring extensive resources into selected universities (Mohrman and Wang 2010). In other countries, competition is left to the institutions themselves. This hands-off, unregulated approach is a facet of free-market economics that has encouraged competition on many levels in the higher education sector. Of course, many of these countries cannot hope to have any world class universities, so they usually positioning themselves in terms of regional dynamics.

A key feature in the global race is academic capitalism, distinguished by universities that have become entrepreneurial marketers and treat knowledge as a commodity rather than a public good (Slaughter and Rhoades 2004). Another feature is an increase in institutional mergers, which involve the melding of "strong" and "weak" institutions, intending to enhance a country's competitive advantage (Harman and Harman 2008). With growing demand for higher education in the free-market system, the global higher education environment is also experiencing increased provision of private and cross-border higher education, accompanied by student mobility.

In the evolving global system of higher education, being competitive becomes key, and global positioning is integral to competing with other nations and institutions (Marginson 2010). Some scholars claim that universities are currently in a "reputation race," in which they compete for reputation and academic prestige (van Vught 2008). Furthermore, Simon Marginson, argues that "the more an individual university aspires to the top end of competition, the more significant global referencing becomes" (Marginson 2006, p. 27). Universities, and the countries in which they are located, thus seek to project the best image possible in order to be poised to compete for research funding, the "best and brightest" international students, and "star" faculty members.

Moreover, "all of this emphasis ... gravitates towards an ideal, a typical picture of a particular type of institution," (Huisman 2008), what Kathryn Mohrman et al. (2008) call the Emerging Global Model (EGM) of the top stratum of research universities.

Institutional rankings, as demonstrated earlier, indicate the governance of a neo-liberal ideology of accountability and efficiency. Accountability instruments increasingly control the lives and careers of academics. They assess and govern the quality and standards of higher education, and include "accreditation, cyclical reviews, and external evaluation by peers, inspection, audits, benchmarking, and research assessments" (Robertson 2012, p. 241). Furthermore, it becomes increasingly evident that university rankings and university league tables are "taking on a life of their own, well beyond the purposes imagined by their originators" (Robertson 2012, p. 244), which is clearly a "reification" of the phenomenon.

Reification occurs when an abstract concept describing a social condition, in this case economic priorities for globalizing higher education reforms, becomes the reality, and the truth. According to Berger and Luckmann, "reification" occurs when specifically human creations are misconceived as "facts of nature, results of cosmic laws, or manifestations of divine will" (Berger and Luckmann 1966, p. 89). Unlike Marx, who used the concept of reification in his *Das Capital* (1867/1996) to dem-

onstrate that it was an inherent and necessary characteristic of economic value; I use “reification” in a broader sense, covering all policy and education reforms which involve power, domination and control. Reification, in this sense, also connects with Baudrillard’s (1994) idea of signification, where perceived key concepts and policy goals have no referent in any “reality” except their own.

1.2.3 Quality Assurance

In this period of intense globalisation, quality assurance has become a priority. The proliferation of institutions, the rapid expansion of students, the mobility of students in foreign parts, and other factors have forced policy makers to pay attention to accountability and quality. In the past, the major focus of most countries has been to increase access and enrollments. Now the focus has begun to shift toward quality and achievement, not only among students but among professors and educational administrators.

A number of issues must be raised. First, most countries have mechanisms for assessing the quality of their higher educational institutions. However, as institutions emerge that fall outside the normal boundaries of control, particularly regarding so-called cross-border institutions, there is often no mechanism for assessing these institutions. Second, many countries have attempted or are attempting to establish accrediting agencies. They turn to highly developed countries and their institutions to help define quality. In the process, quality assurance has become a contested issue. In fact, some observers claim it is nothing more than the cosmopolitan powers once again imposing their notions of quality on the rest of the world and universalizing the criteria by which quality is to be determined (Ntshoe and Letseka 2010).

As international forces confront local traditions, stress and conflict inevitably occur. Anthony Welch claims that cronyism in both Malaysia and Vietnam, and corruption in Vietnam are so endemic to bureaucracies overseeing quality assessment that it is impossible to make objective judgments about the universities of these countries. In addition, he found ethnic discrimination a persistent problem (Welch 2010). In Argentina, attempts to implement quality assurance has been very slow, mainly because such attempts confront the complexity associated with the decision-making process of collegiate governing bodies. In other words, benchmarks set up by new quality assurance standards involve a social, as well as a technical dimension.

There are important regional higher educational responses to globalisation. For example, the Association of Universities of Asia and the Pacific have joined together to ensure that each country in the region has a well-defined accreditation process (Hawkins 2009). The Bologna Process is clearly the dominant regional force in Europe that ensures a common degree structure and a comparable quality of education. Europe was long the center of educational innovation, quality, and standards. However, it stagnated in the past half century and the general consensus has been

universities in the USA have taken the competitive lead in educational standards and research. To address this decline, European educators, ministers, and policy-makers met at Bologna, Italy and adopted the so-called Bologna Process. The purpose of the Bologna process (or Bologna accord) is to make European higher education standards more comparable and compatible. In 1999, the accord was signed by Ministers of Education from 29 European Union countries. Additional countries belonging to the Council of Europe later signed the accord so that the number of participating countries has reached 47. Other governmental meetings have been held in Prague (2001), Berlin (2003), Bergen (2005), London (2007), Leuven (2009), Vienna (2010), Bucharest (2012) and Yerevan (2015).

The overall aim of the Bologna Process was to establish a European higher education area (EHEA) by 2010, with a harmonized degree and course credit system that would allow students to move freely between European countries without having to translate their credits or qualifications—a single education currency. That process has now expanded far beyond the European Union and encompasses almost all countries in the region). In particular, the efforts to introduce a three-cycle degree system—composed of bachelor, master and doctoral degrees—are already beginning to change the landscape.

1.2.3.1 Evaluating Teaching and Research Performance in the Higher Education Sector

Summative evaluation of the teaching and research performance in universities involves annual faculty career and performance plans, annual research plans for individual academics and obligatory evaluation of teaching. At some universities, evaluation of teaching is compulsory for all teaching staff, and is administered in the online mode. Students rate their lectures online. An annual career and performance plan for an academic covers teaching workload, short-term and long-term career goals, and agreed performance objectives for teaching, research and other activities (such as university leadership, profession and service), as well as strategic links to school, faculty and university targets, and professional and career development, which includes development to be undertaken to achieve agreed performance outcomes. All these are typical features of a neo-liberal ideology and its focus on accountability, efficiency and ongoing performance surveillance of learning, teaching and research.

All these new facets of evaluating teaching and research represent a very high degree of surveillance, power (Foucault 1980) and control over academics' professional lives. It becomes a global and ubiquitous managerial version of "panopticon", or the all-seeing environment. Certain offices, without walls, all in glass, are modern examples of surveillance and panopticon. Panopticon, as a concept, was an institutional building designed by English philosopher and social theorist Jeremy Bentham (c. 1798). In Foucault's development of this notion, the individual is under constant surveillance in the prison/organization. This power/knowledge mechanism over time becomes *internalized* by the subject, resulting in a self-surveillance and

self-analysis in terms of the *normalizing* pressure of the system. This power/knowledge mechanism “compares, differentiates, hierarchies, homogenises, excludes. In short it normalises” (Foucault 1977, p. 183). Its contemporary manifestation is present in such managerial systems as ongoing annual appraisals, performance reviews, the constantly reworked CV and E portfolios—a ubiquitous feature of today’s higher education environment.

In deconstructing modes of evaluation of the performance of universities, we may also refer to “simulacrum”, to critique the reification of systemic accountability, quality and standards. The simulacra that Jean Baudrillard (1994) refers to are the significations and symbolism of culture and media that construct perceived reality. According to him, our perception of the world/reality is constructed out of models or simulacra, which have no referent or ground in any “reality” except their own.

One could argue, in terms of reification, that the models employed in for measuring the overall quality of the higher education system are taking on a life of their own, and parading as truth in their own right. It is essential, argues Robertson, to remember that ranking universities is based on a selection of criteria of *preferred* “fragments” of knowledge:

That we remind ourselves of just what a ranking is a fragment of knowledge about what university knowledge and experiences mean, rather than some essential understanding, or distilled essence of the whole. (Robertson 2012, p. 244)

1.2.3.2 Evaluation

In higher education policy rhetoric, both locally and globally, there is a tendency to argue, using a powerful tool of logic, that there is a need to increase global competitiveness, and to improve excellence and quality in education, training and skills. The major problem with policy rhetoric is that its main thrust is on traditional values and commonsense. Who would argue against improving global competitiveness, and excellence and quality education, training and skills that contributes to better living conditions, and creating a world-class higher education system that benefits all, regardless of their background?

It has been argued that the politics of higher education reforms surrounding standards, excellence and quality have “largely come from Northern, often World Bank, ideologies” (Watson 2000, p. 140; see also Zajda 2005, 2015). At the same time, Moses and Nanna (2007) argue that high-stakes testing reforms, driven by political and cultural ideology and concerns for efficiency and economic productivity, serve to impede the development of *real* equality of educational opportunity, particularly for the least advantaged students (p. 56). Although centralization and decentralization reforms in education reflect a neo-liberal ideology at work, they do not necessarily capture a complexity of forces fuelling educational and policy change. Academic standards, performance and quality of schooling continue to dominate the reform agenda globally, especially the performance leagues tables.

The divided and highly elitist and stratified higher education sector, by means of their “hegemonic structures, legitimises social inequality” (Zajda 2008, p. 4). In

general, students from lower SES are unlikely to be successful in entering universities, let alone prestigious universities. Hence, equity-driven policy reforms in higher education are unlikely to succeed. Furthermore, national economic priorities, aligned with a knowledge economy, human capital and global competitiveness, compel increasingly entrepreneurial universities to reward high-level over low-level knowledge, skills and training. The latest higher education reforms focus more on economic competitiveness, academic elitism, quality and standards, rather than on addressing access and equity, in order to solve serious educational inequalities in the higher education sector.

1.3 Concluding Comments

Higher education reforms globally, as discussed earlier, represent policy responses to globalized market ideology, which focuses on increasing global competitiveness, accountability, efficiency, quality- and standards-driven policy reforms, and higher education stratification. They reflect aspects of a dominant ideology of neo-liberalism and neoconservatism. Neo-liberal policies are largely based on dominant market-oriented ideologies, rather than democratic policy reforms.

The foregoing demonstrates that neo-liberal dimensions of globalisation and market-driven economic imperatives have impacted higher education reforms in four ways: competitiveness-driven reforms, finance-driven reforms, equity-driven reforms and quality-driven reforms. Global competitiveness was and continues to be a significant goal on the higher education policy agenda (Carnoy et al. 2013; Turner and Yolcu 2014). Accountability, efficiency, academic capitalism, the quality of education, and the market-oriented and “entrepreneurial” university model represented a neo-liberal ideology, which focuses primarily on the market-driven imperatives of economic globalisation.

References

- Altbach, P. (2003, Fall). The costs and benefits of world-class universities. *International Higher Education*, 33, 5–8.
- Bagley, & Portnoi. (2015). Higher education and the discourse on global competition: Vernacular approaches within higher education policy Documents. In J. Zajda & V. Rust (Eds.), *Globalisation and higher education reforms*. Dordrecht: Springer.
- Baudrillard, J. (1994). *Simulacra and simulation*. Ann Arbor: Éditions Galilée (French) and University of Michigan Press.
- Becker, G. (1964). *Human capital*. New York: Columbia University Press.
- Becker, G. (1994). *Human capital: A theoretical and empirical analysis with special reference to education*. Chicago: University of Chicago Press.
- Berger, P., & Luckmann, T. (1966). *The social construction of reality: A treatise in the sociology of knowledge*. New York: Anchor/Doubleday.
- Carnoy, M. (1999). *Globalisation and educational reform: What planners need to know*. Paris: UNESCO, International Institute for Education Planning.

- Carnoy, M., Loyalka, P., Dobryakova, M., Dossani, R., Froumin, I., Kuhns, K., Tilak, J. B. G., & Wang, R. (2013). *University expansion in a changing global economy: Triumph of the BRICs?* Stanford: Stanford University Press.
- Clark, B. R. (2004). Delineating the character of the entrepreneurial university. *Higher Education Policy*, 17(4), 355–370.
- EFA Global Monitoring Report. (2009). *Overcoming inequality: Why governance matters*. Paris: OECD.
- Foucault, M. (1977). *Discipline and punish: The birth of the prison*. New York: Pantheon.
- Foucault, M. (1980). Truth and power. In C. Gordon (Ed.), *Power/knowledge: Selected interviews and other writings 1972–1977*. New York: Pantheon Books.
- Fumasoli, T., & Stensaker, B. (2013). Organizational studies in higher education: A reflection on historical themes and prospective trends. *Higher Education Policy*, 26, 479–496. doi:10.1057/hep.2013.25.
- Harman, G., & Harman, K. (2008). Strategic mergers of strong institutions to enhance competitive advantage. *Higher Education Policy*, 21, 99–121.
- Hawkins, J. N. (2009). *Higher Education and quality assurance: Trends and tensions in Asia*. Paper presented at the Association of Universities of Asia and the Pacific Kuala Lumpur, Malaysia.
- Hazelkorn, E. (2014). Rankings and the global reputation race. In L. M. Portnoi & S. S. Bagley (Eds.), *Critical perspectives on global competition in higher education* (New directions for higher education, pp. 13–26). San Francisco: Jossey-Bass.
- Huisman, J. (2008). World class universities. *Higher Education Policy*, 21, 1–4.
- International trends in higher education*. (2015). The International Strategy Office: Oxford.
- Jacob, J. (2015). Globalisation and higher education policy reform. In J. Zajda (Ed.), *Second international handbook of globalisation, education and policy research* (pp. 151–165). Dordrecht: Springer.
- Knight, J. (2008). *Higher education in Turmoil: The changing world of internationalization*. Rotterdam: Sense Publisher.
- Kogan, M., & Teichler, U. (Eds.). (2007). *Key challenges to the academic profession*. UNESCO Forum on Higher Education Research and Knowledge. Paris/Kassel: Werkstattberichte. Retrieved from: http://portal.unesco.org/education/en/files/54977/11970234265Key_Challenges_Academic_Profession_REV.pdf/Key_Challenges_Academic_Profession_REV.pdf
- Levin, H. (1987). Work and education. In G. Psacharopoulos (Ed.), *Economics of education* (pp. 146–157). Oxford: Pergamon Press.
- Locke, W., Cummings, W., & Fisher, D. (Eds.). (2011). *Changing governance and management in higher education: The perspectives of the academy*. Dordrecht: Springer.
- Marginson, S. (2006). Dynamics of national and global competition in higher education. *Higher Education*, 52, 1–39.
- Marginson, S. (2010). Global comparisons and the university knowledge economy. In V. D. Rust, L. M. Portnoi, & S. S. Bagley (Eds.), *Higher education, policy, and the global competition phenomenon*. New York: Palgrave Macmillan.
- McLaren, P., & Farahmandpur, R. (2005). *Teaching against global capitalism and the new imperialism*. Lanham: Rowman & Littlefield.
- Mohrman, K., & Wang, Y. (2010). China's drive for world class universities. In V. D. Rust, L. M. Portnoi, & S. S. Bagley (Eds.), *Higher education, policy, and the global competition phenomenon*. New York: Palgrave Macmillan.
- Mohrman, K., Ma, W., & Baker, D. (2008). The research university in transition: The emerging global model. *Higher Education Policy*, 21, 5–27.
- Mok, K. H. (2015). Higher education transformations for global competitiveness: Policy responses, social consequences and impact on the academic profession in Asia. *Higher Education Policy*, 28, 1–15. doi:10.1057/hep.2014.27.
- Moses, M., & Nanna, M. (2007). The testing culture and the persistence of high stakes testing reforms. *Education and Culture*, 23(1), 55–72.

- Ntshoe, I., & Letseka, M. (2010). Policy and practices on quality assurance and global competitiveness in higher education. In V. D. Rust, L. M. Portnoi, & S. S. Bagley (Eds.), *Higher education, policy, and the global competition phenomenon*. New York: Palgrave Macmillan.
- OECD. (2014). *OECD StatExtracts*. Paris: Organisation for Economic Co-operation and Development.
- Robertson, S. (2012). World-class higher education (for whom?). *Prospects*, 42(3), 237–245.
- Rust, V. D. (2003). Globalisation. In D. Groux (Ed.), *Dictionnaire d'éducation comparée* (pp. 305–308). Paris: L'Harmattan.
- Rust, V. D., & Kim, S. (2015). Globalisation and global university rankings. In J. Zajda (Ed.), *Second international handbook of globalisation, education and policy research*. Dordrecht: Springer.
- Sabour, M. (2015). The impact of globalisation on the mission of the university. In J. Zajda (Ed.), *Second international handbook of globalisation, education and policy research* (pp. 243–259). Dordrecht: Springer.
- Saha, L. (2005). Cultural and social capital in global perspective. In J. Zajda (Ed.), *The international handbook of globalisation and education policy research* (pp. 745–755). Dordrecht: Springer.
- Saunders, D. (2010). Neoliberal ideology and public higher education in the United States. *Journal for Critical Education Policy Studies*, 8(1), 42–77.
- Schultz, T. (1971). *Investment in human capital*. New York: Free Press.
- Schwarz, F., Hunger, A., & Werner, S. (2003). Retrieved from: https://www.researchgate.net/publication/2484342_Measures_to_Improve_the_Globalization_in_Higher_Education
- SJTUIHE. (2008). *Academic ranking of world universities*. <http://ed.sjtu.edu.cn/ranking.htm> (2009)
- Slaughter, S., & Rhoades, G. (2004). *Academic capitalism and the new economy*. Baltimore: Johns Hopkins University Press.
- Times. (2008). World university rankings. *Times Higher Educational Supplement*. <http://www.topuniversities.com/worlduniversityrankings/>
- Turner, A., & Yolcu, H. (Eds.). (2014). *Neo-liberal educational reforms: A critical analysis*. London: Routledge.
- Understanding tomorrow: A research report on trends in higher education and their impact on UK. (2014). Retrieved from: http://uknow.uky.edu/sites/default/files/trends_report_04.01.14.pdf
- van Vught, F. (2008). Mission diversity and reputation in higher education. *Higher Education Policy*, 21, 151–174.
- Watson, K. (2000). Dependency vs. partnership: The paradoxes of educational aid and development in an age of globalisation. *World Studies in Education*, 1(2), 123–143.
- Welch, A. (2010). Vietnam, Malaysia, and the global knowledge system. In V. D. Rust, L. M. Portnoi, & S. S. Bagley (Eds.), *Higher education, policy, and the global competition phenomenon*. New York: Palgrave Macmillan.
- Zajda, J. (Ed.). (2005). *The international handbook of globalisation and education policy research*. Dordrecht: Springer.
- Zajda, J. (2007). Credentialism in the 21st century: The importance of qualifications. *Educational Practice and Theory*, 29(2), 61–79.
- Zajda, J. (2008). Globalisation and implications for equity and democracy in education. In J. Zajda, L. Davies, & S. Majhanovich (Eds.), *Globalisation, comparative and policy research: Equity, access and democracy in education* (pp. 3–13). Dordrecht: Springer.
- Zajda, J. (2010). Globalisation, ideology and education policy reforms. In J. Zajda (Ed.), *Globalisation, ideology and education policy reforms* (pp. xiii–xxii). Dordrecht: Springer.
- Zajda, J. (2012). Globalisation, credentialism and human capital. *Educational Practice and Theory*, 34(2), 45–60.
- Zajda, J. (Ed.). (2015). *Second international handbook of globalisation and education policy research*. Dordrecht: Springer. Retrieved from: <http://www.springer.com/education+%26+language/book/978-94-017-9492-3>.

Part I
Higher Education Reforms in the USA

Chapter 2

Higher Education and the Discourse on Global Competition: Vernacular Approaches Within Higher Education Policy Documents

Sylvia S. Bagley and Laura M. Portnoi

Abstract Over the past few decades, globalization and global competition have become prominent buzzwords in the higher education sector. These two constructs are highly interconnected: Higher education institutions (HEIs) are becoming increasingly linked across borders in a multitude of ways (whether intentionally or not), which in turn engenders competition within the global higher education landscape. The drive toward globalization and global competition is clearly evident; its effects are not uniform, however, and local entities mediate global trends. In this chapter, we build upon our prior work by investigating evidence of the discourse on global competition (DGC)—a pervasive rhetoric about excellence, rankings, and world-class status—within national higher education policy documents. Our aim was to ascertain to what extent the DGC was evident in these policies alongside other localized priorities. Before delving into this analysis, we frame the study by outlining trends and developments related to globalization in higher education. We also delineate our approach to the study, which entails employing the construct of vernacular globalization and qualitative policy document analysis strategies.

Keywords Global competition in education • Discourse of global competition • Excellence in higher education • Higher education competition • Higher education policy documents

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2.1 Higher Education Trends and Developments

The higher education sectors of countries across the globe have expanded in recent decades. Two of the most prominent developments within the higher education realm are massification and the related effort to serve broader and more diverse student populations. Other salient trends are connected to neoliberal economic tenets that favor free markets and limited government intervention—ideologies and practices that prevail throughout much of the world. In the higher education sector, neoliberal trends have resulted in increased commercialization, privatization, industry-higher education partnerships, managerial forms of governance, and market-like behavior, all of which signal a shift away from the social democratic values that had been prominent in higher education previously (Hazelkorn 2014; Rizvi and Lingard 2010). Within this neoliberal framework, higher education has increasingly become a commodity to be bought and sold, rather than an avenue for social progress. Indeed, the World Trade Organization’s 1995 General Agreement on Trade in Services (GATS) stipulated that higher education would be subjected to the free market principles that prevail in commercial and economic sectors for member countries (Shields and Edwards 2013). In this context, higher education has become increasingly connected to national economic advancement and development of human capital to support economic vitality (Rizvi and Lingard 2010).

Another key development connected to trends in the higher education realm is the emergence of a global knowledge economy with a new division of labor that includes knowledge producers, knowledge users, and passive or non-users (Friedman 2005). Knowledge producers are central in this division of labor, as “knowledge and people with knowledge are the key factors of development, the main drivers of growth, and the major determinants of competitiveness in the global economy” (Gürüz 2008, p. 6). The knowledge economy emphasizes the production of knowledge and activities that are knowledge-intensive, accentuating the role of HEIs (Gürüz 2008; Marginson 2013; Rizvi 2004). The emergence of the global knowledge economy signals an impetus for HEIs to focus on preparing students for a post-Fordist society in which technological skills, new forms of knowledge, and flexibility are key (Duderstadt et al. 2008; Gürüz 2008; Rizvi and Lingard 2010). Indeed, private sources of global capital have begun to invest heavily in higher education’s efforts toward knowledge production for economic strength (Altbach and Knight 2007). In turn, HEIs continually “behave in more competitive and enterprising ways” (Yang 2005, p. 114), engendering increased competition between and among them.

Finally, and more importantly, global competition in the higher education sector has emerged during an era of increased globalization—a multidimensional phenomenon involving a conglomeration of social, economic, political, and cultural processes that result in a heightened interconnectedness and awareness between and among countries and their citizens (Rizvi and Lingard 2010; Robinson 2007; Steger 2013). HEIs are not immune to the changes globalization generates; indeed, it is no longer possible for HEIs to operate in completely insular ways. Various trends and

developments in the higher education sector have led to a heightened emphasis on international benchmarking and being globally competitive.

2.2 The Manifestation of Global Competition in Higher Education

One of the most observable markers of global competition in the higher education sector is the development of global university rankings. Although the United States and several European countries have used national HEI rankings or league tables for a number of years, the first *Academic Ranking of World Universities (ARWU)* published by the Shanghai Jiao Tong University Institute of Higher Education in 2003 was significant because rankings became a global endeavor at this point (Hazelkorn 2014). *ARWU* was originally designed to gauge China's universities' standing against global competitors, though it quickly translated into a powerful if contentious global phenomenon. Two additional ranking mechanisms—*Times Higher Education World University Rankings (THE)* and *Quacquarelli-Symonds World University Rankings (QS)*¹—have also gained significance, while a number of other systems have emerged over the past 10 years (e.g., Webometrics, Spain's SCImago, and Europe's U-Multirank). Many scholars have criticized the measurements ranking systems use as methodologically unreliable and overly narrow, given that they tend to focus on English language publications in specific journal types (Marginson 2013; Ntsohe and Letseka 2013; Rhoads et al. 2014). Institutions from the United States and United Kingdom dominate the three main global rankings (*ARWU*, *THE*, and *QS*), and few countries and HEIs have the ability to compete with dominant players. Nevertheless, higher education policy makers increasingly utilize global university rankings to make key decisions (Hazelkorn 2008; Wildavsky 2010).

Ranking systems are both a product of and a driver of global competition. Whether or not they are viable players in the hierarchical global higher education sector, HEIs of all types are participating in a “reputation race” for international stature and prestige (van Vught 2008). As Rhoads et al. (2014) contend, global ranking schemes contribute to the reputation race because they accentuate the superiority of a particular type of institution: the elite research university, which Marginson (2006) has called the Global Research University (GRU) and Mohrman et al. (2008) have labeled Emerging Global Model (EGM) institutions. Marginson (2006) posited that GRUs are top-tier HEIs that emphasize enhanced research capacity, display global interconnectivity, and project globally-focused missions and priorities. GRUs represent central resources for governments and industry partners concerned with knowledge production and innovation. Similarly, Emerging Global Model universities are characterized by global missions, knowledge production, diversified funding, emphasis on commercially-valuable research, worldwide recruitment of faculty

¹The *Times Higher Education* and Quacquarelli-Symonds rankings began as a joint entity in 2004 and split into separate ranking mechanisms in 2009.

and students, increasingly complex organizational structures, new partnerships with government and industry, and greater collaboration with EGMs worldwide (Mohrman et al. 2008). Focusing on GRU/EGM institutions leads to the valorization of a particular form of excellence, one that is firmly entrenched in neoliberalism and does not take into account the variety of institutional types needed to broaden participation in higher education (Bagley and Portnoi 2012).

Given the increasing attention paid to GRU/EGM institutions in the global rankings era, one of the most common strategies governments employ to make their higher education systems and institutions more globally competitive is developing world-class universities (WCUs). Although there is no universally accepted definition of “world-class,” the characteristics of WCUs tend to align with the GRU/EGM schema: global engagement, elite status, high research intensity and productivity, and significant funding (Altbach 2004; Khoon et al. 2005). Numerous countries have employed the strategy of developing WCUs, including Singapore, South Korea, India, Thailand, Germany, and France. Governments often prioritize funding to increase the stature of a small number of their HEIs. China’s 211 and 985 projects,² for example, were designed to elevate the position of a small number of elite universities through “promot[ing] innovation and creativity as well as international competitiveness. Similarly, Russia intends to focus on elite institutions with the express goal of having at least five universities as top-100 contenders on global university rankings by 2020 (Vorotnikov 2013). Other nations seek to build WCUs from the ground up, as with Saudia Arabia’s King Abdullah University of Science and Technology (KAUST), which was created in 2009 with the express purpose of becoming an elite global research university.

In addition to developing WCUs, governments and HEIs commonly employ five other strategies (separately or in combination) to improve their stature and prestige within an increasingly hierarchical higher education landscape (Portnoi and Bagley 2011; Bagley and Portnoi 2014). University mergers constitute a strategy closely tied to WCUs. Harman and Harman (2008) described mergers as “formal combinations or amalgamations of higher education HEIs with the aim of enhancing competitive advantage, or merging for ‘mutual growth’” (p. 99). Mergers often combine “strong” and “weak” institutions to solidify market share, thereby fostering global competitiveness and the possibility of developing WCU status. Given the increasingly global nature of higher education, another key strategy is internationalization, both at home through curricular and extracurricular innovations and abroad through the exchange of students and scholars (Knight 2004). Drawing top international scholars and students to HEIs is important for “a university’s status and recognition as a highly qualified global institution” (Shields and Edwards 2013, p. 244), especially given their contributions to HEIs’ research prowess. Related to internationalization is the strategy of cross-border higher education (CBHE), also referred to as

²Launched in 1995, Project 211 focused on strengthening 100 HEIs with funding from central and provincial government sources as well as matching funds from HEIs. Project 985 followed in 1998 to develop 39 HEIs as strong contenders on global higher education rankings by emphasizing research and attracting elite international scholars.

transnational or borderless higher education, which involves delivery models such as international branch campuses, joint degree programs, and distance education.

With the changing nature of higher education, quality assurance—both related to foreign providers within a host country and to regulation through accreditation and international benchmarking—has become one of the most ubiquitous global competition strategies. Numerous countries have national quality assurance authorities, while regional quality assurance bodies such as the Asian-Pacific Quality Network (APQN) and European Association for Quality Assurance in Higher Education (ENQA) and international entities such as the International Network for Quality Assurance Agency in Higher Education (INQAAHE) have emerged. Finally, regional alliances (e.g., the Bologna Process) are another common global competition strategy, one in which partners may benefit from collaborating and providing greater combined strength to participate in the global reputation race.

Clearly, trends toward globalization and global competition are evident in the higher education sector worldwide. Yet, are these trends monolithic and uniform? This is a question we have explored throughout our work on global competition in higher education, including the present research study.

2.3 Employing a Vernacular Globalization Approach

The evolution of our scholarship on global competition in higher education has led us to employ a vernacular approach that emphasizes the importance of local context. During the process of editing *Higher Education, Policy, and the Global Competition Phenomenon* (Portnoi et al. 2010/2013b), we recognized how global competition manifests in multifaceted ways around the world. Through “vernacular globalization,” or local entities mediating dominant forms of globalization (Appadurai 1996), context-specific realities play a role in how governments and HEIs react to developments in the higher education realm. When considering whether or not there is a global competition “phenomenon,” it becomes clear that the answer is both yes and no. Despite the existence of trends toward increasing the global competitiveness of higher education institutions and systems, countries and HEIs do not employ strategies in a uniform manner. Context plays a significant role and countries’ local realities mediate dominant trends (Anderson-Levitt 2003; Appadurai 1996; Bagley and Portnoi 2014; Portnoi and Bagley 2011; Rizvi and Lingard 2010).

Over the past several years, we have continued to explore the vernacularization of global competition in higher education. Recently we published a research article (Portnoi and Bagley 2011) based on a secondary analysis of existing literature in which we employed Marginson and Rhoades’ (2002) “glonacal agency heuristic,” which allows for the agency of various entities (including national governments, regional blocs, HEIs, and others) to launch counter-movements to global trends. Our findings aligned with Marginson and Rhoades’ (2002) key assertion that numerous actors are involved in a multidirectional process through which global trends and developments are incorporated into regional, national, and institutional contexts.

In the present study, we explored vernacular globalization further by seeking primary empirical evidence related to the mediated manifestation of the DGC within higher education policy documents. Our study was guided by the following three research questions: In what ways, if any, is the discourse on global competition (DGC) evident in governmental higher education policy documents from countries across the globe? What, if any, variations exist based on the local context? To what degree are other national priorities reflected in the documents? We began our research with the assumption that evidence of vernacular globalization would be present in higher education policy documents and sought to test this assumption. Although we had a clear premise, our research questions were open-ended to allow for other possible findings.

2.4 Research Design and Data Analysis Methods

Our research with higher education policy documents covered two main phases: (a) in Phase I we collected, sorted, and coded relevant documents, and (b) in Phase II we analyzed a subset of the policies using an adapted version of Saldaña's (2012) two-cycle qualitative coding process. We employed a qualitative methodology to identify patterns and meaning within the text of the documents in order to better understand how the discourse on global competition manifests in higher education policies. Rather than using quantitative content analysis procedures common in communication and media studies, we opted to employ an inductive approach that would allow us to build in-depth understanding (Bogdan and Biklin 2007; Merriam 2001). Throughout the study, the research design remained emergent and fluid, and we continually revised and enhanced our procedures as the process progressed.

In Phase I, we collected primary governmental policy documents (policies, strategic plans, legislation, reports, and other documents) and arranged the collection by the United Nations regional categories—Africa, Arab States, Asia and the Pacific, Europe and North America, and Latin American and the Caribbean—and then by country within each region. Documents were collected through several online sources, including search engines and sites hosted by the United Nations, the World Bank, and national education ministries. All of the policies we collected for the study were in English and available on the Internet. The final sample for Phase II included over 300 educational policy documents from more than 100 countries. We coded and categorized each document descriptively by type; they ranged from stand-alone higher education policies to specific subsets of higher education (e.g., quality assurance) to general education policies that referenced higher education. The full list of document type codes included: (a): HEO (higher education overview/strategic plans); (b) HEQA (higher education quality assurance), (c) HEEA (higher education equity and access issues), (d) HELD (higher education legal document), (e) HEC (higher education competitiveness/world-class), (f) HEGE (higher education within general education), (g) NDP (national development policy), (h) PRS (poverty reduction strategy), (i) VT (vocational training), and (j) O (other).

For Phase II, we sought to compare “varieties of apples” through purposive homogenous sampling (Patton 2002), and limited the sample to stand-alone higher education policy documents projecting countries’ intentions and visions for their higher education systems (e.g., national policies, objectives, and strategic priorities). All of the documents were full-length policies in the 100-page range. Although there is no global standard for this type of policy, we sought to include documents that were as similar as possible, and countries that did not have a stand-alone, full-length policy document emphasizing strategic priorities were excluded from the sample. The final sample of documents we analyzed in Phase II came from Afghanistan, Australia, Canada, Chile, France, India, Ireland, South Africa, Vietnam, and Yemen.

During this second phase of the study, we completed a two-cycle coding process with the smaller sample of documents, building on Saldaña (2012), followed by comparative analysis of the policies. First cycle coding involved both holistic and provisional coding. Through holistic coding we labeled “chunks” (or lines) of text descriptively based on their general content. Holistic coding allowed us to gain a broad understanding of the topics covered within the documents. A second step in first cycle coding involved provisional coding with a “start list” of provisional codes related to the discourse on global competition, based on our review of the literature and prior research. To develop the start list, we created separate indexes and then worked together to establish a combined set of codes. The provisional code list was open to new additions or modifications as needed, and we subsequently collaboratively revised the list after we had each coded the same three documents. Some codes were collapsed, while others were renamed or deleted. The final provisional coding list contained 19 entries, including “global vision,” “knowledge production,” “quality assurance,” “rankings/ranking systems,” “reputation/excellence/status,” “research,” and “world-class aspirations.”

Second cycle coding involved pattern coding to move up from codes to categories and themes based on our original holistic and provisional coding. This process led to the development of themes regarding each higher education policy document, and facilitated comparison across policies. We developed salient themes regarding each document independently, and then collaboratively combined our themes into one set of findings. Adding a unique layer to Saldaña’s two-cycle coding process, in the third and final level of our analysis, we compared results from the documents to seek not only evidence of the DGC present in each document, but also the variety of additional issues and concerns highlighted therein. We also considered variations based on the local contexts in which the policies were created.

For the research presented in this chapter, we selected three countries’ policies to highlight, in order to provide in-depth analysis of each country’s documents as well as comparative findings. The selected countries—Afghanistan, India, and Ireland—represent different political, historical, and socio-cultural realities; this heterogeneity allowed for comparative analysis aimed at addressing our research questions. Afghanistan’s policy is called “National Higher Education Strategic Plan 2010–2014,” while India’s is named “Inclusive and Qualitative Expansion of Higher

Education: 12th Five-Year Plan, 2012–2017,” and Ireland’s is titled “National Strategy for Higher Education to 2030.”

2.5 Evidence of the Discourse on Global Competition (DGC) in Higher Education Policies

Through our analysis of the higher education policy documents from the three countries profiled in this chapter, we discerned a continuum of evidence related to the DGC, with Ireland at the high end of this continuum, Afghanistan in the middle, and India at the lower end. Although all three documents contain, to differing degrees, market-driven discussions about how higher education can assist in enhancing the nation’s economic status and ranking within an increasingly globalized landscape, these vary depending upon context, and—as we predicted—are balanced by more localized concerns. Below we present and discuss findings on the first two research questions by focusing on evidence of the DGC in each country’s policy documents and variations in evidence of the DGC across the contexts. Next, we discuss findings related to our third research question on the degree to which other context-specific priorities are reflected in the documents.

2.6 The DGC Continuum: Varying Evidence in Ireland, Afghanistan, and India

Ireland’s policy is strongly indicative of the DGC. The document is infused with a market sensibility and is full of the “buzz words” we most strongly associate with global competition, such as “world-class,” “rankings,” and “reputation.” Ireland repeatedly references the need for promoting the knowledge economy within its borders. For example, the Executive Summary notes that “higher education is central to the economic renewal we need” given that “the people who enter higher education in the coming decades are the job creators, policy-makers, social innovators and business leaders of the future” (p. 9). These statements position Ireland’s HEIs as drivers of the knowledge economy and central to economic revitalization. Indeed, the document notes that Ireland has “made great strides in increasing the number of people in the workforce with higher levels of education,” which is important because “as the knowledge economy develops, the quality of Ireland’s workforce will increasingly depend on the quality, relevance and responsiveness of our education and research system” (p. 33). The policy also highlights the need for citizens who can update their skills and competencies throughout their careers due to the “growing demand for upskilling” (p. 46).

Closely aligned with the goal of promoting knowledge production is strengthening Ireland’s workforce, given that the country’s “capacity to generate jobs—both in

indigenous enterprise and via foreign direct investment” (p. 34)—is viewed as dependent on workforce quality. Striving towards innovation and enterprise is another dominant theme throughout the document, closely aligning its goals with the Global Research University/Emerging Global Model schema. In a section entitled “The need to foster entrepreneurial imagination,” Ireland notes that “the sustainability of the Irish economy relies on our success in nurturing indigenous enterprise as well as our ability to remain an attractive destination for leading multinational companies” (p. 37). Market-driven rhetoric is especially dominant when Ireland enjoins its HEIs to “become more active agents in *knowledge transfer* than before and gain greater value from inherent *intellectual property* by engaging more effectively with *enterprise*, and by incubating *new companies*” (p. 38, emphasis added). As aspiring Emerging Global Model institutions, Ireland’s HEIs seek greater industry-university collaborations.

Promotion of a strong research agenda is also central, with priority given to “research areas with the greatest potential for national economic and social returns,” as well as research “fully conducive to the capture, protection and exploitation of Intellectual Property and enhanced enterprise competitiveness” (pp. 66–67). Ireland specifically sees itself as poised to become “an innovation and commercialisation hub in Europe” as “a country that combines the features of an attractive home for innovative R&D-intensive multinationals while also being a highly-attractive incubation environment for the best entrepreneurs in Europe and beyond” (p. 32). The connection between higher education and global industry, as well as Ireland’s desire for global research prowess, is markedly evident. Meanwhile, Ireland discusses university mergers (specifically to create large technological universities), maintaining internationally-trusted quality assurance structures, and intensifying internationalization efforts—three of the key strategies countries and HEIs employ to develop and sustain a globally competitive edge.

Afghanistan’s higher education policy document also contains evidence of the DGC, though to a lesser extent than Ireland’s policy. The policy indicates the desire to be “internationally recognized” (p. 3), and international norms and standards are referenced in relation to improving overall quality as well as promoting “international mobility and recognition” (p. 7). The document signals a desire for Afghanistan to be able to compete within a globalized economy, with the Ministry of Higher Education seeking “to ensure that policy changes make it possible for public higher education institutions to be entrepreneurial” and “produce graduates who are competitive in a market economy” (p. 7). Global competition is specifically referenced in a statement regarding the need to “provide relevant and quality academic programs” that are not only “responsive to national and regional needs” but “globally competitive” (p.7). This DGC rhetoric emerges later in the document as well: “For Afghanistan to attain globally competitive status and produce quality graduates, a variety of tertiary institutions offering different types of high quality education is essential” (p. 19). Clearly, both local and global concerns are prominent in this policy.

Many of the specific goals outlined in Afghanistan’s policy document—such as strengthening teaching and research capacity, as well as addressing overall quality

control and improving faculty training and incentives—align with those of Western higher education ideals, indicating a distinct intention to integrate Afghanistan’s system into an increasingly rankings-driven global landscape. Similarly, the desire to promote “proficiency in English, as the global language of communication and also the language of the Internet” (p. 12) signals an awareness of the need to shift beyond local cultural norms in order to produce graduates capable of interacting and competing on a global scale. These goals align with trends and developments in the higher education realm, especially given the predominance of English in global ranking mechanisms.

India’s higher education policy demonstrates the least evidence of the DGC in comparison to Ireland and Afghanistan, though excellence and quality—clear DGC “buzz words”—are dominant themes throughout the document, and an entire chapter is devoted to “Enhancing Quality and Excellence in Higher Education.” In this section, a number of DGC-related priorities are discussed, including the need to attract high-quality faculty, to incorporate “global perspectives” into the curriculum (p. 93), to promote research, and to collaborate and cooperate with industry. All of these notions align with common global competition strategies and key aspects of the Global Research University/Emerging Global Model schema. As in Ireland and Afghanistan’s documents, India’s policy continually references international norms and standards, thus indicating an acknowledgement of higher education’s inevitable positioning within a global landscape as well as its awareness that “with necessary recognition and support,” it “has the potential for extending frontiers of knowledge in all disciplines” (p. 88).

India acknowledges that it currently has very few globally recognized HEIs and that one of its goals is “promotion of Indian Universities to find their place among the top 250 Universities of the world through the international ranking processes” (p. 113). Though not highlighted prominently in the document, India’s recent efforts to create an Indian “Ivy League” of *navratna* universities is noted, specifically through the statement that “some Indian Universities have enormous potential to reach world standards in teaching and research” (p. 102). The document notes the country’s intention to grant greater autonomy to the top echelon of HEIs. All of these developments appear to be designed to develop a small number of HEIs that align with the Global Research University/Emerging Global Model framework.

All three policy documents profiled here show evidence of the DGC, though to varying degrees and in diverse ways. As suggested by our second research question, manifestations of the DGC are highly dependent upon local contexts, histories, and concerns. Ireland’s document is the most saturated with DGC rhetoric, indicating a strong desire and perceived ability to position the country’s higher education system within a globally competitive landscape. As a developed country with a relatively strong higher education system already in place, Ireland goes into significant detail regarding its aspirations towards world-class status. In Afghanistan’s document, on the other hand, the DGC is strongly driven by the country’s need to align its emergent system with the norms of Western higher education in order to produce graduates capable of competing on a global scale, thus contributing to the war-torn nation’s fragile economy. As we discuss in the following section, Afghanistan

acknowledges a number of locally mediated concerns and priorities that must be addressed before its institutions can compete on a global scale. Finally, the DGC in India's document is primarily focused on promoting quality and excellence throughout its higher education system. India discusses the country's potential for world-class status in its top institutions, and has explicit goals in this area. However, the three primary priorities reiterated throughout India's document—equity, expansion, and access—relate more to local, regional, and national concerns than to global posturing. These localized priorities are the focus of the next section.

2.7 Vernacularization of Priorities: Beyond the Discourse of Global Competition

In addition to researching varying degrees of prevalence of the DGC in each country's policy document, we sought to determine to what extent more localized concerns and goals were present. We found a diverse array of contextually-specific priorities evidenced in each country's policy document, reflecting the highly vernacular nature of higher education initiatives within countries across the globe.

Ireland's policy document makes it clear that the purpose of economic development through higher education is not only to promote the nation's global competitiveness but also to support individual well-being and social equity. In addition to highlighting DGC-related goals of improving collaborations with business and industry and partnerships on an international scale, Ireland notes the importance of joining forces “with the civic life of the community, with public policy and practice, with artistic, cultural and sporting life and with other educational providers in the community and region” (p. 74). Thus, more local, less market-driven concerns emerge in tandem with the DGC in Ireland's policy.

Responding to the needs and concerns of all of Ireland's students is an important focus throughout the document. Ireland notes a desire to offer higher education through more flexible venues and to encourage greater access by allowing and encouraging non-traditional students to align their post-secondary schooling with their current jobs. In addition, in a section specifically devoted to the improvement of teaching and learning in higher education, Ireland discusses its intention to solicit feedback from students, to identify entry-level gaps in student knowledge, and to better address diverse student needs and learning styles.

The delicate balance between the DGC and more vernacular concerns in Ireland is nicely outlined in the document's overview of “high level objectives” (p. 27). Alongside the DGC-related goal of promoting “an excellent higher education system” with a research base “characterised by its international level quality,” Ireland notes its commitment to “attract[ing] and respond[ing] to a wide range of potential students,” making higher education “fully accessible throughout their lives and changing circumstances,” and ensuring that “students will experience an education that is... relevant and responsive to their personal development and growth as fully

engaged citizens within society” (p. 27). Economic, social, and cultural needs are highlighted in these objectives.

For Afghanistan’s higher education system, political and historical contexts are key to its priorities, which incorporate the DGC but only to a limited degree. As “one of the poorest countries in the world” (p. 3) and a war-torn nation in need of extensive repair on multiple levels, higher education is seen as one of eight strategic pillars for national recovery and movement “into the realm of developing economies” (p. 4). The primary vision evident in the policy is to create and maintain a high quality, research-driven higher education system that will “contribute to economic growth, social development, nation building, and the stability of the country” (p. 4). Given its status as a nation dependent on outside assistance, with a need to demonstrate accountability and transparency, Afghanistan overtly addresses donor concerns and contributions throughout its higher education policy.

Other dominant goals in Afghanistan’s policy include improving equity for underserved populations, maintaining institutional autonomy while promoting quality assurance, and “preserving the uniqueness of Afghanistan, its history and culture” (p. 5). The desire to promote “national unity,” “ethics and integrity,” and equity (p. 5) are also strategically highlighted. International benchmarking is present; for instance, the document notes that enrollment “averages out at 2818 students per university, which is very small in size by international comparison” (p. 19). However, such comparisons are couched within candid discussion of specific logistical concerns such as a “shortage of both human and financial resources” (p. 19).

As in Ireland’s document, examining Afghanistan’s overall vision and values for higher education provides a clear snapshot of how the DGC is balanced by vernacular concerns rooted in both pragmatism and social justice. Afghanistan notes that its vision is for “a high quality public and private higher education system that responds to Afghanistan’s growth and development needs, improves public well-being, respects traditions, incorporates modern scientific knowledge, is well managed, and [is] internationally recognized” (p. 3). Its listed values are “high quality tertiary education; [the promotion of] national unity; ethics and integrity; equity; good governance, effectiveness, and efficiency; institutional autonomy; [and] public accountability” (p. 3). These ambitious goals and values highlight the number of vitally important priorities Afghanistan is striving to address as it rebuilds what it describes as a once thriving higher education system in the midst of significant economic and other challenges.

With its rapidly increasing population (currently at 17 % of the world’s total population and steadily growing), India faces a unique set of needs vis-à-vis its higher education system. Given that it has one of the lowest Gross Enrollment Ratios in the world (only 13.8 %, compared to a global average of about 26 %) expanding access across the nation remains a pressing concern. In India’s policy document, equity for under-served populations—including women, students from “socially deprived groups,” and “differently-abled students” (p. 32)—is predominant, along with the explicit intention to “significantly reduce urban-rural, inter-regional and inter-social group disparities” (p. 32). In addition, the country is concerned with correcting the “skewed growth of higher education towards techni-

cal and professional education” (p. 32), and ensuring that regional imbalances are addressed. Promoting equitable, distributed access is central to the country’s vision as outlined in the policy, and key social-justice terms appear in numerous instances. Indeed, word counts reveal that the term “inclusion” appears nine times, “marginalized” 14 times, “access” 74 times, and “equity” 64 times in the policy.

Throughout India’s document, an explicit focus on higher education as a “social and economic good” (p. 13) emerges, as well as the need to maintain a balance between vocational concerns and preserving higher education as “both a public good and as an autonomous sphere for the development of a critical and productive democratic citizenry” (p. 104). Indeed, these factors are noted as an important counterpart to “the encroaching demands of a market driven logic” (p. 104). Clearly, an array of concerns other than competitive global positioning is at play in India’s notion of a high-quality higher education system. India’s stated vision provides a succinct overview of these tensions:

The vision... is to achieve further access to higher education through... creating new universities and increasing the intake capacity of existing universities and colleges. Access will be coupled with equity and inclusion by bridging regional imbalances and disparities across disciplines and shall address spatial, economic, social and technological needs of the country. The initiatives will be capped with enhancing inputs for quality and excellence in all spheres of higher education: student intake, faculty enrichment, curricular and evaluation reform, revamping governance structures, [and] greater emphasis on research and innovation by creating efficient regulatory framework (p. 30).

In this vision statement, DGC buzz-words such as “excellence” and “innovation” exist in counterpart with issues related to access, equity, inclusion, and regional imbalances. Global competitiveness is clearly salient in India’s document, yet it is mediated by vernacular concerns.

2.8 Conclusion

Globalization and global competition are central facets of the worldwide higher education sector. Clear developments and trends, such as global university rankings and the valorization of elite research universities, have manifested within higher education. Nevertheless, countries and their HEIs respond to these developments in context-specific ways. Our analysis of Ireland, Afghanistan, and India’s higher education policy documents demonstrates that in addition to global positioning, other vernacular concerns are high on all three countries’ reform agendas. The DGC is clearly evident, but to varying degrees and in diverse ways, balanced by localized priorities. Context remains vitally important to developments within the higher education realm, as nations and their HEIs seek to continually improve their systems for internal reasons as well as for global positioning. Variations in how the DGC manifests across each country’s documents demonstrates that vernacular efforts and goals unambiguously mediate global trends.

References

- Altbach, P. G. (2004). The costs and benefits of world-class universities. *Academe*, 90(1), 20–23.
- Altbach, P. G., & Knight, J. (2007). The internationalization of higher education: Motivations and realities. *Journal of Studies in International Education*, 11(3–4), 290–305.
- Anderson-Levitt, K. (Ed.). (2003). *Local meanings, global schooling: Anthropology and world culture theory*. New York: Palgrave Macmillan.
- Appadurai, A. (1996). *Modernity at large: Cultural dimensions of globalization*. Minneapolis: University of Minnesota Press.
- Bagley, S. S., & Portnoi, L. M. (2012). Expanding the notion of “world-class” higher education institutions. *CIES Perspectives*, 159, 1–2.
- Bagley, S. S., Portnoi, L. M., et al. (2014). Setting the stage: Global competition in higher education. In L. M. Portnoi & S. S. Bagley (Eds.), *Critical perspectives on global competition in higher education* (New Directions for Higher Education, pp. 5–11). San Francisco: Jossey-Bass.
- Bogdan, R., & Biklin, S. K. (2007). *Qualitative research for education: An introduction to theories and methods* (5th ed.). Boston: Allyn & Bacon/Pearson.
- Duderstadt, J., Taggart, J., & Weber, L. (2008). The globalization of higher education. In L. E. Weber & J. J. Duderstadt (Eds.), *The globalization of higher education* (pp. 273–290). London: Economica.
- Friedman, T. (2005). *The world is flat: A brief history of the 21st century*. New York: Farrar, Straus and Giroux.
- Gürüz, K. (2008). *Higher education and international student mobility in the global knowledge economy*. Albany: State University of New York Press.
- Harman, G., & Harman, K. (2008). Strategic mergers of strong institutions to enhance competitive advantage. *Higher Education Policy*, 21(2), 99–121.
- Hazelkorn, E. (2008). Learning to live with league tables and ranking: The experience of institutional leaders. *Higher Education Policy*, 21(2), 193–215.
- Hazelkorn, E. (2014). Rankings and the global reputation race. In L. M. Portnoi & S. S. Bagley (Eds.), *Critical perspectives on global competition in higher education* (New directions for higher education, pp. 13–26). San Francisco: Jossey-Bass.
- Khoon, K. A., Shukor, R., Hassan, O., Saleh, Z., Hamzah, A., & Ismail, R. (2005). Hallmarks of a world-class university. *College Student Journal*, 39(4), 765–768.
- Knight, J. (2004). Internationalization remodeled: Rationales, strategies, and approaches. *Journal for Studies in International Education*, 8(1), 5–31.
- Lingard, B. (2000). It is and it isn't: Vernacular globalization, educational policy, and restructuring. In N. C. Burbles & C. A. Torres (Eds.), *Globalization and education: Critical perspectives* (pp. 79–108). New York: Routledge.
- Marginson, S. (2006). Dynamics of national and global competition in higher education. *Higher Education*, 52(3–4), 1–39.
- Marginson, S. (2013). Global comparisons and the university knowledge economy. In L. M. Portnoi, V. D. Rust, & S. S. Bagley (Eds.), *Higher education, policy, and the global competition phenomenon* (pp. 29–42). New York: Palgrave Macmillan.
- Marginson, S., & Rhoades, G. (2002). Beyond nation states, markets, and systems of higher education: A glonacal agency heuristic. *Higher Education*, 43(3), 281–309.
- Merriam, S. B. (2001). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.
- Mohrman, K., Ma, W., & Baker, D. (2008). The research university in transition: The emerging global model. *Higher Education Policy*, 21(1), 5–27.
- Ntsohe, I., & Letseka, M. (2013). Quality assurance and global competitiveness in higher education. In L. M. Portnoi, V. D. Rust, & S. S. Bagley (Eds.), *Higher education, policy, and the global competition phenomenon* (pp. 59–72). New York: Palgrave Macmillan.

- Patton, M. Q. (2002). *Qualitative evaluation and research methods* (3rd ed.). Thousand Oaks: Sage.
- Portnoi, L. M., & Bagley, S. S. (2011). Global competition in higher education: Strategies in a glonacal context. *World Studies in Education*, 12(2), 5–33.
- Portnoi, L. M., Bagley, S. S., & Rust, V. D. (2013a). Mapping the terrain: The global competition phenomenon in higher education. In L. M. Portnoi, V. D. Rust, & S. S. Bagley (Eds.), *Higher education, policy, and the global competition phenomenon* (pp. 1–14). New York: Palgrave Macmillan.
- Portnoi, L. M., Rust, V. D., & Bagley, S. S. (2013b). *Higher education, policy, and the global competition phenomenon*. New York: Palgrave Macmillan.
- Rhoads, R. A., Li, S., & Ilano, L. (2014). The global quest to build world-class universities: Toward a social justice agenda. In L. M. Portnoi & S. S. Bagley (Eds.), *Critical perspectives on global competition in higher education* (New directions for higher education, pp. 27–39). San Francisco: Jossey-Bass.
- Rizvi, F. (2004). Debating globalization and education after September 11. *Comparative Education*, 40(2), 157–171.
- Rizvi, F., & Lingard, B. (2010). *Globalizing education policy*. New York: Routledge.
- Robinson, W. I. (2007). Theories of globalization. In G. Ritzer (Ed.), *The Blackwell companion to globalization* (pp. 125–143). Walden: Wiley-Blackwell.
- Saldaña, J. (2012). *The coding manual for qualitative researchers*. Thousand Oaks: Sage.
- Shields, R., & Edwards, R. M. (2013). In L. M. Portnoi, V. D. Rust, & S. S. Bagley (Eds.), *Higher education, policy, and the global competition phenomenon* (pp. 235–248). New York: Palgrave Macmillan.
- Steger, M. (2013). *Globalization: A very short introduction*. Oxford: Oxford University Press.
- van Vught, F. (2008). Mission diversity and reputation in higher education. *Higher Education Policy*, 21(2), 151–174.
- Vorotnikov, E. (2013). Government approves universities for world-class bid. *University World News*. Retrieved from <http://www.universityworldnews.com/article.php?story=20130911144451887>
- Wildavsky, B. (2010). *The great brain race: How global universities are reshaping the world*. Princeton: Princeton University Press.
- Yang, R. (2005). Internationalizing Chinese higher education: A case study of a major comprehensive university. In P. Ninnes & M. Hellsten (Eds.), *Internationalizing higher education: Critical explorations of pedagogy and policy* (pp. 97–118). Hong Kong: Springer.

Chapter 3

Globalisation and New Developments in Global University Rankings

Val Rust and Stephanie Kim

Abstract In the past two decades, higher education has been going through a dramatic change, in large part to meet the dramatic challenge of globalization. A number of theoretical orientations have been devised to explain some of these changes, including intriguing labels such as Academic Capitalism and McDonaldization. These orientations usually give excessive attention to the market as the impetus for driving institutional reform, and the greatest indicator of this change is the growing importance of global university rankings. However, scholars, politicians, and pundits have also generated widespread criticism to rankings, and in response to that criticism, alternative ranking systems have begun to be formulated. This paper explores the growing criticism to established global university rankings and the criteria developed for alternative ranking systems, including the European Commission rankings, the Higher Education Evaluation and Accreditation Council of Taiwan (HEEACT) rankings, and the Webometrics Ranking of World Universities. We ultimately ask whether these new ranking systems are improving the process or adding to the negative attention to rankings.

Keywords Globalization • Global competition in education • Global university rankings • Excellence in higher education • Higher education competition • Higher education policy documents • Holistic measures of excellence

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3.1 Introduction

In the past two decades, higher education has been going through a dramatic change, in large part to meet the dramatic challenge of globalization. A number of theoretical orientations have been devised to explain some of these changes, including intriguing labels such as Academic Capitalism and McDonaldization (Slaughter and Rhoades 2004; Ritzer 2000). These orientations usually give excessive attention to the market as the impetus for driving institutional reform, and the greatest indicator of this change is the growing importance of global university ranking systems.

The first international ranking project was undertaken by Shanghai Jiao Tong University Institute of Higher Education in 2003 with the title Academic Rankings of World Universities. It was followed by the *Times Higher Education World University Rankings* in 2004. These two systems have captured widespread attention and “triggered the transformation of world higher education” (Marginson 2010) to the point where all universities, and the countries in which they are located, are now conscious of their rankings (Rust and Kim 2015). However, scholars, politicians, and pundits have also generated widespread criticism to university rankings, and in response to that criticism, new ranking systems have begun to be formulated. This paper explores what is happening and the criteria developed for new ranking systems. We ultimately ask whether the new ranking systems are improving the process or adding to the negative attention to rankings.

3.2 Rise of Global University Ranking Systems

At the turn of the twenty-first century, there were no highly publicized global university rankings. Some nations maintained internal comparisons of performance, but few had developed globally. The United States, for example, has long maintained rankings of its universities and colleges, the most prominent example being the annual rankings by *US News and World Report* that has been given the broadest kind of media coverage. However, university rankings were primarily of interest to students and their families, and nobody took seriously the notion of global classifications or cross-country comparisons of higher education.

Things have since taken a dramatic turn. The first global university ranking project was undertaken by Shanghai Jiao Tong University in 2003 with the title Academic Ranking of World Universities. It was followed by the *Times Higher Education-QS World University Rankings* that appeared from 2004 to 2009 [1]. The Shanghai rankings focus on four indices related to research: (1) quality of education (the number of Nobel Prizes and Fields medals); (2) quality of faculty (the number of staff members who have won awards and the number of “highly cited” researchers); (3) research output (papers published in specific English-language journals); and (4) per capita performance (adding weighted scores of 1–3 and dividing by number of faculty members). The *Times Higher Education-QS* composite rankings

involve reviews by academics and employers, as well as university indicators such as faculty-student ratio and the number of citations per faculty member.

When the Shanghai rankings first appeared, higher education specialists, the media, and the general public took notice. Furthermore, higher education leaders are increasingly using these rankings to make decisions and to influence higher education reform (Hazelkorn 2008). These ranking mechanisms also engender increased competition as universities clamor to make it to the top of the list, or to be represented at all. In the evolving global system, being competitive becomes of key importance, and global positioning is integral to competing with other nations and institutions (Marginson 2006). Some scholars claim that universities are currently in a “reputation race” in which they compete for academic prestige (van Vught 2008). Furthermore, arguments have been made that “the more an individual university aspires to the top end of competition, the more significant global referencing becomes” (Marginson 2006, p. 27). Universities, and the countries in which they are located, thus seek to project the best image possible in order to be poised to compete for research funding, the best and brightest students, and star faculty members. Moreover, “all of this emphasis ... gravitates towards an ideal, a typical picture of a particular type of institution” (Huisman 2008), what Kathryn Mohrman et al. (2008) call the Emerging Global Model of the top stratum of research universities.

3.3 Growing Criticism of University Rankings

A chorus of scholars has certainly derailed globalization’s effects on higher education, in particular the shift towards market orientations and the global competition phenomenon (Slaughter and Rhoads 2004; Deem et al. 2007; Rust and Kim 2015). These scholars vehemently decry the neoliberal turn that higher education is taking where education policy and practices are further influenced by market forces over public interests. Global university rankings have only fueled more criticism, and both the Shanghai and the *Times Higher* lists seem to have as many critics as fans. The critics say the methodology is flawed, with Shanghai putting too much emphasis on scientific research and the *Times Higher* on the opinions of people at peer institutions. More broadly, there are also fundamental questions about the utility of even the best cross-border assessments by fellow academics. Although susceptible to manipulation and misuse, rankings have become an integral part of global higher education to the point where higher education institutions, governments, and organizations compete to have their institutions reflected well in the rankings.

Because the ranking systems much more heavily weigh top scholarly output as a measure of institutional quality, the highest ranked institutions are the large research and development universities. Unfortunately, however, the ranking systems are often read by the public as a list of the world’s best universities and not as a research list. This is because there is not yet an objective measure of performance that includes quality of teaching and learning and other hard-to-measure indicators (Dill and Soo 2005). There are great universities in the world that do not pursue heavy

research agendas and whose missions include other priorities, including increasing access to higher education for the mass population. For example, the Universidad Nacional Autonoma de Mexico and the Universidad de Buenos Aires in Argentina provide access to a quarter of a million students or more on multiple sites and perform many functions in national and regional development, social and cultural life, and national research leadership. Critics of global university rankings have pointed out that a narrowly defined criterion of quality might have a detrimental influence on universities that prioritize alternate agendas.

In Asia, critics have noted the unfavorable leanings towards universities in English-speaking countries. Many universities in Asia have responded by aggressively incorporating English-language classes into their general curriculums and requiring faculty members to publish in top English-language journals, particularly in China, Taiwan, Hong Kong, and South Korea. This is done to increase the visibility of their institutions in the global rankings. In fact, Taiwan has even developed its own university ranking system that ranks its domestic universities by the quantity and quality of articles published in journals ranked on the Science Citation Index and Social Science Citation Index—most of which are in English (Hou and Morse 2009). However, such English-language policies have created contentious politics over the hegemony of English in academic settings, and they are not without backlash. Students in Hong Kong staged an adamant protest in 2005 to point out the hypocrisy of the founding mission of their universities that states that the principal medium of teaching would be in Chinese, and some Hong Kong-based scholars have called the incorporation of English-language curricula as an extension of colonialism (Choi 2010). In South Korea, students felt that they experienced disempowerment and discrimination in their interactions with foreign students due to variations in their English language ability (Jon 2012). Further research also shows that Korean students often encounter difficulty in their understanding of course content due to the English language medium (Byun et al. 2011).

Scholars have also pointed out that institutions outside of “the West” are intrinsically disadvantaged within the global university rankings, which give preference to measures of institutional quality based on much larger socio-historical trajectories—histories, wealth, ability to attract top scholars and students worldwide, strong traditions of academic freedom, and academic cultures based on competition and meritocracy—and their significant head starts create centers and peripheries based on colonial legacy (Altbach 2004, 2009). Indeed, a number of scholars have argued that “Anglo-Saxon academic paradigms” drive the global standards that all higher education institutions are forced to follow in the quest for world-class status (Mok 2007; Deem et al. 2008).

3.4 Development of Alternative Ranking Systems

In response to growing criticism about ranking methodologies, several key players are responding by offering alternative global university rankings. We shall mention four versions. They are significant because they originate from sources other than a

single university or media outlet, or because they attempt to create new criteria for which universities should be evaluated.

The European Commission: The European Commission, as well as some EU member states, have been criticizing the established university ranking systems for biasing in favor of research and development institutions and for failing to represent the diverse and multifunctional nature of universities and their research activities. In late 2009, the European Commission began a push to develop a more nuanced and complex ranking system, and by 2014, launched U-Multirank, a ranking system that allows comparisons of institutions by discipline and across multifaceted qualities. The project steers away from research intensity and toward a basket of other indicators, such as teaching and learning, knowledge transfer, international orientation, and regional engagement. Though the system is in the infant stages and still trying to convince more institutions to volunteer data, the project is generating much interest from the academic community worldwide.

International Observatory on Academic Rankings and Excellence: The International Observatory on Academic Rankings and Excellence (IREG Observatory) was established in 2004 as a nonprofit group that seeks to track, evaluate, and rank the ranking systems. The organization was spun off by UNESCO's European Centre for Higher Education and works with a questionnaire that is used to confirm that rankers meet certain minimal standards. Those standards are meant to reflect the Berlin Principles on Ranking of Higher Education Institutions that are endorsed by many international educators, experts, and publishers. The organization also launched an audit project based closely on their quality assurance principles that emphasize clarity and openness in the purposes and goals of rankings, the design and weighting of indicators, the collection and processing of data, and the presentation of results.

The Higher Education Evaluation and Accreditation Council of Taiwan: The Performance Ranking of Scientific Papers for World Universities is a product of the Taiwanese government that has undertaken a ranking exercise as part of its accreditation process. In 2005, Taiwan revised its University Law and mandated that all 76 4-year universities and colleges in the country undergo a regular assessment process. The Higher Education Evaluation and Accreditation Council of Taiwan (HEEACT) became the country's quality assurance agency and was given authority to oversee the process. HEEACT emphasized teaching excellence, and in 2005, the Ministry of Education established a one billion NT dollar budget to reward 13 of the best institutions of higher education. In 2006, that budget was increased to six billion NT dollars (Cheng 2009). HEEACT has been active in working with other accreditation institutions around the world so that they work cooperatively with each other in developing mechanisms for accreditation, including ranking processes.

HEEACT was also charged with the task of collecting international data so that Taiwan's institutions might be compared with the best institutions in the world. Consequently, in 2007, the Performance Ranking of Scientific Papers for World Universities was developed, along with a number of other measures including indicators such as patents, collaborations, and research papers by Taiwanese universities and colleges. The Performance Ranking system, which is housed at the National

Taiwan University, uses a bibliometric method to analyze and rank the scientific papers of the top 500 world universities and the top 300 world universities in six scientific fields (Agriculture and Environmental Sciences, Clinical Medicine, Engineering and Technology, Life Sciences, Natural Sciences, and Social Sciences). The system relies on quantitative data drawn from the Science Citation Index and the Social Science Citation Index. The unique approach of this system is that it ranks the universities according to the number of scientific papers produced. HEEACT is aware that its assessment deals only with the research performance of universities and does not attempt to comment on teaching effectiveness, professional service, etc., in its global comparisons. Instead, assessment is based on the number of articles published since 1999, and the number of citations in the previous 2 years. These citations are weighted in terms of their citation rates and the number of articles that appear in high-impact journals. The number of students and faculty members are also taken into account so as to neutralize bias because of size. The main feature of this ranking system is that it is unique for its objectivity and fairness, even though there remains a subjective element to the process in that the journals are weighted according to their status and perceived quality. The system is also extremely narrow in its focus, because it only takes research publications into account and neglects issues such as teaching and professional service. It also does not look at most professional schools, such as Business, Law, Education, or Information Studies.

The Webometrics Ranking of World Universities: This ranking system has been in place since 2004 and is published by the Cybermetrics Research Lab, a research group that is part of the Spanish National Research Council. The group's main objective is to promote scientific research. It bases its rankings on a quantitative analysis of a university's web presence, visibility, and web access, thus promoting open access publication of scholarship. This allows a measurement of a university's scientific activity on the web. In theory, a university's web presence is a reliable indicator of the global prestige of that university and is therefore a reliable way to measure that university's performance. Some web measures include scientific communication through electronic journals and repositories; social network visualization with friendly, dynamic, and interactive web interfaces; evaluation of documental analysis techniques of web resources; genre studies applied to scholarship activity on the web; positioning on search engines of web domains; and analysis of information usage through web data mining of log files.

The Webometrics ranking system currently provides web indicators for 15,000 universities worldwide. The original aim of the ranking system was to promote web publication, support open access initiatives, and encourage electronic access to scientific publications and other academic materials. But the rankings are especially interesting when considering the social ramifications of web statistics. Web usage not only covers formal information sources (e-journals, repositories), but also informal scholarly communication (links, personal webpages, blogs). Web publication is cheap and can reach much larger audiences than print can. This can potentially offer access to scientific knowledge to researchers and institutions without geographic limitations and to third party organizations (research foundations, NGOs, cultural

institutions), and takes into account non-traditional sources of information from junior scholars and scholars in developing countries. Web statistics can also be obtained for a greater number of institutions worldwide than case-by-case assessment of traditional rankings systems. In some ways, Webometrics Rankings adopt similar standards that traditional rankings systems do, but the rankings are able to translate it to a much broader scope. This can be seen when comparing the methodology of Webometrics to the methodology of the Shanghai rankings.

Criteria	WR (webometrics)		ARWU (Shanghai)	
Univ's analyzed	15,000		3,000	
Univ's ranked	5,000+		500	
Quality of education			Alumni Nobel & Field	10 %
Internazionalization				
Size	Web size	20 %	Size of institution	10 %
Research output	Rich files	15 %	Nature and science	20 %
	(Google) scholar	15 %	SCI & SSCI	20 %
Impact	(Link) visibility	50 %	Highly cited res'ers	20 %
Prestige			Staff Nobel & Field	20 %

Source: www.webometrics.info/about_rank.html

3.5 A Better System?

Are the alternative ranking systems better? Or are they making more complicated the process through which universities are ranked? Does it help to create even more criteria through which universities are compared to one another? The new systems certainly differ from the ones created by Shanghai Jiao Tong University and the *Times Higher Education* in that they establish a precedent for collaboration amongst multiple institutions and/or governments. There are several benefits to this. For one, no singular interest is solely represented in the new ranking systems, reducing bias and favoritism. Furthermore, collaborative ranking systems are less susceptible to manipulation and abuse, as has been suspected with some ranking systems in the past [2].

Using holistic measures of excellence is also a goal of alternative ranking systems. Whether it is by assessing a university's teaching and learning processes or quantifying an institution's web presence, alternative ranking systems attempt to go beyond an overly simplistic form of evaluation that puts too much emphasis on research productivity. Even ranking systems that do use research productivity as the primary method of evaluation do so with the disclaimer that their curated list is only reflective of the best research institutions and not an indicator of the best universities per se. Ultimately, alternative ranking systems force ranking systems in general to be more accountable for the ramifications that their lists have on the wider academic community. By questioning the methodology of all ranking systems—and even ranking the ranking systems—alternative ranking systems provide necessary checks and balances onto a global trend.

Notes

1. The first *Times Higher Education*-QS composite ranking system was published in the *Times Higher Education Supplement* in November 2004. In 2009, the *Times Higher Education* ranking split with its original partner, Quacquarelli Symonds, and created a new ranking methodology, compiling the information for its citation database in partnership with Thomson Reuters. Quacquarelli Symonds has continued to publish the QS World University Rankings. Currently, the *Times Higher Education* rankings are aligned more closely to the Shanghai rankings and differ from the QS rankings in that they place less importance on reputation and prestige and give more weight to hard measures of research, teaching, and knowledge transfer.
2. In 2009, several Chinese newspapers reported that Chengdu University of Technology was suspected of paying a representative of the Chinese Academy of Management Science, which publishes the annual China University Evaluation Program that ranks universities within China, to climb the rankings. This ranking system is significant in that it began in 1997 as a precursor to the global university rankings created by Shanghai Jiao Tong University.

References

- Altbach, P. G. (2004). Globalisation and the university: Myths and realities in an unequal world. *Tertiary Education and Management*, 10(1), 3–25.
- Altbach, P. G. (2009). Peripheries and centers: Research universities in developing countries. *Asia Pacific Education Review*, 10(1), 15–27.
- Byun, K., Chu, H., Kim, M., Park, I., Kim, S., & Jung, J. (2011). English-medium teaching in Korean higher education: Policy debates and reality. *Higher Education*, 62(4), 431–449.
- Cheng, K. S. Y. (2009). Quality assurance in higher education: The Taiwan experience. In T. W. Bigalke & D. E. Neubauer (Eds.), *Higher education in the Asia/Pacific: Quality and the public good*. New York: Palgrave Macmillan.
- Choi, P. K. (2010). Weep for Chinese university: A case study of English hegemony and academic capitalism in higher education in Hong Kong. *Journal of Education Policy*, 25(2), 233–252.
- Deem, R., Reed, M., & Hillyard, S. (2007). *Knowledge, higher education, and the new managerialism: The changing management of UK Universities*. Oxford: Oxford University Press.
- Deem, R., Mok, K. H., & Lucas, L. (2008). Transforming higher education in whose image? Exploring the concept of ‘world-class’ university in Europe and Asia. *Higher Education Policy*, 21(1), 83–97.
- Dill, D., & Soo, M. (2005). Academic quality, league tables and public policy: A cross-national analysis of university ranking systems. *Higher Education*, 49(4), 495–537.
- Hazelkorn, E. (2008). Learning to live with league tables and ranking: The experience of institutional leaders. *Higher Education Policy*, 21, 193–215.
- Hou, Y.-c., & Morse, R. (2009). Quality assurance and excellence in Taiwan higher education – An analysis of three major Taiwan college rankings. *Evaluation in Higher Education*, 3(2), 45–72.
- Huisman, J. (2008). World class universities. *Higher Education Policy*, 21, 1–4.
- Jon, J.-E. (2012). Power dynamics with international students: From the perspective of domestic students in Korean higher education. *Higher Education*, 64(4), 441–454.

- Marginson, S. (2006). Dynamics of national and global competition in higher education. *Higher Education*, 52, 1–39.
- Marginson, S. (2010). Global comparisons and the university knowledge economy. In V. D. Rust, L. M. Portnoi, & S. Bagley (Eds.), *Higher education, policy, and the global competition phenomenon*. New York: Palgrave Macmillan.
- Mohrman, K., Wanhua, M., & Baker, D. (2008). The Research university in transition: The emerging global model. *Higher Education Policy*, 21, 5–27.
- Mok, K. H. (2007). Questing for internationalization of universities in Asia: Critical reflections. *Journal of Studies in International Education*, 11(3/4), 433–454.
- Mroz, A. (2009, November 5). Leader: Only the best for the best. *Times Higher Education*. Retrieved from: <https://www.timeshighereducation.com/comment/leader/leader-only-the-best-for-the-best/408968.article>
- Ritzer, G. (2000). *The mcdonaldization of society* (3rd ed.). New York: Pine Forge Press.
- Rust, V. D., & Kim, S. (2015). Globalisation and global university rankings. In J. Zajda (Ed.), *Second international handbook of globalisation, education and policy research*. Dordrecht: Springer.
- Slaughter, S., & Rhoads, G. (2004). *Academic capitalism and the new economy: Markets, state, and higher education*. Baltimore: The Johns Hopkins University Press.
- van Vught, F. (2008). Mission diversity and reputation in higher education. *Higher Education Policy*, 21, 151–174.

Chapter 4

Higher Education Engagement and Economic Participation: Divide and Conquer

Kassie Freeman

Abstract What does this mean for reforming higher education policies and practices, particularly as it relates to community engagement and Black Diaspora? It is easy to assume that any time the subject of Divide and Conquer is broached that both terms conjure up negative, divisive language and thoughts, and can mean placing blame. That is not the intent of this writing. The long overdue focus is on the education participation, or lack thereof, of Black populations across the Diaspora. The intent is to first provide a brief historical context as it relates to Black Diaspora, followed by global implications of the Divide, particularly as it relates to education, and will conclude with implications of the Divide for reforming policies and practices as it relates to higher education engagement/partnerships. Higher education community engagement is exactly the arena that can help wrestle with different sets of challenges and engage in debates that hopefully will lead to new policies—or, at a minimum, shed new light on engaging possibilities. Higher education institutions, individually and collectively, bring people together and provide spaces to address important issues.

Keywords Access • Black Diaspora • Community engagement • Equity • Higher education • Higher education policies • Inequality • Reforms

4.1 Brief Historical Overview

First, it is important to understand the backdrop of the creation of the Black Diaspora. It is as James Anderson (1988) indicated, to understand the experiences of Black people [of any people], it is necessary to examine the historical context of their existence. The Black Diaspora can be defined as the dispersal of people removed/exiled from a common territorial/geographic origin, Africa. Although

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slaves were traded since as early as the fifteenth century, it was the Berlin Conference of 1884–1885, when a meeting was held between European nations to create rules on how to peacefully divide Africa among their countries for colonization.

At that meeting, in the second half of the nineteenth century, after more than four centuries of contact, the European powers finally laid claim to virtually all of Africa. Parts of the continent had been “explored,” but now representatives of European governments and rulers arrived to create or expand African spheres of influence for their patrons. Competition was intense. Spheres of influence began to crowd each other. It was time for negotiation, and in late 1884 a conference was convened in Berlin to sort things out. This conference laid the groundwork for the now familiar politico-geographical map of Africa. The African slave trade constituted the largest forced migration in human history (Freeman 2012; Segal 1996).

The Berlin Conference was Africa’s undoing in more ways than one. The colonial powers superimposed their domains on the African Continent. By the time Africa regained its independence after the late 1950s, the realm had acquired a legacy of political fragmentation that could neither be eliminated nor made to operate satisfactorily. The African politico-geographical map is thus a permanent liability that resulted from the 3-month period when Europe’s search for minerals and markets had become insatiable. In other words, now almost 130 years after the Berlin Conference, Africa was divided among European nations and, in many cases, individuals from those colonies were placed/dropped in the corresponding countries, whether Great Britain, France, Portugal, later to USA, Brazil, and the Americas, as examples. Today, individuals still come from formerly colonized countries, sometimes voluntarily and/or involuntarily, to the countries that colonized them.

What does a comparative analysis of the Black Diaspora afford researchers and practitioners, particularly as it relates to education participation generally and more specifically community and community engagement? There are at least three reasons why this analysis is essential:

- (1) An historical context can provide an examination of similar and different educational challenges to better determine different and new paths;
- (2) A broader examination of the educational experiences of Black populations and beyond African American experiences offer the opportunity to rethink new and different solutions; and
- (3) A review of similarities and lessons learned across groups, using history and cultural contexts as lenses, can lead broader and more generalizable possibilities.

4.2 Consequences of the Divided Black Diaspora

There were several consequences of the Divided Black Diaspora. First, there was the process of marginalization and silencing. Decisions were made and executed far away from the very lives of affected individuals—on another continent, with no voices to speak for the individuals impacted.

4.2.1 *Marginalization/Silent Voices*

The process began with the affected groups not participating or having voice in the course for the direction of their lives, especially not participating in education. Particularly, as new arrivals in different countries, small in number, and in unfamiliar terrain, Black populations were absent voice and relegated to lower status in every sector. For example, writing about the Afro—French and linking invisibility with marginalization, Fleming (2012) states the following:

Ironically, their ethnoracial ‘visibility’ in metropolitan classrooms is accompanied by a symbolic ‘invisibility’ due to a lack of representation in the historical and cultural material included in the centralized French educational system. The paradox of both being marked and unmarked, visible and invisible, contributes to the complex challenges Antilleans face in being both Caribbean and French (p. 80).

Even countries like Sweden that purport to be neutral on most things, including race, Habel (2012) writing about teaching White students discusses the marginalization of Afro-Swedes:

Today, Afro-Swedes are certainly visible as a growing minority in Sweden, yet exceptionally marginalized in political and cultural terms. Even if the history of the Black presence may go back as long as in many parts of Europe, it enjoys an ambivalent status: on the one hand it is recurrently spectacularized as purportedly recent—something intriguingly cool, different, and exotic (or abject) in quotidian culture. On the other, the presence and achievements of Black people is often overlooked or erased in historical records (p. 107).

This same situation is described again and again in countries where Black populations have migrated, involuntarily or voluntarily, or, in many cases where they were enslaved and brought against their will. They are marginalized and/or voiceless.

4.2.2 *Uneven, But Always, Lack of Participation in Education at Every Level*

If you fast-forward, another consequence of the Divided Black Diaspora, using the USA, England, France, and/or the Americas, you find Blacks disproportionately uneducated or undereducated at every level of schooling, especially higher

education. As an example, in Portugal, according to the Honorable Fernando Ka (2012), the percentage of the Black populations with compulsory school (ninth grade) is less than 1 %, when the Black population is 8–10 %. According to him, Afro-Portuguese school success will consist, undoubtedly, on addressing infrastructures for such issues as after school programs, places where they can receive assistance to do their homework and be supported in their studies by appropriate teachers while they are waiting for their parents to come home (p. 75).

This pattern of exclusion of Black populations' participation in education is repeated in other European countries, for example, Germany. In his research, Long (2012) cites the work of Massaquoi who indicated, "Children of African Diaspora families were many years not allowed to attend secondary schools or were limited to the Berufsschule that educated them for low-skilled trades" (p. 125). In other European countries, such as the United Kingdom, Cecile Wright (2012) writes about the differential treatment of Blacks in the United Kingdom. She poignantly indicates, "Within educational discourse, Black and minority students have been regarded historically as a problem in and for the British educational system" (p. 66).

However, this pattern of excluding Black populations' participation in education is not limited to Europe. In Latin and Central America, the pattern is similar, even in countries, like Brazil, where Blacks are in the majority. In Brazil, although the Black population is 51 %, according to the US State Department, Blacks are terribly underrepresented in education. Dassin (2013), reporting from a 2005 World Bank publication, validated the publication's findings, "Higher Education in Latin America remains largely elitist, with the majority of students coming from the wealthier segments of society" (p. 20). With newly voted comprehensive action policies, where a person's race can be taken into account, Brazil will be an interesting case to watch.

An often overlooked and under-researched Black population in Latin America is Afro-Ecuadorians, who have only recently been able to claim their Black heritage. According to Johnson (2012), "for the first time in history, Ecuador people of African descent were able to identify themselves with the normal census conducted in 2001" (Johnson 2012, p. 27). Even with only recent ethnic identity, there has been differentiation in the quality of schooling. As Johnson has indicated, "schooling in the city of Esmeraldas is racially segregated and unequal regarding economic and cultural resources" (p. 38).

Because of the value of education in uplifting people from their circumstances, how Black populations have confronted this reality globally is particularly important. Unfortunately, this is a reality that continues as a consequence of the divided Diaspora.

4.2.3 Unemployment or Underemployment

The next common thread that you find among Blacks across the Diaspora is the high level of unemployment and/or underemployment. The level of unemployment and underemployment has historical roots. Just as Black people in America were

relegated to working the land and as servants to increase the wealth of this country, so were Black people in European countries. For example, according to Fryer (1992), “The majority of the 10,000 or so black people who lived in Britain in the eighteenth century were household servants—pages, valets, footmen, coachmen, cooks, and maids—much as their predecessors had been the previous century” (p. 73). Although working menial jobs, Fryer conceded that as a Liverpool writer declared in 1893, “It was the capital made in the African slave trade that built some of the docks and the price human flesh and blood that gave us a start” (p. 66).

Similarly in Germany, for example, Black people “were forced to cultivate export products or to work on plantations and in the mines of whites” (Opitz et al. 1992, p. 25). The same was the case in Portugal. According to Saunders (1982), “The nobility employed—or underemployed—large numbers of slaves solely as domestic servants” (p. 63). Through his interview with Afro-Ecuadorians, Johnson (2012) found explicit examples of differential treatments as it related to employment opportunities. An interviewee made this observation:

For example, in the opportunities for employment in our environment, in the companies in the few private companies there are, there does not exist the well defined possibilities for a Black, for example, to access very easily a job. Applying for a job two non-Blacks I would say it like this, those administrators and company owners prefer the non-Blacks. They prefer them and I have seen it” (p. 36).

Although the Divided Diaspora had historical consequences on the employment status of Black populations, the remnants of the status remain today. Across the globe, Black populations continue to be unemployed and underemployed, the USA, as an example. Where the overall unemployment rate in the USA is just under 8.0 %, for African Americans unemployment is approximately double that percentage at 14–15 % (U.S. Census Data 2010). These rates of unemployment contribute to the high rate of poverty among Blacks.

4.2.4 High Levels of Poverty

Lastly, a consequence of the Divided Black Diaspora, tragically, includes high levels of poverty. In the USA, the poverty rate for Blacks is approximately 27.4 %, more than one in four, compared to one in seven (15.1 %) USA wide (US Census Data 2010). In Great Britain, the poverty rate of Black Africans is 45 % and Black Caribbean is 30 % compared to 20 % White British (Palmer and Kenway 2007).

This level of poverty of Black populations is similar across different parts of the world. For example, according to Johnson’s (2012) findings, Ecuador census data indicated that within the city and province of Esmeraldas, 56 % of the overall population live at or below the poverty line while 79 % of Afro-Ecuadorians live in poverty. The high levels of Black uneducated and undereducated populations contribute to continued high levels of unemployment and poverty. Higher education institutions have a role to play in both highlighting and combating this global dilemma.

4.3 Implications for Reforming Current Higher Education Policies and Practices of Community Engagement

What are the implications and importance for reforming current higher education policies and practices of community engagement? First, what really is community engagement? I am using the definition from the National Resource Center on Advancing Emergency Preparedness for Culturally Diverse Communities: “Community engagement is the process of working collectively with and through groups of people affiliated by geography proximity, special interest, or similar situations to address issues affecting the well-being of those people.” Further, they state, “It often involves partnerships and coalitions that help increase resources and influence systems.” This definition highlights important roles of higher education engagement. One, higher education is a place of special interest, as outlined in the definition. The key is working collectively, targeting specific goals to achieve common outcomes.

More importantly, higher education community certainly, if not, should be based on partnerships and coalitions that help increase resources and influence systems. The following are suggestions for leveraging these partnerships and coalitions:

- *Bringing Together Communities/Partnerships to education participation (Equal Voices)*

One, bringing together communities/partnerships to address education participation at every level is an imperative. Higher education institutions are ideal communities to begin to create partnerships to rethink the influence of conquering and dividing and the vestiges of that event on the current outcomes on education participation. However, rather than working collectively to achieve different goals as it relates to Black populations across the globe, this research suggests that higher education institutions have almost been silent partners. In every country, Black populations have been underrepresented in education participation at every level. More disheartening is the lack of the voices of these populations in discussions of different alternatives to address some of these issues.

How does the higher education community accomplish this? It begins with acknowledging that a problem exists. Then, it will require focusing attention on establishing true partnerships and engagement to influence resources and systems. Such questions as what different systems must be put into place and what resources are necessary to achieve different outcomes must be addressed.

However, the partnerships must be equal voices and a combination of voices must be included, not just voices from the higher education community alone. There should not be silent or marginalized voices, as a carryover from processes created from the past.

- *Engaging with Broader Stakeholders*

Next, engaging broader stakeholders is necessary. These stakeholders must include a range of educators (scholars and practitioners), economists, policymakers, and it must truly be from a global perspective. The higher education community

certainly has a leadership role to play in engaging these stakeholders, given education is so critical in a globalized world. There must be partnerships, intra- and inter-community. By this, I mean partnerships and action plans must be defined within the Black community and developed and shared between global communities. Certainly, there are recognized cultural and language barriers between Black populations. Even so, the challenges of education participation, poverty and unemployment of Black populations are similar across these groups across countries. Consequently, as a first step, discussing and determining common plans and goals must be accomplished between and across groups as a critical first step.

Given that it is rare, if ever, Black populations have come together to discuss the commonalities and possible solutions to common problems, such as the educational dilemma facing Blacks globally, defining steps to address such an ingrained problem is important before defining to groups outside of the culture as to how they can form beneficial partnerships. Addressing such questions as the following is imperative: what should be the first steps? How can Black populations from different cultures share common solutions, while maintaining their identity? How should other communities be engaged? Can and/or should similar patterns be formed and be productive across cultures?

A range of different voices and institutions must be included in these new stakeholder relationships. For example, what role should Historically Black Colleges and Universities (HBCUs) and predominately Black higher education institutions in other countries play in relationship building intra- and inter- community?

It is following these intra-community discussions that higher education engagement can be most effective. Otherwise, the higher education community will be following old models/paradigms in determining what is best for different populations without their input or voices. Understanding how these communities unfold for the betterment of all is a highly necessary step and can determine the most appropriate higher education community engagement strategies.

- *Redefining What the Current Higher Education Participation Policies and Practices Should be in a Globalized, Mobile World*

Thirdly, redefining what the current education participation policies and practices should be in a globalized, mobilized world must be addressed. How should higher education participation be increased, truly utilizing multiple stakeholder voices? Now, there continues to be a void in Black voices being included in the development of solutions regarding their education participation. Are Massive Open Online Courses (MOOCs) the answer to higher participation and quality participation for inclusion? What should be the distribution of higher education participation across various sectors? What should be new and different linkages between higher education and the world of work that truly value multiple stakeholders? What really is the value of study abroad and why has it stayed stagnant across groups? How should what is documented through research and practice be better applied to recruit, retain, and graduate more diverse students?

These are just some of the questions that need to be addressed to value and appreciate broader participation in higher education in a globalized, mobilized

model. These questions must be addressed in order to ensure authentic higher education engagement.

- *Developing/Defining New/Different Paradigm*

Finally, what higher education researchers, scholars, and practitioners will agree is that the current education models are not working for all, particularly for Black populations across the Diaspora. There has to be that acknowledgement. No policies can or will be effective without allowing the affected individuals' voices in their own solutions.

4.4 Conclusion

The global implications of the Divide, particularly as it relates to education, as indicated above, has to result in a genuine attempt to reform higher education policies and practices on engagement/partnerships. Higher education must move away from the old divide and conquer mindset and model to a unified/equal voices partnership. This must be a true community engagement and groups like higher education institutions/associations must be the catalyst. It needs to address the inequality dimensions impacting on Black populations across the Diaspora. After all, it is through engagement that partnerships and coalitions can be developed that can help increase resources and influence systems to increase higher education participation for all.

References

- Anderson, J. D. (1988). *The education of Blacks in the South, 1860–1935*. Chapel Hill: The University of North Carolina Press.
- Dassin, J. (2013). Promoting inclusiveness in higher education in Latin America: A policy response. In: *Access to higher education: IIE networker* (pp. 20–22). Iias.columbia.edu. <http://adcexchange.org/adc-resources/>
- Fleming, C. M. (2012). The educational experiences of Caribbean people in France. In K. Freeman & E. Johnson (Eds.), *Education in the Black Diaspora: Perspectives, challenges, and prospects* (pp. 79–89). New York: Routledge Press.
- Freeman, K. (2012). Historical overview of Black populations in the Diaspora: A review of their educational challenges (pp. 3–12). In K. Freeman & E. Johnson (Eds.), *Education in the Black Diaspora: Perspectives, challenges, and prospects* (pp. 79–89). New York: Routledge Press.
- Fryer, P. (1992). *Staying power: The history of black people in Britain* (6th ed.). London: Pluto Press.
- Habel, Y. (2012). Challenging Swedish Exceptionalism?: Teaching while Black. In K. Freeman & E. Johnson (Eds.), *Education in the Black Diaspora: Perspectives, challenges, and prospects* (pp. 99–121). New York: Routledge Press.
- Johnson, E. (2012). Race, nation, and schooling in Esmeraldas, Ecuador. In K. Freeman & E. Johnson (Eds.), *Education in the Black Diaspora: Perspectives, challenges, and prospects* (pp. 27–47). New York: Routledge Press.

- Ka, F. (2012). Education and black people in Portugal. In K. Freeman & E. Johnson (Eds.), *Education in the Black Diaspora: Perspectives, challenges, and prospects* (pp. 72–78). New York: Routledge Press.
- Long, J. (2012). Education of the African Diaspora in Germany. In K. Freeman & E. Johnson (Eds.), *Education in the Black Diaspora: Perspectives, challenges, and prospects* (pp. 123–136). New York: Routledge Press.
- National resource center on advancing emergency preparedness for culturally diverse communities. (2012). www.diversitypreparedness.org
- Opitz, M., Oguntoye, K., & Schultz, D. (Eds.). (1992). *Showing our colours: Afro-German women speak out*. London: Open Letters.
- Palmer, G., & Kenway, P. (2007). *Poverty rates among ethnic groups in Great Britain* (pp. 3–40). The Homestead: New Policy Institute, Joseph Rowntree Foundation.
- Saunders, A. C. de C. M. (1982). *A social history of Black slaves and freedmen in Portugal 1441–1555*. Cambridge: Cambridge University Press.
- Segal, R. (1996). *The Black Diaspora: Five centuries of the Black experience outside Africa*. New York: Farrar, Straus & Giroux.
- United States Census. (2010). <http://www.census.gov/2010census/>
- Wright, C. (2012). Black students, schooling, and education in the United Kingdom. In K. Freeman & E. Johnson (Eds.), *Education in the Black Diaspora: Perspectives, challenges, and prospects* (pp. 66–78). New York: Routledge Press.

Chapter 5

University Social and Public Engagement: Creative Nexuses for STEM Research and International Relations

Beverly Lindsay and Eric Jason Simeon

Abstract The three hallmarks of universities encompass: teaching; research; and public engagement. While the first two receive considerable attention, university global or international relations – via university social and public engagement – are also espoused by various university executives and senior faculty. Universities allocate considerable credence in faculty evaluations to obtaining prestigious research fellowships and grants such as Fulbright Fellowships, the National Science Foundation, National Institute of Health, Research Council of Great Britain, and those of philanthropic bodies like Ford and Rockefeller Foundations. Via such awards, academicians interact in domestic and international or global arenas in research projects in social sciences and STEM. In order to explore how research, especially in Science/STEM fields – indispensable features of society that provide the bedrock physical and social infrastructures – are linked, our chapter focuses on nexuses among university social and public engagement via Science and STEM research in international venues. Hence our presentation: (1) explicates conceptual and policy frameworks of university engagement in relation to diplomacy and/or international relations; (2) explores aspects of science and diplomacy referencing some historical endeavors; (3) portrays salient illustrations of universities' and individuals' interactive endeavors based upon national grants and prestigious fellowship (for example, the field work of our current NSF grant and Fulbright Fellowship) as part of university research and public engagement that Ministries of Foreign Affairs and government officials view as forms of diplomacy; and (4) synthesizing

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findings and positing policies for enhancing mutual science diplomacy and research as features of university social and public engagement in domestic and global venues.

Keywords Higher education • International relations • Partnership • Research • STEM • University engagement

As a member of the G-20 (the 20 most industrial countries in the world), the Indonesian President, Cabinet Ministers, and university executives are keenly interested in fostering their nation's development so the citizenry can live in socioeconomic and viable communities that enhance the lives of everyone.¹ To accomplish this comprehensive goal, the nation is receptive to Fulbright Fellows, British Council Fellows, and scholars and policymakers particularly from G-7 nations (the seven most economically advanced nations) to foster research skills within universities (USAID 2014). During a 2013 distinguished Fulbright Fellowship at two Indonesian universities within the Faculty of Teacher Training and Education and Faculty of Humanities, the senior author designed seminars and led discussions to enhance the research skills of faculty and foster postgraduate options for students and professionals still pursuing PhDs. At the second largest Faculty of Education in Indonesia with 7500 education students, one institution has far-reaching effects on early childhood to graduate education and training for professionals whether teachers, counselors, and university administrators. Given these diverse audiences, the senior writer delivered an invited presentation to the Bandar Lampung metropolitan Consortium of University Executives (composed of Deans, Vice Rectors, and Rectors/Presidents from Lampung province) on "Contemporary Opportunities and Challenges to Prepare the Next Generation of Education Leaders". The salience of integrating teaching, research, and social and public engagement to provincial and national Indonesian needs were foci (Lindsay 2014).

While in Indonesia, the senior author was awarded another National Science Foundation (NSF) grant that addresses underrepresented demographic groups in graduate STEM (science, technology, engineering, and mathematics) programs. The NSF grant seeks to enhance ultimately the successful entrance and completion of underrepresented demographic groups (graduate students of South Eastern Asian, African American, and African British backgrounds, including women of such categories). When Indonesian university administrators learned of the NSF grant, they quickly invited her to team teach a research methods and English language seminar

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to faculty in the Faculty of Medicine. The rationale, especially in the Faculty of Medicine, was to foster faculty skills so faculty could engage in international research conferences in the G-20 and learn and share best practices for social and medical conditions throughout Indonesia. In short, an immediate nexus was desired between university social and public engagement, research, and STEM.

Although Indonesian officials may observe linkages between university social and public engagement and research in science/STEM, in North American and other G-7 nations overall credence is allocated to scholarship and research. In fact, in university rankings, university social and public engagement are usually not counted in university league/ranking tables and in annual faculty evaluations and promotions, except in peripheral manners (Hollister 2014, cited in MacGregor; Lindsay 2012; Watson 2011; LaMont 2009). The three hallmarks of universities encompass: teaching and learning; scholarship and research; and public service and engagement. While the first two receive considerable attention within the academy, university global or international relations – via university social and public engagement – are still espoused by various university executives and senior faculty. Moreover, universities function in a globalized world and produce research and knowledge that foster social, economic, and cultural conditions contributing to viable communities and diverse populations therein. What does this portend for the overall academy, particularly when research and scholarship are evaluated most favorably in faculty assessments?

Universities allocate considerable credence in faculty evaluations to obtaining prestigious fellowships and grants such as Fulbright Fellowships, highly competitive grants from the National Science Foundation (NSF), National Institute of Health (NIH), Research Council of Great Britain, and those of philanthropic bodies such as Ford and Rockefeller Foundations. Via such fellowships and grants, academicians interact in international and global arenas in research projects in social sciences and STEM. Moving beyond research to enhance public good should be foundations for social and public engagement thereby extending university walls in an era of globalization (Lindsay and Simeon 2014). But, in order to explore how research, especially in Science/STEM fields – indispensable features of society that provide the bedrock physical and social infrastructures – are linked, our presentation focuses on nexuses among university social and public engagement via Science and STEM research in international venues. Hence our presentation: (1) explicates conceptual and policy frameworks of university engagement in relation to diplomacy and/or international relations; (2) explores specific aspects of science and diplomacy referencing some key historical endeavors; (3) portrays salient illustrations of universities' and individuals' interactive endeavors based upon national grants and prestigious fellowship as part of university research and public engagement that Ministries of Foreign Affairs and government officials view as forms of diplomacy; and (4) synthesizing findings and positing policies for enhancing mutual science diplomacy and research as features of university social and public engagement in domestic and global venues.

5.1 Conceptual and Policy Frameworks

Frameworks associated with public service assumed some prominence during junctures of the twentieth century so that perspectives emerged concerning the roles of universities that laid the foundations for 21st university responsibilities in social and public service. Such views are witnessed as components of university mission statements and writings of renowned scholars and policy executives. The initiatives of James Conant, an eminent Harvard University president, introduced a general education curriculum to provide comprehensive perspectives to incorporate an awareness of public service roles (Conant 1945). Later Professor and Nobel Peace Laureate Ralph Bunche articulated public service roles for universities to prepare students to challenge societal conditions and address concrete problems (Bunche 1940; Lindsay 2008). Conant's and Bunche's understanding of universities and public service roles are echoed as we fast-forward to the early 2000s wherein a terminological shift changes to public engagement. Various professional associations – ranging from the Association of Public and Land Grant Universities (APLU) to the American Sociological Association (ASA) discuss the concept and need for university public engagement.

The APLU, an American national policy and research organization for public universities, emphasizes the salience of university public and social engagement through research. The President of the APLU maintained that engagement is a viable mechanism for public universities, not just those designated as land-grant universities:

By engagement, we refer to institutions that redesigned their teaching, *research*, [emphasis added] and extension and service functions to become even more sympathetically and productively involved with their communities, however, community is defined. And, community colleges give us lessons in community engagement. (McPherson 2007)

Continuing evolving technologies (for example, mobile phones, instant messages, and video conferences from individual phones) allow almost instantaneous communications with local and global communities. Immense social and economic problems interlinked throughout the world necessitate that the engaged university undertake solutions, or at least to recognize and analyze the problems.

The APUL cites Fitzgerald et al. (2011) concerning the centrality of engagement in higher education. These authors articulate the importance of the knowledge society and assert that various forms of knowledge are in communities. Integration of both the academy and communities via engaged research would benefit the publics. Associated with such writings, by Fitzgerald et al. is an APLU template with four pillars: (1) define connections; (2) align potential connections and synergies among people needed for engagement; (3) connect associations and relationships; and (4) plan the groundwork for engagement initiatives and implementation (APLU 2014).

Of particular note are the challenges and opportunities to include underrepresented demographic groups in universities and their active immersion in the design of solutions to problems affecting communities (Caplan and Ford 2014). According to the APLU President, American research universities were constructed and/or

funded with extensive Federal funds and thus have an obligation to contribute to the well-being of all societal demographic groups (McPherson 2007). Professional fields such as agriculture, communication and journalism, education, consumer science, and medicine are often envisioned as having special obligations to social and public engagement. However, there are ample opportunities for the sciences and liberal arts for engagement (Lindsay and Simeon 2014). For instance, ASA asserted that, “public sociology should transcend the academy and engage wider audiences to be inclusive and democratic” by building bridges that connect multiple communities (Lindsay 2008). An ASA article examined public engagement in England and the United States offering this concept or definition, of [going] beyond the narrow confines of academia, to lending their intellect, expertise, and scholarship to the public good – that is, to the development of public discourse and to the development of policies on issues of public concern (Brooks 2013).

Scholars and university policymakers such as Jacoby (2009), Kezar et al. (2005), Watson (2011) articulate universities’ public involvement with communities. Various international scholars and policymakers such as former United Nations Commissioner Mary Robinson posit key roles for universities and scholars to change conditions by direct engagement in endeavors contributing to democratic societies by grooming students and professionals for leadership, scholarship, and new technological development and administration (Robinson 2003).

In December 2014 an international conference, convened in South Africa, featured university faculty researchers and executives, along with senior government officials from Africa, Australia, North American, and South America. A senior convenor declared:

For those of us who see the engaged university replacing the ivory tower, the exciting challenge is to figure out how to realistically navigate those cross-pressures and to respond to the mix of driving forces – those that facilitate community work and those that cut against it. (Hollister 2014, cited in MacGregor)

This would include moving civic or public engagement from marginalization within various disciplines, maintains a senior officer from the Kettering Foundation (Barker 2014, cited in Sharma). The introduction of university fellowships, for example those initiated by the University of Pennsylvania (Warden 2014), can be tools for attracting faculty into social and public engagement, since this would be part of positive faculty evaluation tools posited by Boyer a quarter century ago (Boyer 1990).

The concepts of university social and public engagement are further interconnected to global citizenship, particularly since the late twentieth century to the present. Global citizenship or cosmopolitanism (Rizvi 2008, 2009; Appiah 2006; Banks 2008) articulates interactions within the local venues and the larger world, the cosmos. This encompasses the sharing of research, knowledge production, and dissemination to policymakers and local citizens in order to enhance social institutions such as education/universities, economies, governance, and families. The importance of science/STEM research and development is quite notable in evolving technological societies where science is juxtaposed with fundamental social institutions.

While governance is cited, diplomacy is a key feature among nations and various forms of diplomacy exist. These include *inter alia*: science diplomacy, arts and cultural diplomacy, educational diplomacy, and most often recognized – political diplomacy or foreign policy.

We turn our attention to science diplomacy. To paraphrase the American Association for Advancement of Science (AAAS), the world's largest scientific organization that seeks to advance science and related fields for the benefit of people throughout the world, science diplomacy entails strategic policies and models to enhance global collaborations among nations and social institutions to address generic challenges (Science and Diplomacy- A Quarterly Journal of the AASA 2014). This entails science engagement as “building and maintaining trusted relationship in the development of science...and the use of science as a way to contribute to foreign policy objectives” (Royal Society 2010; AAAS Mission 2014). A flip side of the coin is diplomacy for science by using “diplomacy to facilitate international scientific cooperation” (Royal Society 2010). In using the research produced by G-7 universities, nations throughout the world use STEM and Social Science research within their respective countries and communities since there are reportedly transparent methods of quantitative and qualitative research. That is, the methodologies could be replicated and adapted to local venues to address challenges contributing to the public good, as the senior author's Fulbright in Indonesia is illustrative.

Within the United States, there is no specific Federal Department or Ministry of Science as there are in various nations. STEM and Social Science Research are the overarching foci of the NSF and the NIH. Nevertheless, research is supported by a range of American Federal bodies such as the Department of Defense, Department of Agriculture, Department of Housing and Urban Development, and National Aeronautics and Space Administration (NASA). In contrast, other nations have Ministries/Departments of Science/Research and/or Technology as observed in Canada, China, Indonesia, India, South Africa, and South Korea. Ministry officers are charged with domestic and international scientific endeavors and work with the Department/Ministry of Foreign Affairs. For instance, in Great Britain collaborations throughout the European Union and with other G-20 nations on research and its benefits to the various countries are highlighted (Council for Science and Technology 2015). To reiterate, science diplomacy is evident, as we were informed by the Science and Technology Offices of the American Embassy and university executives who are part of our NSF grant.

5.2 Science and Diplomacy

According to the AAAS “the practice of science is increasingly expanding...from a national to an international scope...” in which “...scientific partnerships are based on disciplines and values that transcend politics, languages, borders, and cultures” (AAAS 2014). Social science and STEM research strides have bolstered global

conditions such as almost instantaneous communications throughout most of the world, intellectual migration without leaving an office, guiding surgery from remote venues to new physicians, and exploring space (Lindsay and Blanchett 2011). Challenging features to be addressed via research and subsequent policy development can focus on torrential floods and hurricanes in North America and the Caribbean, continuous droughts in Asian and African nations, and the Ebola crises – arenas of university and international engagement.

Science diplomacy draws from the belief that “...scientific values of rationality, transparency, and universality are the same the world over...” and “...can help underpin good governance and build trust between nations...” (Royal Society 2010). These are some of the same core beliefs that govern international affairs/diplomacy, but where they diverge, and where science can take the lead, are in the ability to provide non-ideological environments for the free exchange of ideas between people, regardless of geopolitical position. Science diplomacy seeks to strengthen the symbiosis between the interests and motivations of both the scientific and foreign policy communities through international cooperation driven by the need for the best people/research facilities/and sources of funding (Royal Society 2010).

While the term has evolved, the idea of science diplomacy is not a new concept, and has been around for decades both before-and-after World War II. In some countries, science diplomacy has been around (in some forms) for generations. In 1723, Great Britain appointed Phillip Zollman as Foreign Secretary of the Royal Society. The Royal Society has a long history of using science to rise above military conflict, as well as political and cultural difference (Royal Society 2010). In the United States, this use of science as a diplomatic tool has not been as thoroughly traced, but it has had deep impacts on modern history. In 1961 then-President John Kennedy and Prime Minister Hayato Ikeda of Japan established joint committees focused-on expansion of cultural, educational, scientific, and technological cooperation in order to strengthen the bilateral relationship (Dolan 2012; Turekian and Neureiter 2012). Through these agreements, leaders in science and education from both nations worked with the governments to identify opportunities to expand cultural/educational/scientific links through collaborations with universities, and exchanges of students/scientists. Such agreements led to the intertwining of economic, educational, and cultural linkages at all levels (Dolan 2012; Turekian and Neureiter 2012; U.S.-Japan Conference on Cultural and Educational Interchange [CULCON] 2008).

In 1972 a similar approach was undertaken by then-President Richard Nixon during his visit to China whereby he introduced specific proposals focusing-on science cooperation that included collaborations between university STEM departments. Today’s science and technology collaboration with China are some of the largest cooperative programs and productive relationships, with the United States, across multiple educational disciplines ranging from environmental issues to energy/food security (Campbell 2012; Turekian and Neureiter 2012). These examples of ‘soft power’ or ‘smart power’ (as defined by Joseph Nye [2007], of Harvard’s Kennedy School of Government) achieved the goals of science diplomacy, which are “...[investments] in the global good...[by] providing things that people and gov-

ernments want but cannot attain...[by] complementing...economic strength with... investments...[to] build the framework to tackle tough global challenges” (Nye 2007).

5.3 University Research and Social and Public Engagement

In this section, we present national, university level, and individual professional endeavors that link nations through educational, cultural, and scientific research diplomacy. The American Department of State publication, *Quadrennial Diplomacy Review* asserts: “science, engineering, technology and innovation are engines of modern society and a dominant force in globalization and international economic development” (Hormats 2012). About 50 PhD scientists and engineers (often seconded/loaned from universities and think tanks) via the AAAS Diplomacy Fellows and Jefferson Science Fellows work with career diplomats to craft policies and programs to foster and reinforce scientific and socioeconomic endeavors for innovations that should relate to public good. Upon return to universities and think tanks, the experiences of Fellows should be translated into their faculty and professional roles including dissemination to various public audiences.

Arguably, the most prestigious and well-known individual Fellowships are recipients of Fulbright Fellowships – funded by the American Department of State – and in highly unusual cases, MacArthur Fellowships. Intense open competition results in the award of Fulbrights with some professionals contending that a Fulbright to Great Britain and select European Union universities is as challenging as obtaining faculty positions at the world’s top ranked universities such as Harvard, Oxford, Cambridge, Massachusetts Institute of Technology, University College London, and University of California-Berkeley (Interview with Penny Egan 2014). MacArthurs are not awarded via open competition; rather the non-public support and/or nomination by former MacArthur Fellows and eminent university executives and senior faculty or those from the apex of the world of arts and humanities appear to be the *sin quo non* for “Genius Fellowships” as the fellowships are known (MacArthur Fellows Foundation 2014). However, few of these involve international endeavors.

Within the academy, faculty and executives view such prestigious fellowships as part of research and scholarship (Lamont 2009). However, such endeavors are part of educational, cultural, and scientific diplomacy. Ultimately, these types of diplomacy are to concentrate on the improvement of people’s lives, that is, social and public engagement. Such intellectual and international exchanges are noteworthy goals in and of themselves. The community of scholarship engages in cross-national development and sharing of knowledge from basic to applied policy research (Lindsay 1989). An interviewee, of our current NSF grant who immigrated to the United States from an Asian nation, provided lucid comments on the role of scientific information disseminated via scientific diplomacy. He voiced that his interest in science was peaked when, as a teenager, he visited American Embassy cultural centers and viewed audiovisual presentations of the moon landing, scientific expla-

nations of weather conditions, and emerging fields of computer science. Later he earned his PhD from an American research university and became a professor of computer science and interacts with local American and original home country communities.

Earlier in this chapter, we cited the senior author's Fulbright Fellowship to Indonesia where she taught in the Faculty of Medicine (where medicine is a field of science). In 2013, about 1600 Fulbright were awarded to American and international faculty and professionals in a range of fields to teach and conduct research. Earlier in her career at the Department of State, she directed a Fulbright-funded program, for American universities in cooperation with international sites, that focused on mathematics, science, and English education. Such Fulbright programs are dimensions of institutional policies that are also fundamental to American diplomacy (Lindsay 1989). Upon their return to home countries, the recipients are to engage actively in disseminating their Fulbright experiences to academic and public audiences, that is university social and public engagement (Fulbright Scholars Program 2014).

The Presidential Council of Science and Technology advises the President of the United States and executives regarding matters of domestic and international affairs pertaining to these fields. The Council's goals include *inter alia*:

- Ensuring that Federal investments in science and technology are making the greatest possible contribution to economic prosperity, public health, environmental quality, and national security; and
- Generating a core workforce of world-class expertise capable of providing policy-relevant advice, analysis, and judgment for the President and his senior staff regarding the scientific and technical aspects [of domestic and foreign policy] (Office of Science and Technology Policy 2013).

The social and public engagement of a Council member of the Presidential Council of Science and Technology advisors is exemplified at the individual level by one of America's top 50 scientists who regularly interact with various domestic and international publics. American Presidential Medal of Science Professor S. James Gates lectures to diverse public audiences in England, South Korea, and throughout the United States. Professor Gates, from the University of Maryland, presents topical components of "The Future of the Universe", "Will We Ever Understand the Universe", and "Science Reality" on British Broadcasting Corporation (BBC) television and on South Korean media outlets. In interviews at the Cheltenham Science Festival in England, Professor Gates, discussed his and colleagues roles in advising President Barack Obama. Gates declared, "For the first time in history we have a Science Fair at the White House and the President attends two to three of our meetings each year. [I felt] weak at the knees" at the opportunity to speak directly with the President about how to "plot a way to make my country [and world] have a better future" (Brice 2014).

Since the late twentieth century, the University of Leicester (Leicester, England) has worked with NASA on cooperative projects. Former American astronaut Jeff Hoffman, was seconded/loaned to the University of Leicester's Physics and

Table 5.1 Perspectives of English Women University Executives

Name	Position	University	Statements
Amberlyn	Vice Provost	University of Flowers	Establish an Academy, particularly in target schools with substantial number of free meals
			Infuse spirit of aspirationalism [sic]
Penelope	Dean of Graduate School	University of Midlands	Undertake outreach to schools through projects, e.g., an archaeology of a British king dig involves various STEM fields
			Communicate about scientific career
Molly	Dean of Faculty of Education	University of Midlands	Do outreach activities to graduate students from Caribbean nations
Manhattan	Vice Principal	University of Steeple	Understand Widening Participation: official government policy of 2000s to increase students from disadvantaged backgrounds
			Establish outreach to schools with number of free lunches

Astronomy department to be a guest lecturer. Leicester was the first British university to have an astronaut, in a teaching role, offering degree courses taught by a professional who actually worked in space (University of Leicester 2014a). Leicester also built a telescope used in NASA projects (University of Leicester 2014a, b, c). Further in July 2014, the University assembled British, European, and American scientists to dialogue and discuss innovative concepts and plans in aeronautics and space. Participants expanded topics – of research funded programs by NASA, Department of Defense, and British Research Councils – that began a quarter century earlier (University of Leicester 2014a, b, c).

The NSF awards the vast majority of its highly competitive grants to American professionals, usually at universities and/or think tanks. Such grants can have international collaborative research, as our grant does, and is an illustration of science diplomacy. Within our multi-year NSF grant that concentrates on comparing graduate STEM programs between the United States and England, the American Principal Investigator (PI) and English Co-PI interviewed a range of university executives, faculty, and students and queried them about engagements. In light of funding options, eight university field sites were visited at comprehensive public American and English universities in metropolitan areas with 500,000 or more residents. For this paper, we present qualitative highlights of Phase One/Year One as we explicate the perspectives of 17 university executives (deans, vice presidents, provosts, vice chancellors, and presidents) regarding especial STEM/science and social and public engagement or outreach for their universities *and/or* at the national levels. Nine English (five men and four women) and eight American (six men and two women) executives' succinct comments are presented in Tables 5.1, 5.2, 5.3, and 5.4.

In examining these tables, containing fictional university and individual names, we observe that several English university executives often cited “Widening Participation”. This is a national government policy, enacted in the 1990s, that

Table 5.2 Perspectives of American Women University executives

Name	Position	University	Statements
Donna	Associate Vice President	University of Municipalities	Encourage and coordinate with deans and associate deans regarding projects in the urban area, geographical region, and select nations
			Engage with other Tier 1 American university and equivalents in other nations
Paula	Provost	University of Statues	Delegate to deans

Table 5.3 Perspectives of English University male executives

Name	Position	University	Statements
Paul	President	University of Flowers	Comprehend and initiate Widening Participation, e.g.: emphasis on fair access on socioeconomic background, <i>per se</i> not on race
			Posit that African American PhD students could be a good source, for example, for British underrepresented student. Show them that people can succeed
			Help schools raise their attainment since statistics indicate many people (without high grades) are from Afro Caribbean backgrounds
Jack	Principal	University of Steeple	Learn from American universities with different purposes, e.g., junior colleges/ liberal arts colleges/research universities
Raoul	Dean of Graduate School	University of Flowers	Present to House of Lords on STEM
Adrian	Pro-Vice Chancellor and Dean of Science and Engineering	University of Midlands	Focus on widening participation goals and reports that one of the leaders of Civic university in widening participation
			Participate in University project on <i>Athena Swan</i> – focuses on increasing gender participation in Science Department
Liam	Vice Chancellor	University of Cove	Need to learn from USA on philanthropic endeavors and outreach
			Focus on social class for outreach activities

provided some funding for universities to engage in outreach to communities and schools. An overarching aim is to help foster the entrance and completion of secondary schools and to matriculate at universities and complete undergraduate degrees. In the 2014–2015 academic year, Widening Participation funds commenced focus on graduate education at select universities such as the University College London (UCL) and University of London (UCL 2015). We observe that most of the English executives discussed widening participation and/or outreach to schools and communities. Of special note were the three university vice chancel-

Table 5.4 Perspectives of American Men University Executives

Name	Position	University	Statements
Dr. K.	Vice Provost for Graduate Education	University of Edifice	Establish annual Research Fellows Symposium emerging from Martin Luther King Day, and academy and community invited
Edward	Dean of Education	University of Edifice	Engagement as part of Social justice component of university Continue involvement by Dean and faculty with various university and city communities to enhance education and prepare teachers for public and charter schools Import of Social Justice roles in this huge city
Bobby Glenn	Former Dean of Education	University of Edifice	Engagement as part of Social justice component of university Help students and larger urban community see value of STEM PhD and PhD in STEM education in relation to community challenges Comprehend pressures from city and community leaders to produce science, math, and special education teachers Articulate agreements with 2 year colleges Designed master’s program in another nation that prepares education professionals for various local venues
Ron	Vice President for Research	University of Municipalities	Undertake STEM health research on underrepresented groups in USA and Asian nations Prepare students to engage in research related endeavors in hospital and others sites with diverse populations
Elroy	Vice President for Community Outreach	University of Municipalities	Outreach to community as substantial part of professional portfolio Facilitate access to underrepresented graduate and undergraduate students via Town – Gown relationships Interact with African American and Latino ministers and political leaders Import of Social Justice with university leaders and public officials
Dr. B	Dean of Sciences	University of Statues	Constant need for public engagement since University is located relatively near the state capital and in metropolitan area with over one million residents Understand that community, city, and state leaders and elected officials impact university Location lends itself to continuous interactions with international faculty and researchers who visit campus Engagement is good for all

lors/principals (equivalent to the American president) who stated that lessons could be learned from the United States on engagement, outreach, and the presence of successful African American students as some examples that could encourage English underrepresented groups to attend universities and post graduate (graduate) education.

The American executives articulated the importance of community and city engagement to encompass interactions with elected city and state officials, consortiums with 2-year city colleges and other local universities, university fairs for local residents and potential students, and outreach to Historically Black Colleges and Universities (HBCUs). An immediate former dean emphasized “Pressures from the city to produce science, math, and special education teachers”. Thus the university president, senior executives, and faculty would need to be attuned to community needs, via social and public engagement, in designing academic degrees. Statements regarding social justice, as a foundation for social and political engagement, infused their American comments. Nevertheless, it was sometimes difficult to have equal credence allocated to social and public engagement in faculty evaluations – unless there were notable grants or sound refereed publications on their engagement enterprises. Further the former University of Edifice Dean discussed outreach through the offering of a master’s degree program to professionals in another nation that can also be viewed as part of the university’s international relations and global outreach that ultimately contributes to reciprocal public good between academic universities and their respective cities.

5.4 Synthesizing Findings and Illuminating Policies

As we began this presentation, we explicated university and federal/national organizations concerns with social and public engagement and the critical role that scholars and professionals could engage in beyond regional and national borders to global conditions. Simultaneously, we acknowledged that while teaching, scholarship/research, and engagement are central to university missions, it is recognized that in comprehensive doctoral universities, research is first among equals in faculty evaluations and university rankings. Concurrently, university executives and public policymakers emphasize global and international relations, especially since what occurs in one country can have far reaching effects in various geopolitical nations. In essence, it appears that a confluence or nexus does or should exist between social and public engagement roles – via research – and various forms of diplomacy. In this case, the emphasis was on science diplomacy.

Initially, we raised the question of what social and public engagement could mean for faculty evaluations and universities and we now reiterate and then posit policy steps. First, communication on the linkages between college life and social and public engagement should be clearly incorporated in faculty evaluations. This could be accomplished in university fellowships and both the encouragement and support for external fellowships and grants. Second, often faculty are critical of

what are viewed as negative features of globalization (Stromquist 2009; Rhodes and Szelenyi 2011) and international relations. Comprehending that positive features are present and that diplomacy occurs at the individual and institutional levels. Third, it is exceedingly vital for university presidents, provosts, and deans to impart authentic credence to social and public engagement endeavors – as our NSF grant portrays from university senior administrators – that do not provide direct university fiscal resources, especially for administrative overhead. The senior author communicated (at a non-NSF research site) with a dean who did not encourage faculty to pursue Fulbright Fellowships because the funds support individual researchers. At that same university, the provost voiced to the senior author that Fulbright Fellowships; especially in emerging nations are “academic Peace Corp” rather than genuine scholarly endeavors. Instead, the template offered by APLU (2014) recommends defining connections, creating synergies, and implementing social and public engagement to encompass collegial and diplomatic relations as blueprints in domestic and global settings. Hence Fulbrights that fund individual scholarly endeavors in Indonesia, Brazil, Kenya, or South Korea are just as crucial as those funded by NSF (that does provide university administrative overhead) grants for England, as the authors’ current NSF grant that includes research queries on social and public engagement.

Finally, cognizance and concrete policies should incorporate social and public engagement in domestic and international settings – that are linked to American Department of State, Federal funding agencies, the national Research Councils of countries, and Ministries of Science – that enable confluence with various forms of basic, applied, and policy research that contribute to the public good. As cited on page 10, universities and governments have shown that the use of ‘soft power’ (Nye 2004, 2007), or authentic cooperative relationships amongst nations and people, can work to transform existing paradigms to take-on worldwide challenges. The scientific community works beyond national boundaries on global problems that spark the public’s common interest and imagination (for example, outer space), making it well-placed to support emerging forms of diplomacy that require nontraditional alliances of not only nations, but additional sectors such as universities.

President Nelson Mandela declared that universities are charged with the responsibility of leading themselves and continents into the new world of the twenty-first century so innovative policies can contribute to a cherished rebirth of academic excellence (Mandela 2006). Harvard University President Faust echoes Mandela’s perspectives as she maintains, “Learning and understanding [make] contributions beyond what can be measured in dollars and cents, are aspects of [university] citizenship, [moving] beyond one’s particular selves to a wider contribution to the world” (Faust 2013, November 13). An indispensable step is via a sound nexus among research and social and public engagement.

References

- American Association for the Advancement of Science. (2014). *About AAAS*. Retrieved from: <http://www.aaas.org/about-aaas>
- Appiah, K. A. (2006). *Cosmopolitanism: Ethics in a world of strangers*. New York: W.W. Norton & Co.
- Association of Public and Land-grant Universities. (2014). *Transformative regional engagement*. Retrieved from: <https://sites.google.com/site/trepartneringtoolkit/>
- Banks, J. A. (2008). Diversity, group identity, and citizenship in a global age. *Educational Researcher*, 37(3), 129–139.
- Barker, D., as cited in Sharma, Y. (2014, December 19). Including the community in community-based research. *University World News*. Issues No. 348. Retrieved from: <http://www.university-worldnews.com/article.php?story=20141216163632132&query=Including+the+community+i+n+community-based+research>
- Boyer, E. (1990). *Scholarship reconsidered: Priorities of the professoriate*. Princeton: The Carnegie Foundation for the Advancement of Teaching.
- Brice, J. (2014, June 9). Cheltenham science festival, review: Jim Gates: Race, science and advising the president. *Gloucestershire Echo*. Retrieved from: www.gloucestershireecho.co.uk/CHELTENHAM-SCIENCE-FESTIVAL-review-Jim-Gates-Race/story-21206531-detail/story.html
- Brooks, A. (2013, November). Public engagement: Differences between the U.S. and the UK. *Footnotes- A Publication of the American Sociological Association*, 41(7). www.asanet.org/footnotes/nov13/intl_persp_1113.html#sthash.MNmr0m87.dpuf
- Bunche, R. J. (1940). The role of the university in the political orientation of Negro youth. *Journal of Negro Education*, 9(4), 571–579.
- Campbell, C. (2012, June). A consortium model for science engagement: Lessons from the U.S.-DPRK experience. *Science & Diplomacy*, 1(2). www.sciencediplomacy.org/article/2012/consortium-model-for-science-engagement
- Caplan, P. J., & Ford, J. C. (2014). The voices of diversity: What students of diverse races/ethnicities and both sexes tell us about their college experiences and their perceptions about their institutions progress toward diversity. *APORIA Journal*, 6(3), 30–69.
- Conant, J. (Ed.). (1945). *General education in a free society: Report of the Harvard committee*. Cambridge, MA: Harvard University Press.
- Council for Science and Technology. (2015). *Government Office for Science*. Retrieved From: <https://www.gov.uk/government/organisations/council-for-science-and-technology>
- Dolan, B. M. (2012, December). Science and technology agreements as tools for science diplomacy: A U.S. case study. *Science & Diplomacy*, 1(4). www.sciencediplomacy.org/article/2012/science-and-technology-agreements-tools-for-science-diplomacy
- Egan, P. [Interviewee] with Lindsay, B., & Simeon, E. [Interviewer]. (2014). *The work of the U.S./UK Fulbright Commission* [Interview transcript]. Conducted on June 11, 2014. London.
- Faust, D. G. (2013, November 19). *Harvard president sounds alarm over sequester*. Retrieved from: www.politico.com/story/2013/11/harvard-president-drew-faust-sequester-100087.html
- Fitzgerald, H. E., Bruns, K., Sonka, S. T., Furco, A., & Swanso, L. (2011). The centrality of engagement in higher education. *Journal of Higher Education Outreach and Engagement*, 16(3), 7–27.
- Fulbright Scholars Program. (2014). *About us*. Retrieved on December 14, 2014, from www.sciencediplomacy.org/about
- Hollister, R. M., as cited in MacGregor, K. (2014, December 19). Rapid growth in university engagement worldwide. *University World News*, Issues No. 348. Retrieved from: www.universityworldnews.com/article.php?story=20141219073302259&query=Rapid+growth+in+university+engagement+worldwide

- Hormats, R. D. (2012, March). Science diplomacy and twenty-first century statecraft. *Science & Diplomacy*, 1(1). www.sciencediplomacy.org/perspective/2012/science-diplomacy-and-twenty-first-century-statecraft
- Jacoby, B., & Associates. (2009). *Civic engagement in higher education: Concepts and practices*. San Francisco: Jossey-Bass.
- Kezar, A. J., Chambers, T. C., Burkhardt, J. C., & Associates. (2005). *Higher education for the public good: Emerging voices from a national movement*. San Francisco: Jossey-Bass.
- Lamont, M. (2009). *How professors think: Inside the curious world of academic judgment*. Cambridge, MA: Harvard University Press.
- Lindsay, B. (1989). Integrating international education and public diplomacy: Creative partnerships or ingenious propaganda? *Comparative Education Review*, 33(4), 423–436.
- Lindsay, B. (2008). *Ralph Johnson Bunche: Public intellectual and Nobel peace laureate*. Champaign: University of Illinois Press.
- Lindsay, B. (2012). Articulating domestic and global university descriptors and indices of excellence. *Comparative Education*, 48(3), 385–399.
- Lindsay, B. (2014). *Fulbright report to Council on International Exchange of Scholars*. Washington, DC: CIES.
- Lindsay, B., & Blanchett, W. J. (2011). *Universities and global diversity: Preparing educators for tomorrow*. Milton Park: Routledge.
- Lindsay, B., & Simeon, E. J. (2014). Relationships between global citizenship and university rankings. *Research in Comparative and International Education*, 9(2), 243.
- MacArthur Fellows Foundation. (2014). *MacArthur fellows program*. Retrieved on December 20, 2014, from www.macfound.org/programs/fellows
- Mandela, N. (2006). *An indispensable link for national and social development: Comments for Nelson Mandela University*. Speech delivered on May 28, 2006. Retrieved on December 20, 2014, from <http://Africanhistoryabout.com/odmandelanelson>
- McPherson, P. (2007). *Speech from APLU '07: Notes on engagement*. Delivered on October 7, 2007. Retrieved on December 30, 2014, from www.aplu.org/NetCommunity/Document.Doc?id=403
- Nye, J. (2004). *Soft power: The means to success in world politics*. New York: Public Affairs/Perseus Books.
- Nye, J. (2007, November 29). Smart power. *Washington Post*. Retrieved from www.huffingtonpost.com/joseph-nye/smart-power_b_74725.html
- Office of Science and Technology Policy. (2013). *About OSTP*. Retrieved from: www.whitehouse.gov/administration/eop/ostp/about/
- Rhodes, R. A., & Szelenyi, K. (2011). *Global citizenship and the university: Advancing social life and relations in an interdependent world*. Stanford: Stanford University Press.
- Rizvi, F. (2008). Epistemic virtues and cosmopolitan learning. *Australian Educational Researcher*, 35(1), 17–35.
- Rizvi, F. (2009). Towards cosmopolitan learning. *Discourse*, 30, 253–268.
- Robinson, M. (2003). *Human rights and ethical globalization*. A speech at Stanford University in February, 2003. Retrieved from: http://tannerlectures.utah.edu/_documents/a-to-z/r/robinson_2003.pdf
- Royal Society. (2010). *New frontiers in science diplomacy: Navigating the changing balance of power*. London: The Royal Society.
- Science and Diplomacy- A Quarterly Journal of the American Association for the Advancement of Science. (2014). *About science diplomacy*. Retrieved from: www.sciencediplomacy.org/about
- Stromquist, N. (2009). Theorizing global. Citizenship: discourses, challenges, & implications for education. *Inter-American Journal of Education for Democracy*, 2(1), 6–29.
- Turekian, V. C., & Neureiter, N. P. (2012, March). Science and diplomacy: The past as prologue. *Science & Diplomacy*, 1(1). Retrieved from: www.sciencediplomacy.org/editorial/2012/science-and-diplomacy

- U.S.-Japan Conference on Cultural and Educational Interchange [CULCON]. (2008). *Re-defining the Japan-US relationship*. Retrieved from: <http://culcon.jusfc.gov/wp-content/uploads/2012/01/The-CULCON-Report1.pdf>
- University College London. (2015). *Widening participation: Postgraduate activities*. Retrieved from: www.ucl.ac.uk/medicalschooll/postgraduate/acme/wideningparticipation
- University of Leicester. (2014a). *NASA astronaut to lecture at the University of Leicester*. Retrieved from: www2.le.ac.uk/departments/physics/news/news_items/nasa-astronaut-to-lecture-at-the-university-of-leicester
- University of Leicester. (2014b). *2014 NASA/ESA conference on Adaptive Hardware and Systems (AHS 2014)*. Retrieved from: www2.le.ac.uk/news/events/2014/july/2014-nasa-esa-conference-on-adaptive-hardware-and-systems-ahs-2014
- University of Leicester. (2014c). *British scientists chosen for key role in NASA swift satellite*. Retrieved from: www.le.ac.uk/press/press/swift.html
- USAID. (2014). *Global engagement*. Retrieved from: <http://www.usaid.gov/indonesia/global-engagement>
- Warden, R. (2014, December 19). Rewarding academics for engagement gains ground. *University World News*. Issues No. 348. Retrieved from: www.universityworldnews.com/article.php?story=20141218094832579
- Watson, D. (2011). *The engaged university: International perspectives on civic engagement*. New York: Routledge.

Chapter 6

Investing in MOOCs: “Frenemy” Risk and Information Quality

Maureen W. McClure

Abstract This chapter examines the proliferation of online courses in today’s society, mainly massive open online courses (*MOOCs*). *MOOCs* have become a ubiquitous feature of the knowledge society. What do Massive Open Online Courses (MOOCs) do? They can range from a few to hundreds of thousands of students. Open means free or low cost to all. It is argued that open access is essential to reaching those with limited means, and may be MOOCs most powerful contribution to those with limited means. Online means freely accessible on the Internet. Courses can be standard (time delimited) or student self-paced. Courses come in two basic models: cooperative and expert. In addition, currently most courses are in English, thus presenting global access problems, but courses are being developed in other languages, such as Spanish, Chinese, French and Arabic.

Keywords Globalization • Global access • Higher education • The internet • Learning • Massive open online courses (*MOOCs*) • Online courses

6.1 Introduction

The proliferation of online courses in today’s society, mainly massive open online courses (MOOCs), has become a ubiquitous feature of the knowledge society. What do Massive Open Online Courses (MOOCs) do? They can range from a few to hundreds of thousands of students. Open means free or low cost to all. Open can also mean intellectual property rights agreements that promote widespread sharing (e.g., Creative Commons). Open access is essential to reaching those with limited means, and may be MOOCs most powerful contribution to those with limited means (Vander Ark 2012). Online means freely accessible on the Internet. Courses can be standard (time delimited) or student self paced. Courses come in two basic models:

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cooperative and expert. In addition, currently most courses are in English, thus presenting global access problems, but courses are being developed in other languages, such as Spanish, Chinese, French and Arabic (Gibney 2013; Walters 2014).

The initial cooperative model, called cMOOCs, evolved out of self-directed distance education and online programs to support those in rural and isolated areas (Siemens 2010a, b). They were developed primarily by Canadian education and technology teams following a traditional agricultural cooperative extension model. University experts worked with local and global communities to share knowledge and solve problems (McClure 2013c, 2014c). The cooperative extension model begins with expertise and builds on a “connectivist” theory. Based on the power of diversity, it assumed under certain conditions, peer learning networks could be effective (Downes 2008, 2010; McClure 2013b). Assessments tended to be formative, not summative.

cMOOC networks tended to be self-organizing and temporary, constructed by individuals, not institutions (Cormier 2010; Siemens 2010a, b). In 2008 David Cormier of the University of Prince Edward Island began calling the work MOOCs (Massive Open Online Courses 2015). As the model developed, Canadians partnered with other countries and UNESCO to improve global access, for example, for small island nations (UNESCO 2012).

The second MOOC model is the most visible today. Called xMOOCs, they took a very different approach. Developed primarily in the US, this “best and brightest” model focused on opening access globally to experts using traditional course shapes. These courses were often extensions of courses faculty members at elite universities were already teaching. These faculty members were willing to share “freely” their knowledge and skills beyond their own campuses (Anderson 2012). Often a series of short video lectures allowed students to cover a concept and then review it as needed, even adjusting the video speed if needed. Pause, rewind, and speed up, keep trying until mastery (Agarwal 2014).

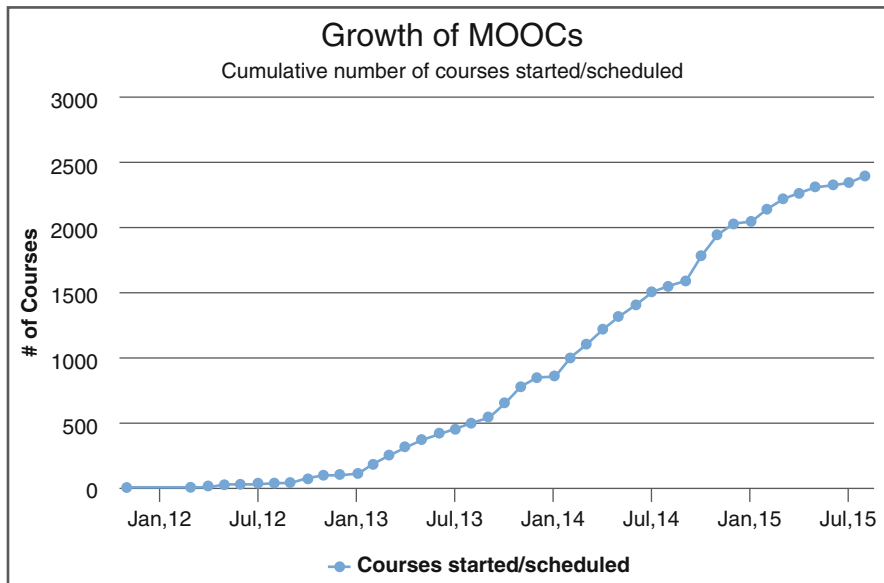
This feature alone was useful for students whose first language was not the one taught (Walters 2014). These courses often had built-in quizzes for students to test their knowledge, taking them as often as need. Engaged discussions with diverse users globally were possible. Peer assessments and grading was used. Students interested in verified certificates of completion could sign up for secure identification options (e.g., Coursera’s Signature Track, edX’s verified certificates of achievement) for a relatively low cost, with options for formal assessments (Coursera 2015; edX 2015).

Both the cooperative extension and the best and brightest models have much to offer HEIs. From a production point of view, they can be a relatively low cost way to raise both domestic and international visibility. From a consumption point of view, they can be useful not only as stand-alone courses, but also as contributors to local online and blended (hybrid) courses.

xMOOCs designed closed, centralized platforms to ensure radical convenience. Two of the earliest MOOC provider networks were Stanford startups: Coursera and Udacity. Drawing on the Silicon Valley model, they grew externally, using external venture capital funding. A third network, edX, was formed out of a partnership with Harvard and MIT, using internal venture capital (McClure 2013a). Later, edX, together with Google, veered away from the closed platform model typical in many university Learning Management Systems (LMS), like Blackboard. Instead they turned their code in open source, making it freely available to other providers with some intellectual property rights caveats (Open edX 2014; Walters 2014). Early interest in it was from countries seeking to create MOOCs in national and regional languages (Gibney 2013; Walters 2014).

In addition, there are MOOC networks that cater to individuals, not institutions. These include Udemy and P2P (Oremus 2013; P2P 2015). Finally in the US, running in the background, are private sector online universities such as the University of Phoenix, Corinthian Colleges and others. They are an important part of the overall online education movement, usually selling online degrees. They did well during the recession, but ran into serious financial distress recently, with the Corinthian Colleges closing in California, stranding about 16,000 students in the largest higher education collapse in US history (Staiti and Lorin 2015).

Despite problems in the US private sector, the number of globally available MOOCs grew rapidly from a few in 2012 to almost 2500 in early 2015, serving roughly 20 million registered users (ICEF 2015).



400+ UNIVERSITIES. 2400+ COURSES. 16-18 MILLION STUDENTS.

(ICEF 2015)

6.2 MOOCs Are Not Monolithic

MOOCs are neither rigid nor static in their design. Indeed, they are the “shapeshifters” of the online movement, changing their basic forms rapidly in fundamental ways (Keohane 2013; McClure 2015a; Pappano 2012). For example, what started out for xMOOCs as a standard, single path course model of multiple videos, embedded quizzes, and peer assessments, has been moving toward greater personalization of multiple paths to standardized achievement (McClure 2014a). Many cMOOCs were already designed toward personalized, self-directed learning that encouraged creative responses resulting in personalized ends.

In a short time, both cMOOCs and xMOOCs, have morphed into multiple formats as local institutions redesign them for their own purposes. Some of these morphed forms are listed below. They support the notion that MOOCs are not monoliths and should not be treated as such for institutional planning purposes, especially when so many options are available.

- **BOOCs** were big but not massive open online courses, aiming for about 500. They were more interactive, using peer endorsements within and across groups for assessments rather than peer grading (Kolowich 2012)
- **DOCCs** (distributed open collaborative courses) were designed and taught blended learning courses simultaneously by multiple faculty members from multiple institutions. Faculty members simultaneously taught face-to-face courses at their home institutions and co-taught online (FemTechNet 2014; Jaschik 2013).
- **GROOCs** (GRoup open online courses) – teams worked across networks rather than students studying individually (Mintzberg et al. 2014)
- **LOOCs** were little open online courses. They were kept small for better control because they are intended for used for some level of credit or certification (Kolowich 2012)
- **MOODs** (either massive open online discussions OR massive open online data-“data” use (Wellman 2010))
- **POOCs** (personalized open online courses), Harvard and MIT’s edX and Carnegie Mellon’s Open Learning Institute (OLI), for example, researched online adaptive learning in MOOCs in order to better personalize it
- **ROOCs** (re-mixable open online course OR regional open online course) – Re-mixable means support OERs or open (free, yours to use) educational resources – essential for global reach and access by those with limited resources OR ROOCs can mean regional interests, regional design.
- **SMOCs** (synchronous massive online course), taught online for those willing to pay tuition costs
- **SPOCs** (small private) courses were designed for on-campus use in hybrid or blended learning courses. May be made available outside for free or fee (Dominique 2013; Kolowich 2012; University of Rochester 2012)
- **Also LAPs** – (local access points). This UK-based model restructured MOOCs from totally online courses to hybrids, where students met face-to-face regularly in cities around the world. This made it possible for teaching faculty members

and assistants to hold online office hours city by city. LAPs built on students’ “meetups” organized informally in multiple cities since the inception of xMOOCs (Dominique 2013).

6.3 MOOC Investments Face Structural Risk

Why invest in MOOCs? It is an important question because institutional policymakers need to decide how MOOCs may or may not fit into their mission and strategic management. And they need to do so based on little, often biased, or somewhat unrelated information. MOOC investment decisions need to consider at least two problems: structural uncertainty and poor quality information. Both drive up decision costs.

6.3.1 “Frenemy” Risk

Structural uncertainty is built into MOOC investment and cannot be removed. Reduction of risk in one area only increases it in another. No clear resolution is possible. Institutional decision makers have to adjust its uncertainties to their local contexts. MOOCs are evolving rapidly in highly innovative environments whose shapes are both hopeful and inherently unstable.

The greatest uncertainty in the rise of MOOCs and their derivatives is the unknown scope and scale of domestic and global demand. New “big data” research is beginning to better define current use, but future domestic and global demand is still difficult to anticipate. For example, earlier work discovered most early US MOOC users were young, male, already had college degrees and were interested in career advancements in technology. More recently, a newer study revealed that 39 % of edX users were teachers and, like the UK’s FutureLearn, increasing numbers were older women (Ho et al. 2015; Massive study on MOOCs 2015).

The inherent complexities of HEIs and MOOCs and other areas of online education make their relationships wicked. This means they are both too complex to predict and too important to ignore (Camillus 2008). Wicked problems, among other things are (1) difficult to define, (2) unstable, (3) socially complex, and (4) have unforeseen consequences (Australian Public Service Commission 2007; Churchman 1967; Rittel and Webber 1973). They can’t be solved, but they can be mitigated (Australian Public Service Commission 2007; Camillus 2008).

Under these conditions, any business model for MOOCs will tend to be fragile for two reasons. First, fragility is created by time locations. Startup costs can be high, while the return may be longer term. Second, and more risky, the Internet has lowered the costs of new entrants into three foundational HEI structures: (1) content, (2) delivery and (3) accreditation. This means that both opportunities and competition are increasing in each of these three areas simultaneously. This is radically

new. Each threatens traditional HEIs' cultural monopolies. Because HEIs are not monolithic, these new entrants will impact them differently, whether MOOCs are (1) ignored (Anderson 2013), (2) produced, (3) used or (4) competed against.

MOOCs can be expensive to produce; yet they are given away for free or low cost. An adequate return requires high volume demand. They could serve as loss leaders for lower cost global recruitment strategies, but global access is also likely to set off international competition within and across HEIs and their networks. What could possibly go wrong?

What then are some of the structural uncertainties built into the “frenemy” relationships between MOOCs and some HEIs? A frenemy is someone who is simultaneously both a friend and a competitor. This metaphor may be a good fit for many MOOC/HEI relationships. Growth in one area may lead to unanticipated loss in another.

It is important to remember that MOOCs are only one, highly visible aspect of the Internet's online invasion of HEIs through the distance education movement. Both wholly online and hybrid or blended use has grown at an extraordinarily rapid pace. Commentaries on institutional investments have run from wholehearted acceptance to a lack of acceptance (Anderson 2013; Azevedo 2012; Carr 2013; Kolowich 2013b). To what extent is there room for a wide range of strategic responses?

Decision makers charged with institutional access and sustainability can consider both structural risk and information quality as they balance both concern for a lack of access and inequality for the poor, domestically and internationally, against needs for institutional sustainability. What will this landscape look like in 5 years, and what will have happened to these two foundational concerns? edX CEO, Anat Agarwal steers toward synergistic relationships between HEIs and MOOCs, that can change both in healthy ways (Walters 2014).

6.3.2 Frenemy Risk #1: Online Learning

Right now a massive number, but still relatively narrow range of students, many of them who already have bachelor's degrees, build knowledge and skills by logging on from anywhere on a more flexible schedule, playing lectures repeatedly, immediately taking and retaking quizzes, having discussions with an extraordinary range of students, and receiving certificates they can add to their CVs. On one hand, the generosity of the MOOC designers should not be overlooked. They wanted to help those who couldn't afford to attend their institutions. And they have found success in many countries. On the other hand, are there drawbacks? To what extent will MOOCs simultaneously serve both as complements (base expansion) and substitutes (cost reduction) for teaching faculties in HEIs that are not producers (Anderson 2013; Azevedo 2012; Carr 2013; Kolowich 2013b)? Bringing attention to the “downside” risk side of technological innovations, David Noble (1998) said provocatively:

In Kurt Vonnegut’s classic novel *Player Piano* the ace machinist Rudy Hertz is flattered by the automation engineers who tell him his genius will be immortalized. They buy him a beer. They capture his skills on tape. Then they fire him. Today faculty are falling for the same tired line, that their brilliance will be broadcast online to millions. Perhaps, but without their further participation. Some skeptical faculty insist that what they do cannot possibly be automated, and they are right. But it will be automated anyway, whatever the loss in educational quality. Because education, again, is not what all this is about; it’s about making money (para. 23).

But on a third hand, HEIs do not exist in a “permanent present” where most courses, once created, can continue to exist without updates, especially those courses by high value research faculty members. Most HEI managers have only superficial connections with students when it comes to planning and investments. When it comes to technology, however, generational differences in its use, matter (Cutler 1970). Administrations may not be adequately informed about trends in the generational use of online education, as research is only now developing. HEIs, looking to produce or license MOOCs need to avoid leaping too quickly into the fray with inappropriate business models, like Columbia University’s Fathom project and the University of California’s Digital Campus (Derausseau 2015; Fathom.com 2015).

6.3.3 *Frenemy Risk #2: Unstable Demand*

Online education use is unstable not only because of the newness, but also because both MOOCs and users are shapeshifters (McClure 2015a, b). Shapeshifters shatter expectations because the forms anticipated (e.g., human) are not the forms (e.g., animal) that appear. This shapeshifting is interacting with HEIs’ fundamental forms (McClure 2015a, b). Three years ago they were marginal to HEI strategy. Yet, 3 years later Arizona State and the University of Florida each offered a freshman year of online classes. The argument is student debt reduction. Whether or not these ventures are successful, MOOCs moved quickly from the margins of academic discussions about higher education reforms, to become embedded in three foundational strategic issues: content, delivery and accreditation in at least two major universities.

The instability of MOOCs makes predicting return on investment (ROI) or cost effectiveness difficult. For example, market saturation is a potential problem for some, as enrollments have more recently declined, then stabilized (Ho et al. 2015; Massive study on MOOCs 2015). Beyond word of mouth, MOOCs’ globally marketing can be a problem. So is new market development. For example, Dan Wagner and The University of Pennsylvania have been particularly concerned with Internet access in Africa, working on improving access through mobile technology. At the same time, concerns were also raised about how best to also improve access to poor neighborhoods next door in Philadelphia (McClure 2014b; MOOCs for Development Conference Report 2014; Edward Rock, personal communication, April 2014).

Also, demand is stacked within courses, as MOOCs offer different levels of service for the same course. It may take a while to better understand the shifting demand for MOOCs because of new forms of accreditation: certificates, digital badges or nanodegrees (Crotty 2013; Porter 2014). Here content, delivery and accreditation, linked together, pose both opportunities and threats to institutions and hope for off-campus students (Kolowich 2013a).

In the spring of 2015, the LinkedIn blogs were of discussions about how to represent MOOCs on CVs, and how employers are responding to them. From an ad hoc point of view, this ground appears to be shifting slowly toward greater employer acceptance. Given the high costs of most HEIs (Brady 2013), to what extent might MOOCs' certificates and digital badges nibble at the traditional monopoly power of accreditation through degrees? Or how might these innovations provide better access to HEI-based professional development and enrichment for those who can't afford campus courses? The jury is still out. Success is possible and so far, is limited (Carr 2013).

6.3.4 Frenemy Risk #3: National Support for MOOCs

In the US HEIs are increasingly driven by a market orientation that frames higher education as a sequence of transactions intended to acquire measurable knowledge and skills. Democratic, public support for higher education for a national experience for the next generation has receded in favor of privatized, neoliberal views of individual investments and labor market return. Receding are public, generational identity issues pertaining to national security, citizenship and civic responsibilities, as well as public health and economic development. These market approaches create individual HEIs flexibility in individual institutional planning.

In contrast, strong national support for domestic MOOCs in countries in Europe and Asia creates a shared vision for a national presence and identity in the larger world (Walters 2014). One example of national presence can be found in the UK, the public Open University's MOOC provider, FutureLearn, for example, has developed a sequence of short courses for domestic and international students related to study in the UK. This treats UK HEIs and their international networks as a source of national pride and income worth support. Many of FutureLearn's courses draw on UK HEIs and national cultural institutions (British Museum, British National Library), adapting BBC's expertise in social networking (Gibney 2013; Paar 2012).

It remains to be seen how these different financing approaches will work out. Even with large endowments, individual institutions in the US and their networks may have difficulty competing against countries whose governments work together with their private sectors to invest in education that helps promote their next generation's access to national development, citizenship and security.

6.3.5 Frenemy Risk #4: Competitive Teaching Faculty Internationally

US student access to strong international faculty globally can improve their global competence, hopefully motivating more parochial US students to study abroad. At the same time MOOCs could reduce some domestic HEIs revenues as domestic students begin to request transfer credits for their international MOOC courses.

6.3.6 Frenemy Risk #5: High Volume, Low Cost Strategy

MOOCs have a possibility of new and significant revenue streams based on a high volume low cost strategy. It is beginning to work where students sign up for low cost accreditation through verified certificates of completion. What HEIs have the funds to invest in upfront MOOC production, and then wait for demand to build?

Many HEIs are financially unstable and may leap too quickly into MOOCs. Many are buffeted by rapidly evolving trends in higher education, such as shifting demographics, public reductions in revenue streams, technology innovations and internationalization. For most, as tuition costs rise, this major source of revenue only covers a fraction of the real costs. A second revenue source, research grants and contracts also have costs that are rarely fully covered. Third, the ascendancy of neoliberal politics also has reduced government support. Public support has turned against many HEIs because of their rapidly rising costs. Where can they turn?

Little research exists related to MOOCs, HEIs and revenue growth and sustainability. Business strategy is still evolving as institutional decision makers struggle with two different general frames. MOOCs can be seen either as *investments*, direct sources of new revenue, or as *expenditures* indirectly related to support for other activities such as brand, recruitment, remediation, operations, professional development or alumni enrichment. In the former case higher levels of investment and risk may be tolerated over longer periods of time. In the latter case, lower levels of funding and budget risk may translate into shorter term cost containment.

6.3.7 Frenemy Risk #6: Well-Endowed Partners

As some HEIs turn toward business partnerships, both benefits and risks are likely. For a traditional monopoly controlling degrees, new entrants from both public and private sectors may be both welcome and threatening. Who are these new entrants?

One source of new entrants is the MOOC providers themselves. They control network access, offering beneficial partnerships, and possible competition as global networks. A second source is employers like AT&T seeking top talent from Georgia Tech’s experimental low cost online degree program (Karsenti 2013). Google

faculty teach Udacity courses. Reducing HEI middle-man costs could be attractive to those taking employer taught courses. A third potential competitive source is publishing corporations with access to well-designed online materials (Howard 2012). In the US, a fourth potential source of new entrants is testing companies chronically pushing for national standards and external assessments. Any of these sources could be tough competitors because of their access to capital. In the UK, MOOC platform provider FutureLearn has creatively partnered with Pearson VUE, which has a global network of secure exam centers (Paar 2015).

6.4 Framing Problems Can Lead to Poor Information Quality

Information quality can be poor when it is distorted or out of focus. Poor framing can raise decisions about costs. Both social media and academic research have distorted information quality, for different reasons.

Two of the biggest problems HEI policymakers face are relatively high information and transactions costs. Information costs refer to the time and effort needed to acquire adequate information, especially information necessary to the decision making process. MOOC information costs are high because the media tends to frame MOOCs as monolithic and therefore generic; whereas HEI policymakers need to develop institutionally unique strategy (Hardesty 2013; Mehaffy 2011). Neither MOOCs nor HEIs are monolithic, and generic referrals to them can be problematic to institutional policymakers.

Transaction costs are the costs of doing business. They can be high for MOOCs because of their rapid rates of simultaneous change and new entrants into areas critical to HEI sustainability. Given the high degree of complexity needed for diverse HEIs' decision making, policymakers need to carefully consider three critical institutional policy issues related to MOOCs as move forward: (1) content control, including curricula, pedagogy, assessment and intellectual property rights, (2) delivery control, including platform design, ownership and financing, and access for those who need educational opportunities, and (3) accreditation control of assessments, verification, security, and new forms such as digital badges and certificates. HEI strategists have to pay close attention to how they relate to each other. These could be high stakes games.

Social media raise information costs in three ways. First, some of them frame an "insider's view" of MOOCs, treating them generically. Second, others assume MOOCs can be framed in terms of known risks and outcomes. They, however, can't provide predictable solutions to solvable problems when critical problems have yet to be adequately articulated, let alone solved. Third, still confuse means and ends when framing HEIs.

Finally, even high quality academic research may raise information and transactions costs because it is traditionally deliberative and slow in production, and its research topics may be out of focus for those closely related to institutional sustainability.

6.4.1 Social Media Framing: The Insider

How can there be insiders when there is no clearly defined inside? The siren call of an insider’s point of view, so important in the technology industry, has spilled over to reporting on MOOCs. In addition, reporters and bloggers need to be able to attract readers in highly competitive conditions. This can lead to shrill voices hawking concerns and certainty, telling you that you can’t live without what they know. In this attention-grabbing world, it makes sense to frame MOOCs as though they were monoliths falling in and out of fashion, creating a need for an insider’s point of view to report on in-ness and out-ness. Unfortunately, this is in no small part a media construction, not factual reporting.

MOOCs’ global users are generationally, linguistically and culturally diverse. Competition is fragmenting them by national provider, as well as by the growing diversity in delivery, content, pedagogy, languages and cultures, assessments and accreditation. So how could one trade on inside information when no one is quite sure where the inside is?

Insiders can transpose theories from other industries to frame expectations from generic models (e.g., Christensen’s disruptive theories of business and Gartner’s Hype Cycles™ from the technology industry) (Christensen and Eyring 2011; Mehaffy 2011; Tapson 2013). More than insiders’ views, local decision makers need to know their target audiences, their resources and their capacities for endurance. Care needs to be taken to separate the media’s generic social constructions of frames, agendas and claims of stakeholders, and not overly conflate them with local conditions.

6.4.2 Social Media Framing: Solutions Where None Exist

How can solutions be imposed on problems that can’t be solved?

MOOCs are often framed as predictable solutions to solvable problems. Worse, MOOCs have been touted as salvation for almost intractable dilemmas. Below are a few of the solutions that have been ascribed to MOOCs (McClure 2015a, b).

- Significant solutions for the high costs of education
- In 10 years, network providers will replace individual institutions, greatly concentrating their number – In 50 years only ten providers (Leckhart and Cheshire 2012)
- Low cost access to extend some HEIs’ global reach (recruitment, placement, networking for teaching and research) (McClure 2013a)
- Sources of domestic and global media visibility for HEIs (McClure 2013a)
- Cooperative outreach to the remote and isolated (McClure 2013a)
- Democratic access to elite educations (with and without accreditation) (McClure 2013b)

- Access to global, cosmopolitan discussions (Dolan 2014)
- Global access to Open Educational Resources (OER) and concomitant intellectual property rights issues (Peralta 2012).
- Sources of remedial education for college entrants (Kolowich 2013a)
- Sources of enrichment for high school students in resource poor environments
- Sources of on-campus blended learning (McClure 2013a)
- New methods for building alumni relations through professional development and enrichment (McClure 2013a)
- New opportunities for cross-university teaching (Jaschik 2013)
- New sources of revenue for struggling HEIs through employer partnerships, generating degrees, certificates and digital badges (McClure 2014b)
- Low cost access to elite education for poor communities both domestically and in developing countries (especially with mobile use) (McClure 2014b)

Many HEI managers were trained to frame problems in solvable terms. This is fine, but a second class of problems can too often be ignored, even though they are also central to many HEIs' missions. These wicked problems are too complex to be considered solvable, but are too important to be ignored. These problems have structural risk and are the frenemies discussed earlier. Wicked problems can emerge from structural uncertainty such as competing stakeholder interests. Interdisciplinary fields such as climate change, humanitarian assistance, poverty reduction or generational succession are structurally unstable because policies that support one area may diminish another. Their multi-disciplinary bases, for example, may lead to irreconcilable conflicts in interests, as in urban planning's ownership or resource control issues (Keiner and Schmid 2006). Despite conflicting interests and frameworks, institutions must move forward. Wicked problems can't be solved in traditional ways, but their consequences can be reduced. Rather than solutions, balances can be helpful. The HEI/MOOC relationships are fundamentally wicked.

6.4.3 Social Media Framing: HEIs Are Not Just "Means"

How can we solve problems when we don't even know the right questions?

Wicked problems are important because they are related to a third source of poor quality information, the confusion of means and ends. Increasingly HEIs are portrayed as means, expensive middlemen that stand between students and employers. This is a serious problem because it's simplistic frame overlooks wicked problems. Market-oriented interests assume that college courses are primarily transactional, i.e., based on teaching and learning the same measurable knowledge and skills. The problem with this is it discounts the central social roles that HEIs play, especially in developed societies. HEIs are not only transactional means; they are also fundamentally ends in themselves, transforming generations and societies with ways of experiencing the world (Conway and Lee 2014).

First, they not only help prepare the next generation for jobs and careers, they also create spaces for younger people to develop identities connected to their larger social responsibilities as citizens and colleagues. Increasing numbers of young people both on and off campus need access to high quality campus experiences or high quality MOOCs that can challenge them to learn how to engage in social responsibility and citizenship.

Second, they are living repositories and active preservers of a society’s histories, languages and cultures. And as preservers of critical analysis, they ask questions and are sources of dissent that lead to innovation. MOOCs have shared that through interest in enrichment. The public sector (Australian Public Service Commission 2007), and HEIs in particular, are well suited to address some of the most complex, wicked problems in societies. Their convening power allows them to bring together multiple disparate points of view and encourage them to engage in research and productive dialogue around issues such as urban planning, climate change, poverty and inequality, war and peace, the law, medicine, and generational succession. Wickedness is integral to the cosmopolitan traditions of liberal arts. This space is rare in any society and cannot be lost without serious consequences.

6.4.4 Academic Traditions: Don’t Fit, Too Slow?

Academic traditions favor the cautious and deliberative, and they may not be able to keep up with the rapidity of developments. In addition, much of the high quality research on MOOCs that has taken place has been understandably focused on student achievement. This type of academic research can’t speak directly to the strategic problems of institutional sustainability or inequality reduction. Big data can make certain contributions, but deeper understandings of local contexts are also critical (Howlett 2009). For example, where access is limited, openness rather than scale may be the more important MOOC contribution (Vander Ark 2012).

6.5 Whither MOOCs?

Moving forward, additional “high context” research is needed to support MOOC investment decisions. Many HEI decision makers currently may not be aware of MOOCs’ structural uncertainty problems or of their low quality information. Many were trained as modernists during a less complicated time to frame management through a lens of “one best way” thinking, generic models and algorithmic methods. They may not be well prepared to balance decision making in the wicked, postmodern worlds of chronic uncertainty and multiple, conflicting points of view (Connery and Hasan 2014). Many may also not realize the speed of MOOC innovations across strategic areas of interest: (1) content, (2) delivery and (3) accreditation. These areas

are foundational to the institutional sustainability needed to support of a broad range of HEIs. Further investments in MOOCs may be necessary, even though neither the risks nor the outcomes are easily measured.

Fewer managers are trained in liberal arts traditions used to wicked problems, multiple conflicted points of view, personal agency and an emphasis in the quality of experience. Institutional strategists may need to move beyond today's simpler, algorithmic methods of management toward more complex, comparative and personalized perspectives based on local conditions. Otherwise, while generic thinking about MOOCs may appear organized, it overlooks the dilemmas they create:

Universities need to be prepared to embrace fast-moving technological change while recognizing that benefit from such investment may be short-lived. A major risk for universities is that they become strategically led by what digital technology can do, rather than requiring digital technology to enhance their educational and research missions within a defined academic strategy. (Mapstone et al. 2014)

The urgency of online education issues related to HEIs and their sustainability cannot be underestimated. Market perspectives make a terrifically important one trick pony, e.g., managing HEIs and MOOCs generically, as though they were exclusively focused on employment. Today's institutions, however, need unique assessments of unique conditions (Connery and Hasan 2014). Generic thinking frames HEIs as (1) domestic, (2) generic, (3) degree monopolists, and (4) needing only the monopolistic perspectives of markets. But the Internet is global. And HEIs were never generic. And new entrants in the private and public sectors internationally are challenging HEI monopolies with certificates and digital badges.

International partners and competitors are challenging basic US market assumptions of HIEs exclusively as labor market means. Other countries frame HEIs as central to societal ends such as generational succession that are essential to addressing the most difficult of society's problems. These include human and property rights, generational succession and national and global development. If "super wicked" problems are not confronted, they can lead not to jobs, but to tragedies, including wars and man-made natural disasters (Hardin 1968; Levin et al. 2012).

In the US and elsewhere, many institutional administrators are still unaware of the value that comparative education researchers can offer HEI management in the face of globalization. In the postmodern twenty-first century, high-risk demands created by structural uncertainty and poor information quality require institutional decision makers to abandon their generic and monopolistic thinking from the last century. They need to learn to better recognize, acknowledge, map and compare the multiple perspectives that comprise their local institutions' unique places in the world of internationalizing higher education. Their own children are counting on them.

Notes

1. Udacity has been a primary example of this, partnering with Google, AT&T and other corporations looking for top talent.
2. These arguments make the case for adaption argue that MOOCs will shift quickly from domination of HEI's low value to high value assets.

References

- Agarwal, A. (2014). Six advantages of online education. *Online Education in Canada* (blog). Retrieved from: <http://www.onlineeducationincanada.com/online-study-tips/anant-agarwal-describes-six-advantages-online-education/>
- Anderson, N. (2012, November 3). Elite education for the masses. *The Washington Post*. Retrieved from: http://www.washingtonpost.com/local/education/elite-education-for-the-masses/2012/11/03/c2ac8144-121b-11e2-ba83-a7a396e6b2a7_story.html
- Anderson, N. (2013, May 1). As Amherst rejects online lecture model, educators ponder what’s to gain from trend. *The Washington Post*, Education section. Retrieved from: http://articles.washingtonpost.com/2013-05-01/local/38945447_1_moocs-edx-coursera
- Australian Public Service Commission. (2007). *Tackling wicked problems: A public policy perspective*. Retrieved from: <http://www.apsc.gov.au/publications-and-media/archive/publications-archive/tackling-wicked-problems>
- Azevedo, A. (2012). In colleges’ rush toward MOOC’s, faculty are not always in the conversation. *Chronicle of Higher Education*, 59, A22–A22. Retrieved from: <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=82115297&site=ehost-live&scope=site>
- Brady, H. E. (2013). Let’s not railroad American higher education! *PS: Political Science & Politics*, 46(1), 94–101. doi:10.1017/S104909651200159X.
- Camillus, J. C. (2008). Strategy as a wicked problem. *Harvard Business Review*, 86, 98–106.
- Carr, D. (2013, July 18). San Jose State University suspends Udacity MOOC project. *InformationWeek*. Retrieved from: <http://www.informationweek.com/software/san-jose-state-u-suspends-udacity-mooc-project/d/d-id/1110807?>
- Christensen, C., & Eyring, H. J. (2011). *The innovative university*. San Francisco: Jossey-Bass.
- Churchman, C. W. (1967). Wicked problems. *Management Science*, 14(4), B141–B142.
- Connery, A. M., & Hasan, H. (2014). Towards a modified framework for informer emancipation in complex contexts. *Proceedings of informing science & IT education conference (InSITE)* (pp. 91–102). Retrieved from <http://Proceedings.InformingScience.org/InSITE2014/InSITE14p091102Connery0646.pdf>
- Conway, M. R., & Lee, S. S. (2014, September 2). In first major speech, Khurana details vision. *The Harvard Crimson*. Retrieved from <http://www.thecrimson.com/article/2014/9/2/khurana-speech-convocation-transformative/>
- Cormier, D. (2010, December 8). *MOOC definition (video)*. Retrieved from http://www.youtube.com/watch?feature=player_embedded&v=eW3gMGqCZQc#
- Coursera. (2015). *Earn a verified certificate with signature track*. Retrieved from <https://www.coursera.org/signature/>
- Crotty, J. M. (2013, February 25). Badges lend gravitas to free education revolution. *Forbes*. Retrieved from <http://www.samachar.com/badges-lend-gravitas-to-free-education-revolution-nc1rL6geacd.html>
- Cutler, N. E. (1970). Generational succession as a source of foreign policy attitudes: A cohort analysis of American opinion. *Journal of Peace Research*, 7(1), 33–47.
- Derousseau, R. (2015). California’s multi-million dollar online education flop is another blow for MOOCs. *The Hechinger Report*. Retrieved from <http://hechingerreport.org/californias-multi-million-dollar-online-education-flop-is-another-blow-for-moocs/>
- Dolan, V. L. (2014). Massive online obsessive compulsion: What are they saying out there about the latest phenomenon in higher education? *The International Review of Research in Open and Distance Learning*, 15(2). Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/1553/2849>
- Dominique, A. (2013, December 13). MOOCs, SPOCs, and LAPs: The evolving world of education. *Young Voices. Huffington Post UK* (blog). Retrieved from http://www.huffingtonpost.co.uk/anton-dominique/moocs-spocs-and-laps-the-_b_4492046.html?utm_hp_ref=uk-universities-education&ir=UK+Universities+%26+Education

- Downes, S. (2008). MOOC and Mookies: The connectivism and connective knowledge online course. Seminar presentation delivered to eFest Auckland, New Zealand by Elluminate. *Stephen's Web Presentations*. Retrieved from www.downes.ca/presentation/197
- Downes, S. (2010, June 15). *The role of open educational resources in personal learning* (video). Retrieved from <http://www.youtube.com/watch?v=AQCvj6m4obM&feature=relmfu>
- edX. (2015). Verified certificates of achievement. Retrieved from <https://www.edx.org/verified-certificate>
- Fathom.com. (2015). *Wikipedia*. Retrieved May 1, 2015, from <http://en.wikipedia.org/wiki/Fathom.com>
- FemTechNet. (2014). DOCC 2013: Dialogues on feminism and technology. Retrieved from <http://femtechnet.news.school.edu/docc2013/>
- Gibney, E. (2013). FutureLearn plans to stand out from MOOC crowd. *Times Higher Education*. Retrieved from <http://www.timeshighereducation.co.uk/news/futurelearn-plans-to-stand-out--from-mooc-crowd/2007482.article>
- Hardesty, L. (2013, March 6). Higher-ed leaders meet to discuss future of online education. *Online Learning and the Future of Residential Education*. Retrieved from <http://newsoffice.mit.edu/2013/edx-summit-0306>
- Hardin, G. (1968). Tragedy of the commons. *Science*, 162(3859), 1243–1248.
- Ho, A. D., Chuang, I., Reich, J., Coleman, C., Whitehill, J., Northcutt, C., Williams, J. J., Hansen, J., Lopez, G., & Petersen, R. (2015). *HarvardX and MITx: Two years of open online courses* (HarvardX Working Paper No. 10). doi:10.2139/ssrn.2586847.
- Howard, J. (2012, September 17). Publishers see online mega-courses as opportunity to sell textbooks. *The Chronicle of Higher Education*. Retrieved from <http://chronicle.com/article/Can-MOOCs-Help-Sell/134446/>
- Howlett, M. (2009). Policy analytical capacity and evidence-based policy-making: Lessons from Canada. *Canadian Public Administration*, 52(2), 153–175. doi:10.1111/j.1754-7121.2009.00070_1.x.
- ICEF. (2015, January 19). Retrieved from: <http://monitor.icef.com/2015/01/global-review-maps-state-moocs-2014/>
- Jaschik, S. (2013, August 19). Feminist anti-MOOC. *Inside Higher Education*. Retrieved from <http://www.insidehighered.com/news/2013/08/19/feminist-professors-create-alternative-moocs#ixzz38WAhMtoF>
- Karsenti, T. (2013). The MOOC: What the research says. *International Journal of Technologies in Higher Education*, 10(2), 23–37. Retrieved from http://www.ritpu.org/IMG/pdf/RITPU_v10_n02_23.pdf
- Keiner, M., & Schmid, W. A. (2006). On the way to gigapolises: Can global urban development become sustainable? *WIT Transactions on Ecology and the Environment*, 93, 169–178. doi:10.2495/SC060161.
- Keohane, N. O. (2013). Higher education in the twenty-first century: Innovation, adaptation, preservation. *PS: Political Science & Politics*, 46(01), 102–105. doi:10.1017/S1049096512001734.
- Kolowich, S. (2012, September 6). MOOCs' little brother. *Inside Higher Education* (blog). Retrieved from <http://www.insidehighered.com/news/2012/09/06/u-maine-campus-experiments-small-scale-high-touch-open-courses#ixzz25idkYRCl>
- Kolowich, S. (2013a, February 7). American Council on education recommends 5 MOOCs for credit. *The Chronicle of Higher Education*. Retrieved from.
- Kolowich, S. (2013b, April 29). Why some colleges are saying no to MOOC deals, at least for now. *The Chronicle of Higher Education*. Retrieved from http://www.fulbright.de/fileadmin/files/tousa/stipendien/ees/Educational_Experts_Seminar_2013/Why_Some_Colleges_Are_Saying_No_to_MOOCs_at_Least_for_Now_-_Technology_-_The_Chronicle_of_Higher_Education.pdf
- Leckhart, S., & Cheshire. (2012, April 16). University just got flipped: How online video is opening up knowledge to the world. *Wired.Co.UK*. Retrieved from <http://www.wired.co.uk/magazine/archive/2012/05/features/university-just-got-flipped/page/2>

- Levin, K., Cashore, B., Bernstein, S., & Auld, G. (2012). Overcoming the tragedy of super wicked problems: Constraining our future selves to ameliorate global climate change. *Policy Sciences*, 45, 123–152. doi:10.1007/s11077-012-9151-0.
- Mapstone, S., Buttendijk, S., & Wiberg, E. (2014, April). *Online learning at research-intensive universities*. Advice Paper, No. 16, League of European Research Universities. Retrieved from http://www.leru.org/files/publications/LERU_AP16_Online_Learning_at_RIUs_final.pdf
- Massive Open Online Course. (2015). *Wikipedia*. Retrieved May 3, 2015, from: http://en.wikipedia.org/wiki/Massive_open_online_course
- Massive study on MOOCs. (2015, April 1). *Harvardgazette*. Retrieved from <http://news.harvard.edu/gazette/story/2015/04/massive-study-on-moocs/>
- McClure, M. W. (2013a, March). *MOOCs: Efficiency frameworks: Blurring boundaries*. Paper presented at the annual meeting of the Comparative and International Education Society (CIES), New Orleans.
- McClure, M. W. (2013b, October). MOOCs: Hype or hope: Conflicting narratives in higher education policy, in Higher education reforms: Looking back- looking forward: *Proceedings from the 10th international workshop on higher education reform* (pp. 159–171). University of Ljubljana, Slovenia. Retrieved from http://www.pef.uni-lj.si/uploads/media/HER_proceedings_2013.pdf
- McClure, M. W. (2013c). MOOCs: Hope and hype in viral technologies and policies. *Excellence in Higher Education*, 4(1), 7–24. doi:10.5195/ehe.2013.83.
- McClure, M. W. (2014a, March). Whither MOOCs?: Beyond the fog. Organized and presented at the 2nd annual symposium on MOOCs. *Comparative and International Education Society (CIES)*. Toronto.
- McClure, M. W. (2014b, April). Who owns development?: MOOCs in a wicked world. Presentation at the *MOOCs for development conference*. University of Pennsylvania.
- McClure, M. W. (2014c). MOOCs, wicked problems and the spirit of the liberal arts. *Journal of General Education*, 63(4), 269–286. doi:10.1353/jge.2014.0024.
- McClure, M. W. (2015a, March). Presentation at the 3rd annual symposium on MOOCs *Comparative and International Educational Society (CIES)*. Washington, DC.
- McClure, M. W. (2015b, August). MOOCs and HEIs: The ambiguous relationships continue. *Proceedings from the 11th International Workshop on Higher Education Reform*. St. John’s: Newfoundland and Labrador.
- Mehaffy, G. L. (2011). The innovative university. *Public Purpose*, no. Fall. Retrieved from <http://www.unf.edu/uploadedFiles/aa/acadaffairs/provost/Newsletter/Review-of-Innovative-University.pdf>
- Mintzberg, H., Leslie Breitner, L., Nowak, L., & Carlos Rued, C. (2014). Social learning for social impact. McGill University GROOC (Group MOOC). Retrieved from: <http://www.mcgill.ca/desautels/programs/grooc>
- MOOCs for Development Conference Report. (2014, April). Retrieved from http://www.gse.upenn.edu/pdf/moocs4d/conference_report.pdf
- Noble, D. F. (1998). The automation of higher education. *First Monday*, 3, 1–8. doi:10.5210/fm.v3i1.569.
- Open edX. (2014). EdX terms of service. *Website*. Retrieved from <https://www.edx.org/edx-terms-service>
- Oremus, W. (2013, June 24). Get rich quick: Become a teacher. *Slate*. Retrieved from http://www.slate.com/articles/technology/technology/2013/06/online_learning_startup_udemy_rookie_teachers_make_big_money_teaching_online.html
- P2PU (Peer-2-Peer University) website. (2015). Retrieved from <http://info.p2pu.org/about/>
- Paar, C. (2012, December 14). Open University launches British MOOC platform to rival US providers. *Times Higher Education*. Retrieved from <http://www.timeshighereducation.co.uk/422137.article>
- Paar, C. (2015, May 9). Mooc test agreement between FutureLearn and Pearson. *Times Higher Education*. Retrieved from <http://www.timeshighereducation.co.uk/news/mooc-test-agreement-between-futurelearn-and-pearson/2020145.article>

- Pappano, L. (2012, November 2). The year of the MOOC. *The New York Times*. Retrieved from <http://www.nytimes.com/2012/11/04/education/edlife/massive-open-online-courses-are--multiplying-at-a-rapid-pace.html?pagewanted=all>
- Peralta, C. (2012, November 1). Online courses raise intellectual property concerns. *Stanford Daily*. Retrieved from <http://www.stanforddaily.com/2012/11/01/intellectual-property-concerns-for-moocs-persist/>
- Porter, E. (2014, June 17). A smart way to skip college in pursuit of a job: Udacity-AT&T 'nano-degree' offers an entry-level approach to college. *New York Times*. Retrieved from <http://www.nytimes.com/2014/06/18/business/economy/udacity-att-nanodegree-offers-an-entry-level-approach-to-college.html>
- Rittel, H. W. J., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, 4, 155–169. doi:10.1007/BF01405730.
- Siemens, G. (2010a, March 6). *TedX/NY* (video). Retrieved from: <http://www.youtube.com/watch?v=4BH-uLO6ovI&feature=related>
- Siemens, G. (2010b, June 15). Connectivism: Socializing open learning (video). Retrieved from http://www.youtube.com/watch?v=rqL_lsogeNU&feature=youtu.be
- Staiti, C., & Lorin, J. (2015, April 26). Corinthian shuts all campuses, ending college for 16,000. *Bloomberg Business*. Retrieved from <http://www.bloomberg.com/news/articles/2015-04-26/corinthian-colleges-ends-all-classes-at-last-campuses-and-closes>
- Tapson, J. (2013, September 13). "MOOCs and the gartner hype cycle: A very slow tsunami." *PandoDaily* (blog). Retrieved from <http://pando.com/2013/09/13/moocs-and-the-gartner-hype-cycle-a-very-slow-tsunami/>
- UNESCO. (2012). MobiMOOC: Using a mobile MOOC to increase educational quality for a diversity of learners through dialogue and ubiquity. *UNESCO:ICT in Education*. Retrieved June 23, 2013, from <http://www.unesco.org/new/en/unesco/themes/icts/m4ed/unesco-mobile-learning-week/speakers/ingene-ignatia-de-waard/>
- University of Rochester. (2012, November 15). University of Rochester joins nine other universities to explore for-credit online education. Retrieved from <http://www.rochester.edu/news/show.php?id=4942>
- Vander Ark, T. (2012, September 25). Sir John Daniel: Openness rather than scale is MOOC contribution. *Education Week*. (blog). Retrieved from http://blogs.edweek.org/edweek/on_innovation/2012/12/sir_john_daniel_openness_rather_than_scale_is_mooc_contribution.html
- Walters, H. (2014). 'We need to change everything on campus.' *Ideas.Ted.Com*. Retrieved from <http://ideas.ted.com/2014/01/27/we-need-to-change-everything-on-campus-anant-agarwal-of-edx-on-moocs-mit-and-new-models-of-higher-education/>
- Wellman, J. V. (2010). Improving data to tackle the higher education 'cost disease'. *Planning for Higher Education*, 38(3), 25–37.

Part II
Higher Education Reforms:
An International Perspective

Chapter 7

Expansion and Curtailing in Finnish Higher Education Between 1950–2015: The Impact of Economy, Politics and Regional Policy on the Higher Education Network

Toni Saarivirta and Riitta Jaatinen

Abstract The Finnish higher education system and network have experienced a great deal of changes from the second half of the twentieth century until today. This chapter discusses both the expansion and the curtailing of the university network in Finland, offering several explanations and reasons for such changes during the past 60 years. As background knowledge, an outline of Finnish society is described from three points of view, i.e. changes in national economy, party politics, and education system. The expansion and curtailing processes are explained as consequences of political decision-making, controlled top-down governance of educational policy, regional policy of a sparsely populated country and the economic situation of Finland. This chapter focuses on the characteristics of the expansion of higher education and its links to regional policy in Finland. The main purpose is to study whether the regional policy involved in the Finnish higher education expansion was successful or not and what the Finnish experience can teach others. The relevance of this paper for other countries is its emphasis on the education as the most important factor in the competitiveness of the country. Also, the present day and future prospects of higher education are discussed, since Finnish society is facing structural changes in the near future, which, as a consequence, will have an impact on the higher education network. The chapter argues that in spite of the ups and downs of Finnish society and many changes in its education system, investing in education at all levels has been worthwhile and profitable.

Keywords Higher education • Education policy • Regional policy • University network • University system

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7.1 Introduction

The huge expansion of the higher education system has been a very common feature in several developed countries, Finland included, after the Second World War. Why did it happen almost directly after the war, what are the underlying reasons? In many countries, the paths of the expansion seem to be more or less similar. Previous studies on the topic (Smelser 1973; Bowman and Anderson 1974; Abrahamsson 1986; Cerych and Sabatier 1986; Goldin 2001; Lin 2003; Wang 2003) suggest the following key explanations. First, the age groups in the countries had grown to a new, higher level, increasing the individual demand for education. Second, the countries had reached better economic statuses, i.e. families had more money and the chance to provide their children with longer and better education. Third, a more educated labour force was needed because of the increasing need for new skills in production processes. This chapter focuses on the characteristics of the expansion of higher education and its links to regional policy in Finland. The main purpose is to study whether the regional policy involved in the Finnish higher education expansion was successful or not and what the Finnish experience can teach others. The relevance of this paper for other countries is its emphasis on the education as the most important factor in the competitiveness of the country.

The expansion of Finnish higher education has been quite similar to that in other countries. Besides the key explanations presented above, however, the expansion of higher education in Finland has its own unique features. Regional policy, in particular, played a huge role in the process in the 1960s. This chapter will first concentrate on the expansion of Finnish higher education between the 1960s and 1970s. It will expose the backgrounds of these tendencies in the light of the policy decisions that were made and discuss the impact of the controlled ‘top down’ governance of the higher education policy. This chapter will also discuss what happened after the expansion, when the economic and political situation had changed, i.e. describe the Finnish higher education system today and the possible prospects for the future.

The chapter is organised as follows. After the introduction, the second part concentrates on the expansion of higher education in general. Several explanations for mass higher education are presented and analysed from today’s perspective. The third part briefly outlines the economy and politics of Finland and gives a description of the Finnish higher education system. The fourth part describes the expansion of Finnish higher education in the 1960s and 1970s and the regional policy in Finland at that time. The background to the establishment of ‘new universities’, founded between 1960 and 1970, is discussed and the regional policy climate considered. The fifth part concentrates on the curtailing of higher education and changes in the ownership of the universities and discusses the future visions of the universities. The sixth part concludes the chapter. The chapter continues the argumentation and updates the facts and discussion first published in the article *Finnish Higher Education Expansion and Regional Policy* by T. Saarivirta (2010) in *Higher Education Quarterly*.

7.2 Expanding Higher Education After the Second World War

The twentieth century is often called the century of ‘human capital’. The origin of ‘human capital theory’ can be traced to Schultz and the Chicago School of Economics, and to Jacob Mincer, as well. The main argument is that wages are based on persons’ productivity and productivity increases when there is more human capital, for example, more education (Mincer 1958; Schultz 1961). Later on, the idea of human capital was adopted, especially by the Organisation for Economic Co-operation and Development (OECD). OECD is an acknowledged authority when developing the connections of education and human capital with economic development. Education and knowledge are considered to be the main drivers of economic growth.

The period after the Second World War was a time for rapid expansion in the field of education in several countries. As early as the eighteenth century, Adam Smith had presented the idea that better skilled workers are more productive than less skilled workers but the idea took concrete shape just before the twentieth century. It was recognised that skills could grow through formal education (Vincent-Lancrin 2007), although it was also recognised that skills could develop in other circumstances, as well. General consensus in the literature of the economics of education states that better-educated people can absorb new information better than the less-educated, and they can also use it more efficiently. Within this literature, the efficiency argument is also the basis for the differences in wages (Nelson and Phelps 1966; Schultz 1987; Cohen and Levinthal 1990; Psacharopoulos 2000; Goldin 2001). The base for mass higher education was created by the expansion of post-secondary education. One of the reasons behind this was that, because of the increasing need for new skills in production processes, better educated people were needed. Up until the 1910s, the leading developed countries were on a similar level in post-secondary education, but soon the Americans began to expand their post-secondary education. As Goldin (2001) suggested, at that point American high schools became more practical and less classical; a more practical approach was needed in education to serve the economy better. High schools were also publicly funded and locally managed; this, on the other hand, meant that high schools were accessible to ordinary people. The building of the mass higher education movement was based on this premise.

Neoclassical economics argues that, when demand increases, it also puts pressure on the need for supply. This is one of the reasons for the expansion of higher education availability: in OECD countries the demand for higher education had grown to a new level, not only because of the people who wanted more education but also because more educated people were needed. The period after the Second World War was also a time of rapid economic growth and investments other than for martial purposes were possible to make. All these explanations mentioned here are likely to have knit together to influence higher education expansion as a cohesive whole (Hjerpe and Vartia 1997).

The main part of the higher education expansion took place at the regional level. After the Second World War, many countries (especially the OECD countries) began to concentrate on reducing disparities between the regions through interventions made by the nation states. Goddard and Puukka (2008) argued that, before the Second World War, the purpose of universities was mainly to serve the whole nation and not regions. In this mindset, the regional location of the university in the country did not matter. In the 1950–1960s, regional policies in many countries endeavoured to balance the disparities between the regions. According to Goddard and Puukka (2008) and OECD (2008a), the expansion of higher education in Europe mainly occurred outside the old higher education institutions and universities. This was because old higher education institutions were seen as inflexible and not able to convert as dynamic actors in the regions. After the 1970s, the big boom of regional policies and reducing regional disparities in higher education began to alter towards more small- and medium-sized enterprises. Similar developmental trends have also taken place in Finnish society. In the 1990s, the trend leaned towards learning regions and economies with the emphasis on supply. Nowadays, however, it has been widely acknowledged that skills, knowledge and innovations develop in a mutual, ‘systemic relationship’ together with higher education institutions and their surroundings (Niosi et al. 1993; Lundvall 1998; Metcalfe and Ramlogan 2006).

There are alternative explanations for expanding higher education other than the need for more educated people in production processes. The most popular arguments against the human capital theory and the importance of education for economic growth are the so-called signalling and screening theories (Bowles and Gintis 1974; Collins 1977, 1975; Johnes 1993; Arabsheibani and Rees 1998; Wolf 2002). To put it briefly, these theories see education as an elitist game; people using education as an instrument to gain, for example, better job positions. A direct link between education and economic growth is not seen. Degrees are considered as some sort of signal for employers as to which people are worth employing without knowing anything about their productivity. Signal and screening theories also suggest that education is a filter for people and only the elite can pass through this filter. To test this, Layard and Psacharopoulos (1974) used previous studies and empirical data on wages and people’s education to see if employers only wanted degrees. They found no evidence; the wage development of the people, who had education but not a complete degree, was comparable to that of the people with a degree. Layard and Psacharopoulos therefore concluded that people learn and their skills get better during education and this is the reason why they are better paid.

7.3 An Outline of the Finnish Economy, Politics and Education System

7.3.1 Economy

Finland is a Nordic country with a population of 5.4 million. In 2010, 28 % of the population had higher/tertiary education (university or polytechnics¹), 39 % had general or vocational upper secondary education and the rest of the population lower secondary education (Tilastokeskus 2012). The situation, however, has not been like this for long; between the 1950s and 1960s less than 10 % of the population over 15 years of age had a university-level degree. Today, Finland is a highly industrialised Western economy with a GDP/capita of €34,718 (in the year 2007). Almost 70 % of Finland's GDP is generated by the service sector, while the remaining share is driven mostly by industry, (The World Competitiveness Scoreboard 2004; Kiander 2004a; Factbook 2005; World Economic Forum 2005; Statistics Finland 2005a, c).

Industrial development began later in Finland than in other European countries. By the end of the 1950s, manufacturing and processing replaced agriculture and forestry as the leading sectors of the economy. By the late 1970s, the service sector surpassed industry in total production and employment figures but industry remained the main export earner, allowing the country to pay for imports of energy and raw materials. Moreover, by the early 1980s, as a result of the 1970s oil crises and the increased competition in world markets for manufactured goods, Finnish industry faced serious challenges. Many argued that to maintain industrial exports, a shift from heavy industry to high-technology products was necessary. Firms faced tougher foreign competition and industry needed to renovate existing plants and sharply increase investments in high-technology production lines. In a relatively short span, the development of high-technology industries, less dependent on transportation and energy supplies, facilitated efforts to decentralise the industry (Hannula et al. 1985; Hjerpe and Pihkala 1989; Hjerpe and Vartia 1997; Ollikainen 1997).

A huge recession with a high rate of unemployment hit Finland early in the 1990s. The reasons behind this economic depression were a combination of events (Honkapohja and Koskela 1999; Kiander 2004a, b). In the late 1980s, the Bank of Finland deregulated financial markets. This allowed commercial banks to borrow from abroad, without recourse to the Central Bank, and expand domestic credit creation. Finnish banks, therefore, fuelled a consumer boom that provided a significant impulse for fast economic growth of the later part of that decade but eventually undermined the economy. In 1991, however, the collapse of the Soviet Union brought Finland's weakening trade with its giant neighbour to a grinding halt. The

¹ Many of the polytechnics call themselves Universities of Applied Sciences (UAS) today. However, the Ministry of Education and Culture uses the term 'polytechnic' instead of 'UAS' on its official website.

widespread recession of the Western countries and the rise of German interest rates after unification put further strain on the Finnish economy. Initially, the Bank of Finland tried to defend the par value of the (then fixed) exchange rate through currency purchases and increasing interest rates (which peaked at 16 %). These measures were followed by devaluation and, eventually, a decision was taken to float the currency. The high indebtedness incurred by the economy in the boom years resulted, however, in a series of bankruptcies in the banking and other sectors and it was only through the intervention of the Bank of Finland that many banks were saved at the taxpayers' expense. Although Finland's economy regained strength, the effects of the recession were damaging. It was not until the end of the 1990s that the Finnish economy managed to recover to the levels of the pre-crisis period, though much had changed in its production and trade structure (Virtual Finland 2005; Statistics Finland 2005b).

7.3.2 Politics

Finland has been a democratic Western country ever since it gained its independence in 1917. Immediately after the Second World War, the Finnish government was Leftist for a while and the influence of the Soviet Union was extensive. Technically, Finland lost the war against the Soviet Union, but, practically, it was a victory for defence; Finland lost part of its land on the eastern border, but was never occupied and the country retained its independence and sovereignty. Soon after the war, Finland and the Soviet Union began to co-operate and develop their relations. The Soviet Union (later Russia), has been Finland's most significant trading partner apart from the years just after the Soviet Union collapsed (Vaalit 2005; Valtioneuvosto 2005). In turn, the period from the 1950s up to the 1980s was a time of the Central Party's rule, largely because the president was a member of the party (The same president was in power from 1956 to 1981). Today, ten (registered) political parties operate in Finland. The parties vary from the left wing to the conservatives. The largest political parties are the Centre Party (slightly conservative), the True Finns (national and Christian-social) and the National Coalition Party (conservative). The present Government is a combination of representatives from these three parties.

7.4 Finland's Higher Education System

Finland's higher education system has many similarities to that of other Western countries. As late as the end of the nineteenth century, the University of Helsinki was the only university in Finland. The first completely Finnish-speaking university was the University of Turku, established in 1920 (Tommila 2002). Today in 2015, there are 14 universities and 24 polytechnics in Finland and the Ministry of Education and Culture is in charge of almost all education institutions in Finland.

In Finnish society and among political parties, education has always been seen as valuable in itself, and there has been a wide consensus to develop education opportunities for everyone. These common values enshrine ideas about education and equal opportunities for all (not just for the elite). In the 1970s, the comprehensive education system was created, where all children study in the same school up to the age of 15–16. After finishing comprehensive education, youngsters can finish studying or continue to a general or vocational upper secondary school or to the combination of these two; most continue studying. The usual path after vocational or upper secondary school leads to polytechnics or universities. Both of these institutions have entrance examinations. A person can also enter the university without an upper secondary school diploma, if he or she passes the entrance examination or otherwise holds enough capacity and knowledge to be able to study at the university (Lehtisalo and Raivola 1988; Saarivirta 2009).

The Finnish higher education system is a combination of two types of higher education institutions: universities and polytechnics. In the late 1980s, some of the non-university, college-level institutions were upgraded to polytechnics and as a consequence another higher education system was created alongside the university sector. Polytechnics have currently university-level status, even if their approach is more practical than academic. Students in polytechnics can complete bachelor and master's degrees but doctoral degrees can only be awarded by universities (Tulkki 1993; Orelma 1996; Minedu 2005a).

Before the so-called Bologna Process, completing a bachelor's degree took 3–4 years in Finland, while a master's degree took three additional years on average (OECD 2005). However, there was no definite deadline for finishing studies. One could study for 20 years or complete a degree in a couple of years; students were able to make their own decisions about how long they wanted to study, and how many courses they wanted to take at a time. In 1999, the Bologna Process was introduced in European higher education institutions. Its purpose was to ensure more comparable, compatible and coherent systems of higher education in Europe. The Bologna Process introduced the concept of a 5-year degree consisting of a 3-year bachelor's degree and a 2-year master's degree. (Bologna Process – European Higher Education Area.) This is nowadays a recommended period of study for Finnish university students, also.

In Finland, as in other Nordic countries, education has been seen as one of the strongest links in ensuring equality among the people and providing the same educational opportunities to everyone. That has also been the most significant reason for the expansion of the higher education system in Finland and other Nordic countries (University of Bergen 2005; Aamodt 1990, 1991). The number of Finnish universities (14) and polytechnics (24) is relatively high compared to the population as a whole (5.4 million). There is continuous debate as to whether the number of higher educational institutions should be reduced or solutions found to reduce the high costs of the system. Tuition fees in Finland do not exist but in the next few years lower age groups will impose additional pressure for changes in the Finnish system and, perhaps, tuition fees will be introduced. Universities and polytechnics have also begun to collaborate more closely. The university law of 2009 gave more

financial autonomy and freedom to the universities to deal with external funding, changes in the operational environment and in focusing their strategic aims. In addition to this, universities became legal entities that separated them from the previous government regulation and allowed them to carry out their decisions in a more independent way (Minedu 2005a, b; Verkko uutiset 2008).

Today, Finland uses 1.97 % of its gross domestic product (GDP) for higher education, and it has one of the densest university networks in the world. With this share of the GDP, Finland is one of the leading countries in the world in higher education funding: in 2010, only Canada, Korea, Denmark and the United States exceeded Finland. Finland is also one of the leading countries among the OECD countries in relation to the share of gross domestic product spent on research and development funding: in 2010, about 4 % of the GDP was spent R&D (Minedu 2002; OECD 2008b, c; Suomen tieteen ja teknologian tietopalvelu 2003; Siren 2013; Kaitila and Ylä-Anttila 2012).

7.5 Expanding Higher Education in 1960–1970 and the Regional Policy in Finland

In the 1950s, the universities in Finland were located in the southern part of the country. There were 11 universities altogether; 4 were state universities and 7 were privately funded. Between 1985 and 2010, every university in Finland was a state-owned university, controlled by the Finnish Government (more specifically, by the Ministry of Education). It has always required the permission of the Finnish parliament to establish a new university in the country. Furthermore, there was a so-called baby boom in Finland after the Second World War, as well, and these children reached the university age in the 1960s. This put the Finnish Government in a new situation, because the number of potential university students was immense. In the 1950s, Finland had only 5,000 matriculation examination graduates (i.e. upper secondary leaving certificate usually required for entry into university) per year but, in the 1960s, there were over 15,000 matriculation examination graduates per year. The number of potential university students was increasing, and therefore new universities were needed. In the 1950s and 1960s, approximately 10 % of the upper secondary school graduates began their studies at university. Today, the official aim of the Ministry of Education and Culture is to achieve 90 % university attendance among people in that age group (Komiteamietintö 1956; Suomen tilastollinen vuosikirja 1959, 1963, 1967; Nevala 1983; Eskola 2002; OKM 2012; Yliopistolaki 2009).

A similar situation was also experienced in other countries. In Sweden, Norway and Germany, for example, higher education expanded, largely because of the growing age groups. Individual demand for higher education was huge and actions to solve the problem were taken. New universities and university branches were established (Cerych and Sabatier 1986; Teichler 1990; Tuijnman 1990; Nilsson et al.

2003). In Sweden and Norway, especially, regional policy was a new theme and resulted in the expansion of higher education to rural areas (outside the capital area).

The northern part of Finland did not have a university until 1958. At that time, the Central Party was in power in Finland and the party wanted to develop all areas of the country equally. Regional policy was a new approach in the 1950s and it has been in practice until today. When the investigating committee appointed by the government made a suggestion in 1956 that a new university should be founded in a city called Oulu in Northern Finland, no one (except the old established universities) disagreed with it. Two years later, the University of Oulu was founded (Komiteamietintö 1956; Eskola 2002). The committee appointed by the government consisted of a group of people from several Finnish universities, most of them being professors. It was self-evident that, if there was to be higher education policy at the regional level, it should be university people who made recommendations and presented them to the government. This committee did not suggest that small universities be established in rural regions, but their point of view was not supported.

And what happened next? After the University of Oulu was established, several regions in Finland began lobbying for a university in their region. In the 1960s, extremely hard competition for the establishment of new universities and their possible locations ensued. The eastern part of Finland did not have a university at that time and cities in the east established an association to pressure the Finnish government to locate a university there. The association was actually a spin-off from a former university association in the City of Vyborg. Finland lost this cultural city to the Soviet Union in the Second World War. It is important to emphasise that the movement to establish a university in the region began because of its active, educated citizens with their ideological roots in Vyborg. At first, the cities of the eastern part of Finland discussed having a single university for Eastern Finland. Shortly afterwards, however, every large city in Eastern Finland began to lobby for a university of its own. Thus, the cities began to compete against each other. Local politicians tried everything to convince the national politicians. Finally, the public pressure for establishing a new university in Eastern Finland began to have an impact. The government appointed two commissions to evaluate whether more universities were needed. Both committees recommended that Lappeenranta be the best site for a university. It was also suggested that a separate university of technology be established there. One of the committees suggested that the government also establish a university of technology in the old industrial city of Tampere (in the middle part of Finland). Once again, old universities were against the idea of establishing new universities. Nevertheless, when they realised that the government was going to establish a new (or more than one) university, the old universities began to support the idea of one large university in Eastern Finland (Komiteamietintö 1961, 1965; Kertomus Joensuu 1971; Nousiainen 1976; Nevala 1983; Michelsen 1994; Eskola 2002).

The City of Lappeenranta looked forward to the government's actions. The Central Party had a strong hold on the Finnish political environment at that time, but it was expected to lose some of its political influence after the next election. The result was that the new university was split into three, and all the big cities of Eastern

Finland got their own university. There has been speculation (Michelsen 1994) that the Central Party wanted to please people in Eastern Finland and earn more votes in the forthcoming elections. The former Minister of Education said in his interview (Itälä 2002) that it was important for the Prime Minister to have a university in Eastern Finland, because he wanted to develop not only the capital area but also other parts of the country. The Prime Minister was born in the City of Vyborg. Itälä (2002) also mentioned in his interview that the government was forced to split the university into three because the people of Eastern Finland had to be kept satisfied. The speculations that a political game was being played may be at least partly true.

After the 1960s, only two more universities were established in Finland. The government gave permission to the Foundation of Vaasa Business School to establish a business school (university) in Vaasa in 1966. Vaasa had struggled for a long time to have a university of its own, and the time was right in the 1960s. The intention of the City of Vaasa was to have a Finnish speaking business school (Vaasan kauppakorkeakoulun säätiön lausunto kauppakorkeakoulukomitean mietinnöstä 1962; Katajamäki 1998). At that time, there were four business schools in Finland: two of them Finnish-speaking and two Swedish-speaking (Both Finnish and Swedish are official languages in Finland). Gaining entry into the Finnish-speaking business schools was much more difficult than into the Swedish-speaking business schools. This was because less than 6 % of the inhabitants in Finland speak Swedish as their mother tongue. The difference between Vaasa and the other universities was that it was meant to be private (25 % privately funded, 75 % publicly funded). Business schools came under the aegis of the Ministry of Trade and Industry, while other universities were controlled by the Ministry of Education. Vaasa was an old commercial city and it had good relations with the Ministry of Trade and Industry. This helped Vaasa considerably. In the 1960s, Finland received a new Prime Minister who was a former minister of trade and industry. He considered it a good idea to establish a business school in Vaasa. The old established business schools, of course, were against the idea but to no avail. The government gave its permission for a new business school in Vaasa in 1966, and no permission from the Finnish parliament was required, because of the special circumstances (law and the possibility for Ministry of Trade and Industry to do so) those days (Valtioneuvoston pöytäkirja 1966; Ulkuniemi 1978; Katajamäki 1998).

The last university to be established in Finland was the University of Lapland (in the northern part of Finland) in 1979. Since the 1970s, there have been no single new universities in Finland. The establishment of the University of Lapland can be seen as purely political and, especially, regionally political. The politicians from Lapland demanded a university, because the province was not in an equal position compared to other regions in Finland with respect to higher education. As a consequence, Northern Finland had no availability of academic research activities or an academic, educated labour force. The politicians were also convinced that the general quality of living would improve if there were a university there. The idea of a university in Lapland was also seen as a way to improve the opportunities for the Sámi people, a minority group in northern Finland (Komiteamietintö 1979; Oinas 1999; Salo 1999; Eskola 2002).

During the decades, there were no significant disagreements between the different political parties in Finland when it came to increasing higher education. The Centre Party was powerful from the 1950s to the 1980s. The President, too, represented the Central Party and he was in office between 1956 and 1981 (Lehtisalo and Raivola 1988). The Centre Party had a huge number of voters living in rural areas, so it was obvious that the party wanted to please its supporters by expanding the university network outside the capital area and southern Finland. On the other hand, the Conservatives, especially in the 1960s, would have preferred a larger university complex centred on existing universities and not the establishment of three different universities in the provinces (Komiteamietintö 1961; Michelsen 1994). The slogan ‘education for all’ was so powerful, however, that a common agreement on more opportunities for people in rural areas to study close to home region was strong.

7.6 Recent Economic and Political Developments and Higher Education in Finland

Since the 2010s, Finland’s economy has been suffering from economic slowdown, even though the country is still ranked number 4 in the Global Competitive Index by the World Economic Forum (2015). Previously, strong business sectors, such as electronics (including Nokia) and the paper industries, especially in international trade, have not been able to maintain their position of the early 2000s. Global competition and the financial crises have influenced every European country. The growth of the Finnish GDP is below average, which is mostly due to the difficulties in the country’s export activities. These difficulties have had a direct impact on the employment rate and national consumer demand. The low GDP growth has put pressure on cutting public expenditures. The new government (May 2015 onwards) policy, with the Centre Party, the True Finns and the National Coalition Party, aims at reducing public expenditures and increasing taxation within the next few years. Although the current policy represents intense financial control, similar policy actions were already seen in the actions taken by the previous government (coalition of six parties from left to right). These actions will have an immense influence on the public sector, including universities, as a whole (Ahokas et al. 2015; Government Programme/Hallitusohjelma 2015).

The Finnish university sector has seen several reforms in the 2010s. The University of Joensuu and the University of Kuopio merged in the year 2010. On the basis of an initiative by the Ministry of Education and Culture, these two universities, established in the 1960–1970s, became the University of Eastern Finland which is nowadays one of the largest universities in Finland. In 2015, the University of Eastern Finland hosts 15,000 students and the number of staff members is 2,800. Another merge of the universities was also seen in 2010 when the universities of Art and Design, Helsinki School of Economics and Helsinki University of Technology became one university, ‘Aalto University’. The idea behind the merge was an

objective to create a high-level university to attract students and scholars from abroad to study and work in Finland as well as to create critical mass for future innovations and boost Finland's economy by providing better knowledge for economic purposes. The government financially subsidised the new university heavily, and this, naturally, attained much interest in other Finnish universities. Later on, the government launched a programme encouraging all universities to apply for external funding. The government rewarded the universities for every euro obtained from external sources by giving them the same amount of funding from the government budget. This meant that one external euro became two euros for the universities. This programme gave a boost to universities to search for funding outside their normal budgets (Sintonen 2008; Aalto 2015; UEF 2015).

The formation of Aalto University started a new era for previously publicly owned universities. From the 1970s onwards all Finnish universities had been publicly funded and operated under the guidance of the Ministry of Education and Culture. In the new Millennium, both universities and politicians wanted the universities to be able to act in the changing economic environment more rapidly. In 2009, the Ministry of Education and Culture presented a reform whereby a university could apply for the position of an independent public corporation if the economic situation of the university was strong enough and its future prospects looked promising. This would give the university more freedom to decide on its own matters. Two universities, Aalto University and Tampere University of Technology, applied for the position and were also granted it. These universities are currently known as foundation universities. They have more freedom regarding the economic actions than the other universities, for example when hiring new staff or determining the conditions of the work contracts. The foundation universities are closer to enterprises than the traditional Finnish universities (OKM 2009; Tampereen kauppakamarilehti 2012).

The regional aspects in Finnish higher education have remained ever since the expansion of the university network in the 1960–1970s. A good example of this is the so-called University Consortia that currently includes six cities. The University Consortia brings university-level research and education to the regions not having a university of their own. The consortia model was initiated in the 2000s. Universities used to have branches, typically, in one or two regions, but they belonged to one university only. The consortia may have several universities operating under the same roof. Each consortium has its own director, facilities and budgets obtained from different funding sources. In the year 2013, the overall turnover of the University Consortia was 11 million euros; the Consortia employed 130 people and had 2,400 students, out of which 220 were degree students. Usually municipalities, provincial federations and polytechnics are active participants in the consortia (University Consortia 2013; Minedu 2015a). During the next few years, the 'cutting costs' actions of the government will most likely have an effect on the University Consortia as well, but the regional aspects defending higher education will create a counterbalance to that.

The number of higher education institutes (=HEIs) in Finland is currently 38 (14 universities and 24 polytechnics), while not long ago the figure was 52 (Minedu

2015a, b). The number of HEIs is most likely to decrease further in the future as well, and larger universities will become more common. As a result of the initiatives of the Ministry of Education and Culture (OKM 2011) and the new Government Programme (2015), universities are under an obligation to take a stronger individual profile in the future. Traditionally, multidisciplinary universities may not have had a clear profile, but several faculties with many functions. However, as outlined in the Ministry of Education and Culture report (OKM 2011), the Finnish HEI network is too fragmented and working skills needed for the future are not taken into account well enough. The report is especially concerned about the small university branches and the small polytechnics, and argues that the intake of new students in them will decrease while the intake in the universities will remain at the same level. The new Government Programme (2015) requires universities and polytechnics to make a proposition on how the division of labour between the universities and their faculties as well as between the universities and the polytechnics could be best organised. This proposal of the 'division of labour' is not going to be an easy task for the HEIs.

As described earlier in this section on the establishment of Aalto University, similar actions have been planned in Tampere among the HEIs located in the city (Hannula et al. 2015). The University of Tampere, Tampere University of Technology and Tampere University of Applied Sciences (polytechnic) have taken an initiative in 2015 to form a competitive university in Tampere that combines these three HEIs (Tampere3). This would be a totally new approach to provide the highest-level education in Finland, since traditionally universities and polytechnics have followed the so-called dual system of higher education. This new model of organising the university level education would need amendments to the Finnish University Act. It is yet impossible to estimate what type of impact this action would have on the current Finnish university network and whether these actions will materialize. The previous government had a positive attitude toward such a model, but the aspirations of the new government concerning this question are not yet known.

7.7 Conclusions

This chapter argues that the driving forces behind mass higher education were, on the one hand, changes in the structure of society, and on the other hand, individual demand for education and also increased need for qualifications and skills in production processes. This was the case in Finland as well, but the Finnish higher education expansion was characterised by regionalism, too. The actual location of universities in the era of expansion was caused by the local political actors who had an influence on ruling political parties. The lesson to be learnt from Finland tells other countries that investing in education at all levels has been successful: being one of the most competitive nations in the world is, no doubt, due to the country's strong educational basis (Rantanen 2004; Kiander 2004a; Kansallinen innovaatiostrategia 2008; World Economic Forum 2015).

People in today's economies need more skills and knowledge in their everyday lives than ever. There is no turning back. Without major investments made in the public sector and due to formal education in Finland, much of the country's knowledge base built in the 1950s, 1960s, 1970s, 1980s, 1990s and the Millennium would have been left in the shadows. However, the world is complex and more emphasis these days is put on the demand of knowledge and skills in the educational planning for the future instead of just investing more in education without more detailed deliberation.

The higher education and regional policies in the 1950–1960s with their 'equality for all' slogans have been successful in Finland, giving an opportunity to youngsters to study in other parts of Finland, other than in the capital area. Nevertheless, the trend to move towards southern Finland is stronger today than ever before. Still, most students registering at universities are from the regions where universities are located. 'Equality for all' still exists and, due to the 1950–1960s policies, this aim has clearly been fulfilled and, therefore, the policies of those days can be said to have been successful. This is if we look at the situation through regional lenses; if focusing more on the national level, the conclusions might seem different. At the moment, the government wants larger university complexes to be able to compete internationally. According to the government's point of view, the small units cannot fulfil this purpose.

The Finnish higher education system will be facing structural changes in the near future; the university network is becoming tighter, universities are put together by the government but, at the same time, more financial autonomy is given to the universities, which, hopefully, will make Finnish universities more flexible in terms of working life in the future. This 'new financial autonomy', i.e. the economy of the universities based on foundations, for example, enhances the quality of research. On the other hand, however, it may weaken 'academic knowledge', if research is based excessively on practical, working-life-oriented matters, and not enough on core scientific issues. The government wants Finnish universities to be top-level international universities with strong links to other universities abroad. Aalto University is an example of such an institution. The relationship between the universities and polytechnics is getting warmer, as highlighted in the previous section concerning the Tampere 3 case. If cutting the costs of higher education continues, the dual system may vanish in the future.

References

- Aalto. (2015). *History*. Retrieved from: <http://www.aalto.fi/en/about/history>
- Aamodt, P. O. (1990). A new deal for Norwegian higher education? *European Journal of Education*, 25(2), 171–185.
- Aamodt, P. O. (1991). *Alter natives to universities in Norway*. Paper presented in November at the seminar 'New Directions for Higher education'. Vienna: OECD.
- Abrahamsson, K. (1986). *Adult participation in Swedish higher education. A study of organizational structure, educational design and current policies*. Stockholm: Almqvist & Wiksell International.

- Ahokas, J., Honkatukia, J., Lehmus, M., Niemi, J., Simola, M., & Tamminen, S. (2015). *Työvoiman tarve Suomen taloudessa vuosina 2015–2030*. Helsinki: VATT Institute for Economic Research. VATT Tutkimukset 181.
- Arabsheibani, G. R., & Rees, H. (1998). On the weak vs strong version of the screening hypothesis: A re-examination of the P-test for the UK. *Economics of Education Review*, 17(2), 189–192.
- Bologna Process – European Higher Education Area. (2015). Retrieved from: <http://www.ehea.info/>
- Bowles, S., & Gintis, H. (1974). The problem with human capital theory – A Marxian critique. *The American Economic Review*, 65, 74–82.
- Bowman, M. J., & Anderson, C. A. (1974). *Mass higher education: Some perspectives from experience in the United States*. Paris: OECD.
- Cerych, L., & Sabatier, P. (1986). *Great expectations and mixed performance. The implementation of higher education reforms in Europe*. Chester: European Institute of Education and Social Policy, Trentham Books.
- Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35, 128–152.
- Collins, R. (1975). *Conflict sociology. Toward an explanatory science*. New York: Academic.
- Collins, R. (1977). Functional and conflict theories of education stratification. In J. Karelbel & A. H. Halsey (Eds.), *Power and ideology in education*. New York: Oxford University Press.
- Eskola, S. (2002). Tiedepolitiikka ja korkeakoulut. In P. Tommila (Ed.), *Suomen tieteen historia 4. Tieteen ja tutkimuksen yleinen historia 1880-luvulta lähtien*. Porvoo: WSOY, WS Bookwell Oy.
- Factbook. (2005). *The World Factbook*. Retrieved from: <http://www.cia.gov/cia/publications/factbook/geos/fi>
- Goddard, J., & Puukka, J. (2008). The engagement of higher education institutions in regional development: An overview of the opportunities and challenges. *OECD Higher Education Management and Policy*, 20(2), 3–33.
- Goldin, C. (2001). The human-capital century and American leadership: Virtues of the past. *The Journal of Economic History*, 61, 263–292.
- Government Programme/Hallitusohjelma. (2015). *Valtioneuvoston tiedonanto eduskunnalle 29.5.2015 pääministeri Juha Sipilän hallituksen ohjelmasta*. Retrieved from: http://valtioneuvosto.fi/documents/10184/1433371/Tiedonanto_Sipilä_29052015_final.pdf/6de03651-4770-492a-907f-89452141d0d5
- Hannula, S., Mäkelä, A., Peltovuori, R., & Ylikangas, H. (1985). *Nyky-Suomen perusta, Yhteiskunnan rakennetekijät, Muutuva maailma*. Pieksämäki: Kustannuskiila Oy.
- Hannula, M., Melin, H., & Naukkarinen, M. (2015). *Tampere3-vararehtoriyöryhmän raportti 13.5.2015*. Retrieved from: http://www.tatte.fi/@Bin/477989/t3_raportti.pdf
- Hjerpe, R., & Pihkala, E. (1989). Suomen taloudellinen kasvu. In H. Loikkanen & J. Pekkarinen (Eds.), *Suomen kansantalous – instituutiot, rakenne ja kehitys*. Porvoo: WSOY.
- Hjerpe, R., & Vartia, P. (1997). Taloudellinen kasvu ja rakennemuutos. In H. Loikkanen, J. Pekkarinen, S.-A. Siimes, & P. Vartia (Eds.), *Kansantaloutemme – rakenteet ja muutos*. Tampere: Taloustieto Oy.
- Honkaphja, S., & Koskela, E. (1999). Finland's depression. A tale of bad luck and bad policies. *Economic Policy*, 14, 401–436.
- Itälä, J. (2002). *An interview on 16 October 2002 in Helsinki*. Jaakko Itälä was the Minister of Education in Finland in the 1970s.
- Johnes, G. (1993). *The economics of education*. London: The Macmillian Press Ltd.
- Kaitila, V., & Ylä-Anttila, P. (2012). *Investoinnit Suomessa. Kehitys ja kansainvälinen vertailu*. The Research Institute of the Finnish Economy. Retrieved from: <https://www.etla.fi/wp-content/uploads/2012/09/dp1267.pdf>
- Kansallinen innovaatiostrategia. (2008). *Esitys kansalliseksi innovaatiostrategiaksi työ- ja elinkeinoministeriölle*. Ministry of Employment and the Economy. Retrieved from: http://www.tem.fi/files/19704/Kansallinen_innovaatiostrategia_12062008.pdf

- Katajamäki, H. (1998). *Oman alueensa yliopisto. Vaasan yliopiston kolme vuosikymmentä*. Vaasa: Vaasan yliopisto.
- Kertomus Joensuun korkeakoulun synnystä ja 1. ja 2. toimintavuodesta 1969–71 (1971). Joensuu: Kirjapaino Osakeyhtiö Maakunta – Joensuu, 4–13.
- Kiander, J. (2004a). *The evolution of the Finnish model in the 1990s: From depression to high-tech boom* (VATT Discussion Papers 344). Helsinki: Government Institute for Economic Research.
- Kiander, J. (2004b). *Growth and employment in Nordic welfare states in the 1990s: A tale of crisis and revival* (VATT Discussion Papers 336). Helsinki: Government Institute for Economic Research.
- Komiteamietintö. (1956). *Korkeakoulukomitean mietintö*. Helsinki: Komiteamietintö.
- Komiteamietintö. (1961). *Itä-Suomen kulttuurikomitean mietintö*. Helsinki: Komiteamietintö.
- Komiteamietintö. (1965). *Korkeakoululaitoksen suunnittelukomitean mietintö I*. Helsinki: Komiteamietintö.
- Komiteamietintö. (1979). *Lapin korkeakoulun suunnittelutoimikunnan mietintö 1979:63*. Helsinki: Komiteamietintö.
- Layard, R., & Psacharopoulos, G. (1974). The screening hypothesis and the returns to education. *Journal of Political Economy*, 82, 985–998.
- Lehtisalo, L., & Raivola, R. (1988). *Koulutuspolitiikka ja koulutussuunnittelu*. Juva: WSOY.
- Lin, T.-C. (2003). Education, technical progress and economic growth: The case of Taiwan. *Economics of Education Review*, 22, 213–220.
- Lundvall, B.-Å. (1998). Why study national systems and national styles of innovation? *Technology Analysis & Strategic Management*, 10, 407–421.
- Metcalfe, J. S., & Ramlogan, R. (2006). *Innovation systems and the competitive process in developing countries* (CRIC Discussion Paper 77). Manchester: University of Manchester.
- Michelsen, K.-E. (1994). *Lappeenrannan teknillinen korkeakoulu 1969–1994*. Espoo: Painatuskeskus Oy.
- Mincer, J. (1958). Investment in human capital and personal income distribution. *The Journal of Political Economy*, 66(4), 281–302.
- Minedu. (2002). *Toimialat*. Retrieved from: <http://www.minedu.fi/opm/talous/ministerio/toimialat2001.html>
- Minedu. (2005a). *Yliopistokoulutus*. Retrieved from: <http://www.minedu.fi/opm/koulutus/yliopistokoulutus/yliopistokoulutus.html>
- Minedu. (2005b). *Ammattikorkeakoulutus*. Retrieved from: <http://www.minedu.fi/opm/koulutus/ammattikorkeakoulut/ammattikorkeakoulut.html>
- Minedu. (2015a). *Yliopistot ja yhteistyöverkostot*. Retrieved from: <http://www.minedu.fi/OPM/Koulutus/yliopistokoulutus/yliopistot/?lang=fi>
- Minedu. (2015b). *Ammattikorkeakoulut*. Retrieved from: <http://www.minedu.fi/OPM/Koulutus/ammattikorkeakoulutus/ammattikorkeakoulut/?lang=fi>
- Nelson, R. R., & Phelps, E. S. (1966). Investment in humans, technological diffusion, and economic growth. *The American Economic Review*, 51, 69–75.
- Nevala, A. (1983). *Joensuun korkeakoulun perustamisvaiheet*. Joensuu: Joensuun korkeakoulun offsetpaino.
- Nilsson, J. A., Arbo, P., Dahl, M. S., Dahlum, B., Edvardsson, I. R., Eskelinen, H., Nielsen, K., Uhlin, Å., & Ylinenpää, H. (2003). *The role of university in regional innovation system*. Copenhagen: Nordic Industrial Fund, Centre for Innovation and Commercial Development.
- Niosi, J., Saviotti, P., Bellon, B., & Crow, M. (1993). National systems of innovation: In search of workable concepts. *Technology and Society*, 15, 207–227.
- Nousiainen, E. (1976). *Katsaus Joensuun korkeakoulun syntyvaiheisiin*. Joensuu: Joensuun korkeakoulu.
- OECD. (2005). *Education at a glance. OECD indicators 2005*. Paris: OECD.
- OECD. (2008a). *Higher education and regions. Globally competitive, locally engaged*. Paris: OECD.

- OECD. (2008b). *Education at a glance 2008 – OECD indicators*. Retrieved from: http://www.oecd.org/document/9/0,3343,en_2649_39263238_41266761_1_1_1_1,00.html
- OECD. (2008c). *OECD science, technology and industry outlook 2008*. Retrieved from: http://www.oecd.org/document/36/0,3343,en_2649_34269_41546660_1_1_1_37417,00.html
- Oinas, A. (1999). Se syntyi sittenkin, in *Matkalla Kojamoon, Muisteluksia Lapin yliopiston alkuvaiheista*. Rovaniemi: Lapin yliopiston hallinnon julkaisuja.
- OKM. (2009). *Esitys uudeksi yliopistolaiksi*. Retrieved from: http://www.minedu.fi/export/sites/default/OPM/Koulutus/koulutuspolitiikka/Hankeet/Yliopistolaitoksen_uudistaminen/liitteet/yolaki_info_19022009.pdf
- OKM. (2011). *Koulutus ja tutkimus vuosina 2011–2016. Kehittämissuunnitelma*. Ministry of Education and Culture. Retrieved from: http://www.minedu.fi/export/sites/default/OPM/Koulutus/koulutuspolitiikka/asiakirjat/Kesu_2011_2016.fi.pdf
- OKM (2012). *Koulutus ja tutkimus vuosina 2011–2012. Kehittämissuunnitelma*. Retrieved from: <http://www.minedu.fi/export/sites/default/OPM/Julkaisut/2012/liitteet/okm01.pdf?lang=fi>
- Ollikainen, M. (1997). Luonnonvara- ja ympäristötalous. In H. Loikkanen, J. Pekkarinen, S.-A. Siimes, & P. Vartia (Eds.), *Kansantaloutemme – rakenteet ja muutos*. Tampere: Taloustieto Oy, Tammer-Paino Oy.
- Orelma, A. (1996). *Insinöörikkoulutus epävarmuuden yhteiskunnassa*. Turku: Painosalama Oy.
- Psacharopoulos, G. (2000). Economics of education a la Euro. *European Journal of Education*, 35, 81–95.
- Rantanen, J. (2004). *Yliopistojen ja ammattikorkeakoulujen tutkimuksen rakenneselvitys* (Opetusministeriön työryhmämuistioita 2004:36). Helsinki: Yliopistopaino.
- Saarivirta, T. (2009). *Why not the best schools? The Finland report*. Melbourne: ACER Press.
- Saarivirta, T. (2010). Finnish higher education expansion and regional policy. *Higher Education Quarterly*, 64(4), 353–372.
- Salo, T. (1999). Korkeakoulun perustaminen oli poliittinen päätös. In Edition *Matkalla Kojamoon. Muisteluksia Lapin yliopiston alkuvaiheista*. Rovaniemi: Lapin yliopiston hallinnon julkaisuja.
- Schultz, T. W. (1961). Investment in human capital. *The American Economic Review*, 51, 1–17.
- Schultz, T. W. (1987). Education and population quality. In G. Psacharopoulos (Ed.), *Economics of education: Research and studies*. Oxford: Pergamon Press.
- Sintonen, K. (2008). *Aalto-yliopisto tähtää edelläkävijäksi*. Acatiimi 6/2008. Retrieved from: http://www.acatiimi.fi/6_2008/06_08_03.php
- Siren, H. (2013). *Korkeakoulutuksen haasteita*. Retrieved from: <http://videonet.fi/min-edu/20131127/5/siren.pdf>
- Smelser, N. J. (1973). Epilogue. Social-structural dimensions of higher education. In T. Parsons & G. M. Platt (Eds.), *The American university*. Cambridge: Harvard University Press.
- Statistics Finland. (2005a). *Suomi lukuina, kansantalous*. Retrieved from: http://www.stat.fi/tup/suoluk/taskus_kansantalous.html
- Statistics Finland. (2005b). *Industrial statistics in year 2003*. Retrieved from: http://www.stat.fi/tup/suoluk/taskue_teollisuus.html
- Statistics Finland. (2005c). *Väestön koulutusrakenne*. Retrieved from: <http://www.stat.fi/til/vkour/index.html>
- Suomen tieteen ja teknologian tietopalvelu. (2003). *Tutkimus- ja kehittämistoiminnan menot*. Retrieved from: http://www.research.fi/voimavarat/Tk_menot
- Suomen tilastollinen vuosikirja 1958. (1959). *Tilastollinen päätoimisto*. Helsinki: Suomen tilastollinen vuosikirja.
- Suomen tilastollinen vuosikirja 1962. (1963). *Tilastollinen päätoimisto*. Helsinki: Suomen tilastollinen vuosikirja.
- Suomen tilastollinen vuosikirja 1966. (1967). *Tilastollinen päätoimisto*. Helsinki: Suomen tilastollinen vuosikirja.
- Tampereen kauppakamarilehti. (2012). *Eteenpäin, etujoukoissa*. Profili 3/2012. Retrieved from: http://old.tampereenkauppakamarilehti.fi/2012/profiili/profiili_3_12.php
- Teichler, U. (1990). *The First years of study at fachhochschulen and universities in the federal republic of Germany*. Kassel: Gesamthochschule Kassel.

- The World Competitiveness Scoreboard. (2004). The World competitiveness scoreboard. Retrieved from: <http://www01.imd.ch/documents/wcc/content/ranking.pdf>
- Tilastokeskus. (2012). *Uudet sukupolvet entistä koulutempia*. Retrieved from: http://www.stat.fi/artikkelit/2012/art_2012-03-12_009.html?s=0
- Tommila, P. (2002). Suomalaisen tieteen voimakkaan kasvun kausi. In P. Tommila (Ed.), *Suomen tieteen historia 4. Tieteen ja tutkimuksen yleinen historia 1880-luvulta lähtien*. Porvoo: WSOY, WS Bookwell Oy.
- Tuijnman, A. (1990). Dilemmas of open admissions policy: Quality and efficiency in Swedish higher education. *Higher Education*, 20, 443–457.
- Tulkki, P. (1993). *Työelämän ja ammattikorkeakoulujen yhteys*. Turku: Painosalama Oy.
- UEF. (2015). Introduction to the university of East Finland. Retrieved from: <https://www.uef.fi/fi/uef/esittely>
- Ulkuniemi, M. (1978). *Vaasan kauppakorkeakoulu, Perustamisvuodet 1959–1968 ja lukuvuodet 1968–1978. Vaasan kauppakorkeakoulun säätiö*. Vaasa: Vaasa Oy: n Kirjapaino.
- University Consortia. (2013). *Energy and inspiration. From ideas to innovations*. Retrieved from: <http://www.ucpori.fi/sites/ucpori.fi/files/tiedostot/linkki1ID237.pdf>
- University of Bergen. (2005). *University of Bergen*. Retrieved from: <http://www.uib.no/siu/ur/bros-eng.htm>
- Vaalit (2005). *Yleistietoa vaaleista*. Retrieved from: <http://www.vaalit.fi/15366.htm>
- Vaasan Kauppakorkeakoulun säätiön lausunto kauppakorkeakoulukomitean mietinnöstä. (1962). Helsinki: Archive of the Finnish Government.
- Valtioneuvosto. (2005). *Tietoa valtioneuvostosta*. Retrieved from: <http://www.valtioneuvosto.fi/vn/liston/base.jsp?r=385&k=en>
- Valtioneuvoston pöytäkirja. (1966). *Archive of the Finnish government*. Helsinki.
- Verkkouutiset. (2008). *Verkkouutiset*. Retrieved from: <http://www.verkkouutiset.fi/arkisto/politiikka/132914.htm>
- Vincent-Lancrin, S. (2007). Developing capacity through cross-border tertiary education. In S. Vincent-Lancrin (Ed.), *Cross-border tertiary education – A way towards capacity development* (Organisation for Economic Co-operation and Development (OECD)). Paris: OECD.
- Virtual Finland. (2005). *Virtual Finland*. Retrieved from: <http://virtual.finland.fi/netcomm/news/showarticle.asp?intNWSAID=28308>
- Wang, R.-J. (2003). From elitism to mass higher education in Taiwan: The problems faced. *Higher Education*, 46, 261–287.
- Wolf, A. (2002). *Does education matter? Myths about education and economic growth*. London: Penguin Books.
- World Economic Forum. (2005). *World economic forum*. Retrieved from: <http://www.weforum.org/site/homepublic.nsf/Content/United+States+in+Second+Place+Behind+Finland+in+Global+Competitiveness+Report>
- World Economic Forum. (2015). *Competitive rankings*. Retrieved from: <http://www.weforum.org/reports/global-competitiveness-report-2014–2015>
- Yliopistolaki. (2009). *Hallituksen esitys Eduskunnalle yliopistolaiksi ja siihen liittyviksi laeiksi. Opetus- ja kulttuuriministeriö*. Retrieved from: http://www.minedu.fi/export/sites/default/OPM/oulutus/koulutuspolitiikka/Hankkeet/Yliopistolaitoksen_uudistaminen/liitteet/HE_yliopistolaki.pdf

Chapter 8

Paradigm Shift in Higher Education: Learning, Internationalisation and Development

Yin Cheong Cheng

Abstract The challenges of globalisation have led to the great expansion of higher education in different parts of the world. In this global context, the implications for the development and reform of higher education in the twenty-first century have become a worldwide concern for policy-makers, social leaders, change agents and educators. Aiming to address the concern, this chapter proposes that a paradigm shift in higher education is needed. Tertiary learning must shift from a traditional site-bounded model towards a new model of globalisation, localisation and individualisation to create unlimited opportunities for students to learn and develop world-class competences and contextualised multiple intelligences for lifelong development in the twenty-first century. To facilitate such a paradigm shift, the chapter further presents a conceptual framework to re-define and develop internationalisation as one of the key strategies for transforming higher education, and a four-scenario typology to map out the possible directions for higher education development in the future.

Keywords Development in higher education • Globalization • Higher education • Paradigm shift in higher education • Internationalization • Lifelong learning • Reforms in higher education learning & teaching • 21st century education • Quality • World class education

8.1 Introduction: Learning, Internationalisation and Development

Over the past two decades, there has been an extensive worldwide movement in the development of higher education with the aim of building up high-level human resources and competitive intellectual capital (Lane 2015; Yeravdekar and Tiwari

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2014). The tremendous growth in tertiary student enrolment across the world may be a good indicator of the rapid expansion of this movement. The total global enrolment in higher education jumped from 85 million in 1997 to 182 million in 2011, representing a 114 % increase (UNESCO Institute for Statistics 2014). The fast growth of higher education is expected to continue, particularly in the Asia-Pacific region, in the coming decades.

In this global context of higher education expansion, the implications for the development and reform of higher education in the twenty-first century have become a worldwide concern for policy-makers, social leaders, change agents and educators. Many people doubt whether quantitative expansion will be sufficient to meet the emerging needs arising from the huge social, economic and technological transformations in the globalisation era. In particular, the core issues for higher education reform are the qualities that higher education will need and should develop to groom a new generation of leaders for the competitive future locally and globally, and how unlimited opportunities can be created to facilitate students' tertiary learning and high-level intellectual capacity.

To address these issues, this chapter first discusses the paradigm shift in higher education that is needed to create unlimited opportunities for students to learn and develop world-class competences and contextualised multiple intelligences for life-long development in the twenty-first century. It illustrates how tertiary learning should shift from a traditional site-bounded model towards a new model of globalisation, localisation and individualisation. To facilitate such a paradigm shift, the chapter further proposes a conceptual framework to re-define and develop internationalisation as one of the key strategies for transforming higher education and a four-scenario typology to map out the possible directions for higher education development in the future.

8.2 World-Class Education and Twenty-First-Century Competencies

The challenges of rapid globalisation, advanced information technology, intensive international competition and strong demands for development have generated local and international debate over the implications for higher education reform. To ensure that younger generations are able to overcome the challenges of the rapid transformation to lifelong learning and multiple forms of development in a new era, many social leaders, researchers, policy-makers and educators worldwide have advocated a paradigm shift in learning and teaching. They have advocated a fundamental reform of the aims, content, practice and management of education to enhance the relevance of students' learning to the future (Beetham and Sharpe 2013; Longworth 2013; Ramirez and Chan-Tiberghien 2003).

In response to globalisation and international competition, the reform and development of higher education are often driven by the notion of a *world-class education or world-class university*. It is not surprising that performance in higher education is studied, compared and measured in terms of world-class standards, global comparability and even international university rankings to ensure that the future of graduates is sustainable in this challenging and competitive era. To some extent, the ongoing worldwide efforts to identify and promote twenty-first-century competencies, deeper learning and high-level intellectual capacity in both school education and higher education represent the strong pursuit of world-class standards and a new paradigm of learning for the future (Abbas et al. 2013; Beetham and Sharpe 2013; Griffin et al. 2012; Pellegrino and Hilton 2012).

8.3 Higher Education for CMI

The ongoing process of globalisation involves multiple aspects, including technological, economic, social, political, cultural and learning developments. To survive and develop in such a multiple and complicated context, the new generation in the twenty-first century needs to have the knowledge, skills, competencies and intelligences of multiple people: a technological person, an economic person, a social person, a political person, a cultural person and a learning person (Binkley et al. 2012). According to Cheng (2000, 2013), higher education should help students to develop not only twenty-first-century skills and competencies, but also high-level intellectual capacity, which includes a set of contextualised multiple intelligences (CMI) such as *technological intelligence, economic intelligence, social intelligence, political intelligence, cultural intelligence* and *learning intelligence* [1]. The characteristics of CMI in terms of assumptions about the person, rationality, ideology, and thought processes are summarised in Table 8.1. For further details, please refer to Cheng (2000, 2013).

Technological Intelligence: Given the tremendous effects of technology on different aspects of society and the global community in the twenty-first century, grooming students' technological intelligence is emphasised for their future development (Tan and Subramaniam 2006). Technological intelligence is based on a type of *technological or instrumental rationality* that focuses on achieving planned targets and solving emerging problems through scientific methodology and effective technology. Goal achievement, technological engineering, methodological effectiveness and technical optimisation are often the key ideologies and values in the application of technological intelligence. Its thinking process is characterised mainly by scientific reasoning, technological imagination and methodological consideration.

Economic Intelligence: Economic growth is usually considered the driving force of individual and national developments and the cutting edge in international competition, particularly in the context of globalisation (O'hame 2000). Inevitably,

Table 8.1 A typology of contextualised multiple intelligences

		Contextualised multiple intelligences					
		Technological intelligence	Economic intelligence	Social intelligence	Political intelligence	Cultural intelligence	Learning intelligence
Assumption about person	Rationality	Technological person	Economic person	Social person	Political person	Cultural person	Learning person
	Ideology	Technological rationality	Economic rationality	Social rationality	Political rationality	Cultural rationality	Adaptive rationality
Thinking process		Methodological effectiveness; goal achievement; technological engineering; technical optimization	Efficiency; cost-benefit; resources and financial management; economic optimization	Social relations; human needs; social satisfaction	Interest, power and conflict; participation, negotiation, and democracy	Values, beliefs, ethics and traditions; integration, coherence and morality	Adaptation to changes; continuous improvement and development
		Scientific reasoning, technological imagination, and methodological consideration	Economic calculation of cost and benefits	Investigation of social conditions and consequences	Consideration of micro-politics among interests; calculation of political cost and consequences	Searching, clarifying, and making of meanings in line with values, beliefs, ethics and morality	Generation, accumulation and management of new knowledge about action and outcomes

Source: Adapted from Cheng (2013)

the importance and necessity of nurturing and applying economic intelligence are strongly emphasised (Cavalcanti 2002; Fontana 2001). Economic intelligence is based on *economic rationality*, which is concerned with maximising benefits and achieving planned aims and targets of action through the optimal use of various resources. The key values and ideology of economic intelligence in action include efficiency, cost-benefit, cost-effectiveness, resource and financial management and economic optimisation. Economic thinking is mainly concerned with the economic calculation of cost and benefits and the allocation of resources.

Social Intelligence: Individual action or activity is mainly carried out in a social context, in which human factors such as human needs and development, social relations and social expectations can deeply influence and shape the nature, aims and outcomes of an action and the actor's performance and future development. Social intelligence is based on *social rationality*, which emphasises the importance and necessity of social relationships and human initiative in the completion of actions and achievement of aims. Therefore, the key values and ideology used in thinking, learning and action include social interactions and relations, the satisfaction of social needs, and human initiative and development. The recent strong emphasis on the need for emotional intelligence or emotional quotient for success in a competitive social or business world also reflects the importance of developing social intelligence in higher education (Cherniss and Goleman 2001).

Political Intelligence: The increasing diversity of expectations and demands, competition for resources and struggles for power among different parties intensify the political aspects of life in the twenty-first century. In such a context, developing and using political intelligence has received serious attention in action and learning. Political intelligence is based on *political rationality*, which concerns the diversity and conflict between the interests and demands of the actors and constituencies involved in an action. It assumes that the resolution and management of conflicts and struggles, using various strategies such as alliances building, negotiation, compromise, participation and the democratic process, are necessary for action and development (Pfeffer 1992; Bolman and Deal 1997).

Cultural Intelligence: In facing the challenges presented by the ambiguities and uncertainties emerging from the fast-changing internal and external environments, how individuals remain consistent and confident in their values and beliefs systems is an important concern relating to cultural intelligence (Schein 1999). Cultural intelligence is based on the *cultural rationality* that assumes that the nature, aims and effectiveness of action are heavily determined by the values, beliefs, ethics and traditions shared among the actor and others involved. Therefore, the key ideologies in thinking and action include the sharing of values, beliefs and ethics, integration and coherence among members and morality in action. In general, the nature of cultural thinking in action learning is a process of searching, clarifying and making meanings in line with the shared key values, beliefs, ethics and morality.

Learning Intelligence: Given the tremendous challenges of the fast-changing global context on the development and survival of the actor and related constituencies,

the ability to learn and adapt to such challenges is crucial. The pursuit of a learning society becomes important (Wain 2004; Gorard and Rees 2002). Developing and applying learning intelligence is based on *adaptive rationality*, which emphasises continuous learning and successful adaptation to the changes and challenges in the internal and external environment. Continuous improvement and the development of the actor's operational and cognitive styles to a higher level is a key ideology in learning intelligence. The process of thinking may involve the generation, accumulation and management of new knowledge about actions, learning and outcomes (Davenport and Prusak 2000). The notion and pursuit of "learning how to learn" in current curriculum reforms of both school and tertiary education often represent the importance of nurturing learning intelligence.

CMI can help the new generation to be more adaptive, creative and sustainable in life-long development, despite the huge transformations and challenges of the twenty-first century. Higher education in this new era of globalisation, diversity and information technology should develop students as CMI leaders and citizens to lead society and the world. Traditionally, higher education emphasises the development of specialists who focus on only one or two areas, and nurtures certain types of intelligence, such as technological, economic or social intelligence, while ignoring the others. It is often assumed that over their lifetimes, most tertiary graduates will have only one to three careers in the same area and other types of intelligence or knowledge may not be necessary or relevant to their future development. This kind of thinking sets a very tight limit on the development of graduates in today's fast-changing environment, with its huge transformations in economy, manpower requirements and social infrastructure.

In the era of globalisation, career changes may become more common for the new generation. Higher education graduates will need not only specific professional skills and knowledge, but also CMI and creativity for continuous learning, development, innovation and adaptation in fast-changing local and global environments.

8.4 Pentagon Theory of Tertiary Learning

The past two decades have witnessed a worldwide trend of higher education curriculum reforms with an emphasis on breaking down specialisation/subject boundaries, promoting multi-disciplinary or inter-disciplinary learning, and broadening intellectual bases to nurture creativity and multiple thinking among graduates (Davies and Delvin 2007; Park and Son 2010). For example, the twenty-first century liberal education advocated by the Association of American Colleges and Universities (2015) is "an approach to learning that empowers individuals and prepares them to deal with complexity, diversity, and change. It provides students with broad knowledge of the wider world (e.g. science, culture, and society) as well as in-depth study in a specific area of interest. A liberal education helps students develop a sense of social responsibility, as well as strong and transferable

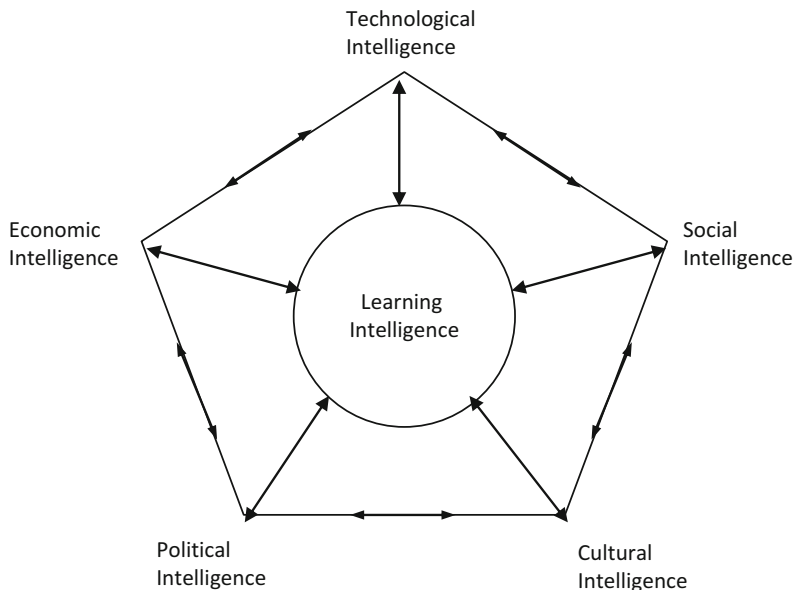


Fig. 8.1 Pentagon theory of tertiary learning (Source: Adapted from Cheng 2000)


intellectual and practical skills such as communication, analytical and problem-solving skills, and a demonstrated ability to apply knowledge and skills in real-world settings.....(it) usually includes a general education curriculum that provides broad learning in multiple disciplines and ways of knowing, along with more in-depth study in a major.

In line with this trend, the *Pentagon Theory of Tertiary Learning* (Cheng 2000), based on the above CMI concepts, provides a new framework to re-conceptualise and facilitate tertiary learning, as depicted in Fig. 8.1.

A higher education curriculum for the twenty-first century should cover the development of all six types of CMI in tertiary learning. Curriculum design (e.g., multi-disciplinary learning) promotes interaction, mutual fertilisation, and integration among the six types of CMI development, with learning intelligence at the centre of the pentagon, as illustrated in Fig. 8.1. The development of learning intelligence may accelerate the development of other types of CMI.

Learning activities and experiences should also encourage and facilitate *intelligence transfer* or *thinking transfer* from one type of intelligence to another (e.g., from economic intelligence to political intelligence or social intelligence) to achieve a higher level of intelligence or meta-thinking. The transfer itself can represent a type of intellectual creativity. The more students can transfer their intelligence from one type to other, the more creative they will become. To a great extent, the ability to transfer intelligence represents the potential for creativity, which is a crucial asset in the emerging knowledge-driven economy (UNDP/UNESCO 2013; Dubina et al. 2012). Therefore, higher education should facilitate the development of CMI and the transfer of intelligence between different types of CMI.

Table 8.2 Paradigm shift in tertiary learning

Traditional paradigm of site-bounded learning		New paradigm of CMI-triplized learning
Reproduced learning:		Individualized learning:
Student is the follower of the teacher		Student is the centre of education
Standard programs		Individualized programs
Absorbing knowledge		Self-learning and developing CMI
Receiving process		Self-actualizing process
Focus on how to gain		Focus on how to learn
Rewarded from external sources		Self-rewarding
Site-nounded learning:		Localized and globalized learning:
Teacher-based learning		Multiple sources of learning
Separated learning		Networked learning
Fixed period and within institution		Lifelong and everywhere
Limited opportunities		Unlimited opportunities
Site-bounded learning		World-class learning
Mainly institution-based experiences		Local and international outlook

Source: Adapted from Cheng (2005a, b)

8.5 Paradigm Shift in Tertiary Learning

During the past two decades, many initiatives have sought to develop a new education paradigm that will develop students' CMI or twenty-first-century competencies for sustainable development, emphasising lifelong learning, facilitating global networking and an international outlook and promoting the wide application of ICT in education (Finegold and Notabartolo 2010; Noweski et al. 2012; Salas-Pilco 2013; Kaufman 2013). According to Cheng (2005a, b, 2015) and the above discussion, in the new paradigm *tertiary learning* is treated as the process whereby students, as *self-initiated CMI learners*, develop their CMI and high-level or twenty-first-century competencies to participate in multiple and sustainable forms of development. The role of the university teacher is that of a *facilitator* of students' multiple and sustainable forms of development.

A paradigm shift in tertiary learning from the traditional paradigm of *site-bounded learning* to the new paradigm of *CMI-triplised learning* is emerging, as indicated in Table 8.2. Triplised learning is learning that integrates globalised, localised and individualised learning to create unlimited learning opportunities to develop students' CMI, which is relevant to technological, economic, social, political, cultural and learning development in both local and global contexts (Cheng 2005a, b).

In the traditional paradigm, students' tertiary learning is part of the process of reproducing and perpetuating existing knowledge and the manpower structure needed to sustain society, particularly the social and economic aspects (Blackledge and Hunt 1985). Students are followers of their teachers. They go through standard education programmes in which they are taught in the same manner and at the same

pace, regardless of their abilities. Individualised programmes seem to be unfeasible. All learning activities are site-bounded and teacher-based. Students' learning experiences are mainly institutional experiences alienated from the fast-changing local and global communities (Cheng and Mok 2008).

In the new paradigm, tertiary learning is individualised, localised and globalised. The student is the centre of education. Students' learning should be individualised to meet their individual needs and personal characteristics and to optimise their potential. Individual, tailor-made programmes (including targets, content, methods and schedules) are necessary for students with diverse needs. Students are self-motivated and self-initiated with appropriate guidance and facilitation, and learning is a process of self-actualisation, discovery, experience and reflection that facilitates the development of CMI. The focus of tertiary learning is on how to learn, think, create and develop. To sustain lifelong learning, learning must be enjoyable and self-rewarding (Cheng 2000).

Some studies have examined how *individualisation in tertiary learning*, particularly with the support of ICT, can be used to maximise the motivation, potential and creativity of students with diverse learning needs (Bernat and Mueller 2013). Typical questions in managing tertiary learning include the following.

- How can educational programmes be tailor-made to meet the individual needs of students?
- How can learning targets, methods and progress schedules for students be individualised using Web-based technology?
- How can the curriculum become more flexible and diverse to meet students' diverse needs?
- How can students' self-initiated and self-regulated learning be considered as a major factor in curriculum design?
- How can mobile learning and e-learning be used as major tools to optimise learning opportunities for individual students?

Localisation in tertiary learning may cover a wide range of activities with various purposes: (a) to ensure that the aims, content and process of learning are relevant to the local context, thereby allowing students to learn and develop socially and intellectually through local exposure and experience; (b) to bring in local resources, such as physical, financial, cultural, social and intellectual assets, to support students' learning activities; (c) to increase parental involvement, community partnership and collaboration with various social agents or business sectors to create opportunities for students to learn and for teachers to teach well; and (d) to ensure that the curriculum and students' learning meet the future needs and multiple forms of development of the local community (Cheng 2005a). As a new area in education, localised learning is studied to determine how to maximise local resources, community support and cultural relevance to broaden students' learning experiences and knowledge about the community.

Globalisation in tertiary learning may include activities such as global networking, international sharing through e-platforms, international immersion and exchange programmes, international partnerships in various learning projects,

video-conferencing to enable international interactions between students, sharing world-class learning materials and including global issues in the learning content. A new research trend in globalised learning aims to advance knowledge on how to maximise learning opportunities for students on a global scale using innovative arrangements and activities (Webb and Reynolds 2013; Wastiau et al. 2013; Kamylyis et al. 2013).

The application of ICT is an innovative means of facilitating students' globalised, localised and individualised learning and CMI development in a networked environment because it redefines and optimises (a) the boundary and nature of the learning context from 'site-bounded' to 'unbounded'; (b) the composition of players involved in the learning process from 'limited internal teachers and peers' to 'unlimited local and global experts and peers'; (c) the format, speed and nature of communication and feedback on learning in a much more interactive, efficient and effective way to enhance students' triplised learning; and (d) the generation, management, sharing and utilisation of knowledge in a much creative, powerful and efficient way to serve diverse needs during the learning process (Cheng 2006; Rajasingham 2011).

With the support of ICT, the notion of the learning environment becomes non-traditional. It becomes an *unbounded, open, flexible and locally and globally networked* environment, providing unlimited opportunities for world-class tertiary learning. Students can learn from world-class scholars, researchers, experts, peers and learning materials worldwide through various networks and innovative programmes. The new paradigm has made the development of an e-learning environment and innovative applications of ICT a fast-growing area in education (Fu 2013; Özyurt et al. 2013; Ray et al. 2012; Redecker and Johannessen 2013; Wastiau et al. 2013; Webb and Reynolds 2013).

8.6 Internationalisation of Higher Education

As part of the paradigm shift and reform of higher education, internationalisation has received central attention or become a strategic priority in international declarations, national policy statements, university strategic plans and academic articles since the turn of the new century (Knight 2014a). It is often believed that the processes and results of internationalisation contribute to the development of world-class education, student global competences, economic competitiveness, income generation, national soft power building, the modernisation of the tertiary education sector and transformation towards a knowledge/innovation society (Altback and Knight 2007; Knight 2014b; Mohsin and Zaman 2014; Yeravdekar and Tiwari 2014).

We can see that the nature and purpose of the internationalisation of higher education have become increasingly complicated, dynamic and multi-dimensional in the past few decades. There may be multiple motives, including academic/educational (e.g., development of student/staff global competences, world-class academic capacity building, international benchmarking), economic (e.g., development of

A. Motives of Internationalization					
<ul style="list-style-type: none"> • Academic/Educational: Student/staff global competences, World-class capacity building, International benchmarking, etc. • Economic: Economic competitiveness, Financial income, etc. • Political: National soft power building, Diplomatic influence, etc. • Social & cultural: Societal transformations in a globalized world, etc. 					
C. International Activities	B. International Mobility of Key Actors/Elements				
	Students	Teachers	Expertise/ Knowledge	Programs	Institutions
Delivery					
Exchange					
Export/ Import					
Marketization					
Entrepreneurship					
Competition					
Building Alliances/ Collaboration					
D. Functional Areas of Higher Education	Teaching/Learning, Curriculum, Professional & Development Services, Research, Consultancies, Knowledge Sharing, Technology Transfer, etc.				

Fig. 8.2 Conceptualisation of the internationalisation of higher education (Source: Adapted from Cheng et al. 2016a)

economic competitiveness and financial income), political (e.g., enhancement of national soft power and regional diplomatic influence), and social/cultural motives (e.g., facilitating societal transformations or multicultural adaptations in response to a globalised world) (Altback and Knight 2007; Ennew and Greenaway 2012; Mohsin and Zaman 2014; Yeravdekar and Tiwari 2014). Comparatively, the academic and educational motives of internationalisation are more directly related to the discussion of the paradigm shift in tertiary learning and serve the achievements of world-class education and twenty-first-century competencies. The other motives may only contribute indirectly. What priorities should be given to these motives, and why, is an important issue in planning the internationalisation of higher education. In general, the academic and educational motives should be at the core and be given a high priority. Internationalisation may also include the international mobility of key actors and elements and various types of international activities across borders in functional areas of higher education. The complexities and domains (or dimensions) in the conceptualisation of higher education can be illustrated in a matrix, as shown in Fig. 8.2 (Cheng et al. 2016a).

Internationalisation may not be limited to the international mobility of students, teachers and programmes (Bista and Foster 2014; Clifford and Montgomery 2014; Healey and Michael 2014; Jones 2013; Quezada 2014; Rhodes et al. 2014; Yee 2014), but may also be extended to expertise, knowledge and institutions and even to the development of a city as a regional education hub (Cheng et al. 2011; Knight 2014a, b; Li and Roberts 2012; Tadaki and Tremewan 2013). The international mobility of these key actors and elements can directly or indirectly contribute to the development of world-class education and facilitate a paradigm shift in learning at

different levels and in different aspects, depending on the intended motives of the internationalisation of higher education.

Following the fast expansion of higher education in the past decades, internationalisation processes have become more complicated, and include not only the traditional modes for the international delivery, exchange and export/import of higher education services, but also the emerging modes of international activities such as international marketisation, entrepreneurship, competition and building alliances and collaboration across borders (Ennew and Greenaway 2012; Cheng et al. 2009; Knight 2014c). All of these modes of internationalisation can be used to create conditions that facilitate the development of world-class education and a paradigm shift in learning, depending on the motives of internationalisation, the availability of resources and the existing institutional and national constraints. Which mode will turn out to be universally better is a question that remains to be answered.

Internationalisation takes place not only in the functional areas of teaching, learning, the curriculum and professional and development services, but also in research, consultancies, knowledge sharing and technology transfer across borders. Nearly all of these functional areas can directly contribute to the development of world-class education and facilitate a paradigm shift in higher education if they are well designed, managed and implemented to achieve the planned aims.

This conceptualisation matrix provides policy-makers, scholars, educators and change agents with a comprehensive approach for the formulation of internationalisation strategies for the development of twenty-first-century higher education and learning.

8.7 Scenarios of Higher Education Development

The analysis of the internationalisation of and paradigm shift in higher education cannot be separated from the mainstream development of higher education in the local and global contexts. The development of higher education worldwide is often influenced by two key tensions (Cheng 2004). The first tension is between *public funding* and *private funding/market driven* and the second is between *global/regional orientation* and *local orientation*, as illustrated in Fig. 8.3. To a great extent, the global/regional orientation is in line with the globalisation of tertiary learning and internationalisation of higher education discussed above.

Based on these two tensions, a new typology of four scenarios outlining the potential directions for higher education development is proposed (Cheng 2004; Cheng et al. 2016a).

Scenario 1 development is characterised by public funding and a global/regional orientation with emphasis on the development of world-class higher education, international benchmarking, global branding, international exchange and collaboration and global competitiveness at the individual (staff, students), institution and system levels. This scenario is consistent with the academic and educational motives

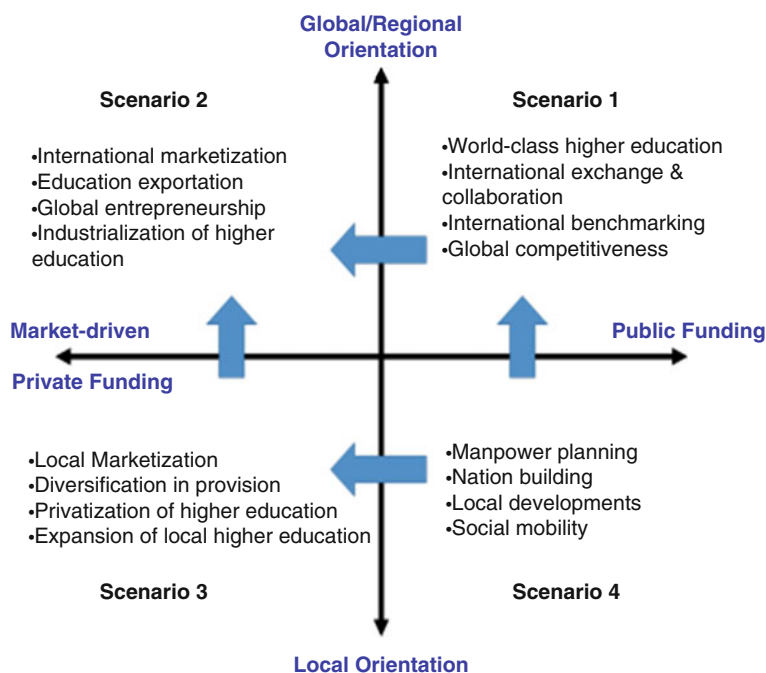


Fig. 8.3 Higher education development: four scenarios (Adapted from Cheng 2004; Cheng et al. (2016a))

of internationalisation and the paradigm shift in tertiary learning discussed above. Scenario 1 seems to be a preferable choice if public funding is already available to support the development and reform of higher education. For example, higher education in Hong Kong is currently making an effort to shift from Scenario 4 towards Scenario 1 (Fig. 8.3).

Scenario 2 development is driven by market demand/private funding and a global/regional orientation that emphasises the international marketisation, export, global entrepreneurship and industrialisation of higher education. To some extent, this development, with its focus on international marketisation and export, echoes some of the common practices that take international education as the internationalisation of higher education. If the motives are also to pursue world-class education and a paradigm shift in tertiary learning for the twenty-first century (in addition to the explicit purposes of international marketisation and education export), this scenario may be preferable for higher education development with private funding and international resources. Given the serious competition for scarce resources locally and internationally, higher education systems around the world are increasingly shifting towards Scenario 2, with the aim of broadening the international market for resources (Cheung et al. 2011).

Scenario 3 development is driven by market demand/private funding and a local orientation. Different from Scenario 2, it emphasises the local marketisation, priva-

tisation, expansion and diversification of higher education provision to meet the increasingly diverse demands of local communities. Given its main focus on the local community and local market rather than the needs of internationalisation, and global orientation, it may be difficult for Scenario 3 development to facilitate a paradigm shift in learning and pursue world-class education. Traditionally, many colleges, institutes or universities with major missions to serve their local communities and markets are in this scenario.

Scenario 4 development is a comparatively traditional model of higher education development, characterised by public funding and local orientation. It focuses on the use of public funding for the development of higher education to meet local needs for manpower planning, nation building, community development and social mobility. The internationalisation of higher education may not be the major concern in this model. Similar to Scenario 3, it is difficult for Scenario 4 to facilitate the paradigm shift in tertiary learning and the pursuit of world-class education in the twenty-first century. This may explain why, in facing the challenges of globalisation, policy efforts in the Asia-Pacific region have tended to transform the higher education system from Scenario 4 towards Scenario 1 or Scenario 2 over the past two decades. The Hong Kong higher education system is an interesting case that illustrates this transformation over the past 20 years (Cheng et al. 2016b).

8.8 Concluding Remarks

In response to the increasing effects of globalisation on higher education and the limited public resources for development, there is a trend of transforming higher education from a local orientation to a global orientation through internationalisation, and from public funding to private funding through marketisation, as illustrated by the arrows in Fig. 8.3. To a certain extent, these transformations also represent a paradigm shift in higher education development and management that is intended to broaden the local and global sources of resources and support to expand and reform higher education and re-define its aims, nature and practices to make them more relevant to the future.

Conceptually, this typology of higher education development, together with the conceptualisation matrix of internationalisation, provides an original framework to observe, study and analyse the complicated issues related to the fast development and transformation of higher education. In addition, the proposed new paradigm of tertiary learning, including the pentagon theory of CMI developments and the concepts of globalisation, localisation and individualisation in tertiary learning, provide a comprehensive perspective to promote and facilitate the paradigm shift in tertiary learning and the development of world-class education in the twenty-first century.

Notes

1. In this chapter, *intelligence* is conceptualised as a person's internal or internalised thinking ability, and correspondingly, *thinking* is conceptualised as an internal mental process of the person in action or learning. The experience of thinking in action or learning can be internalised as the person's intelligence in terms of techniques, concepts, knowledge, mind-set, schemes (Piaget 1962), schemata (Schmidt 1975), images (Denis 1991), repertoires (Schön 1987) or theories-in-use (Argyris and Schön 1974). The existing level of a person's intelligence will determine his or her performance in thinking and action.

References

- Abbas, Z., Bharat, A., & Rai, A. K. (2013). Paradigm shift from informative learning to transformative learning: A preliminary study. *International Journal of Innovative Research and Development*, 2(12), 167–172.
- Altbach, P., & Knight, J. (2007). The internationalization of higher education: Motivation and realities. *Journal of Studies in International Education*, 11(3/4), 290–305.
- Argyris, C., & Schon, D. A. (1974). *Theory in practice: Increasing professional effectiveness*. San Francisco: Jossey-Bass.
- Association of American Colleges and Universities. (2015). *What is the 21st century liberal education?* Retrieved from: <https://www.aacu.org/leap/what-is-a-liberal-education>
- Beetham, H., & Sharpe, R. (Eds.). (2013). *Rethinking pedagogy for a digital age: Designing for 21st century learning*. London: Routledge.
- Bernat, C., & Mueller, R. J. (2013). *Individualized learning with technology: Meeting the needs of high school students* (pp. 1–204). Lanham: Rowman & Littlefield Education.
- Binkley, M., Erstad, O., Hermna, J., Raizen, S., Ripley, M., Miller-Ricci, M., & Rumble, M. (2012). *Defining twenty-first century skills*. In Griffin, P., Care, E., & McGaw, B. (Eds.), *Assessment and teaching of 21st century skills* (pp. 17–66). Dordrecht: Springer. http://dx.doi.org/10.1007/978-94-007-2324-5_2
- Bista, K., & Foster, C. (2014). Internationalizing curriculum and pedagogy in higher education. *Multicultural Perspectives*, 16(3), 185–189.
- Blackledge, D., & Hunt, B. (1985). *Sociological interpretations of education*. Sydney: Croom Helm.
- Bolman, L. G., & Deal, T. E. (1997). *Reframing organizations: Artistry, choice, and leadership* (2nd ed.). San Francisco: Jossey-Bass.
- Cavalcanti, C. (2002). Economic thinking, traditional ecological knowledge and ethnoeconomics. *Current Sociology*, 50(1), 39–55.
- Cheng, Y. C. (2000). A CMI-triplization paradigm for reforming education in the new millennium. *International Journal of Educational Management*, 14(4), 156–174.
- Cheng, Y. C. (2004). New thinking and strategic platform for higher education development in Hong Kong. In K. H. Kwok & S. L. Chan (Eds.), *Hong Kong education in the past seventy years* (pp. 187–200). Hong Kong: Hong Kong Teachers' Association.
- Cheng, Y. C. (2005a). *New paradigm for re-engineering education: Globalization, localization and individualization*. Dordrecht: Springer.
- Cheng, Y. C. (2005b). Multiple thinking and multiple creativity in action learning. *Journal of Education Research*, 134, 76–105.

- Cheng, Y. C. (2006). New paradigm of learning and teaching in a networked environment: Implications for ICT literacy. In L. W. H. Tan & R. Subramaniam (Eds.), *Handbook of research on literacy in technology at the K-12 level* (pp. 1–20). Hershey: Idea Group.
- Cheng, Y. C. (2013). Contextualized multiple thinking and creativity. In A. Antonietti, B. Colombo, & D. Memmert (Eds.), *Psychology of creativity: Advances in theory, research and application* (pp. 21–52). Hauppauge: Nova Science Publishers. Ch.2.
- Cheng, Y. C. (2015). Paradigm shift in education: Towards the third wave research. In L. Hill & F. Levine (Eds.), *World education research yearbook 2014* (pp. 5–29). New York: Routledge.
- Cheng, Y. C., & Mok, M. M. C. (2008). What effective classroom: Towards a paradigm shift. *School Effectiveness and School Improvement*, 19(4), 365–385.
- Cheng, Y. C., Ng, S. W., Cheung, A., Choi, P. L., Tang, Y. F., Yuen, Y. M., & Yuen, W. W. (2009). *A technical research report on the development of Hong Kong as a regional education hub* (pp. 1–125). Hong Kong: The Hong Kong Institute of Education.
- Cheng, Y. C., Cheung, A. C. K., & Yuen, W. W. (2011). Development of a regional education hub: The case of Hong Kong. *International Journal of Educational Management*, 25(5), 474–493.
- Cheng, Y. C., Cheung, A. C. K., & Ng, S. W. (2016a). Internationalization of higher education: Conceptualization, typology and issues. In Y. C. Cheng, A. C. K. Cheung, & S. W. Ng (Eds.), *Internationalization of higher education: The case of Hong Kong*. Dordrecht: Springer.
- Cheng, Y. C., Cheung, A. C. K., & Ng, S. W. (Eds.). (2016b). *Internationalization of higher education: The case of Hong Kong*. Dordrecht: Springer.
- Cherniss, C., & Goleman, D. (2001). *The emotionally intelligence workplace: How to select for, measure, and improve emotional intelligence in individuals, groups, and organizations*. San Francisco: Jossey-Bass.
- Cheung, A., Yuen, W. W., Yuen, Y. M., & Cheng, Y. C. (2011). Strategies and policies for Hong Kong's higher education in Asian markets: Lessons from the United Kingdom, Australia, and Singapore. *International Journal of Educational Management*, 25(2), 144–163.
- Clifford, V., & Montgomery, C. (2015). Transformative learning through internationalization of the curriculum in higher education. *Journal of Transformative Education*, 13(1), 46–64.
- Davenport, T. H., & Prusak, L. (2000). *Working knowledge: How organizations manage what they know*. Boston: Harvard Business School Press.
- Davies, M., & Delvin, M. (2007). *Interdisciplinary higher education: Implications for teaching and learning*. Center for the Study of Higher Education, University of Melbourne, Australia. http://www.cshe.unimelb.edu.au/resources_teach/curriculum_design/docs/InterdisciplinaryHEd.pdf
- Denis, M. (1991). *Image and cognition*. New York: Harvester Wheatsheaf.
- Dubina, I. N., Carayannis, E. G., & Campbell, D. F. J. (2012). Creativity economy and a crisis of the economy? Coevolution of knowledge, innovation, and creativity, and of the knowledge economy and knowledge society. *Journal of the Knowledge Economy*, 3(1), 1–24.
- Ennew, C. T., & Greenaway, D. (2012). Introduction and overview. In C. T. Ennew & D. Greenaway (Eds.), *The globalization of higher education* (pp. 1–19). Paddyfield: Palgrave Macmillan.
- Finegold, D., & Notabartolo, A. S. (2010). 21st century competencies and their impact: An interdisciplinary literature review. *Transforming the US workforce development system: Lessons from research and practice*. Retrieved from: http://www.hewlett.org/uploads/21st_Century_Compencies_Impact.pdf
- Fontana, G. (2001). Keynes on the “nature of economic thinking”: The principle of non-neutrality of choice and the principle of non-neutrality of money. *The American Journal of Economics and Sociology*, 60(4), 711–743.
- Fu, J. (2013). Complexity of ICT in education: A critical literature review and its implications. *International Journal of Education and Development using ICT*, 9(1), 112–125.
- Gorard, S., & Rees, G. (2002). *Creating a learning society: Learning careers and policies for lifelong learning*. Bristol: Policy Press.
- Griffin, P., Care, E., & McGaw, B. (Eds.). (2012). *Assessment and teaching of 21st century skills*. Dordrecht: Springer.

- Healey, N., & Michael, L. (2014, July 15). Towards a new framework for analysing transnational education. *Higher Education Policy*, 1–23. Advance online publication. <http://www.palgrave-journals.com/hep/journal/vaop/ncurrent/pdf/hep201417a.pdf>
- Jones, E. (2013). The global reach of universities: Leading and engaging academic and support staff in the internationalization of higher education. *Leadership and Cooperation in Academia: Reflecting on the Roles and Responsibilities of University Faculty and Management*, 161, 161–182.
- Kampylis, P., Law, N., Punie, Y., Bocconi, S., Han, S., Looi, C. K., & Miyake, N. (2013). *ICT-enabled innovation for learning in Europe and Asia. Exploring conditions for sustainability, scalability and impact at system level* (No. JRC83503). Institute for Prospective and Technological Studies, Joint Research Centre. Retrieved from <http://ftp.jrc.es/EURdoc/JRC83503.pdf>
- Kaufman, K. J. (2013). 21 ways to 21st century skills: Why students need them and ideas for practical implementation. *Kappa Delta Pi Record*, 49(2), 78–83.
- Knight, J. (2014a). Is internationalisation of higher education having an identity crisis? In *The forefront of international higher education* (pp. 75–87). Dordrecht: Springer.
- Knight, J. (2014b). International education hubs: Collaboration for competitiveness and sustainability. *New Directions for Higher Education*, 168, 83–96.
- Knight, J. (Ed.). (2014c). *International education hubs: Student, talent, knowledge-innovation models*. Dordrecht: Springer. doi:10.1007/978-94-007-7025-6_3.
- Lane, J. E. (2015). Higher education internationalization: Why governments care. In E. Ullberg (Ed.), *New perspectives on internationalization and competitiveness* (pp. 17–30). Dordrecht: Springer International Publishing.
- Li, X., & Roberts, J. (2012). A stages approach to the internationalization of higher education? The entry of UK universities into China. *The Service Industries Journal*, 32(7), 1011–1038.
- Longworth, N. (2013). *Lifelong learning in action: Transforming education in the 21st century*. London: Routledge.
- Mohsin, A., & Zaman, K. (2014). Internationalization of universities: Emerging trends, challenges and opportunities. *Journal of Economic Info*, 3(1), 1–21.
- Noweski, C., Scheer, A., Büttner, N., von Thienen, J., Erdmann, J., & Meinel, C. (2012). Towards a paradigm shift in education practice: Developing twenty-first century skills with design thinking. In *Design thinking research* (pp. 71–94). Berlin: Springer.
- Ohmae, K. (2000). *The invisible continent: Four strategic imperatives of the new economy*. London: Nicholas Brealey.
- Özyurt, Ö., Özyurt, H., Baki, A., & Güven, B. (2013). Integration into mathematics classrooms of an adaptive and intelligent individualized e-learning environment: Implementation and evaluation of UZWEBMAT. *Computers in Human Behavior*, 29(3), 726–738.
- Park, J. Y., & Son, J. B. (2010). Transitioning toward transdisciplinary learning in a multidisciplinary environment. *International Journal of Pedagogies and Learning*, 6(1), 82–93.
- Pellegrino, J. W., & Hilton, M. L. (Eds.). (2012). *Education for life and work: Developing transferable knowledge and skills in the 21st century*. Committee on Defining Deeper Learning and 21st Century Skills; National Research Council. Washington, DC: National Academic Press.
- Pfeffer, J. (1992). *Managing with power: Politics and influence in organizations*. Boston: Harvard Business School Press.
- Piaget, J. (1962). *Play, dreams and imitation*. New York: Norton.
- Quezada, R. L. (Ed.). (2014). *Internationalization of teacher education: Creating globally competent teachers and teacher educators for the 21st century*. New York: Routledge.
- Rajasingham, L. (2011). Will mobile learning bring a paradigm shift in higher education? *Education Research International*, 2011. Retrieved from: <http://dx.doi.org/10.1155/2011/528495>
- Ramirez, F. O., & Chan-Tiberghin, J. (2003). Globalisation and education in Asia. In J. P. Keeves & R. Watanabe (Eds.), *International handbook of educational research in the Asia-Pacific region* (pp. 1095–1106). Dordrecht: Kluwer Academic Publishers.

- Ray, W. C., Muñiz-Solari, O., Klein, P., & Solem, M. (2012). Effective online practices for international learning collaborations. *Review of International Geographical Education Online*, 2(1), 25–44.
- Redecker, C., & Johannessen, Ø. (2013). Changing assessment – Towards a new assessment paradigm using ICT. *European Journal of Education*, 48(1), 79–96.
- Rhodes, G., Loberg, L., & Hubbard, A. (2014). Historical, philosophical, and practical issues in providing global learning opportunities through study abroad. *New Directions for Student Services*, 2014(146), 5–13.
- Salas-Pilco, S. Z. (2013). Evolution of the framework for 21st century competencies. *Knowledge Management & e-Learning: An International Journal (KM&EL)*, 5(1), 10–24.
- Schein, E. H. (1999). *The corporate culture*. San Francisco: Jossey-Bass.
- Schmidt, R. A. (1975). A schema theory of discrete motor skill learning. *Psychological Review*, 82, 225–260.
- Schön, D. A. (1987). *Education the reflective practitioner: Toward a new design for teaching and learning in the professions*. San Francisco: Jossey-Bass.
- Tadaki, M., & Tremewan, C. (2013). Reimagining internationalization in higher education: International consortia as a transformative space? *Studies in Higher Education*, 38(3), 367–387.
- Tan, L. W. H., & Subramaniam, R. (Eds.). (2006). *Handbook of research on literacy in technology at the K-12 level* (pp. 1–20). Hershey: Idea Group.
- UNDP/UNESCO. (2013). *Creative economy report 2013 (special edition): Widening local development pathways*. United Nations Development Programme (New York: UNDP) and United Nations Educational, Scientific and Cultural Organization (Paris: UNESCO) <http://www.unesco.org/culture/pdf/creative-economy-report-2013.pdf>
- UNESCO, Institute of Statistics. (2014). *Higher education in Asia: Expanding out, expanding up*. Retrieved from: <http://www.uis.unesco.org/Library/Documents/higher-education-asia-graduate-university-research-2014-en.pdf>
- Wain, K. (2004). *The learning society in a postmodern world: The education crisis*. New York: Peter Lang.
- Wastiau, P., Blamire, R., Kearney, C., Quittre, V., Van de Gaer, E., & Monseur, C. (2013). The use of ICT in education: A survey of schools in Europe. *European Journal of Education*, 48(1), 11–27.
- Webb, M., & Reynolds, N. (2013). Current and future research issues for ICT in education. *Journal of Computer Assisted Learning*, 29(1), 106–108.
- Yee, C. P. (2014). Internationalization of higher education: A literature review on competency approach. *International Journal of Asian Social Science*, 4(2), 258–273.
- Yeravdekar, V. R., & Tiwari, G. (2014). Internationalization of higher education and its impact on enhancing corporate competitiveness and comparative skill formation. *Procedia-Social and Behavioral Sciences*, 157, 203–209.

Chapter 9

Higher Education Reforms and Center-Periphery Dilemmas: Ukrainian Universities Between Neo-Soviet and Neo-Liberal Contestations

Anatoly Oleksiyenko

Abstract The awakening of the civil society in Ukraine has called national universities to play a major role in social and economic transformations aimed at eliminating post-colonial legacies and accelerating the country's European integration. However, the higher education system of Ukraine used to be on periphery of "knowledge empires" (Altbach PG, *Empires of knowledge and development*. In: Altbach PG, Balán J (eds) *World class worldwide: Transforming research universities in Asia and Latin America*. The Johns Hopkins University Press, Baltimore, 1–30, 2007), controlled by various imperial forces over the last few centuries. Will the marginalized academe be able to help their country reverse the relegation trends in economy as much as in building civil society? The analysis draws on the literature and document analysis pertaining to higher education transformations, and interviews with professors at the leading universities in the cities of Kyiv and Lviv, in order to explore cumulative disadvantages, as well as seek opportunities for reform leverages. The analysis is framed by focus on tensions between neo-Soviet and neo-liberal reform approaches in the post-colonial higher education, which have incompatible perspectives on academic freedom, grassroots initiatives, and structural innovations.

Keywords Civil society • Economic transformation • European integration • Global academic standards • Higher education reform • Ideology • Knowledge based economy • Marketization of higher education • Neo-liberal reform • Professoriate • Ukrainian universities

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9.1 Introduction

Following the 2014 Revolution of Dignity, Ukraine's universities faced a major challenge: in order to empower the intellectual and technological revamp of the national economy, they had to fully revamp themselves. This implied not only embracing European and global standards of higher learning, but also providing a vital space for the creative class to connect science, education and knowledge transfer to enable new ideas and products, and to make them globally attractive. This required from Ukrainian universities a concerted effort to stimulate transformations in research and education, so that local campuses would turn into accumulators of local and global talents, and spearhead the innovations so badly needed by the emerging knowledge based economy.

This was easier said than done. The military conflict with Russia, which started immediately after the revolution, thrust the integrated Soviet-style military-industrial complex of Ukraine, and its dilapidating post-colonial infrastructure, into collapse. The trade embargo imposed by Russia on Ukrainian goods meant that the Ukrainian economy lost its traditional markets. While some argued that the resulting economic pain would spur the reorientation of the economy through the adoption of European standards and markets, as well as stimulate the growth of new economies (indeed, the IT industry appeared to be taking off), the state budget continued to be gutted by defense spending and austerity measures. Resulting cuts in government subsidies seriously affected most social sectors, including education. When choosing priorities in the time of crisis, policymakers were more likely to propose deep cuts to higher education than other "more critical" sectors.

Having endured tight bureaucratic supervision imposed by the neo-Soviet government of President Yanukovich, which shaped human resource development to reconstruct Russian zones of trade, cultural and military influence, in 2014 Ukrainian universities suddenly faced the prospect of austere neo-liberal reforms pushed by the west: i.e., marketization of higher education, devolution of budgetary responsibilities, public-private partnerships, increasing reliance on private tuition fees, sponsorship and industrial contracts, as well as strategic internationalization (see Zajda 2014). While the Yanukovich-era trends were repulsive to reform-minded academics, the alternatives being proposed were not without influential detractors. The following section sheds light on the nature of the tensions and explains how neo-Soviets and neo-liberals clashed over placing the Ukrainian university into either the Russian or the European center-periphery constructs. The chapter draws on inputs from the literature and document analysis pertaining to higher education transformations in the Ukrainian context. It also engages inputs on related issues from a data-set of 50 semi-structured interviews with professors at leading Ukrainian universities in the cities of Kyiv and Lviv.

9.2 Ukrainian Higher Education: Center-Periphery Legacies

For centuries, Ukrainian socio-political contexts were formed through colonial dependencies on various powerful empires, which used Ukrainians as cheap labor and subjected them to terrible suffering through ideological and military conflicts on the territory that Snyder calls the European “bloodlands” (Subtelny 2009; Snyder 2012). According to some scholars, the formation of the Soviet Union in 1922 signaled the possibility of a “renaissance” in Ukraine’s politics and culture (Szporluk 2000; Subtelny 2009). However, the aspirations for self-determination were quickly tramped by the Stalinist regime, which placed Ukraine back into colonial dependence on the Kremlin. The Soviets and their descendants nurtured in Ukraine a sense of defeat, compliance and dependence through political repressions, genocide and forced migration, as well as redistributive hierarchies guided by cronyism and corruption. Ukrainian academic elites maintained some semblance of integrity by investing themselves in the de-ideologized natural sciences and engineering, or by escaping to intellectual centers in western diasporas and universities. Meanwhile, national culture, history and political studies, among other social sciences and humanities, were heavily censored, regimented and periodically purged in Ukrainian universities, as they were elsewhere in the Soviet empire (Cummings and Hinnebusch 2011), so as to curb creative and independent thinking.

While the collapse of the Soviet Union and the rise of the new independent state generated some openings for transformations in Ukrainian universities, the lingering mind-set of dependence on the colonial regime in Moscow, as well as the tendency to develop new dependencies (for example, on western donations), thwarted the development of innovative programs and processes in the country (see some findings in Korostelina 2013). The newly independent Ukrainian governments were cautious about radical reforms, most frequently resorting to institutional and programmatic adjustments, which produced hybrids that were equally unattractive to talented local students, to western-educated returnees, and to foreign collaborators. Inspired in part by the Chinese transformations in higher education aimed at enhancing national performance in global competition, the Ukrainian government that took power after the 2004–2005 Orange Revolution began to develop its own model of a global research university. However, the project was shut down several months after it began, i.e., as soon the neo-Soviet government of Viktor Yanukovich came back to power (Oleksiyenko 2014). With the backing of Vladimir Putin’s regime in Russia, the Ukrainian neo-Soviets tightened bureaucratic controls in the Ministry of Education and reversed innovative trends, including the post-Orange Revolution re-interpretations of Soviet history in the university curricula (e.g., on the national liberation movements in western Ukraine, as well as regarding the Stalinist-era genocide through deliberate mass starvation). Although the reasons for the 2014 popular uprising against the Yanukovich government are too complex to discuss in detail here, the growing bureaucratization, regression and corruption in the education sector was certainly among key grievances.

The following sub-sections illustrate the systemic, institutional and individual challenges that Ukrainian academics confronted since their country became independent in 1991, with some references to their experiences in Soviet times.

9.3 Systemic Challenges

Almost half of the professors interviewed for this study indicated that the collapse of the Soviet Union led to significant transformations in Ukrainian universities. In their words: “The higher education system became more open... Our students study in Europe; our students are mobile. Our professors conduct research in the framework of European educational programs”; “the students became more independent... and more demanding”. “They demand more dynamic processes, interactivity, exploratory studies, where they act as subjects (rather than objects) and active participants of the educational process”. “The teachers lose the authoritarian style and adopt democratic styles...”. Some also pointed to “the development of dialogical forms of study”; teachers are seen as having “more freedom in selecting information, and expressing their thoughts”.

However, more than 80 % of the interviewees argued that the pre-2014 higher education reforms failed, having produced a rigid system of governance that makes Ukrainian universities unattractive to both local and foreign students. One interviewee argued that Ukrainian higher education turned out to be a “combination of the Soviet and European systems of education... artificially joined... keeping everything negative from the Soviet system, and adding everything negative from the European system; without any positive elements of one or the other system”. Many participants expressed an expectation that the Revolution of Dignity would offer an opportunity to overturn the existing model. So what exactly made the professors unhappy about the post-Soviet model of education?

Several participants argued that the post-Soviet reforms progressed quite rapidly in the 1990s, when the Ministry of Education was weak and under-resourced. Various private universities emerged (e.g., National University of Kyiv Mohyla Academy, and the Ukrainian Catholic University in Lviv), centers of excellence were created in public universities, and new courses were introduced, primarily with the help of resources provided by various western donors. However, in the early 2000s, the emerging oligarchy began to consolidate its hold over the economy, taking over the process of nation-state building. Governmental structures were centralized and the post-Soviet bureaucracy was strengthened (Ukraine’s centralization efforts corresponded with similar trends in the Russian Federation). Among other governmental agencies, the Ukrainian Ministry of Education increased its regulatory functions, and began to control resource flows in the university self-funding programs. Bureaucratic functions became firmly entrenched after the 2005–2010 Orange Revolution government failed to make reforms, while “the dynamics of innovation began to slow down; meanwhile, what might be called post-Soviet legacy began to return”.

Some study participants pointed out that, as it became more bureaucratic, the Ministry of Education accelerated control over curricula development and urged enhanced access to private forms of higher education in order to generate more budget income. Indeed, the participation rate in higher education was expanded from 40 % in 1991 to 80 % in 2012. At the same time, the workloads of professors increased to an average of 900–1,000 instruction hours per academic year. The comeback of the neo-Soviets in 2010 intensified prescriptive regulation: for example, the Education Ministry formalized all university courses and increased formal accountability for each course, essentially placing professors into the same industrial format as was practiced by the Soviet Union. Government bureaucrats took control of tuition rates and collected all of the revenue, returning only a small fraction of it to universities. Meanwhile, professors' salaries remained low. Some study participants complained that they often had to spend their own money on paper and other classroom supplies. Many worked in unheated, unrepaired or unlit classrooms. According to one professor: "Our worst challenge is that we have a very centralized system of powers. We have the ministry that controls all functions. We don't have academic freedom or institutional autonomy. We can earn some money, but then we are forced to give this money away, and then we make requests in order to get money and buy paper, computers, etc."

In practice, by 2012, Ukraine adopted a highly disadvantageous form of state-controlled entrepreneurialism, which created layers of extractive bureaucracy to keep tight control over the rates of admissions and fees. However, it should be noted that the Ukrainian system did not emerge as a commercial project similar to the tuition-fee-based entrepreneurial models in Australia or the UK. Although the neo-Soviets engaged some neo-liberal strategies, the oligarchic government primarily practiced control "for the sake of control over political agenda and processes". Like other ministries, the Ministry of Education intensified control to enable various forms of corruption (e.g., privatization of university lands and premises by governmental officials and their supervisors in the industrial oligarchy). The neo-Soviet system emerged as a much worse replica of the Soviet model. In contrast to the Soviet regime, one study participant argued, the neo-Soviets had no vision of why they needed education: "Today, this vision is that education is peripheral, and can be funded or unfunded; it can be a target for budget cuts. Today, there is no vision that education is a pivot of economic and welfare development in the country."

One interviewee explained why such a vision did not evolve: "In Soviet times, the ministers of education in the republics were statisticians. The Soviet administrative system never anticipated local initiatives. For example, giving initiative to the Baltic republics could be dangerous. Therefore, the system was very simple. All decisions were made in the All-Union Ministry and the regional ministries were dumbly implementing what was ordered from Moscow. When Ukraine announced independence, all the short-sighted implementers got full freedom and began to implement whatever might have come to their mind. However, given that they were once recruited and promoted as implementers only, nothing good was coming to their mind".

To reproduce the Soviet pretense of equity, the neo-Soviets adopted the bureaucratic template of assigning the same heavy workload and the same low pay-scale across all universities. As one professor remarked: “The system of competition and grant-giving is absent; instead there is the Soviet-style approach of ‘a little bit to everyone’”. Another respondent pointed out: “The resource distribution is organized hierarchically, and in reality there is very weak competition. Hence, some irrelevant research projects are subsidized.” One professor explains the neo-Soviet evolution of the hierarchical distribution in the following way: “At the moment, we have an equitable distribution of resources. We finance those who do not need money, but cannot finance those who need money. In my opinion, this distribution principle is wrong. The government made bad decisions from the very beginning. In the early 1990s, we had 140 universities (of three to four accreditation levels), and we had the highest concentration of universities in the entire Soviet Union. At that time, we thought that we did not need larger quantity, but we did need better quality. However, the process went wrong: there emerged private universities and new universities in small cities, hence public financing, which was in fact decreasing, became divided among the larger number of universities. As a result, we now have over 350 universities (and we used to have 140), and among those, two thirds are public universities; this means that the number of the public universities has doubled”.

Like in Soviet times, the populist notion of equity did not reflect reality, given that certain rectors built good relations with the Ministry of Education to get a larger piece of the budgetary pie. In the words of an experienced academic: “Today, if you are closer to the ministry and to the minister, or to his deputies, then you can secure good finance. Today, there are no clear criteria of public funding distribution. In fact there are such criteria, but they are very ambiguous. It’s very hard to explain why a 10–15 year old university is assigned to train thousands of specialists, and a 100-year old university is assigned to train only 100 specialists in the same specialty. In other words, the system is completely in the mode of manual steering... This is not even the Soviet approach. This is a synthesis of the Soviet system with criminality. This is a criminal system – banditry – synthesized with the Soviet Party system. This is a terrible synthesis”.

9.4 Institutional-Level Challenges

The neo-Soviet universities were turned into a vertical hierarchy, which took powers away from individual professors and cancelled out some of the early post-independence gains. One of the professors argued that “in Soviet times, there was not as much demand for reports”. Professors felt that they had to fill in numerous forms to communicate their needs, or report on any course changes, no matter how minor. One participant argued that they were saddled with “Stakhanovism-kind of workload norms, followed by excessive bureaucratic paperwork”. Moreover, the neo-Soviets insisted on actual paperwork, despite the time and effort-saving

potential of modern information technology. A researcher at the National Lviv University was among others who expressed similar complaints: “The question is: can’t we fill in these forms online? Why do we need to post them at the Main Post Office? ... Who will read such volumes of paper? It’s impossible to review them efficiently and effectively... There are requirements that these need the signature of the Minister, and a fresh stamp. But we live in the twenty-first century and information technologies allow us to make process improvements. However, you have to make visits to Kyiv because everyone does so, and then you have to walk around the ministerial offices – really very humiliating and redundant.” Another professor echoed: “people sink in the papers. Nobody knows who really needs them, you fill in all kinds of circulations, letters, references... and most interestingly, nobody really needs this”.

The universities however had little choice and no satisfactory means to challenge the authorities. One professor argued that the Ukrainian system did not really depart from the Soviet model at all: “there is a complete monopoly.... The higher education system in Ukraine, is hyper-centralized. In formal terms, the law defines the autonomy of higher education institutions, but it provides no support academically, financially, or administratively. Moreover, in the last 2 years we witnessed a tendency to curb academic freedom and university autonomy”. As one interviewee put it, “there is a need for decentralization: the rector should not be the owner of the university; the minister should not be the owner of the educational system. There should be academic freedom.” Hence, the decentralization of education must become the imperative. Another participant said: “I think that the Ukrainian university is an interesting post-Soviet hybrid. It has a non-transparent system of decision-making... There is no effective accountability”. Indeed, the increasingly opaque governance facilitated new levels of corruption at universities. According to one study participant, Ukrainian universities awarded thousands of fake doctorate (candidates of science) degrees to officials across municipal, regional and national government agencies. The granting of degrees was often seen as an opportunity to curry favour and create powerful protégés in the government. Given that the award criteria were regulated by a governmental agency, universities often did not feel responsibility for the legitimacy of such degrees. Plenty of these were fabricated, plagiarized, and recycled by commercial agents. Moreover, as one professor noted, “clans, acquaintances, nepotism” became a key fixture in higher education, while payments for passing grades became commonplace. As corruption took hold and the “diploma factory” churned out more fake degrees, Ukrainian higher education institutions acquired a notorious reputation at home and abroad.

Asked about the powers of individual professors in challenging this state of affairs, many interviewees expressed skepticism about the discretionary roles of academics. One professor took on a defensive position: “This is not a military organization – you can express your thoughts... more so in private conversations. If faculty members want to express their thoughts, they can do so by forming a civic organization. But at the institutional level, such thoughts are not discussed; only the issues regarding how the received directives should be implemented. So if there is something irrelevant, this does not become a subject for discussions or petitions.”

Another professor was more straightforward: “Why would I express my opinion in the department meetings? In order to have someone come and audit me afterward? We have massive layoffs; if I complain about anything, I will be number one on the redundancy list; they will find thousands of explanations [to justify the firing]. Clearly, professors will not express their thoughts to department heads; department heads will not speak to deans or to the rector. The only way out is to become financially independent, not to be afraid of losing the job, and then to express your own opinion”.

Many professors interviewed for this study were deeply skeptical about the prospects for change, even during the radical upheaval of the Revolution of Dignity, which is when most of the cited conversations took place. The Soviet legacy had left a mark on people, instilling them with a sense of fear, argued one local observer: “Everyone is afraid of the rector. The rector is afraid of the minister. That is how it works from the bottom to the top. It is impossible to make your opinion go far”. Some referred to the prevailing “schizophrenic” approach to communication, where on the one hand big public declarations would be made in favor of a more humanistic and democratic style of governing higher education, while on the other hand, directives would be handed down from the top without serious consultations on the ground. The consultations that did take place, would be conducted in the Soviet style: with a ready-made plan that offered a solution convenient to the central bureaucracy presented for rubber stamp approval by “the masses”. Even the younger generation of reformers who started off by trying to change the system, would more often than not succumb to bureaucratism and red tape once they moved up in the ranks. The desire to maintain their status and keep the momentum of social mobility going often kept the former radicals from further disruptive approaches.

Many professors expressed concern about the significant deterioration of the quality of education as a result of corrupt practices and control of resource distribution by a swelling kleptocracy, not particularly interested in improvements. For example, respondents claim that emerging fields of science have been simply stifled by under-resourcing and fear of innovation. One participant argued: “We need to restructure science; identify new trends: for example, complimentary sciences, physics and medicine. Unfortunately, we don’t have biophysics. I know this because I had a student who wanted to take biophysics. He had to go to Moscow, to the Moscow Physics and Technology Institute; there they had created biophysics and he studied there. It’s extremely difficult to swiftly create these kinds of specializations here. Dogmas are terrible in our Ministry. It’s impossible to create new specialisms. You need to go through God knows how many experts. Terribly difficult, while modern times require quick changes”.

The inertia in Ukrainian universities has led a growing number of students to leave for studies abroad. Outbound mobility significantly outweighed inbound flows between 1998 and 2012, with more students choosing Europe over Russia, which had been the traditional destination (see [Appendix 1](#)). “Young people want a quality education. They want to have more than a diploma. They want a diploma of a European standard. We need to aim at issuing such diplomas. Can we do that? Theoretically, yes; practically, this is a very challenging proposition. Consider only

what it would imply to teach courses in German, English or Polish”, argued a university instructor.

The lack of confidence was understandable, given that the Ministry of Education mandated the learning of foreign languages in Soviet style: i.e., teaching the theory of languages, but not practical communication. This type of conservatism seeped into other areas of university life, discouraging innovation and stifling creativity by an insistence on outmoded practices, notwithstanding their practicality in current circumstances. Although there have been some formal innovations (e.g., changes in the degree structures, as required by the Bologna process), most respondents felt that such “innovations” were simply blind imitations or mirages, similar to those that were adopted immediately after the collapse of the Soviet Union. “For example, the university transformed the Department of Atheism into a History of Religions department, and changed the names of the courses; but in fact, the nature of the department [and of the teaching] remains the same. The Department of Scientific Communism was transformed into the Department of Political Studies. The same people lecture on Marxist-Leninist philosophy, although they don’t claim this openly any more”. More profound changes would be impossible to make without dismantling the old institutional culture and hierarchy. One professor proposed the following: “In my opinion, the key reform would be to change the rigid hierarchical system. We are talking not only about subordination to the Ministry of Education and university autonomy, although this is very important, but about the internal structure of universities, where we have academic departments that report to faculties, which in turn report to deputy rectors, of whom there are many in any university and who are governed by rectors, and then rectors are controlled by the minister. That is the pyramid. Only in certain cases, when the ‘pharaoh’ is alive and kicking at the top, is there a chance that the pyramid will work and will not collapse. However, we have had bad luck with pharaohs. The pyramid has become a tomb, and it is not a living organism anymore”.

9.5 The Professoriate

Many participants in the study explained the neo-Soviet re-emergence and continuity of “the Soviet legacy” by referring to “the problem of mind-set”. Some mentioned “old stereotypes” and “inertia from Soviet times,” which they claim dominate in academic circles. Some argued that it was “very hard to change the teacher’s psychology”. For the Soviets, education often implied a literal “knowledge transfer,” so a likely scenario is that: “the university introduces interactive methodology, but teachers instead demand from students information regurgitation; they don’t develop critical thinking and don’t organize the educational process for experiential learning”.

One professor reflected on the continuing impact of the Soviet legacy in the following way:

This may sound banal that we need to get rid of Soviet style or even a post-Soviet style. However, the style of communication and education remains to be Soviet. The teacher continues to be a sage, who knows better, who does not make mistakes, who is infallible. He consequently maintains a superior position to that of a student. Why is that Soviet? Because the old Soviet saying: 'When I am the boss, you should be an idiot; when you are the boss, I will be an idiot,' still applies one hundred percent, and I think it will be most difficult to overcome

Another difficulty is that the hierarchical system essentially killed the sense of collegiality in academic circles. None among the participants referred in their interviews to any important work done by their colleagues. Some department heads were praised, if they succeeded in acquiring funds for their departments. Poorly financed, academic departments were unable to base recruitment on competitive meritocracy. One professor claimed that, "our department has 54 people, while in reality only 8–10 people work there". Some departments engaged a large number of adjuncts on fractional positions (e.g., one fourth of the position) to recycle the same course taught across several universities. Accountability and collegiality were further eroded when academic performance was evaluated on the basis of the average number of publications per department, rather than on individual output.

Not only was collegiality lacking, but professors were skeptical of each other's work, having an insider's understanding of how corruption works, and just how pervasive it is inside the academic walls (e.g., how doctoral degrees were awarded, or how papers were published in commercial journals). As in the old days, some Ukrainian professors were distrustful of domestic publications and relied more on those coming from "recognized" (primarily by post-Soviet academics) centers of excellence in Moscow (often ignoring the cases of corruption and plagiarism widely reported there). As one professor explained:

I review modern articles very carefully to make sure there are no fabricated data there. Another point, where it was published. If it's in Moscow or St. Petersburg, then I have more trust. If elsewhere, I am more critical about the data.

Meanwhile, most respondents explained that they had limited opportunities for access to western journals and data-bases, as the ministry regularly withdraw institutional funds, discriminating against "non-Soviet block" sources.

Teachers did not place a lot of trust in the norms and assessment of academic performance in the modern Ukrainian university. One professor argued: "When we ask whether teachers and researchers have a lot of influence on their universities, we have to remember two things. First, universities are headed by the Ministry of Education, and regardless of our self-governance, we always confront a glass ceiling that we are unable to break. Second, the idea of institutional autonomy was never cultivated during the years of Ukraine's independence. Many people regard their place in the university in the same way that they would feel about manning a machine in a factory or working a service counter: i.e., 'My work begins here and ends there, and I have no idea where it comes from and where it goes to'. In other words, there are very few who raise their head high enough in order to see and think about where we belong in the education cycle and in society".

Many study participants were unable to see how innovations could work under such circumstances. Professors argued that students had no ambition to study foreign languages and apply for study abroad programs. Some attributed the apathy to a general lack of academic aspirations, given that the academic profession was unattractive to younger generations: salaries were very low; the work was regimented and overloaded with bureaucratic routine; tensions with the dominant group of retirement-age faculty were often strongly pronounced. De-motivated to institute change, some teachers would “teach using notes written sometime in the last century”, one participant noted, adding that, “it would be good if those were original and not plagiarized notes, and if they were not trying to present them as the absolute truth.” With a teacher-turned-bureaucrat at the helm of a hierarchical system in the classroom, students were often afraid to engage in discussions or question what was being taught. One professor recounted: “I tell my students, ‘if you don’t like how they teach, why you keep quiet? You are not the Leninist youth organization members anymore, you are citizens of the New Ukraine. Tell Mr. X and Mr. Y: what is this that you are teaching? This is outdated knowledge.’ But they keep quiet. We were taught to keep quiet; we rarely demand”.

Meanwhile, innovations such as the newly introduced testing system (ostensibly created to enhance transparency and fairness) were perceived as a threat by many in the academic community. The fear was justified by the institutional bureaucracy’s constant efforts to exert more control over individual teachers. One professor expressed a widely-held sentiment:

What our higher education lacks is freedom. Freedom for the rank-and-file teachers. I don’t understand why managers should define the framework of my assessment of students’ learning outcomes.

Bureaucratic control became more pervasive with advance of technologies. One participant argued that mobile technologies made things worse – whereas in the past subordinates used to take personal responsibility for completing a task independently after it was assigned at a departmental meeting, modern mobile technology empowered them to abandon this responsibility by allowing them to constantly consult with their supervisors on how to implement the task and avoid any mistakes. “These are very dangerous tendencies”, argued the participant.

Hierarchical dependence also discouraged some professors from applying for competitive grants or seeing competition as something positive. Many of them learned that obtaining and implementing a grant involves heavy bureaucratic work, requiring lots of accounting reports and hierarchical approvals, which could take a significant amount of time away from their research and teaching. Moreover, many university researchers were unable to overcome their previous dependence on public subsidies. One scientist compared dependence on grants from the military-industrial complex to “a drug-addiction”. While these subsidies had dried up after the collapse of the Soviet Union, very few professors acquired the skills necessary to reach out and secure funding from alternative sponsors. What complicated matters was that, in the highly bureaucratic institutions, the rectors and their teams would only support projects that could “feed their executive teams”. As a result,

university bureaucracies disregarded many projects that provided no substantive subsidies to their administrative apparatuses.

9.5.1 Deconstructing the Neo-Soviet Legacy, While Embracing a Neo-Liberal Future?

Ukraine is not the only country in the world where post-colonial dependencies produced a sense of revulsion to any new forms of power relations, whether they be generated nationally, regionally or globally. Many post-colonial governments chose complacency, resistance and disengagement from competition in fear of re-colonization (Jodhka and Newman 2007; Shahjahan 2012). The 2014 Revolution of Dignity overthrew the national government that tried to re-colonize the country through neo-Soviet political and economic dependences. Millions of Ukrainians, including large numbers of university students and professors, fought for freedom and a decisive break with the past, with hundreds losing their lives to bring down a corrupt regime controlled by Moscow.

On the heels of the “people power” victory, Ukrainian higher education reformers called for swift action on the long overdue demands for university autonomy, development of a modern academic profession, internationalization of academic programs, and the creation of stronger university-industry linkages. In July 2014, after an intense campaign by civic activists and progressive education leaders, the old Ukrainian parliament passed a new law on higher education, geared at bringing about systemic changes that would alter the country’s post-Soviet educational agencies to meet new societal expectations. However, the level of lobbying against the passage of the reform-oriented legislation made it abundantly clear that new rounds of struggle would be needed to bring down the corrupt institutions, their governance structures, and organizational cultures within a vast system of 800 higher education institutions serving almost 2.5 million students. In addition to sweeping structural transformations, profound attitudinal changes would be required to address barriers to progress and facilitate change across the country’s diverse cultural, linguistic and political landscape.

Embracing neo-liberal reforms, as implemented elsewhere, seemed to many like the only way out, insofar as decentralization and generation of sustainable local budgets was concerned (see examples of similar efforts elsewhere: Mok 2008; Kwiek and Maassen 2012). The professors involved in this study argued that Ukraine had to introduce a competitive grant system in higher education and empower individual academics for change, in this way disrupting individual and institutional complacency. While the new Ukrainian Law on Higher Education allowed for greater institutional autonomy, real change could only take place if the devolution of powers, would move to the level of academic departments, for example through Responsibility Center Budgeting/Responsibility Center Management (see the RCB/RCM concept explained by Lang 1999). This would meet the

expectations expressed by one of the professors in the following way: “There is no need for this large number of bosses who sign something, permit something. When you have to go somewhere, for example, you need to get a signature from the dean, vice-rector, financial office and registrar. All this is redundant; it wastes time. We need to simplify all the procedures, as they do elsewhere.” The decentralized system of governance would move academic leadership to the level of individual scientists, who would confront the realities of local and global stakeholder demands, while seeking grants, sponsorships, alumni donations, successful student intakes, etc. at home and abroad. The academic fields of study, especially in professional education, would then be able to shape the quality of education on offer, as well as public perception of their institutional brands, by becoming responsive to changes in various professions and the shifting demands of employers, markets and students, which necessitate continuous [curriculum] innovation.

To begin reforms, Ukraine needs a driving force of ambitious, resourceful, risk-taking and innovation-oriented professors, administrators and students, who would be strong enough to confront local bureaucracy and break the boundaries for new linkages with new economy. Alas, a critical contingent of such people fails to immediately materialize. As elsewhere in post-colonial contexts, the legacy of the Ukrainian higher education system engenders a cumulative disadvantage rooted in disenfranchisement, apathy and cross-generational mistrust, which impedes empowerment and progress. Moreover, the public has acquired a high degree of skepticism about domestic education, regarding it as a hotbed of corruption, dogmas and barriers to innovation. With this reputation, universities find it impossible to receive priority consideration in the rapidly shrinking public budget. Ukraine aspires to rapid EU accession, but lacks the conditions enjoyed by many European countries: e.g., sufficient tax payments, strong democratic institutions, and balanced market mechanisms. Ukraine has nothing of the kind, given that the rudiments of these conditions, which began to develop after the collapse of the Soviet Union, were in various ways corrupted by the neo-Soviets. While in most places universities would be the logical sources of knowledge, skills and innovation for building such conditions, in Ukraine they lack the adequate powers and legitimacy at a critical time.

To promote a decisive break from the previous norms of academic work, the Ukrainian reformers seek international sponsorship, which is indispensable given an economic crisis and the war with Russia. The new government has urged for a wider student exchange and more intensive research collaborations with the EU counterparts. However, the EU and other foreign sponsors took a scrupulously critical stance to evaluating and endorsing donor opportunities, in view of negative experiences with corruption in the previous decades. There seems to be a newfound realization on the part of donors that excessive trust in the past allowed the neo-Soviets to benefit from foreign donations. At the same time, the previously funded projects often demonstrated an inability to secure support for sustainable development from local sources, failing to be duplicated widely. The Bologna process and other innovative imports were largely “faked” and remained under-implemented. Moreover, foreign sponsorship was frequently hijacked by the key implementers of the

neo-Soviet revisions, who were responsible for the much maligned bureaucratic resurgence and kleptocratic order. In view of these failures, and the loss of public trust, new international partnerships are argued to require a totally new approach.

Disruptive innovation strategies in post-revolutionary Ukraine call for large scale and long-term engagement of foreign experts in Ukrainian universities to stimulate local students and the young professoriate to adopt radically different forms of inquiry and learning in higher education. These foreign experts are expected to become internal reform monitors, “movers and shakers”, in addition to playing traditional roles of foreign language skill development, as well as program and course innovators. The experts are expected to be administrators, as much as academics, in order to induce far-reaching changes in the organization and management of learning processes, as much as in the curriculum and research project development. The proponents of disruptive innovation in Ukraine have also begun to seek out more radical projects such as establishment of international branch campuses of some renowned global research universities. The new players in the liberalized Ukrainian higher education market would change standards of teaching and learning as well as retain ambitious, open-minded and talented scholars and students, who are looking for opportunities to teach and study in international environments.

There is a widely held belief that local universities will benefit from helping the local economy to become stronger, as a strong economy means more contributions to the growth of universities. As one professor involved in the study remarked:

robust university-business linkages are vitally needed. We need to create optimal stimuli for small and medium enterprises [to develop]. As soon as the business environment is more vibrant, there will be more dynamic processes in education. We can observe this in relation to a variety of initiatives, whether they be one offs, mid- or long-term. This will ensure the attractiveness of our country to investors. First, business; second, social lifts for youth.

While neo-liberal reforms present the most obvious opportunity to get rid of the Soviet legacy, Ukrainians run a risk of setting their expectations too high, developing new types of dependencies, and promoting uncritical elites that will erect new hierarchical and stratified forms and norms of higher education. The reforms have a low chance of succeeding in the absence of crucial conversations about such risks, as well as mitigation of any new Stakhanovism in higher education. As the Ukrainian public continues to deal with an imploding economy and low quality education, while overcoming post-colonial complexes of inferiority, genuine empowerment through a local “academic revolution” will be not be possible without finding, conceptualizing and promoting the success stories of local professors’ individual and collective achievements in innovative science, as well as expressions of academic freedom in the years of Soviet and neo-Soviet repressions. The renewed Ministry of Education needs to become a central hub that will recognize, share and celebrate such achievements, as well as reward new local initiatives for quality improvement, globally-recognized standards, and innovative learning. Belief in local initiative, courage and boundary-breaking is crucial for far-reaching transformations.

9.6 Conclusion

To implement and sustain reforms in the long run, the Ukrainian authorities have to disinvest themselves of the fallacy of centrality that propelled the powers of ministerial or institutional bureaucracies, and diminished those of individual scholars. Many believe that the 2014 Revolution of Dignity has created an immense opportunity for the ultimate eradication of the neo-Soviet bureaucracy and the old post-colonial regime. However, the real reforms in higher education are yet to come. Sustainable results will become feasible and visible once professors and students put aside their doubts and focus on acquiring more independence and freedom, while assuming responsibility for the future of their universities and the society.

Appendix 1: Dynamics of the Ukrainian Higher Education, 1998–2012

	1998	2004	2008	2012
Tertiary enrolment:				
ISCED 5B	526,362	592,917	441,336	357,033
ISCED 5 A	1,109,982	1,843,831	2,372,462	1,997,504
ISCED 6	20,645	28,326	33,915	36,452
Participation rate (%):				
ISCED 5B	31.7	24.0	15.4	14.9
ISCED 5 A	66.9	74.8	83.3	83.5
ISCED 6	1.2	1.15	1.19	1.52
Private university enrolment (%)	–	8.2	15.2	11.3
Student-teacher ratios	[13]	13.2	14.2	12.0
Total outbound students	13,123	24,988	32,628	39,627
Outbound flow to North America and Western Europe	4811	12,509	13,874	15,687
Outbound flow to Russia	[4,760]	6841	12,101	[12,805]
Inbound students from Europe	–	[4770]	5772	3885
Inbound students from Russia	–	[3673]	[4734]	2990
Total population of Ukraine (million)	50	47.4	46.4	45.5
GDP per capita (PPP\$ current international)	3008	5229	7264	7298

Source: UNESCO 2014. ISCED 5B are programs awarding associate (pre-Bachelor) degrees; ISCED 5A are programs awarding Bachelor and Master degrees; ISCED 6 are programs awarding doctoral degrees

References

- Altbach, P. G. (2007). Empires of knowledge and development. In P. G. Altbach & J. Balán (Eds.), *World class worldwide: Transforming research universities in Asia and Latin America* (pp. 1–30). Baltimore: The Johns Hopkins University Press.
- Cummings, S., & Hinnebusch, R. (Eds.). (2011). *Sovereignty after empire: Comparing the Middle East and Central Asia*. Edinburgh: The Edinburgh University Press.
- Jodhka, S., & Newman, K. (2007). In the name of globalization: Meritocracy, productivity and the hidden language of caste. *Economic and Political Weekly*, 42(41), 4125–4132.
- Korostelina, K. (2013). Ukraine twenty years after independence: Concept models of the society. *Communist and Post-Communist Studies*, 46(1), 53–64.
- Kwiek, M., & Maassen, P. (Eds.). (2012). *National higher education reforms in a European context: Comparative reflections in Poland and Norway*. Frankfurt am Main: Peter Lang GmbH.
- Lang, D. W. (1999). *A Primer on responsibility center budgeting and responsibility center management*. Professional File No. 17. The Canadian Society for the Study of Higher Education.
- Mok, K. H. (2008). Varieties of regulatory regimes in Asia: The Liberalization of the higher education market and changing governance in Hong Kong, Singapore and Malaysia. *The Pacific Review*, 21(2), 147–170.
- Oleksiyenko, A. (2014). Socio-economic forces and the rise of the world-class research university in the post-Soviet higher education space: The Case of Ukraine. *European Journal of Higher Education*, 4(3), 249–265.
- Shahjahan, R. (2012). From ‘no’ to ‘yes’: Postcolonial perspectives on resistance to neoliberal higher education. *Discourse: Studies in the Cultural Politics of Education*, 35(2), 219–232.
- Snyder, T. (2012). *Bloodlands: Europe between Hitler and Stalin*. New York: Basic Books.
- Subtelny, O. (2009). *Ukraine: A history*. Toronto: The University of Toronto Press.
- Szporluk, R. (2000). *Russia, Ukraine and the breakup of the Soviet Union*. Stanford: Hoover Institution Press.
- Zajda, J. (2014). Globalization and neo-liberalism as education policy in Australia. In D. Turner & H. Yolcu (Eds.), *Neo-liberal education reforms: A critical analysis* (pp. 164–183). New York: Routledge.

Chapter 10

Reforms in Higher Education in the Russian Federation: Implications for Equity and Social Justice

Joseph Zajda

Abstract The chapter analyses the impact of globalisation and market forces on restructuring of higher education in Russia. The chapter examines major policy reforms and shifts in the higher education sector in the Russian Federation (1996–2014), which resulted in a forced transformation of public universities and the growth of private universities and fee-paying students. The chapter discusses the spectacular growth of private students in state universities, the emerging social inequality and stratification in the higher education sector, and the implications for equity and social justice. The chapter also examines the impact of the internationalisation, rankings (Russia's poor performance in international rankings), accountability, standards and quality.

Keywords Global competitiveness • Global academic standards higher education • Higher education reforms • Marketization • Russia • Neo-liberal ideology • Social inequality

10.1 The Changing Nature of Higher Education in Russia

In 2012, the total number of HEIs was 1,080, including 446 private institutions and 634 state institutions, with some 6,490,000 students, including 1,036,000 students in private HEIs (Higher Education in the Russian Federation 2012). However, as many as 30 % of HEIs are likely to be closed, or amalgamated by 2016 (Nikandrov 2014. See also: <http://monitor.icef.com/2012/09/one-in-five-russian-universities-to-close-by-2014/>). According to Nikandrov (2014), former President of the Russian Academy of Education, there are two major problems confronting the HEIs in the

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RF in the future. First, is the quality debate, particularly in many non-government HEIs. Second, is the impact of demographics on the higher education sector:

There are too few school-leavers to fill the many existing university vacancies. And, last but not least, now most students will end their university life with a Bachelor's degree, with only about 10 per cent of graduates continuing their studies in masters programs. The specialist five-year programs which were of chief importance before will now be an exception. Given all of these changes, the plans are to close or restructure about 30 per cent of universities by 2016. (Nikandrov 2014)

Already, the Russian higher education sector was experiencing a demographic crisis, where the number of students fell from 7.5 million in 2010, and was predicted to fall further to four million within the next few years (Nikandrov 2014). The higher education sector in the RF is characterised by number of structural changes, brought on by demographic factors, global competitiveness and internationalisation.

The first major change in the higher education sector in the new Russia, as with the former Soviet Union, was forced from above. It involved restructuring, decentralisation and privatisation, which affected traditional ex-Soviet universities and colleges. These reforms were brought on by shifting politico-economic imperatives in the governance, globalisation and the market forces. More specifically, they represented Russia's response to systemic reforms in higher education in the West, the imperatives of the European Union, and the Bologna Process.

The second major change was the expanding nature of the higher education sector in Russia after 2000. This was acknowledged by *The Human Development Report 2005 for the Russian Federation* (HDR 2005), which presented a picture of a 'major boom in higher education' (HDR, p. 51). It followed a similar boom in the higher education sector in the Eastern European countries. As Lingens (2004) noted, higher education 'has been expanding for quite some time', especially in the Eastern European countries (Lingens 2004, p. 3). This is particularly true of the spectacular growth in the enrolments in higher education (HE), notably in private universities in Russia between 1996 and 2006. Despite this growth, the proportion of university graduates in the 25–64 age group (this age group is used in international comparative studies) was 20.6 % in 2003, compared with 29 % in the USA, and 28.4 % in Norway (HDR, p. 51).

The third change was brought on recently by the global influence of a new ideology defining excellence and quality in the higher education sector. University ranking and the leagues tables become a global phenomenon. A key motivator for this recent push to improve quality in higher education, and to 'revamp and internationalise higher education is its poor performance in international rankings'. Alexey Repik (2013) of the Agency for Strategic Initiatives has said the reforms and investments will 'enhance the international reputation of Russian universities, which is essential to Russia's plans for its leading national universities to enter the top 100 of international university rankings'.

One way of achieving such a strategic goal is to establish international partnerships with leading research universities in the West. The Massachusetts Institute of Technology (MIT) has partnered with the Russian government, and the Skolkovo Institute of Science and Technology to develop a world-class, high-tech school

offering graduate degrees in the sciences and technology. MIT will design the curriculum, programmes will be taught in English, and researchers will be encouraged to publish in international peer-reviewed publications—all of which will be attractive to international students and rankings. As more Russian institutions engage with international partners, the internationalisation of higher education in the country will take shape. Their willingness to engage internationally, after years of quiet, will surely excite the interest of all major players (<http://monitor.icef.com/2013/07/higher-ed-in-russia-the-international-agenda-takes-centre-stage/>).

The fourth change is to expand the recruitment of international students, whose numbers are indeed growing. The OECD figures for the 2011/2012 academic year demonstrate that there were some 158,000 foreign university students in the Russian Federation. According to the Russian Federation Federal State Statistics Service, the number of foreign students enrolled in 2013–2014 reached 160,307 compared with the year 2000/2001 of 58,992 (RFFSSS 2015).

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At the same time, and paradoxically, this unprecedented growth coincided with a declining level of funding from the state. A highly regulated and centrally controlled higher education sector, in its attempts to respond to forces of globalisation, and market imperatives, was forced by the state, to introduce radical reforms that focused on finance, quality assurance, accreditation, curricula innovations, standards and excellence. The state now allowed greater autonomy, and encouraged the public and private universities to become more ‘entrepreneurial and competitive’ (see Levy 2006, with reference to market-oriented reforms in major Asian countries). It facilitated the emergence of the entrepreneurial university in Russia. Universities were encouraged to obtain funds by charging tuition fees, and finding potential donors and sponsors within the business sector.

In Russia, as in Eastern and Central Europe, the new and radical policy shift was to open public universities to fee-paying students ‘after the quota of free places is exhausted’ (Levy 2006, p. 123). The marketisation and privatisation of higher education in Russia is symptomatic of the introduction of deregulation and performance-based incentives, rewards and pressure to obtain funding, all due to increased competitiveness both globally and locally (see also Bache 2006; Tilak 2005; Turner 2004; Zajda 2005, 2015). Reich warned of the dangers of following the USA in the ‘marketisation’ of higher education. He described what he called ‘the destruction of public higher education in America, and how the UK can avoid the same fate.’ Similarly, Turner (2004) argued that the discourse of market competition and consumer choice now dominates higher education in many countries, where students and their parents, who offer financial support, are ‘consumers’, and universities are ‘providers’. Higher degree qualification is a ‘product’ to be ‘purchased’. Reich’s warnings, together with Turner’s critique of the pitfalls of marketisation of higher education, are even more applicable to Russia, which is undergoing rapid privatisation of the higher education sector.

10.2 The Structure of Higher Education

The structure of higher education in the Russian Federation is a hybrid of the old and the new. Higher education institutions are referred to as *VUZy*, from the Russian *vysshee uchebnoe zavedenie* (higher education institution). This acronym is used to refer to all types of higher education institutions in Russia. *VUZy* consist of universities, polytechnic institutes, which specialise in engineering, science, and technology, specialised institutes and academies, music and performing arts institutes and pedagogical institutes.

After the latest reforms in the higher education sector, there are now six levels of study in higher education:

Level 1: 2-year incomplete Diploma

Level 2: 3 to 4-year Bachelor's degree

Level 3: 5-year Diploma (*Diplom*)

Level 4: Master's degree (BA, plus 2 years of further higher education)

Level 5: Kandidat Nauk (Candidate of Sciences)

Level 6: Doktor Nauk (Doctor of Sciences)

Under the Soviet system until 1991, the most common first award of universities and other higher education institutions was a 5-year tertiary Diploma (*Diplom ob okonchaniï vysshego uchebnogo zavedeniia*—Diploma of completion of higher education). The next degree was a 3-year *Kandidat Nauk* (Candidate of Sciences). Despite the use of the word *nauk* ('science') in the common title, it was awarded across the full range of academic disciplines. To be admitted to the Candidate of Sciences students had to pass a number of preliminary examinations, including a foreign language. They had to study for at least 3 years, completing courses, undertaking supervised research and preparing a dissertation for public defence, not unlike the doctoral thesis oral examination in the USA. The highest award, which is still being offered, was *Doktor Nauk* (Doctor of Sciences). This is a research-oriented degree and is awarded by major dissertation. It normally requires at least further 3–5 years of doctoral studies and as a condition of award, doctoral candidates are expected to publish between 10 and 20 major research papers in scholarly journals (Zajda 1992, pp. 17–18).

10.2.1 Restructuring of Degree Programs

Before the dissolution of the Soviet Union, its top higher education body—the State Committee for Public Education, the Committee had approved in 1989 a new two cycle degree structure, offering BA/MA. The 3–4 year Bachelor's degree (*Bakalavr*), was to be followed by 2-year Master's programme (*Magistr*). This new Russian degree program was derived from the US/British model (Zajda 1992, p. 18). It was implemented gradually by some higher education institutions in the Soviet Union, including, Belarus, Ukraine, and the Baltic States. This Western-inspired model was

introduced more widely after 1992 by the State Committee on Higher Education of the Ministry of Science. The 1994 government decree on the adoption of state standards for higher education specified degree structure as follows:

- Four-year Bachelor's degrees
- Specialist 5-year Diplomas
- Master's degree
- Kandidat Nauk (Candidate of Sciences)
- Doktor Nauk (Doctor of Sciences)

In the light of the Bologna Process, a higher education institution, given its autonomy and self-government, was now able to decide on the introduction of the new BA/MA courses. The traditional structure of Candidate of Sciences and Doctor of Sciences remains unchanged.

10.2.2 Changing Enrolment Patterns

Since the break up of the USSR in December 1991, most higher education institutions have seen their budgets reduced significantly. Despite this, enrolments continued to grow, especially after 1996, when the economy started to improve. If in 1993 some 2,624,000 students were enrolled in 535 State VUZy, then by 2006, over 7,000,000 million students were enrolled in 1,300 VUZy—both public and private institutions. Entrance to VUZy is still by competitive entrance examination and, unlike in the past, when many students (77 %) received stipends (*stipendii*), now up to 60 % of state universities students are full fee-paying students. By 2008, their numbers are expected to reach 70 % (Zajda 2006, p. 253).

During the early 1990s, due to economic recession, unemployment and poverty, demand for university places fell to 2.2 applicants per place in 1994, but in 2006 competition for higher education increased between 4 and 25 per place, depending on the prestige of an institution and the chosen field. The most sought after college was the Moscow College of Performing Arts, with 37 applicants per place, followed by the Academy of Federal Security Services, with 35 applicants. The Moscow State Pedagogical University (MGPU) had four to six applicants, and the MGU (Moscow State University) had 2.8 applicants per place.

10.3 Higher Education Growth in Russia

The higher education sector in Russia continues its spectacular growth, especially in private universities. During the 1996–2012 period, private universities increased from 193 to 446, representing 231 % growth (see Table 10.1). Of these, 89 private higher education institutions were located in Moscow alone. The total number of students in the higher education sector during the 2001–2006 period increased from 4.8 million in 2001 to 7.2 million in 2006, or by nearly 50 %. Due to a 'major boom'

Table 10.1 Students in higher education public and private institutions: 1996–2012

No. of state HEIs		No. of students	No. of private HEIs		No. of students
1996	502		193		
1997	573	2,801,000	244		183,000
1999	595		349		4,070,000 (total)
2000	621	4,800,000	387		630,000
2003	685	5,228,700	619		718,800
2005	655	4,866,700	645		1,079,300
2012	634	5,454,000	446		1,036,000

in higher education in Russia, the number of graduates increased from 401,600 in 1995 to 972,000 in 2003, representing ‘2.4-fold increase over an 8-year period’ (HDR, p. 51). In 2006, the first year intake was 524,500 students, which included 57 % state funded places. However, the total number of private students in the higher education has also increased to 56 % in 2006. Between 1995 and 2012, the total number of students in higher education has increased from 2.8 million to 6.5 million, a 2.3-fold increase, or by 232 % in a decade.

10.3.1 Admission and Access to Universities

Access to all higher education institutions continues to be by competitive examination (*konkurs*). Students must have completed successfully their secondary education. According to the Russian Constitution (article 43, clause 3), everyone is guaranteed the right to have access to free of charge higher education. In reality, at least 50 % have to pay for their education. It is estimated that only one-third of new students enter higher education institutions on merit. The other one-third of prospective students has to take special preparatory courses. Many hire private tutors to ensure that they can pass entrance examinations. Although education reforms were designed to promote equity in higher education, these entrance requirement hurdles—good grades in specified major school subjects, and high scores on the entrance examinations, make it difficult if not impossible, for students from lower SES to enter a university. The financial costs for tutoring and fees for fee paying students become a ‘heavy economic burden for Russian students and their families’ (Survey of National Higher Education Systems 2004, p. 57).

10.3.2 Private and Fee-Paying Students

By 2003, some 53 % of the university students were full fee-paying students. At the same time, the number of new students in state universities grew by 24 %—from 487,100 in 1994 to 603,800 in 2002. Between 1994 and 2002, the largest increase

in the number of first-year students—some 250 % was recorded in private colleges (from 157,000 in 1994 to 384,000 in 2002). It is estimated that some 80 % of students in private and between 60 and 70 % in some state VUZy are full fee-paying students. The Law on Education, which defines the quota of private students (25 % in the faculties of law, management etc) is ‘rarely observed’ as cash-strapped universities prefer to enrol full-fee paying students (*Rossiiskaia Gazeta* 2003, 9 January).

The growth of private students is one way of funding the higher education sector in Russia. The phenomenon of private and fee-paying students has been accepted as a given in Russian society, particularly among the more ambitious and upwardly mobile families, who are prepared to pay, by western standards, high fees, for university education:

Private tertiary education in Russia has increasingly become a normal phenomenon. Today, some 56 percent of higher education students are fee-paying students and the percentage continues to grow. A tuition fee for one year of study at a ‘good’ university costs between US\$3,000 to US\$3,5000, or between US\$5,000 to US\$7,000 at a ‘super prestigious’ university... Those who failed to pass the entrance exam... need to borrow from banks. (Sergeev 2006)

Furthermore, Russian society has accepted not only high tuition fees, but a steep increase in tuition, a natural consequence of increasing competition for desirable institutions and prestigious faculties. Public-opinion polls showed that in 2003 almost 87 % of families were in favour of higher education for the children. In 2003, 87 % of high school graduates entered universities (2005).

10.3.3 Private Universities

Private higher educational institutions (HIEs) began to grow in the early 1990s, and by 1995 there were 208 private HEIs, including the New Humanities University of Natalia Nesterova. In 2003, some 700 private colleges and universities were inspected and it was found that 90 % were guilty of serious breaches, as they did not comply with the relevant articles of the Law on Education (*Parlamentskaia Gazeta* 2003, 28 January). Many private institutions were subsequently de-registered. Some of these private universities were found to be operating from tiny basements or even virtual offices, charging huge fees, and offering worthless university diplomas. By 2006, there were 645 private higher education institutions, but only 367 were accredited tertiary institutions, giving them the right to award state degrees. Some HE institutions were deregistered and closed down by the Ministry of Education. In 2012, there were only 446 private HEIs left.

10.4 Recent Developments in Higher Education in Russia

In Russia, as in Europe and elsewhere, higher education institutions, influenced by globalisation and market forces, which bring about competition for a share of the market, have been forced to undergo a radical transformation—from a traditional and state-funded academic institutions to an entrepreneurial university. In Russia, some of these on-going changes include:

- Increased demand for higher education places
- The emergence of new strategic market goals
- The internationalisation of education policy, curricula and research
- The reorganisation of knowledge within the Unesco and OECD-driven knowledge and society paradigms.
- Creation of major national state universities (from amalgamated VUZy)
- Privatisation of the higher education sector
- Financial incentives for innovative universities

10.4.1 Restructuring of the Higher Education Sector

Higher education reforms have affected all higher educational institutions. The response to globalisation, market forces and the Bologna Process Russia is also introducing its own 'league tables' of universities. In the near future, higher education institutions are likely to be categorised, according to Fursenko (2006), into three main groups:

Group 1: 15–20 'Flagship universities' (*vedushchie universitety*). These will include Russia's leading major and internationally-renowned research universities

Group 2: 150–200 major universities and higher education research academies (*sistemoobrazuiushchie VUZy*), offering specialist training

Group 3: Other higher education institutions (some 1,300 smaller HE institutions)

All Russian HE institutions will be encouraged to apply, on a competitive basis, for their status and position in the league table. One successful in gaining the rank within the Group 1–3 range, they will be accredited as 'Group 1' leading university for 5 years.

The Group 1 HE institutions will be better funded and academics will receive 30 % extra pay increase. These leading universities will be totally funded by the state. Group 2 HE institutions will receive state funding for BA/MA degrees only (Sergeev 2006). In Group 3, the state will fund only BA programmes, the rest has to be self-funded.

In Russia, the new league tables will represent a rough and ready judgement of university performance, and guarantee the appropriate level of funding. Hence, 17 top universities received excellence awards ranging from 400,000 million roubles to

1 billion roubles (*Rossiiskaia Gazeta*, 28 Dec 2006). Another 20 VUZy were rewarded in 2007 for innovation, teaching and research, with the total of 10 billion roubles. The concept of ‘league tables’ of university performance produced by policy makers, higher education administrators, and the media, represent, at best, a rough and ready judgment of university performance.

Russia, like the higher education sector in the UK, Canada and elsewhere, has adopted the three-tier structure to overcome the system’s numerous shortcomings. These seemingly innovative structural reforms mirror similar findings to be seen in the UK universities, where Oxford and Cambridge always top the league tables, and are invariably cited as ‘the best’ universities in the country (Turner 2004). In the case of Russia, it is usually the Moscow State University (MGU), which is, as expected, at the top of the league.

The Funding formula now increasingly reflects enrolment figures, excellence and quality in delivery, and research output. Smaller higher education institutions, including poorly performing and inefficient research institutes have been either amalgamated or closed

10.5 Evaluation of Higher Education Reforms

It needs to be stressed that higher education in Russia—was one of the most highly centralised and state-controlled education systems in Europe, if not in the world, and, in terms of ideology, and power, only rivalled by China. As a result of globalisation, and the market forces, it was transforming, by means of ‘the reciprocal interaction among global, national, and local forces (“glo-na-cal”)’ into a new academic hybridisation that may change its identity and image (Pritchard 2006, p. 92). Forces of globalisation have fuelled, at times, radical, controversial, and anti-egalitarian reforms in Russian higher education, affecting governance, management, financing, curricula, standards, and quality assurance. One of the most radical changes, as a result of global competition, was adapting the traditional Russian (ex-Soviet) model to an Anglo-American model of higher education that is becoming the norm globally. Furthermore, unprecedented and unexpected growth in student numbers created problems with course delivery, human resource management, and quality assurance.

Between 1997 and 2012, the numbers of students increased by nearly 257 % (from 2,801,000 students in 1997 to 6,490,000 in 2012), without a corresponding increase in state funds. This may well represent the largest increase in the number of higher education students in the world.

Higher education policy shifts in Russia mirror macro-social changes due to market forces—namely the reduction of state power and control in some European countries and elsewhere. Yet, as a new hybrid of centralisation-decentralisation-autonomy, it is also exhibiting an increased policy and program regulation—designed to monitor quality assurance in an expanding and deregulated higher education sector in Russia between 1997 and 2012. The most telling sign of an

almost ‘runaway marketisation’ in Russia is not only the rapid growth of private, more entrepreneurial and competitive universities, but also the opening of public universities to fee-paying students. The term ‘runaway marketization’ was used by Levy (2006) to comment on the impact of the market-oriented reforms that facilitated the growth of privatisation in higher education in major Asian countries like China, Japan, Korea, and Malaysia.

Globalisation and the market forces have forced students to re-define themselves as ‘consumers’, who expect results for their investment. Some universities have become too commercial, where academics are expected to secure substantial grants and lucrative consultancies. Academic tenure, promotions and salaries are affected by the entrepreneurial culture. Furthermore, the new league tables in the higher education sector in Russia—promoted by the Putin’s administration and the Ministry of Education in 2012, will contribute, undoubtedly, to a rising gap between better-funded universities and centres of excellence and their poorer cousins. Hence, social stratification, inequality and differentiation within the higher education in Russia are likely to mirror all too familiar patterns of cultural reproduction and correspondence theories, which were used in the 1970s to explain inequalities in higher education in the West.

10.6 Conclusion

The market-driven reforms in higher education in Russia had some positive and negative outcomes. On the positive side, they advocated greater autonomy, flexibility and self-governance. These allowed the institutions to become more entrepreneurial and more competitive. However, these reforms, perhaps unintentionally, have created a new and rising gap between the new ‘flagship’ and well-funded research universities and other more traditional institutions. Poorly funded and resourced institutions are now at the bottom of the new league tables of HEIs. President Putin’s reforms, in response to internationalisation, and Russia’s poor performance in international rankings, targeted innovation, excellence and quality in education, and recent incentives include substantial financial rewards in the shape of major state grants for excellence in research and teaching. On the negative side, privatisation, and marketisation has created a new entrepreneurial culture, where the market allocates finances to non-academic matters, thus, undermining the academic core (Levy 2006, p. 121). Nikandrov (2001), President of the Russian Academy of Education, argued that the ‘quality of education in Russia had deteriorated’ (Nikandrov 2001, p. 206; see also, Nikandrov 2014). The other danger, he noted is emerging ‘social stratification in education’, which affects the quality of education available for those who can afford it, which has serious implications for equity and social justice.

References

- Auzan, A., & Bobylev, S. (Eds.). (2011). *National human development report 2011 for the Russian Federation*. Moscow: UNDP in Russia.
- Bache, I. (2006). The Europeanization of higher education: Markets, politics or learning? *Journal of Common Market Studies*, 44, 231–248.
- Focus on the structure of higher education in Europe 2004/05. (2005). *National trends in the Bologna process*. Brussels: Eurydice.
- Fursenko, A. (2006, December 6). *Vuzy budut pervogo, vtorogo i tretjevo sorta* (Higher Education Institutions will first, second and third class). *Moskovski Komsomolets*.
- Higher Education in the Russian Federation. (2012). Brussels: Tempus. Retrieved from: http://eacea.ec.europa.eu/tempus/participating_countries/overview/russia_country_fiche_final.pdf
- Human development report 2015: Russian Federation in 2015: Development goals and policy priorities*. Washington, DC.
- Levy, D. (2006). Market university? *Comparative Education Review*, 50(1), 113–124.
- Lingens, H. (2004). Editor's introduction: Financing higher education. *European Education*, 36(2), 3–4.
- Nikandrov, N. (2001). *Rossii: sotsializatsiia i vospitanie na rubezhe tysiachileti* (Russia: socialisation and upbringing at the crossroads of milenia). Cheboksary: Chuvash University Press.
- Nikandrov, N. (2014). Reforming education since the year 2000: The case of Russia. *Educational Dialogues on Education: Past and Present*, 1(1). Retrieved from: <http://www.ide-journal.org/article/nikandrov-reforming-education-russia/>
- Parlamentskaia Gazeta*, 28 January 2003, p. 1.
- Pritchard, R. (2006). Trends in the restructuring of German universities. *Comparative Education Review*, 50(1), 92.
- Repik, A. (2013). *Higher ed in Russia: The international agenda takes centre stage*. Retrieved from: <http://monitor.icef.com/2013/07/higher-ed-in-russia-the-international-agenda-takes-centre-stage/>
- Russian Federation Federal State Statistics Service (RFFSS). (2015). *Foreign students enrollment in programs of higher education in public and educational organizations of higher education of the Russian Federation*. Retrieved from: http://www.gks.ru/bgd/regl/b14_12/IssWWW.exe/stg/d01/08-12.htm
- Sergeev, I. (2006, December 4). *Vsio budet OK* (Everything will be OK). *Moskovskii Komsomolets*.
- Survey of National Higher Education Systems*. (2004). Paris: OECD. Retrieved from: http://www.oecd.org/document/7/0,2340,es_2649_34859749_32034247.htm
- Tilak, J. (2005). Are we marching towards Laissez-faireism in higher education development? *Journal of International Cooperation in Education*, 8(1), 153–165.
- Turner, D. (2004). Benchmarking universities: The Canadian case. *World Studies in Education*, 5(2), 5.
- United Nations Human Development Report for the Russian Federation. (2005). *Russia in 2005: Development goals and policy priorities*. New York: UNDP.
- Zajda, J. (1992). *New independent states of the Former Soviet Union (NIS)*. Canberra: Australian Government Publishing Service.
- Zajda, J. (Ed.). (2005). *The international handbook of globalisation and education policy research*. Dordrecht: Springer.
- Zajda, J. (2006). Schooling, education reforms and policy shifts in the Russian Federation (1991–2004). In K. Masurek & M. Winzer (Eds.), *Schooling around the world* (pp. 246–263). Boston: Pearson Allyn & Bacon.
- Zajda, J. (Ed.). (2015). *Second international handbook of globalisation, education and policy research*. Dordrecht: Springer. <http://www.springer.com/gp/book/9789401794923>

Chapter 11

Contemporary Challenges of Higher Education in Israel

Nitza Davidovitch

Abstract Higher education policy in Israel has many faces. On the one hand, policy reflects an approach that expresses common public interest and realization of public goals (i.e., quantity – increasing access to higher education for the general public), and on the other hand, higher education policy adheres to an approach that promotes academic-research interests and its goals (i.e., quality – excellence in scientific outputs), with emphasis on the lofty goal of producing new knowledge for humanity. The primary challenge of such a policy that concurrently embraces two approaches (which are potentially either complementary or mutually harmful, depending on your point of view), is a matter of proportions: which approach drives decision making in higher education, and which is merely a by-product of this policy. In the second decade of the twenty-first century, as the number of students soars, we are witnesses to higher education's transformation into a product for the masses, a change that requires countries worldwide to find new models of academic leadership if they wish to maintain a balance between society's needs and the needs of science and increased academic productivity. This chapter discusses the challenges of higher education in Israel, Israel's attempt to respond to these challenges, and the strengths and weaknesses of the solution in light of the winds of change in Israel and global trends.

Keywords Academic leadership • Globalization • Higher education reform • Higher education policy • Higher education transformation • Israel • Paradigmatic changes • Quality

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11.1 Introduction

Israel's higher education system has undergone radical quantitative and qualitative changes in recent years:

- **A sharp rise in the number of students.** In the 1990s, increasing access to higher education became an important policy goal, paving the way to a significant and rapid rise in the number of students (average annual increase of 8.1 % for all students, and 8.7 % for undergraduate students). Israel's higher education system has since tripled in size, although academic colleges have increased 20-fold and are currently the dominant factor in creating access to higher education. In 2014, there were 308,335 students in the country's research universities (34 %) and colleges (66 %; see www.che.org.il).
- **New institutions were certified to award academic degrees** – In view of the limited resources of the academic system, new models of higher education institutions were developed and established without government intervention, such as extensions of foreign universities. In response to these spontaneous developments in the field, the national establishment upgraded and opened new academic colleges to meet the growing demand for higher education.
- **Legislation** – 1995 was a turning point year, in which an amendment to the Council of Higher Education Law determined that academic degrees awarded by universities and colleges would have equal status under law.
- **Changes in regulation and policy** – Despite the proliferation and growing diversification of higher education institutions and students, from the outset colleges received a disproportionately small share of the budget compared to universities, primarily due to research funding that was directed in entirety to universities. According to the rules of the Planning and Budgeting Committee of the Council of Higher Education (CHE), senior faculty at government-funded colleges were required to devote almost twice as much time to teaching compared to university faculty. The Planning and Budgeting Committee had no expectations that college faculty would engage in research; the Committee expected universities to be the sole source of graduate and advanced degree holders.
- **Paradigmatic changes in the general view of the missions of higher education institutions:** A policy promoting greater access to higher education implies higher education for the masses at a low cost, but should this policy be implemented even at the expense of quality? As the academic mission undergoes a transformation, it becomes necessary to define the role of universities – is it their mission to create knowledge (through research), retain knowledge (libraries and databases), convey knowledge (through teaching), or function as a center of vocational training (commitment to employment and fair wages)? And what are the desired proportions among these various, possibly contradictory, elements?
- **Academic institutions in service of the community** As universities were mobilized to satisfy society's needs for education, the conflict between universities, tending to the abstract, and society, seeking solutions to urgent practical

problems, became blurred. Today society expects academic institutions and faculty to be involved in social issues and ensure that studies and research are “relevant.” The academic system is expected to satisfy national needs, such as training of professionals who will benefit national growth and the growth of the professional, technological and intellectual infrastructure required for modernization and increased efficiencies of the national economy. Universities and colleges both embraced the approach of “knowledge for the sake of practice,” albeit in different degrees (Davidovitch 2013). In fact, this transformation meshes with students’ expectations: According to CHE figures, in colleges and universities both, the majority of undergraduate students are looking to acquire a profession and not a career in academic scholarship (only one third of all students study humanities, natural sciences, and mathematics in universities).

Together, these radical changes that have triggered a series of pointed public debates on what is desirable and what is relevant for academic education in our times (Davidovitch and Iram 2011).

11.2 Higher Education in Israel: Quo Vadis?

11.2.1 On Governance, Leadership, and Policy

Since the mid-twentieth century, higher education has transformed from a domain of an elite minority to the realm of the masses. This process of massification (Trow 1973) was expressed in a sharp rise in the number of students in most countries in the western world (Finnie and Usher 2007; Lindberg 2007; Toutkoushian and Shafiq 2010), which, in turn, affected the number, size, diversity, and structure of higher education institutions. In addition to the rise of a “knowledge society” (Bridges et al. 2014) and growing global competition, these changes changed the face of higher education and called for a new approach to regulate, control, and oversee the evolution of the expanding, increasingly diverse system.

Most western countries tried to control these developments through structural reforms designed to change the patterns of higher education regulation (McLendon 2003; Norton 2012). In the United States, for example, between 1985 and 2000, states discussed over 100 proposals for reforms in the structure, functions, and patterns of authority and governance of their higher education systems (McLendon 2003). Since the 1980s, European countries have experimented with dozens of reforms designed to restructure the relations between the state, society, and higher education institutions (Dobbins and Knill 2009; Eurydice as Cited in De Boer et al. 2010). In Australia, a committee was convened to examine the structure of the academic system and the changing needs for managing academic institutions in the new global economy (Bradley et al. 2008). A publication of the conclusions of this final report (Bradley Report) recommended increasing federal government supervision over higher education (Bradley et al. 2008). All these structural reforms, those

that were proposed and those that were implemented, had one thing in common – the desire to develop the optimal method of governance in higher education, at the institutional and the systemic levels (De Boer and File 2010), in order to address with the changes in higher education.

The term governance is the manner in which the public and the private sector solve social issues and create social opportunities, and the manner in which they are concerned and care for the targets of their sponsorship (Dervin and Zajda 2015). The goal of governance is to express the common public interest and realize the public's goals while effectively defining the boundaries of authority: who decides what. According to a taxonomy proposed, there are three models of governance in higher education: the state-centered model, self-rule model, and the market economy model.

The state-centered model is the most conservative of all regulatory approaches, and considers higher education institutions as public institutions operated by the government in order to meet national goals. Universities are under the close supervision and administrative control of the state, and have limited autonomy. Examples include France, Sweden, Turkey, and Russia.

The self-rule model stems from the principle of freedom to study and explore. According to this approach, universities are not means to attain external goals, but are rather an end unto themselves. Research and learning have intrinsic value that is not necessarily aligned with any national, public, or social interest, which is a view that recalls the Humboldtian model in Germany. Today, the primary feature of this model is a lack of institutional coordination between universities' strategies and political or industrial goals. Higher education operates independent of any national-level human resource planning program. Examples include Germany, Austria, and several countries in central Europe.

The market economy model is inspired by the capitalist approach that assumes that competition and free markets are the conditions that allow organizations to reach maximum efficiency. In such a model, universities compete with each other over students and financial resources. University directors view themselves as entrepreneurs or manufacturers at the head of a corporation whose goal is to offer academic services to students. Universities are not a goal unto themselves, and neither are they representative of the public interest: Universities are considered a commodity, an investment, and a strategic resource. The state takes no action to shape or plan the higher education system, and instead promotes competition and takes steps to increase quality assurance and transparency in these institutions. Examples are the United States and Australia.

In the current era, in which capitalism represents a dominant socio-economic worldview, calls are increasing to re-examine the governance model of higher education in Israel. While some argue that the government component of governance should be increased, others call to open higher education to competition and market factors, and reduce the role of political and governmental elements. In response, the government appointed a committee to settle the issue of governance in the higher education system and redesign the organizational structure of the entities in charge

of managing higher education to ensure that their interface with the government expresses relations that faithfully maintain the autonomy of the higher education system and at the same time give expression to government policy and national needs and goals (CHE website).

This committee recommended to reinforce the first model, in which the government retains a major role: The committee's proposal includes several elements: the establishment of a higher education authority; accreditation will come under the authority of a separate committee rather than under the direct authority of the CHE; student representatives will be members of newly structured budgeting and planning committee; the Minister of Education will serve as the chairperson of the governance committee, and the members of the various committees will be appointed by an appointment committee headed by a former Supreme Court Justice. In view of these recommendations, it seems that the governance model in Israel is diverging from the free market model and is coming closer to the regulatory model typically seen in Europe, where the state has a major impact on governance policy in higher education.

Is the government willing, able and committed to the principle of governance? To what extent can the government stop market forces in our capitalist era, when one third of all students in Israel attend private institutions? Will the government be able to function within the self-rule model, as it seeks to retain a grasp on both the principle of regulation and the principle of privatization? And if so, for how long can such a dual policy be sustained? Is the quality assessment process that was initiated by the CHE over a decade ago part of the government's capitalist policy on higher education, where the strongest institutions (the institutions with the highest quality standards) will prevail? Will the government continue to steer the higher education system by incentivizing competition and quality?

11.2.2 Poised Between Elites and the Masses, Between Screening and Lenient Admission Criteria

Up to WWII, the higher education system reflected the existing social order and served as an incubator that cultivated members of the elite (Bourdieu and Passeron 1977; Collins 1979; Morrison 1998; Habighurst 1989), and higher education was not considered a basic right of all citizens. However, since the second half of the twentieth century, the higher education system has expanded significantly and its target audience changed, marking the beginning of the era of "higher education for the masses" (Arun et al. 2007). In the 1950s, higher education participation of the relevant age group ranged between 3 % and 5 %, but by the mid-1990s reached 20 % (in England), 35 % (in France and Germany), and 55 % (in the United States) (Guri-Rozenblit 1994). At the beginning of this transformation, the high school certificate served as the admission ticket to higher education institutions. Institutions were unable to keep pace with the surge in demand, and as a result, institutions around the world modified their admission policies. Instead of using a high school diploma as

an exclusive admission criterion, universities began to define requirements based on multiple criteria including scores on psychometric tests, personal interviews with admission committees, and other such admission criteria.

Admission screening systems vary the world over, although three primary methods are used (OECD 2012): (a) a combination of high school grades or matriculation grades; (b) university entrance exams; (c) unrestricted access, with minimal admission criteria. Some institutions add additional elements to these requirements, such as reference letters, extra-curricular activities (“life experience”), community volunteering, and socio-economic need. The most common method is a combination of high school grades and some type of entrance exam (Davidovitch and Soen 2015). In summary, admission to higher education in most countries is made on a meritocratic rather than universal basis (Klittgaard 1986). Not all candidates are accepted – only those who appear to the universities to be deserving. This approach is the result of the fact that the demand for higher education exceeds the number of places available. In order to screen candidates, universities set admission requirements that are designed to predict candidates’ academic success.

Whether admission requirements are effective predictors of academic performance is a question that occupies many scholars around the world. Birch and Miller (2005), for example, stated that undergraduate students’ success is the result of several factors, but a considerable share of their success should be attributed to the fact that students met admission requirements. A study conducted in Australia (McKenzie and Schweitzer 2001) found that students’ previous academic achievements (high school grades) are the most significant predictor of their university achievements. A team of researchers who studied this issue in New Zealand (Shulruf et al. 2008) similarly concluded that success on the New Zealand National Certificate of Educational Achievement tests (NCEA), which corresponds to Matriculation exams in Israel, is the best predictor of students’ success in their first year of university. Smith and Naylor (2001) reached a similar conclusion, stating that matriculation grades are the most important predictor of undergraduate students’ grade average.

The expansion of higher education did not bypass Israel. In the last two decades, higher education has demonstrated a general expansion on all measures. In 1989/1990, the country had 21 institutions that awarded academic degrees, yet in 2011/2012, some 70 institutions served 306.6 thousand students (Central Bureau of Statistics, 276/2012, 2013). The growing demand in Israel similarly had an impact on admission criteria and policies.

In Israel, universities independently define their admission requirements, subject to the Council of Higher Education Law 1958. Like other countries, changes in admission requirements were introduced in response to the adoption of the approach that views higher education as a system of mass education. In view of the number of students who sat for matriculation exams up to the 1960s, there was no need for complicated admission procedures as demand for studies at the country’s seven universities (Hebrew University, Technion, Tel Aviv, Haifa, Bar Ilan, Weizmann Institute, Ben Gurion, and Haifa) fell short of their capacity. Therefore, until the 1960s, these institutions typically required candidates to simply present a matricula-

tion certificate or equivalent, with the exception of specific departments where admissions were limited by special facilities such as laboratories (Davidovitch and Soen 2006).

In 1981, the head of the Committee of University Heads decided to establish a National Testing and Assessment Center (NTAC) to design and operate a series of tests to predict academic success. The aim was to create a useful instrument that would facilitate the process of screening candidates for higher education institutions in Israel (Vining and Teshler 2014), as the universities were no longer able to accept all candidates. Demand outpaced supply. Consequently, since the 1980s, the main screening instrument used by higher education institutions for undergraduate admissions was a weighted combination of achievements reflected in candidates' Matriculation certificate (a universal indicator) and a psychometric entrance exam (meritocratic indicator). In some cases, especially high grades on one of these elements (the Matriculation certificate or the psychometric exam) would exempt the candidate from submitting her score on the other.

Throughout the years that the psychometric exam was in use, a public debate ensued on whether to continue its use or replace it with another screening method. As the debate continued, the NTAC published a series of studies that supported the predictive validity and reliability of the psychometric exam. The findings of these studies indicate that the exam has high predictive value, or that individuals who scored high on the exam typically attained greater success in their studies (end of first year grades and final degree grades) than low scoring individuals (Kenet-Cohen et al. 1999; Oren et al. 2007). The NTAC's final conclusion was that the psychometric exam has greater predictive value than Matriculation grades, and that the combination of both provides a better prediction than each of them separately. A study conducted at Oranim College of Education (Zaslavsky and Lev-Ari 2009) concluded that Matriculation grades and psychometric scores together predict the achievements of the students at the College at the end of their first year of undergraduate studies.

Studies in Israel have added to the debate over the connection between admission requirements and students' academic success. One study by Ayalon and Yogeve (2000) for example argued that in certain faculties, no significant statistical association has been found between candidates' psychometric scores and their academic success at the end of their first year of undergraduate studies. Another study conducted in 2012 among social sciences students at the Yizreel Valley College (Ben David and Shichor 2012) also raised serious doubts about the association between psychometric scores and final undergraduate degree grades, and found that Matriculation grades had a stronger effect on university achievements than psychometric scores. Repeated studies conducted by Davidovitch and Soen (2006, 2008) similarly found no association between students' admission profiles and their academic achievements at the end of their first year of study toward an undergraduate degree. These studies found that of the students who had been accepted by Ariel College (today's Ariel University) although they did not meet the official admission criteria (Matriculation grades and/or psychometric scores, completed their degree and adapted to the institution's academic standards.

Additional findings from many studies conducted around the world (e.g., Bolotin-Chachashvili et al. 2002; Karen 2002) raise doubts about the effectiveness of admission criteria in predicting academic success, and these questions have become part of the public discourse on a state's social aims and its obligations to its citizens.

In view of the large number of academic institutions and the goal of universal access to higher education, it was believed that the system was not oriented toward selective admissions and therefore there was no added value to the use of psychometric scores as an admissions criterion in addition to Matriculation grades as. In January 2014, Israel's Minister of Education discussed a reform in higher education admission conditions, and specifically cancellation of the psychometric exam as a mandatory screening tool in higher education. According to one proposal, admission would be based solely on Matriculation grades (Skop 2014). This proposed reform should be viewed as an attempt to abandon meritocratic criteria and guarantee universal admissions instead.

11.2.3 On Quality and Quantity: Access and the Value of Higher Education

As a result of the massification of the higher education, an undergraduate degree has become a kind of degree for the masses. The undergraduate admissions system has become a universal access system, and most students who wish to earn an undergraduate degree will find an institution in which they can realize this goal. The fact that an undergraduate degree is now a degree of the masses has important implications for the future of higher education (Davidovitch 2013).

As degrees become the norm, the question of their value arises. With no other information about candidates, a degree offers an assessment of a candidate's potential or quality. In line with the human capital theory, it has been argued that employers use accreditation as a screening factor, which they consider to be a predictor of employees' efficiency and productivity. An undergraduate degree is a requirement in many jobs all over the world today.

The tendency to overestimate the importance of a certificate compared to the qualifications themselves seems to create a vicious circle that propels individuals to seek increasingly advanced degrees in the attempt to compensate for their certificate's declining value (Davidovitch 2013). The problem is compounded when the labor market is replete with unemployed individuals who have degrees (Davidovitch et al. 2013). In today's world of work, for the same salary, employers hire employees that have academic degrees that may not be necessary for the job, but are available just the same. This occurs especially when employers believe that education "improves" employees, and that the employers are getting "more for their money" by hiring an employee who has a more advanced degree than necessary. Such beliefs lead employers to demand undergraduate and graduate degrees of their employees.

If an employer can hire a “graduate” instead of an “undergraduate” at the same cost, he will demand employees with graduate degrees.

According to a Central Bureau of Statistics publication (2008), two years after graduation 37 % of all employed undergraduates in Israel are overqualified for their jobs. Over the years, there is an income differential between employees whose qualifications fit their jobs and those who are overqualified, in favor of the first group.

Another problem is that social gaps have increased despite the expanding educational opportunities: Students have a wide variety of institutions from which to choose. In 2014, the academic system in Israel comprised 66 institutions: 7 research universities and the Open University, 21 colleges that receive funding from the CHE, 16 non-funded colleges, and 21 teacher training colleges. Statistics show that, when viewed in terms of socio-economic status, the ratio of students in the group of 20–29 year olds in each of the ten socio-economic clusters increased more in the top (higher SES) clusters, and the differences between the top and bottom clusters in this respect even exceeds the differences in the ratio of pupils who sit for Matriculation of psychometric exams. This situation might exacerbate social differences, contrary to the CHE’s policy to increase access, and contrary to expectations that expanding education will reduce social differences. The risk is whether specific groups will study in specific institutions and what effect this will have on socio-economic gaps. How will the profile of the students who attended funded colleges compare with those of students at universities and unfunded colleges?

Admittedly, the increased access policy for undergraduates has proven itself in terms of geographic distribution of access. Between 1990 and 2012, the proportion of students in southern Israel increased from 10 to 15 % of the national student body, in northern Israel the proportion increased from 0 to 10 %, and in the center excluding the country’s three major metropolitan areas the proportion increased from 4 to 17.5 %. The number of students increased in all districts increased. But we must ask whether there is a difference between the degrees awarded by the academic institutions in the periphery and in the center? By definition, the institutions that opened in the periphery are colleges rather than universities, have more lenient admission policies, and offer “softer” academic programs. Does this make these degrees they award “second-class” degrees of lower value in the job market?

There are concerns that, since the majority of the country’s undergraduate students attend colleges, this will lead to an increase in the number of “inferior” undergraduate degrees in Israel, and employers will prefer university graduates to college graduates. The main group that would be affected by this would be students from the country’s geographic and social periphery, who are forced to study at the colleges that opened in their vicinity.

Moreover, the trend of massification appears to be trickling into advanced degrees as well. Official figures indicate that a graduate degree has long since stopped being an interim stage on the path to an academic career. The number of graduate students in Israel tripled over time, and the number of doctoral students has increased even more. These figures indicate that access to education has also affected advanced degrees. This new reality could have serious implications for the future of academic research including unemployment for PhD degree holders.

When colleges became accredited to award graduate degrees, the monopoly of graduate degrees was removed from the universities, and master's degrees became much more accessible. The colleges' decision to offer accredited graduate programs in non-research tracks (in which students are not required to submit a thesis) created a genuine revolution: by 2003, 68 % of all graduate degree holders earned their degree in a non-research track, compared to only 27 % in the early 1990s.

Proliferation of the new non-research graduate programs had an adverse impact on the status of Israel's universities, just as they were hit by a budget cut of approximately NIS 1.2 billion, which was imposed despite the dramatic rise in the number of undergraduate students in the country. The universities had no choice but to join the new trend and also open non-research tracks in order to attract students, in order to generate resources that would allow the universities to survive the budget cuts. In 2005, even the universities with a strong research orientation opened new non-research graduate tracks. To illustrate, in the early 1990s, there were 2,500 MBA students in Israel, all in universities, while in 2013 there were 6,500 MBA students, the vast majority of whom (5,250) attended academic colleges.

Ironically, just as the research universities began to offer non-research graduate programs, the colleges became accredited to award research graduate degrees, a significant milestone in the colleges' development. Part of the colleges' motivation to open graduate degree programs is related to the growing demand for advanced degrees and the fact that frequently pose obstacles (in the form of stringent admission requirements) for students transferring from other institutions (such as the colleges) into their graduate programs. In the United States, the transfer issue was resolved through the use of entrance exams. In Israel, MBA and psychology programs have instituted entrance exams for graduate programs, although these vary from one institution to another and from one program to another. In other graduate programs, entrance exams are not commonly used. Instead, universities sometimes require candidates who earned their degree in a college to complete additional coursework. In this manner, the universities are circumventing the law that requires equal treatment of all academic degrees, whether awarded by universities or colleges in Israel.

In summary, in terms of quantity, the goal of increasing access to higher education in Israel was achieved. At all three degree levels, the number of students has tripled since the early 1990s. To address concerns of declining quality, in 2003 the CHE instituted an entire system of quality assurance mechanisms in higher education institutions.

It appears that the continued development of higher education institutions in general and academic colleges in particular, is at a crossroad. The colleges offered a national solution by providing access to the country's social and geographic periphery. The changes in all academic institutions are an expression of the academic leadership's view on the desired students, the desired teaching methods, and the goals of higher education. The nature of these institutions and their funding requires a rethinking, and it is conceivable that a final decision on their future will come soon. We can wait for the market forces and public and political pressure to have an effect, or the system can take initiative to correct its differential aspects, develop

proposals concerning the status of research in the various types of academic institutions, strengthening the quality of academic teaching, developing academic and applicative programs, and especially – guaranteeing a proper academic standard that meets the needs of the Israeli economy and Israeli society, and ensure the status of the colleges as a fair, equitable alternative to universities, especially since the majority of the country's undergraduate students attend colleges (66 % in 2014).

More specifically, the higher education system requires decisions on substantive issues that concern the relative significance of its three components: quality of research, academic teaching, and community service (Davidovitch et al. 2011). Two points should be born in mind:

- (a) The socio-economic value of higher education is expected to decline (as a result of unemployment and declining wages of college and university graduates who enter saturated market niches). This will lead to disappointment and social agitation of entire population groups who turned to higher education in response to increased access, yet are unable to obtain employment due to the influx of graduates (which was also the root cause of the student riots in Paris in 1968, several of the contemporary revolutions in Arab countries, and the Rothschild Blvd protest in Israel).
- (b) The competition among institutions may lead to lowered admission requirements and academic degrees, including graduate degrees, of increasingly poor quality. Pressure from non-university institutions will continue as they continuously seek to upgrade their degrees and become more than second-class universities.

11.2.4 Remuneration Criteria in the Global and Local Higher Education System: Evaluating the Products of Research and Teaching

One of the direct implications of the transition to education for the masses, especially in the context of public education systems, is the burden on the national budget (Weiler 2000). Countries invest between 0.5 and 1.5 % of their national product to fund higher education, and in OECD countries this rate is especially high, 1.3 % (Docampo 2007). Tuition remains low and institutions are compelled to obtain funding from outside sources. Nonetheless, despite the importance of external financing, research universities mainly rely on public and internal sources of funding. In OECD countries, for example, 94 % of research university budgets was funded from internal sources (Auranen and Nieminen 2010) and the remainder came from private donations.

Reliance on the public budget, together with an expanding higher education system and demands for accountability, have led many countries to adopt a new model of funding and allocation, giving greater weight to the assessment and measurement of academic products. In the past, the main criterion for budgeting was the number

of students in an institution, but today, in view of the enormous increase in this number in all institutions and the fact that the public pie did not grow in proportion, many countries have started to use additional measures as funding criteria. These measures concern the general teaching and research products of these institutions, and give less weight to the inputs that are invested in teaching and research. This is a fundamental policy change that emphasizes competition and product-based incentives, based on the design to transform universities into more efficient and productive systems (Auranen and Nieminen 2010) by promoting research and by improving resource allocation decision making (Pontille and Torný 2010). Today, governments are using a variety of competitive elements to determining budgets and allocations to higher education institutions, such incorporating performance measures into funding formula, or allocating budgets per project (Liefreer 2003).

In general, higher education funding models can be classified according to the ratio between external and internal funding. Internal funding is mainly based on a government budget and the university's own assets (Planning and Budgeting Committee 2012). From a university's perspective, government funding can also be considered external funding, if the university is permitted to determine the allocation inside the organizations (Auranen and Nieminen 2010). In contrast, outside funding is defined as private or public funding that is not part of the university's core budget and may come from various sources such as public projects, endowments, government contracts, competitive research funds, donations, royalties on knowledge, etc. (Hottenrott and Lawson 2012). Auranen and Nieminen proposed an analytical framework for describing the budgeting environment of academic institutions, which includes three parameters: source of funding, total amount, and incentives. In this way, an institution's budgeting environment is a function of the ratio between external and internal funding and the input-output orientation of the allocation of the core resources.

On the one hand, the core budget relies mainly on government funding, which is subject to political decisions. In this case, the state's role is significant, since the institutions are dependent on this funding. On the other hand, universities have additional funding sources when part of the government funding is awarded through budgeting agents. In this case, the state's role is not necessarily weaker, although additional actors (such as private enterprise) and interest groups (Tandberg 2010) may directly influence a university's research orientation (Hottenrott and Thorwarth 2011). In the case of output-based government funding, the impact on state decisions is generally weaker than in an input-oriented system. When government funding is based on inputs, the government emphasizes resource efficiency, but when funding is based on outputs, governments have a direct expectation of efficiency and measurable results from institutions. In general, institutions that rely mainly on government funding are more sensitive to changes in the allocation and incentivization methods used in public funding. While government funding creates stability in the

system, outside funding may provide opportunities for innovation and expansion of existing activities. Input-oriented systems are considered less dynamic than output-oriented systems (Auranen and Niinen). We use this typology to describe the budgeting mechanism used in Israel.

In Israel, institutions receive most of their budgets from the government in the form of a global annual budget, and institutions are not required to provide a breakdown of the budgetary items and have absolute discretion to allocate the budget as they see fit (although they are required to file budget reports throughout the year). In addition, each institution is additionally funded on the basis of output measures. In contrast to the global amount that is allocated for the institutions' ordinary operating expenses, output-based funding is awarded to institutions on the basis of performance (CHE 2012). In universities, performance refers to two components, teaching and research, while in college funding, performance is based solely on measures of teaching that were adapted specifically to colleges (Kirsh 2010). The original budgeting scheme that differentiated between universities, considered research institutions, and colleges, considered to be institutions that focus on academic teaching, gradually changes, as an increasingly number of colleges engaged in research activities. Recently, even several teaching colleges have received budget allocations for research achievements as well.

Funding based on research is based on a competitive allocation of resources and is calculated according to each university's relative share in each of the following five research measures: competitive grant awards, other research fund awards, doctoral students, publications in scientific journals, and number of degrees earned in research-track graduate programs. Each measure has a different weight that reflects its relative significance for budget allocation. The two most important measures of research are competitive grant awards and scientific publications (Davidovitch and Sinuani-Stern 2014): Together these measures account for 68 % of the output-based research budget, which is in line with most international rankings of academic institutions, which refer mainly to research products and give much less attention to learning products.

According to the official view, the budgeting model used in Israel reflects an effort to encourage research products and especially outputs that are considered as "representing the significant share of the products of research work...subject to outside, mostly international, academic assessment" (CHE 2012, p. 69). Student organizations in Israel, however, claim that the current budgeting model in Israel reflects insufficient attention to efforts to promote the quality of teaching, including the quality of teaching in lectures, advanced teaching methods, students' feedback, and other elements. Although the student to instructor ratio features in the budgeting model, it only indirectly promotes smaller class size, as there are no mandatory standards. Due to the academic discretion of the institutions, we find a great variety in teaching hours per instructor and class size.

11.3 Conclusion

In this chapter we focused on the challenges of higher education in Israel in several areas: policymakers' areas of responsibility; promoting access to higher education vs. promoting academic research and excellence; determining the target audience of higher education; evaluating academic outputs; and whether higher education is a reflection of the principle of equality that the state is committed to provide to its citizens. These are all issues that have an impact on both the qualitative and the quantitative dimensions of the higher education system. The question is which side of the equation will prevail: quantity or quality?

In Israel, we find a dual policy on all issues. For example, on the one hand, the state's higher education policy seeks to realize the common public interest and its goals (by increasing access to higher education to the population), yet also wishes to support the interests of academic research and its goals (by promoting excellence in scientific outputs and quality), with emphasis on the supreme goal of producing new knowledge for humanity. Such policies can be complementary or can be mutually damaging, and therefore the most significant challenge is one of proportions. Unfortunately, this point is not clearly addressed by the regulator (Davidovitch and Iram 2014).

In effect, Israel has no single comprehensive policy on higher education. Instead, the strategy is to hold the stick at both ends: privatization and commercialization of higher education, together with a policy designed to encourage excellence and quality. Is it feasible to adhere to both values and allocate equal resources to these goals? We envision several possible scenarios for the higher education system in Israel, which is poised at a crossroad:

- (a) Pursuit of a passive strategy will continue, research activities in universities will diminish in scope, and the number of students in colleges will increase. In one or two decades we will have high accessibility and poor quality. That will be the result of the current absence of a clear policy or structured, uniform supervision.
- (b) Adoption of the view that education is the means to improve individuals' social and economic status, and as an economically viable long-term public investment. This view adopts both an access strategy and a quality strategy and is possible if the higher education market is opened to competition between the universities and the colleges, and both types of institutions are funded on an equal basis. At the same time, a system of supervision and quality assurance should require all academic institutions to meet high standards of academic quality.

There is no turning back time or re-instating higher education in an ivory tower. What the system needs is rationalization and adoption of a market approach in tandem with a system of checks and balances in a mechanism of supervision.

References

- Arun, R., Gamoran, A., & Shavit, Y. (2007). More inclusion and diversion: Expansion, differentiation, and market structure in higher education. In Y. Shavit, R. Arun, & A. Gamoran (Eds.), *Stratification in higher education: A comparison study* (pp. 1–35). Stanford: Stanford University Press.
- Auranen, O., & Nieminen, M. (2010). University research funding and publication performance – an international comparison. *Research Policy*, 39(6), 822–834.
- Ayalon, H., & Yogev, A. (2000). *A window to the academic dream: Stratification and diversity in the expansion of Israeli higher education*. Paper presented at the Calgary meeting of ISA-RC28, Calgary.
- Ben David, N., & Shichor, T. (2012). Does increasing the minimum psychometric admission score increase success in undergraduate studies in the social sciences. *Harivon Lekakala*, 59(1–2), 51–77 [Hebrew].
- Birch, E. R., & Miller, P. W. (2005). *The determinants of students' tertiary academic success*. Perth: Business School, University of Western Australia.
- Bolotin-Chachashvili, S., Shavit, Y., & Ayalon, H. (2002). Expansion of higher education and its implications on stratification in Israel 1980–1996. *Sotziologiya Yisraelit*, D, 317–346. [Hebrew]
- Bourdieu, P., & Passeron, J. C. (1977). *Reproduction in education, society and culture*. London: Sage.
- Bradley, D., Noonan, P., Nugent, H., & Scales, B. (2008). *Review of Australian higher education: final report* [Bradley review]. Retrieved from: <http://www.voced.edu.au/content/ngv32134>
- Bridges, D., Juceviciene, P., Jucevicius, R., Mclaughlin, T. H., & Stankeviciute, J. (Eds.). (2014). *Higher education and national development: Universities and societies in transition*. New York: Routledge.
- Central Bureau of Statistics. (2013, March 2). *Higher education in Israel – Press release on the occasion of the new academic year 2013*. 276/212. Jerusalem. [Hebrew]
- Collins, R. (1979). *The credential society: An historical sociology of education and stratification*. New York: Academic.
- Council of Higher Education. (2012). *The higher education system in Israel 2012 – On the path to growth*. Retrieved from: <http://che.org.il/>. [Hebrew]
- Council of Higher Education. (2014). *The higher education system in Israel*. Retrieved from: http://che.org.il/?page_id=399. [Hebrew]
- Davidovitch, N. (2013). Paradigmatic changes in perceptions of disciplinary and multidisciplinary teaching in the higher education system: Fad or challenge? *Israel Affairs*, 19(4), 704–712.
- Davidovitch, D., & Iram, Y. (2011). Globalization and higher education reforms: Legislation, policy and market forces in Israel. *Educational Practice and Theory*, 33(2), 43–62.
- Davidovitch, N., & Iram, Y. (2014). Regulation, globalization and privatization of higher education: The struggle to establish a university In Israel. *Journal of International Education Research*, 10(3), 201–218.
- Davidovitch, N., & Sinuani-Stern, Z. (2014). Compensation criteria in higher education in Israel and elsewhere: Evaluation of research and teaching outcomes. *Journal of International Education Research*, 10(4), 279–294.
- Davidovitch, N., & Soen, D. (2006). Enhancing access in theory and practice: A study of graduates of a large Israeli public college in 1995–2003. *International Education Journal*, 7(3), 284–304. Retrieved from <http://iej.cjb.net/>
- Davidovitch, N., & Soen, D. (2008). A college as a lever for graduates settling in the region: A case study of the College of Judea and Samaria. *Israel Affairs*, 15(1), 66–80.
- Davidovitch, N., & Soen, D. (2015). Predicting academic success using admissions profiles. *Journal of International Education Research*, 11(3), 125–141.
- Davidovitch, N., Soen, D., & Sinuani-Stern, Z. (2011). Performance measures of academic faculty: A case study. *Journal of Further and Higher Education*, 35(3), 355–373.

- Davidovitch, N., Byalsky, M., Soen, D., & Sinuani-Stern, Z. (2013). The cost of more accessible higher education: What is the monetary value of the various academic degrees? A case study. *Contemporary Issues in Education Research Journal*, 6(1), 37–58.
- De Boer, H., Huisman, J., & Meister-Scheytt, C. (2010). Supervision in 'modern' university governance: Boards under scrutiny. *Studies in Higher Education*, 35(3), 317–333.
- Dervin, F., & Zajda, J. (2015). *Governance in education: Diversity and effectiveness*. Paris: UNESCO.
- Dobbins, M., & Knill, C. (2009). Higher education policies in Central and Eastern Europe: Convergence toward a common model? *Governance*, 22(3), 397–430.
- Docampo, D. (2007). International comparisons in higher education funding. *Higher Education in Europe*, 32(4), 369–386.
- Finnie, R., & Usher, A. (2007). *Room at the top: Strategies for increasing the number of graduate students in Canada*. C.D. Howe Institute, Education Papers 245.
- Guri-Rozenblit, S. (1994). The university: For elites or for everyone? *Psifas*, Special supplement, 29–31. [Hebrew]
- Habighurst, H. W. (1989). Education and social mobility in four societies. In R. Shapira & R. Peleg (Eds.), *Sociology of education – An anthology* (pp. 187–203). Tel Aviv: Am Oved [Hebrew].
- Hottenrott, H., & Lawson, C. (2012). Research grants, sources of ideas and the effects on academic research. *ZEW-Centre for European Economic Research Discussion Paper* (12-048). Mannheim: ZEW-Centre.
- Hottenrott, H., & Thorwarth, S. (2011). Industry funding of university research and scientific productivity. *Kyklos*, 64(4), 534–555.
- Karen, D. (2002). Changes in access to higher education in the United States, 1820–1992. *Sociology of Education*, 75, 191–210.
- Kenet-Cohen, T., Bruner, S., & Oren, K. (1999). Meta-analysis of the predictive validity of components of the university screening system in Israel for academic success. *Megamot*, 40, 54–71 [Hebrew].
- Kirsh, A. (2010). *Higher education policy in Israel – Accessibility, quality and excellence with limited resources*. Haifa: Technion. Hebrew.
- Klittgaard, R. (1986). *Elitism and meritocracy in developing countries: Selection policies for higher education*. Baltimore: The John Hopkins University Press.
- Liefer, I. (2003). Funding, resource allocation, and performance in higher education systems. *Higher Education*, 46(4), 469–489.
- Lindberg, M. (2007). At the frontier of graduate surveys: Assessing participation and employability of graduates with master's degree in nine European countries. *Higher Education: The International Journal of Higher Education and Educational Planning*, 53, 623–644.
- McKenzie, K., & Schweitzer, R. (2001). Who succeeds at university? Factors predicting academic performance in first year Australian university students. *Higher Education Research & Development*, 20(1), 21–33.
- McLendon, M. K. (2003). State governance reform of higher education: Patterns, trends, and theories of the public policy process. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research* (Vol. XVIII, pp. 57–143). Dordrecht: Springer.
- Morrison, T. (1998). *Welcome to the world: Quality, higher education and change*. Mauritius: Mauritius Institute of Education.
- Norton, A. (2012). *Mapping Australian higher education*. Carlton: Grattan Institute. Retrieved from: <http://grattan.edu.au/wpcontent/uploads/2014/10/816-mapping-higher-education-2014.pdf>
- OECD. (2012). Factors, criteria or special circumstances used by tertiary institutions to determine access to the first stage of tertiary education. In *Education at a glance 2012: OECD indicators*. Paris: OECD Publishing. Retrieved from: <http://dx.foi.org/10.1787/eag-2012-en>
- Oren, K., Kenet-Cohen, T., & Bruner, S. (2007). *Collated data on the validity of the university screening system in forecasting first-year students' success (Classes of 2003–2008)*. Mannheim: NTAC. [Hebrew]

- Pontille, D., & Torny, D. (2010). The controversial policies of journal ratings: Evaluating social sciences and humanities. *Research Evaluation, 19*(5), 347–360.
- Shulruf, B., Hattie, J., & Tumen, S. (2008). The predictability of enrolment and first- year university results from secondary school performance: The New Zealand National Certificate of educational achievement. *Studies in Higher Education, 23*(6), 685–698.
- Skop, Y. (2014, September 1). Study: Psychometric score is better predictor of academic success than matriculation grades. *Haaretz*. Retrieved from <http://www.haaretz.co.il/news/education/premium-1.2421288>. [Hebrew]
- Smith, J., & Naylor, R. A. (2001). Determinants of degree performance in UK universities: A statistical analysis of the 1993 student cohort. *Oxford Bulletin of Economics and Statistics, 63*, 29–60.
- Tandberg, D. (2010). The politics of state funding of public higher education. *Educational Policy, 24*(5), 735–778.
- Toutkoushian, R., & Shafiq, M. M. (2010). A conceptual analysis of state support for higher education: Appropriations versus need-based financial aid. *Research in Higher Education, 51*(1), 40–64.
- Trow, M. (1973). *Problems in the transition from elite to mass higher education*. Berkeley: Carnegie Commission on Higher Education.
- Vininger, A., & Teshler, N. (2014). *Election in admission to higher education institutions and the psychometric exam*. Jerusalem: Knesset, Research and Information Center [Hebrew].
- Weiler, H. N. (2000). States, markets and university funding: New paradigms for the reform of higher education in Europe. *Compare, 30*(3), 333–339.
- Zaslavsky, T., & Lev-Ari, L. (2009). Three-year longitudinal study: The connection between Oranim admission criteria (Matriculation and psychometric scores) and students' achievements at the college (follow-up initiative). In M. Volitzker-Pollack (Ed.), *Pedagogical initiatives and social involvement initiatives* (pp. 1–46). Kiryat Tiv'on: Oranim Academic College of Education [Hebrew].

Chapter 12

Research in Globalisation and Higher Education Reforms

Joseph Zajda and Val Rust

Abstract This chapter discusses and evaluates critically current neo-liberal reforms in higher education. It examines major trends in current research in higher education reforms, the politics of education reforms in general, and role of the state, and dominant ideologies defining and shaping policy priorities of efficiency and performance indicators. In evaluating current research on globalisation, policy and the politics of higher education reforms it needs to be concluded that education and societies are under constant pressure from the forces of globalisation, dominant ideologies, and the ubiquitous competitive market forces. The higher education sector, having adopted the entrepreneurial business model, is compelled to embrace neo-liberal ideology, characterised by the corporate ethos of the efficiency, accountability, standards, performance, and profit-driven managerialism. Global competition, university rankings and leagues tables, and internationalisation, are some of the few characteristics defining and shaping the university governance and culture globally.

Keywords Globalisation • Global competition in education • Global university rankings • Excellence in higher education • Higher education competition • Managerialism • Neo-liberalism

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12.1 Current Research in Higher Education Reforms

In discussing current research in higher education reforms, the politics of education reforms in general, and role of the state, and dominant ideologies defining and shaping policy priorities, we need to go beyond the technicist and business-oriented model of education, which focuses on accountability, efficiency and performance indicators (Zajda 2008, 2014). At the macro-societal level we need to consider the teleological goal of higher education reforms. Are we reforming higher education systems to improve the quality of learning and teaching, academic achievement and excellence, and do we hope to change our societies, creating the ‘good society’? (Dalin and Rust 1996; Zajda 2010).

At the level of critical discourse analysis we need to consider dominant ideologies defining the nature and the extent of political and economic power, authority, and the existing social stratification, both locally and globally. They all have profound influences on the directions of higher education and policy reforms. A number of scholars have argued that education systems and education reforms are creating, reproducing and consolidating social and economic inequality (Avalos-Bevan 1996; Arnove and Torres 1999; Klees 2002; Apple 2002; Astiz et al. 2002; Benveniste et al. 2003; McLaren and Farahmandpur 2005; Milanovic 2006; Raffo et al. 2007; Zajda 2015). Our stratified and elitist higher education mirrors social stratification in society.

One could argue that the process of reproducing and consolidating social and economic inequality is one of the effects of forces of globalisation and neo-liberal ideology (Apple 2004; Bowles and Gintis 1976; Carnoy 1999). Educational organisations, having modelled its goals and strategies on the entrepreneurial business model, are compelled to embrace neo-liberal ideology, characterised by the corporate ethos of the efficiency, accountability, standards, performance, and profit-driven managerialism. Hence, the politics of education reforms in the twenty-first century reflect this new emerging paradigm of standards-driven and outcomes-defined education policy change (Zajda 2014).

Globalisation and the competitive market forces have generated a massive growth in the knowledge industries that are having profound effects on society and educational institutions (Carnoy and Rhoten 2002; Deem et al. 2008; OECD 2014). In the global culture the university, as other educational institutions, is now expected to invest its capital in the knowledge market. It increasingly acts as an entrepreneurial institution. Such a managerial and entrepreneurial re-orientation, as part of neo-liberal ideology, would have been seen in the past as antithetical to the traditional ethos of the University of providing knowledge for its own sake (Dalin and Rust 1996; Sabour 2015; Zajda 2015). Delanty (2001) notes that “with business schools and techno science on the rise, entrepreneurial values are enjoying a new legitimacy . . . the critical voice of the university is more likely to be stifled than strengthened as a result of globalisation” (Delanty 2001, p. 115). It can be said that globalisation may have an adverse impact on the higher education sector, and education in general. One of the effects of globalisation is that the university is compelled to embrace

the corporate ethos of the efficiency and profit-driven managerialism. As such, the new entrepreneurial university in the global culture succumbs to the economic gains offered by the neo-liberal ideology, and its push for efficiency, performance, standards, and profit-driven outcomes.

There is a trend in educational systems around the world of shifting the emphasis from the progressive learner-centred curriculum to 'economy-centred', human capital-oriented vocational training, based on human capital theories (Zajda 2007). This was discovered in a comparative study of education in China, Japan, the USA, Great Britain, Germany, Russia and the Scandinavian countries. Although these nations are vastly different in terms of politics, history and culture, and *dominant ideologies*, they are united in their pursuit for international competition in the global market. Hence, higher education reforms increasingly address the totalising imperatives of the global economy discourse: competition, academic standards, performance, productivity, and quality.

In addressing the topic globalisation and higher education reforms, some authors focus on higher education in the USA. Others offer interesting case studies dealing with Finland, Hong Kong, the Russian Federation, Ukraine and Israel (Zajda 2015). While scholars in the USA, examine such trends as global competition, university rankings and leagues tables, economic participation, and the inequality dimensions impacting on Black populations across the Diaspora, STEM research and international relations, and Massive Open Online Courses (MOOC), scholars elsewhere, discuss the impact of economy, politics and regional on the higher education network in Finland, Paradigm Shift in Higher Education: Learning, Internationalisation and Development in Hong Kong, the politics of reforms in Mexico, Ukrainian universities between neo-Soviet and neo-liberal contestations, neo-liberalism and higher education reforms in the RF, and globalisation higher education reforms in Israel.

Various scholars examine the discourse on global competition (DGC), which they see as a pervasive rhetoric about excellence, rankings, and world-class status (see also Portnoi and Bagley 2011) within national higher education policy documents. The authors suggests that higher education reforms are defined and influenced by massification and neoliberal economic ideology that favour free markets and limited government intervention. Consequently, using international research findings by Hazelkorn (2014), and Rizvi and Lingard (2010) the authors argue that these two major influences on higher education have resulted in 'increased commercialization, privatization, industry-higher education partnerships, and managerial forms of governance':

In the higher education sector, neoliberal trends have resulted in increased commercialization, privatization, industry-higher education partnerships, managerial forms of governance, and market-like behaviour, all of which signal a shift away from the social democratic values that had been prominent in higher education previously (Hazelkorn 2014; Rizvi and Lingard 2010).

Rust and Kim (2015) continue their examination of the discourse of global competition, and the growing criticism regarding global university rankings. Some

scholars, politicians, and policy analysts have generated widespread criticism to rankings, and in response to that criticism, alternative ranking systems have begun to be formulated, including the European Commission rankings, the Higher Education Evaluation and Accreditation Council of Taiwan (HEEACT) rankings, and the Webometrics Ranking of World Universities. The authors ultimately ask whether these new ranking systems are improving the process or adding to the negative attention to rankings. Rust and Kim (2015) argue that some researchers have 'derailed globalization's effects on higher education', in particular the shift towards market orientations and the global competition phenomenon (see Slaughter and Rhoads 2004; Deem et al. 2007; Rust and Kim 2012). These scholars vehemently decry the neoliberal turn that higher education is taking, where education policy and practices are further influenced by market forces over public interests:

Global university rankings have only fuelled more criticism, and both the Shanghai and the *Times Higher* lists seem to have as many critics as fans. The critics say the methodology is flawed, with Shanghai putting too much emphasis on scientific research and the *Times Higher* on the opinions of people at peer institutions. More broadly, there are also fundamental questions about the utility of even the best cross-border assessments by fellow academics. Although susceptible to manipulation and misuse, rankings have become an integral part of global higher education to the point where higher education institutions, governments, and organizations compete to have their institutions reflected well in the rankings (Rust and Kim 2015).

The ranking systems, as Rust and Kim (2015), argue, more heavily weigh top scholarly output as a measure of institutional quality, the highest ranked institutions are the large research universities. Unfortunately, however, the ranking systems are often read by the public as a list of the world's best universities and not as a list of top research universities. This is because there is not yet an 'objective measure of performance that includes quality of teaching and learning and other hard-to-measure indicators'.

Freeman shifts her focus to inequality in higher education. She argues that there is a need for reforming higher education policies and practices, particularly as it relates to community engagement. It is easy to assume that any time the subject of Divide and Conquer is broached that both terms conjure up negative, divisive language and thoughts, and can mean placing blame. This long overdue focus is on the education participation, or lack thereof, of Black populations across the Diaspora. Implications of the Divide for reforming policies and practices, as they relates to higher education engagement/partnerships, are discussed.

In 'University social and public engagement: creative nexuses for STEM research and international relations', Beverly Lindsay and Eric Jason Simeon examine STEM research and its impact on nations globally. The authors acknowledged that while teaching, scholarship/research, and engagement are central to university missions, it is recognized that in comprehensive doctoral universities, research is first among equals in faculty evaluations and university rankings. Concurrently, university executives and public policymakers emphasize global and international relations, especially since what occurs in one country can have far reaching effects in various geopolitical nations.

In addressing equity and access to higher education, Maureen W. McClure discusses the proliferation of online courses in today's society, mainly massive open online courses (MOOCs). These can range from a few to hundreds of thousands of students. Open means free or low cost to all. Open can also mean intellectual property rights agreements that promote widespread sharing. Open access is essential to reaching those with limited means, and may be MOOCs that most powerful contribution is to those with limited means.

In examining current trends in research in higher education reforms, we move to international case studies. Toni Saarivirta and Riitta Jaatinen (2015) examine and critique the impact of economy, politics and regional policy on the higher education network and policy change. In Finland, they argue, the 'new financial autonomy', i.e. the economy of the universities is based on a philosophy, which promotes the quality of research above all. However, the authors note such a shift towards prioritizing research may weaken 'academic knowledge', if research is based excessively on practical, working-life-oriented matters, and not enough on core scientific issues. The government wants Finnish universities to be top-level international universities with strong links to other universities abroad.

Cheng, Yin Cheong (2015) evaluates the paradigm shift from a traditional site-bounded model towards a new model of globalisation, localisation and individualisation to create unlimited opportunities for students to learn and develop world-class competences and contextualised multiple intelligences for lifelong development in the twenty-first century. To facilitate such a paradigm shift, the author presents a conceptual framework to re-define and develop internationalisation, as one of the key strategies for transforming higher education, and offers a four-scenario typology, to map out the possible directions for higher education development in the future.

How do different countries in Europe respond to systemic reforms in higher education in the West, the imperatives of the European Union, and the Bologna Process? In his case study, Anatoly Oleksiyenko analyses Ukraine's higher education and its aspirations towards European integration. His analysis is based on interviews with 50 professors at the leading universities in the cities of Kyiv and Lviv, to explore cumulative disadvantages as well as seek opportunities for reform leverages. The analysis is framed by focus on tensions between neo-Soviet and neo-liberal reform approaches in the post-colonial higher education, which have incompatible perspectives on academic freedom, grassroots initiatives, and structural innovations. Oleksiyenko concludes that in order to implement and sustain reforms in the long run, the Ukrainian authorities have to disinvest themselves of the fallacy of centrality that propelled the powers of ministerial or institutional bureaucracies.

Joseph Zajda (2015) continues his analysis of reforms in higher education in the Russian Federation, as the nation responds to the Bologna Process, global competitiveness and internationalisation. President Putin's reforms after 2010, in response to internationalisation, and Russia's poor performance in international rankings, targeted innovation, excellence and quality in education, and recent incentives include substantial financial rewards in the shape of major state grants for excellence

in research and teaching. Reforms have created a new and rising gap between the new ‘flagship’ and well-funded research universities and other more traditional institutions. Poorly funded and resourced institutions are now at the bottom of the new league tables of HEIs. Noted an emerging ‘social stratification in education’, which affects the quality of education available for those who can afford it, which has serious implications for equity and social justice. Thus, in the RF, stratified and elitist higher education mirrors, like in the West, a corresponding social stratification in society. Higher education reforms in the RF should be guided by the provision of authentic democracy, equity, social justice, and values that genuinely promote a democratic and inclusive culture.

Nitza Davidovitch evaluates critically the challenges of higher education in Israel in several areas: policymakers’ areas of responsibility; promoting access to higher education vs. promoting academic research and excellence; determining the target audience of higher education; evaluating academic outputs; and whether higher education is a reflection of the principle of equality that the state is committed to provide to its citizens. Davidovitch concludes that Israel has no single comprehensive policy on higher education. Instead, the strategy is to hold the stick at both ends: privatization and commercialization of higher education, together with a policy designed to encourage excellence and quality. What the system needs, Davidovitch argues, is rationalization and adoption of a market approach in tandem with a system of checks and balances in a mechanism of supervision.

12.2 Conclusion

Globalisation and the competitive market forces have generated a massive growth in the knowledge industries that are having profound differential effects on higher educational institutions and nations in general. One of the effects of globalisation is that educational organisations, having modelled its goals and strategies on the entrepreneurial business model, are compelled to embrace the corporate ethos of the efficiency, accountability and profit-driven managerialism. Hence, the politics of education reforms reflect this new emerging paradigm of standards-driven policy change (Zajda 2015). Globalisation, with its evolving and growing in complexity social stratification of nations, technology and education systems, has a potential to generate further polarisation and socio-economic divisions in society, that are likely to create discontent and social conflict.

In evaluating current research on globalisation, policy and the politics of higher education reforms it needs to be concluded that education and societies are under constant pressure from the forces of globalisation, dominant ideologies, and the ubiquitous competitive market forces. It is a paradox that cultural globalisation is unleashing forces that tend to standardise lifestyles, desires, and needs through commodities, and commodification of the self, information technology and the mass media. Consumer-based social identities are dependent on commodities and commodified forms of selfhood (Langman and Morris 2002, 2007).

The above critique of globalisation, policy and education suggests new economic and political dimensions of cultural imperialism (see Zajda 2014). Such hegemonic shifts in ideology and policy are likely to have significant economic and cultural implications for national education systems, reforms and policy implementations. For instance, in view of GATS constrains, and the continuing domination of multinational educational corporations and organisations in a global marketplace, the “basis of a national policy for knowledge production may be eroded in a free-market context of a knowledge-driven economy” (Robertson et al. 2002, p. 494). This erosion signifies the corresponding weakening of the traditional role of the university, being the pursuit of knowledge for its own sake (intrinsic):

...the heart of the academic dogma is the pursuit of knowledge for its own sake. Knowledge and the processes of coming to know are good in themselves, and the university, above all institutions, is – or used to be – devoted to them. To investigate, to find out, to organise and contemplate knowledge, these are what the university is about . . . (Nisbet 1971, p. vi).

The above analysis of trends in higher education reforms in the global culture shows a complex nexus between globalisation, ideology and education reforms – where, on the one hand, democratisation and progressive pedagogy is equated with equality, inclusion, equity, tolerance and human rights, while on the other hand, globalisation is perceived (by some critics at least) to be a totalising force that is widening the socio-economic status (SES) gap and cultural and economic capital between the rich and the poor, and bringing power, domination and control by corporate bodies and powerful organisations.

The higher education sector, having adopted the entrepreneurial business model, is compelled to embrace neo-liberal ideology, characterised by the corporate ethos of the efficiency, accountability, standards, performance, and profit-driven managerialism. Global competition, university rankings and leagues tables, and internationalisation, are some of the few characteristics defining and shaping the university governance and culture globally.

References

- Apple, M. (2002). Between neoliberalism and neoconservatism: Education and conservatism in a global context. In N. Burbules & C. Torres (Eds.), *Globalization and education: Critical perspectives*. New York: Routledge.
- Apple, M. (2004). *Ideology and curriculum* (3rd ed.). New York: Routledge Falmer.
- Arnone, R., & Torres, C. (1999). *Comparative education: The dialectic of the global and the local*. Lanham: Rowman & Littlefield Publishers.
- Astiz, F., Wiseman, A., & Baker, D. (2002). Slouching toward decentralisation: Consequences of globalisation for curricular control in national education systems. *Comparative Education Review*, 46(1), 66–88.
- Avalos-Bevan, B. (1996). Schooling and the state: A review of current issues. In J. D. Turner (Ed.), *The state and the school: An international perspective* (pp. 55–76). London: Falmer Press.
- Benveniste, L., Carnoy, M., & Rothstein, R. (2003). *All else equal: Are public and private schools different?* New York: RoutledgeFalmer.

- Bowles, S., & Gintis, H. (1976). *Schooling in capitalist America*. London: Routledge & Kegan Paul.
- Carnoy, M. (1999). *Globalization and educational reform: What planners need to know?* Paris: UNESCO, International Institute for Educational Planning.
- Carnoy, M., & Rhoten, D. (2002). The meaning of globalization for educational change. *Comparative Education Review*, 46(1), 1–9.
- Dalin, P., & Rust, V. (1996). *Towards schooling for the twenty-first century*. London: Cassell.
- Deem, R., Reed, M., & Hillyard, S. (2007). *Knowledge, higher education, and the new managerialism: The changing management of UK Universities*. Oxford: Oxford University Press.
- Deem, R., Mok, K. H., & Lucas, L. (2008). Transforming higher education in whose image? Exploring the concept of 'World-Class' university in Europe and Asia. *Higher Education Policy*, 21(1), 83–97.
- Delanty, G. (2001). *Challenging knowledge: The University in the knowledge society*. Buckingham: The Society for Research into Higher Education & Open University Press.
- Hazelkorn, E. (2014). Rankings and the global reputation race. In L. M. Portnoi & S. S. Bagley (Eds.), *Critical perspectives on global competition in higher education* (pp. 13–26). San Francisco: Jossey-Bass.
- Klees, S. (2002). World bank education policy, new rhetoric, old ideology. *International Journal of Educational Development*, 22(5), 451–474.
- Langman, L., & Morris, D. (2002). The net and the self: Cyberactive versus ludic identities. *Information Technology Education and Society*, 3(1&2), 23–46.
- Langman, L & Morris, D. (2007). Globalization, Cyberspace and Identity. Unpublished paper.
- McLaren, P., & Farahmandpur, R. (2005). *Teaching against global capitalism and the new imperialism*. Lanham: Rowman & Littlefield.
- Milanovic, B. (2006). Global income inequality. *World Economics*, 7(1), 131–157.
- Nisbet, R. (1971). *The degradation of the academic dogma*. London: Heinemann.
- OECD. (2014). *Education at a Glance 2014. OECD indicators*. Retrieved from: <http://www.oecd.org/edu/Education-at-a-Glance-2014.pdf>
- Portnoi, L., & Bagley, S. (2011). Global competition in higher education: Strategies in a glonacal context. *World Studies in Education*, 12(1), 5–33.
- Raffo, C., Dyson, A., Gunter, H., Hall, D., Jones, L., & Kalamouka, A. (2007). *Education and poverty: A critical review of theory, policy and practice*. York: Joseph Rowntree Foundation.
- Rizvi, F., & Lingard, B. (2010). *Globalizing education policy*. New York: Routledge.
- Robertson, S., Bonal, X., & Dale, R. (2002). GATS and the education services industry. *Comparative Education Review*, 46(4), 472–496.
- Rust, V. D., & Kim, S. (2012). The Global competition in higher education. *World Studies in Education*, 13(1), 5–20.
- Rust, V. D., & Kim, S. (2015). Globalisation and new developments in global university rankings. In J. Zajda & V. Rust (Eds.), *Globalisation and higher education reforms*. Dordrecht: Springer.
- Sabour, M. (2015). The impact of globalisation on the mission of the university. In J. Zajda (Ed.), *The second international handbook of globalisation and education policy research* (pp. 243–259). Dordrecht: Springer.
- Slaughter, S., & Rhoads, G. (2004). *Academic capitalism and the new economy: Markets, state, and higher education*. Baltimore: The Johns Hopkins University Press.
- Yin Cheong Cheng. (2015). Globalisation and Hong Kong educational reforms. In J. Zajda (Ed.), *Second international handbook of globalisation and education policy research*. Dordrecht: Springer. Retrieved from <http://www.springer.com/education+%26+language/book/978-94-017-9492-3>
- Zajda, J. (2007). Credentialism in the 21st century: The importance of qualifications. *Educational Practice and Theory*, 29(2), 61–79.
- Zajda, J. (2008). Technocrat/technocratic/technocracy. In G. McCulloch & D. Crook (Eds.), *The international encyclopedia of education*. London: Routledge.

- Zajda, J. (Ed.). (2010). *Global pedagogies*. Dordrecht: Springer. Retrieved from:<http://www.springer.com/education/comparative+education/book/978-90-481-3616-2>
- Zajda, J. (2014). Globalisation and neo-liberalism as educational policy in Australia. In H. Yolcu & D. Turner (Eds.), *Neoliberal education reforms: A global analysis* (pp. 164–183). New York: Taylor & Francis/Routledge.
- Zajda, J. (Ed.). (2015). *Second international handbook of globalisation and education policy research*. Dordrecht: Springer. Retrieved from: <http://www.springer.com/education+%26+language/book/978-94-017-9492-3>

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