Education in the Asia-Pacific Region:
Issues, Concerns and Prospects 41

Margarita Pavlova
John Chi-Kin Lee
Rupert Maclean *Editors*

Transitions to Post-School Life

Responsiveness to Individual, Social and Economic Needs

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Preface

The book series *Education in the Asia-Pacific Region: Issues, Concerns and Prospects* is the product of a dynamic partnership linking the education authorities of all Asia-Pacific countries (via UNESCO's APEID and UNEVOC programmes), the region's educational research community (APERA) and one of the world's major international academic publishing houses (Springer). It seeks to encourage and support educational research and innovation by facilitating the sharing of ideas and evidence relating to key policy issues, challenges and problems facing educational authorities, institutions, teachers and students.

This book provides an invaluable contribution to our understanding of one of the most urgent challenges facing all education systems: how to prepare and support students in the transition from education (school, college or university) to adult life and work. Reading the book, one is constantly reminded that what happens during the transition process is affected not only by the length and quality of schooling and training provided but also by labour market conditions, the economic environment and demography.

The first part of the book explores different models, mechanisms and approaches to facilitating the school/college/university to work transition. It sheds light on the effectiveness of innovative approaches in policy and practice and covers issues of selectiveness and inclusiveness, integration of transversal competencies, the vocationalisation of secondary schooling, apprenticeships, approaches to bridging skill gaps and emerging models of student support. In reviewing the structural support mechanisms being put in place by governments and institutions at different stages in transition, it illuminates individual pathways in transition to adult life ranging from the children of refugees in Australia to Indian women in urban slums. As such, the book challenges policymakers and education providers to recognise the diversity of pathways, opportunities and obstacles at each stage in transition, reminding us that one size does not fit all.

Work is of central importance in every society. For the individual, it implies not only financial gain and social status but also economic and personal independence. When times are tough, there are few jobs available for new entrants to the labour

market, the available jobs for unskilled workers are generally poorly paid and insecure and support for entrepreneurial and self-employment ventures is vaporous. Times are tough for an ever-increasing number of young people regardless of their level of education. Many young people face a long wait for work, those with less education and limited skills being the most vulnerable. Discriminatory labour practices make entry to the workforce particularly difficult for young women, the disabled and marginalised groups.

The dramatic changes taking place in the world of work represent an enormous challenge for governments, education policymakers and institutions and young people throughout our region. Globalisation and automation have led to a massive shift from farm to industry in countries like China, India and Indonesia and from manufacturing to service industries in developed countries like Japan, South Korea, Singapore and Australia. By 2020, it has been predicted that there will be a potential shortage of 40 million high-skilled workers and 45 million medium-skilled workers and a potential surplus of 90 million low-skilled workers, predominantly young people with low levels of education (UNESCO-EFA, 2012). Official estimates put the number of unemployed young people across the Asia and Pacific region at 33 million, with youth unemployment rates ranging from over 20% to under 10%. However, the real magnitude of the youth unemployment problem is far more troubling than the official statistics suggest. For example, whereas the official youth (15–24 years) unemployment rate in Australia is 13.2%, more than 30% of young Australians are unemployed or seriously underemployed, and on average it takes them 4.7 years to obtain a full-time job (FYA, 2015). For the society as a whole, high youth unemployment not only hampers economic development and productivity but also creates a multitude of social and mental health problems ranging from youth suicide and crime to frustration that in several countries in the region has erupted into violence.

Education may not be a miracle cure for youth unemployment, but we must ensure that all young people have the knowledge, skills and inner resources needed to find a place in the world of work and to shoulder their responsibilities as adults. Citing the literature on skills development for the transition to work, the book examines the major issues associated with (i) preparation during school for the world of work (e.g. introduction of vocational content into the secondary curriculum, the need to support labour market development to stimulate the demand for skills), (ii) bridging school and work (e.g. different models that link school and work, different types of apprenticeship, work experience at school) and (iii) upgrading skills in the workplace (e.g. internships, in-house training by enterprises).

The book highlights the joint responsibility of the state and industry for enhancing individual employability and combining supply-side and demand-side policies. The chapters reviewing innovative models for youth and transverse skills development are particularly pertinent to the intertwined challenges of facilitating transitions to life beyond school and ensuring a closer match between graduates' skills and employers' skill demands. One of its strengths is that it provides an informed regional perspective on the discourse on twenty-first century skills while insisting

that the guidelines and tools for developing and assessing transversal skills should be relevant to different contexts.

What kind of education is needed to facilitate the transition from schooling to adult life in the twenty-first century? To address that question, UNESCO set up an International Commission on Education chaired by Jacques Delors. The report (UNESCO, 1996) argued that education must build the strong foundations needed to continue to learn throughout life. It saw narrow education as disempowering, insisting that education at all levels be based on four pillars: learning to know, to do, to live together and to be. At the 2011 International Symposium on Lifelong Learning at The Hong Kong Institute of Education, we elaborated on the implications of the concept of lifelong learning and the linkages between the four pillars for the re-engineering of existing systems of education and training:

> *Adopting the principle of lifelong learning does demand a new vision, one that shifts the emphasis from education to learning; one that moves to a more seamless and user-friendly system; one that recognizes the diversity of ways in which knowledge and skill can be acquired in the information age outside of the formal system (Power & Maclean, 2013).*

My latest book (Power, 2015) is part of this series. It develops the case for a broader and more integrated approach to learning throughout life, one that provides young people with the knowledge, skills and inner qualities they need to achieve what is important to them in their life and empowers them as they assume the responsibilities of adult life. It stresses the need to break down the walls between education and work and to build new types of partnerships. These are themes well articulated and developed both in the review chapters in the first part of the book and the more detailed elaboration of life planning, vocational and secondary education, applied learning and post-school support for both regular students and those with special needs in Hong Kong in the second.

Sadly, we must admit that for the most part, education, training and support systems are slow to change and are far from providing adequate preparation for the jobs and responsibilities of adult life today, let alone for the future, given that up to 70% of young people are entering jobs that will be lost or radically affected by automation over the next 10 to 15 years (FYA, 2015). As this book shows, painfully and over time, a new education-training-learning paradigm is emerging in the Asia-Pacific region: one increasingly centred on enabling young people to become lifelong learners and less on formal instruction in classrooms. The manner by which this change will come is by no means certain. It will not mean the end of formal schooling and vocational training, but its transformation. The red brick walls of the school house and ivory towers of academe may not change, but what goes on within them will need to be transformed in ways both subtle and profound, as the gates between school and community, between education, life and work, are forced open.

This book provides a significant and timely contribution to our understanding of how education and training systems in our region are responding to the challenges facing young people in transition to work and adult life. By illuminating the realities of the varied pathways to adult life in the Asia-Pacific region and assessing

the effectiveness of policies and innovations that are being put in place, the book is an invaluable resource for educational policymakers and practitioners alike. It is, in my view, a seminal work, one that needs to be studied, discussed and used to better inform policy and practice at all levels of formal and non-formal education and training

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Series Editors' Introduction

This book titled *Transitions to Post-School Life*, which is edited by Margarita Pavlova, John Chi-Kin Lee and Rupert Maclean, is the latest volume to be published in the long-standing Springer book series *Education in the Asia-Pacific Region: Issues, Concerns and Prospects*. The first book in this Springer series was published in 2002, with this volume being the 41st volume published to date.

The book addresses growing concerns about the relevance of education systems in meeting the economic and social needs of individuals by examining different aspects of transitions from school to work or further studies and within informal settings.

This volume will be of particular interest to educators, policymakers, researchers and other stakeholders concerned about the effectiveness of system-wide and institutional-based approaches. It highlights important issues such as selectiveness and inclusiveness, integration of transversal competencies, vocationalisation of secondary schooling, approaches to career guidance and emerging models of student support.

The overall context of the book is Asia. The first part of the volume explores different models, mechanisms and approaches to policy and practice in Asia, while the second part looks at transitions to post-school life by Hong Kong students and provides an account of issues and challenges which governments and individual schools experience in terms of structural support for both mainstream and special needs students.

The book is unique in the field in that it assists with understanding different models at the systems and institutional levels, designed to facilitate transitions from school to post-school life in the context of Asia. In addition it addresses both formal and informal approaches, focuses on transitions to vocational and further education, clarifies the complexities of the relationships between intentions and the realities of post-school transitions and presents a detailed analysis of the Hong Kong context in terms of issues concerning school to life transitions.

The various topics examined in this Springer book series are wide ranging and varied in coverage, with an emphasis on cutting-edge developments, best practices

and education innovations for development. Topics examined include environmental education and education for sustainable development; the reform of primary, secondary and teacher education; innovative approaches to education assessment; alternative education; most effective ways to achieve quality and highly relevant education for all; active ageing through active learning; case studies of education and schooling systems in various countries in the region; cross-country and cross-cultural studies of education and schooling; and the sociology of teachers as an occupational group, to mention just a few. More information about this series is available at http://www.springer.com/series/6969

All volumes in the book series aim to meet the interests and priorities of a diverse education audience including researchers, policymakers and practitioners; tertiary students; teachers at all levels within education systems; and members of the public who are interested in better understanding cutting-edge developments in education and schooling in Asia-Pacific.

This book series has been devoted exclusively to examining various aspects of education and schooling in the Asia-Pacific region because this is a particularly challenging region which is renowned for its size, diversity and complexity, whether it be geographical, socio-economic, cultural, political or developmental. Education and schooling in countries throughout the region impact on every aspect of people's lives, including employment, labour force considerations, education and training, cultural orientation and attitudes and values. Asia and the Pacific is home to some 63% of the world's population of 7 billion. Countries with the largest populations (China, 1.4 billion; India, 1.3 billion) and the most rapidly growing megacities are to be found in the region, as are countries with relatively small populations (Bhutan, 755,000; the island of Niue, 1600).

Levels of economic and sociopolitical development vary widely, with some of the richest countries (such as Japan) and some of the poorest countries on earth (such as Bangladesh). Asia contains the largest number of poor of any region in the world, the incidence of those living below the poverty line remaining as high as 40 percent in some countries in Asia. At the same time, many countries in Asia are experiencing a period of great economic growth and social development. However, inclusive growth remains elusive, as does growth that is sustainable and does not destroy the quality of the environment. The growing prominence of Asian economies and corporations, together with globalisation and technological innovation, is leading to long-term changes in trade, business and labour markets, to the sociology of populations within (and between) countries. There is a rebalancing of power, centred on Asia and the Pacific region, with the Asian Development Bank in Manila declaring that the twenty-first century will be 'the Century of Asia-Pacific'.

This book series makes a unique contribution to knowledge sharing about education and schooling in Asia-Pacific.

Any readers of this or other volumes in the series who have an idea for writing (or editing) their own book on any aspect of education and/or schooling that is relevant to the region are enthusiastically encouraged to approach the series editors either directly or through Springer to explore the possibility of publishing their own

volume in the series, since we are always willing to assist perspective authors shape their manuscripts in ways that make them suitable for publication in this series.

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Contents

Chapter 1
Stepping into the World: Transitions to Post-school Life

Margarita Pavlova, John Chi-Kin Lee, and Rupert Maclean

Abstract Concerns about the relevance of educational systems to the economic and social needs of countries are growing internationally. Countries in Asia are confronted with the realities of economic development, technological change, urbanisation and demographic issues that require governments to design specific policies and strategies that enable them to invest in human capital and tackle these challenges. The considerable mismatch between the supply of skills and labour market demand is a common problem in the region, meaning that there are around 33 million unemployed young people across the Asia and Pacific. Therefore, the issue of transition from school to work is among the major concerns for the governments. This chapter serves as an introduction to issues associated with transitions and discussed in the book through the analysis of the experiences of different countries, such as innovative approaches in policy and practice, issues of selectiveness and inclusiveness, integration of transversal competencies, the vocationalisation of secondary schooling, approaches to bridging skill gaps and emerging models of student support.

Concerns about the relevance of educational systems to the economic and social needs of countries are growing internationally (OECD & CPRN 2005). Countries in Asia are confronted with the realities of economic development, technological change, urbanization and demographic issues that require governments to design specific policies and strategies that enable them to invest in human capital and tackle these challenges. The considerable mismatch between the supply of skills and labor market demand is a common problem in the region.

Youth unemployment increased by almost 5% between 2011 and 2013 to 11.3%, meaning that there are 33 million unemployed young people across the Asia and Pacific region. Young people are up to ten times more likely to be unemployed than

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adults. However, compared to the youth unemployment rate in OECD countries, the rate in this region is relatively low (UNESCAP 2015). Youth unemployment is particularly high in some countries, such as Indonesia (21.8%), Sri Lanka (19.1%) and Australia (13.1%). In China, India and the Republic of Korea, it is above 10% (The World Bank Database 2016). Youth unemployment is consistently higher than the average level of unemployment. For example, in Hong Kong Special Administrative Region of China (henceforth referred to as Hong Kong), the youth unemployment rate for 15–19-year-olds in 2013 was around 17%, which is much greater than that of the overall population (Lau 2013). Therefore, the issue of transition from school to work is a major concern for these governments and is one of the main focuses of this book.

There is no integrated theory about the transition from school to work, and 'transition-system research often appears theoretically eclectic and fragmented' (Raffe 2008, p.278). A literature review on skills development for the transition to work (Adams 2007) identified three main stages when the development of these skills occurs and highlights the differences in issues associated with each stage: (1) preparation during school for the world of work (e.g. introduction of vocational content into the secondary curriculum; the need to support labor market development to stimulate the demand for skills), (2) bridging school and work (e.g. different models that link school and work, different types of apprenticeship, work experience at school), and (3) upgrading skills in the workplace (e.g. in-service training by enterprises). A critical reflection of these stages provides a framework for this book and can help to evaluate government interventions in supporting transitions and establishing effective trajectories for different target groups.

A terminological debate on the use of such terms as transitions, trajectories and pathways reveals nuances in the ways these terms are used. Transitions usually refer to (a) status change(s) over a longer period of time (e.g. Sakmann and Wingens 2001). Trajectory usually refers to destinations that are largely determined by social factors 'outside the control of individual social actors' (Evans and Furlong 1997). Sometimes trajectories relate to transitions determined by institutional arrangements. For example, a high investment in vocational skills could function as a structural support for particular trajectories for school to work transitions. Some authors prefer to use 'pathways' as an alternative term (e.g. Shanahan 2000).

Government interventions often occur at the system-wide or macro level. System-wide approaches are aimed at improving employment opportunities for young people and often combine education and skills policies, active labor market policies and social security mechanisms. These interventions often highlight the joint responsibility of the state and industry for enhancing individual employability and combine supply-side and demand-side policies. Youth employability is a result of multiple factors, including at the *external level*: access to education and the availability of training options, institutionalised structures that include a variety of possible trajectories, the development of opportunities and encouraging participation. Conditions that support employability at the *internal level* include the development of transversal and technical skills and the ability to take advantage of opportunities for learning and skills development, motivation, initiative and so on.

In many Asian countries, system-wide approaches also need to address challenges of scale. In India, for example, seven million people enter the labor market every year and require support in identifying their pathways to employment.

Research on transitions from school to work has moved beyond the input-output model. Researchers now argue that it is important to look at mediating features within the system that relate structural support to outcomes. The possibility of transforming these support structures in order to improve the effectiveness of transition requires a systematic approach. Different countries' contexts are closely connected to the structural and compositional features of the education and training system and are important mediators in predicting/explaining the effectiveness of measures. The fragmentation of approaches can have ineffectual results.

Problems regarding youth integration into the labor market have been fully acknowledged by governments, and they have identified an increased risk of exclusion for certain marginalized groups like migrants, young people from low socio-economic backgrounds and women. Therefore, there needs to be some differentiation between the support mechanisms that enhance knowledge, skills and attitudes so they are tailor-made for promoting labor as well as the social integration of these groups. Particular support provided by different stakeholders can ensure employability as well as the smooth transition from school to work.

In addition to the macro (system-wide) level, this process of transition can be considered from the mezzo (institution-wide) and micro (personal) levels. At each level input, process and output must be examined if we are to systematically understand the complexity of school to work transitions.

Changing the institutional delivery systems (new types of delivery in existing institutions or creating new kind of institutions), establishing new programs (e.g. to reach new learners), new modes of delivery (at workplaces, in remote areas and distance learning), changing admission policies and providing a variety of support are additional measures that governments and other stakeholders can adopt to improve effectiveness of transitions and develop new trajectories for young people. Tensions between personal agency and institutional structures could lead to inefficiencies within formal arrangements; therefore, innovative, informal structures play a critical role in supporting particular life courses.

In the context of developing countries, *encouraging individual participation and success* is particularly important. Financial incentives for individuals, such as direct subsidies, loans and tuition rebates combined with incentives for employers, can trigger positive results. Governments and other stakeholders are currently focused on measures such as advertising and recruitment, particularly for those in the target groups, as well as support services that provide guidance and counseling.

An analysis of transitions at the micro level demonstrates that a transition is not simply a single event; it is a complex process where different forces come into play. Longitudinal studies of transitions at the micro level such as sequence analysis (Shanahan 2000) are helpful if we want to unpack the complexity of school to work transitions. Research into transitions that used sequence analysis to identify pathways of youth in three countries (France, Spain and Germany) over 60 months after leaving school established eight ideal types of transitions (Brzinsky-Fay 2014, Fig. 1.1). These were present in all countries, but their proportions varied.

This analysis demonstrates the complexity of pathways from school to work at the personal level as well as their dependence on the country's context.

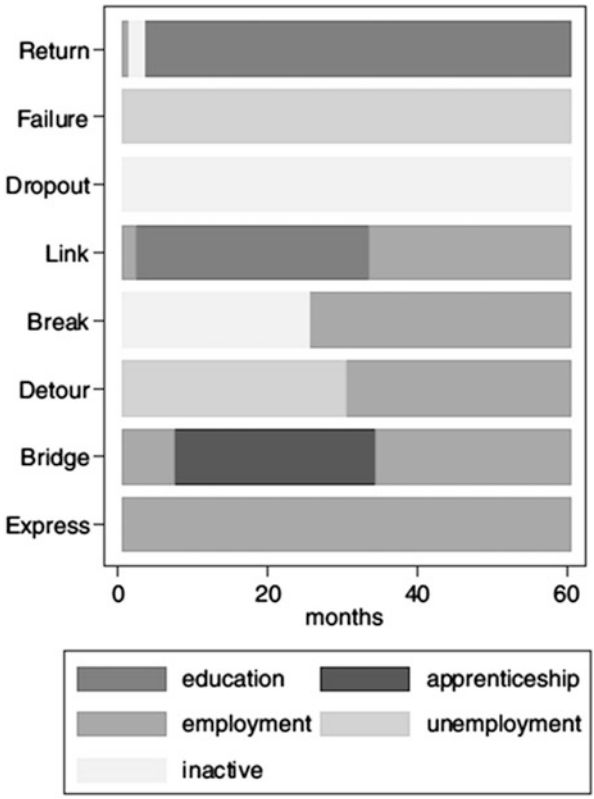

Fig. 1.1 Ideal types of school to work transitions (Source from Brzinsky-Fay 2014, p.224)

Transition from school to work is generally complex and rarely involves a single event. This is the reason researchers are particularly interested in sequence analysis of school leavers. The types of school to work transition depend on the status of the labor market in terms of employment, education, apprenticeship, unemployment and inactivity. Brzinsky-Fay (2011, p.36) identified eight distinct ideal types of transition that facilitate the understanding of what transition is, where it starts and where it ends.

The first three types do not lead to employment at the end of the fifth year after graduation from school. These are:

1. Return: School leavers go back to full-time education after a very short period of employment, inactivity or unemployment and stay there for at least 5 years. This can be described as a maintaining transition.
2. Failure: This transition type comprises school leavers who fail to be offered a job within the first 5 years despite their commitment to labor market participation. This is a type of exclusionary transition.
3. Dropout: The dropout transition generally involves long-term inactivity. The reasons behind this inactivity can be military service or childcare activities, for example. This transition type also belongs to exclusionary transition (Brzinsky-Fay 2011).

The other five types – link, break, detour, bridge and express – do lead to employment. Young people who fall under these types make the transition into stable employment within a 60-month period. However, the transition occurs at different times:

4. Link: School leavers return to the education system at the beginning of the 60-month period and gain employment towards the end.
5. Break: Inactivity in the break type is much shorter than the dropout type, and most school leavers successfully transition to employment.
6. Detour: After a considerable period of unemployment, these school leavers eventually find employment. For this type, unemployment can relate to the search/rest time between one job and another and can be accompanied by retraining or geographical mobility.
7. Bridge: Apprenticeship periods represent a large proportion of this transition type; they bridge the gap between school education and employment.
8. Express: This type refers to the fastest integration into employment for school leavers but does not take into the account the quality of that employment.

This micro-level analysis demonstrates that although governments and institutions have mechanisms in place to support transitions, there are many other complex economic and personal factors to consider which influence the results. For example, there is much psychosocial research in the broad field of transitions research that focuses on elements such as identity, status, roles and belonging (e.g. Ng and Feldman 2007: Ecclestone et al. 2010; Jindal-Snape 2010). There is also a body of research related to career counseling and vocational related behaviour that highlight the various factors that affect students' career aspirations (e.g. Cheng and Yuen 2012; Renn et al. 2014). The focus of this book, however, is on the institutional and policy contexts of selected countries that provide support for school to work transitions and the development of employability skills.

Concern about skills for employment and those needed to navigate new complex social and political realities is typically addressed through existing support systems at different levels. This situation is pivotal to the concerns addressed in this book. The basic issues to be addressed are based on the following principles for facilitating post-school transition: (a) development of employability and twenty-first-century transversal skills advocated in school curriculum reforms and TVET (UNESCO Bangkok 2015) beyond job-specific skills for young people so they are able to prepare for changing societies and economies and (b) addressing individual needs for those ranging from refugee children to children with special educational needs or disadvantaged backgrounds. In addition, individuals with different aspirations, talents and needs should be empowered and enabled through policies, support systems and measures at different levels such as the country and school level in order to pursue their pathways. (c) As there are diverse environments and conditions within and across cities and places, a wide array of approaches ranging from business-school-government partnerships, apprenticeships and mentorships to informal learning could be adapted to match particular needs.

This book is part of the coeditors' contribution to Hong Kong's participation in an International Study of City Youth (ISCY) (http://iscy.org/) led by Stephen Lamb. Several countries are involved, including Australia, Canada, France, Norway, Spain

and the United States. The book, involving scholars from different locations, explores current issues, and the ways supporting systems have dealt with new economic and social demands to enhance transitions from school to work. The book explores different aspects of these transitions and consists of two main parts.

The first part explores different models, mechanisms and issues of school to work transition and focuses on the experiences of different countries, such as innovative approaches in policy and practice, issues of selectiveness and inclusiveness, integration of transversal competencies, the vocationalization of secondary schooling (e.g. Lee et al. 2016), approaches to bridging skill gaps and emerging models of student support.

The chapter by Santosh Mehrotra and Vinay Swarup Mehrotra provides a broad overview of the issues associated with skills development in India. It deals with system-wide approaches towards skills development. The Indian government's major challenge is to align the skilling efforts of different stakeholders with labor market needs. The chapter provides a comprehensive analysis of different initiatives in the country and addresses issues of skills standardization, their recognition, accessibility as well as innovative approaches and government schemes for skilling young people. It also highlights apprenticeship as an effective means of supporting young people in their transition to employment.

The importance of transversal/twenty-first-century skills in facilitating transitions to life beyond school and for ensuring a closer match between graduates and employers' demands is addressed in the chapter by Antony Tam and Barbara Trzmiel. This chapter provides a regional overview of how these skills are categorized and addressed at the policy and curriculum levels as well as in pedagogies in Asia and the Pacific. The authors argue that economic discourse dominates the integration of transversal skills in education and training. The chapter combines policy and institutional levels of analysis. In addition, it focuses on a specific area of assessment that is important for ensuring that the acquisition of transversal skills is included in the national curriculum. A lack of coherent approaches towards assessment could be a barrier to developing these particular skills and assisting young people in their transitions to work.

Apprenticeship has proven to be an effective way of linking the world of education, training and work. The chapter by Zhiqun Zhao discusses one particular means of creating a smooth transition from school to work for young people – a modern apprenticeship in China. Apprenticeships are viewed within the framework of school-enterprise cooperation and as an effective mechanism to limit the mismatch between labor market demands and graduate supply by the education and training system in China. The chapter analyses the history of apprenticeship in China and argues for the importance of establishing formal apprenticeships. The chapter suggests a number of measures that can be adopted to institutionalize modern apprenticeships. The complex but necessary requirements needed to coordinate measures at the macro, mesa and micro levels are outlined. In addition, the formalization of apprenticeship will better support vulnerable youth, such as new migrants to the cities.

Among the emerging models of student support during the last years of schooling is the development of individualized educational pathways (IEPs). The chapter by Margarita Pavlova and Tatiana Lomakina examines how these individual trajectories

can be conceptualized and what criteria ensure their effectiveness. This approach recognizes the autonomy of the individual within existing social and structural constraints and focuses on the institutional (mezzo) level. The IEPs help link the macro and micro levels and are influenced by school culture and the structural arrangements of institutions. In addition, school infrastructure, the community where a school is located, school cohesion and interpersonal relationships between students and teachers are important factors that influence the development and implementation of IEPs. While there are contextual factors that influence the process, this chapter puts forward a set of generic principles that can help to develop IEPs in schools.

Two chapters in the book identify successful approaches to transition for disadvantaged groups. One focuses on the support for particular trajectories for Indian women from an urban slum, and the other on support structures at school that facilitate university pathways for refugee children in Australia. These two chapters interrogate different types of institutional support that facilitate transitions in two very different settings – informal and formal.

Strategies that enable youth to live the life that they appreciate and want to be associated with are essential for supporting people who fail to travel 'standard' pathways from school to employment. The chapter by Supriya Pattanayak and PNSV Narasimham analyzes an example of a livelihood institution, the Urban Micro Business Centre (UMBC), as a facilitator for school dropouts (women who undertook 5 years of schooling or less) transition. The authors examine opportunities presented by this center and argue that it opens up new trajectories for marginalized women. The UMBC targets particular sets of constraints and learning that specify pathways for each individual. The chapter argues that in order to open new trajectories for transition, *an informal institutional mechanism* is required that can empower marginalized individuals by assisting them to make informed decisions in daily life by applying knowledge co-creation pedagogies. In addition, women's agency can be encouraged through the facilitation processes in many aspects of transitions, such as the giving of financial support for their businesses, assistance in procuring raw materials and packaging.

The authors call for a variety of informal institutional support models that should be customized to 'the local population and the demographic character of the respective neighborhood'. For India, these institutions can be set up under the government policy, *National Urban Livelihood Mission*. To support transitions for marginalized groups that have restricted access to schooling, it is important to recognize that options are limited to the challenge of 'choice-forming and choice constraining'. Therefore, it is important to acknowledge that girls' dropout rates closely correspond to their social and economic roles in the informal community.

Programs aimed at disadvantaged youth need to integrate a set of components with which to address the many obstacles faced by young people. They can combine different skills development components, counseling and social inclusion. The chapter by Loshini Naidoo, Jane Wilkinson, Misty Adoniou and Kip Langat unpacks the complexities of transitions from school to university for students with a refugee background. The chapter identifies the crucial role of teachers, education policies and community and learning engagement programs in supporting these marginalized students in their transition to university. A number of successful programs such as the

Refugee Action Support program, the Learning Education Aspiration Participation Initiative and the Refugee Bridging program are examples of formal institutional support provided for these students. One important enabling factor that leads to the success of these interventions is the close collaboration between different stakeholders such as students, parents, schools, universities, NGOs and government and religious agencies, as well as enabling practices at schools that take a systematic approach. Furthermore, there is a need for school-based policies and implementation strategies in order to support students from a refugee background. A teacher's role combines both academic and social support in assisting students to navigate their potential trajectories. This chapter highlights the importance of policies that are critical for the conversion of potential resources and opportunities into real capacities, in terms of transitions that are meaningful for students.

The second part of the book looks at transitions to post-school life among Hong Kong students. It partly arises from the coeditors' involvement in an International Study of City Youth (ISCY) in Hong Kong (which was one of the participating cities). This part of the book presents a variety of concerns relevant to issues associated with structural support at the school and system levels. In this context, the second part explores current issues and the ways secondary schooling has been dealing with new economic and social demands (Lee 2016; Pavlova 2017). Issues of education reform, the changing context of the education sector, schools' support for post-school planning and students' performance, aspirations and realities of transition for both mainstream and special needs students are discussed. Two chapters report on the results of the ISCY in Hong Kong.

The chapter by John Chi-Kin Lee, Rupert Maclean and Joy Lan Yang discusses issues associated with life planning in Hong Kong at the policy level. It analyzes recent government decisions in relation to life planning and links them to transition issues. The chapter focuses on three distinct areas where government has launched a number of initiatives: vocational education and training, pathways articulation and tailored support for different youth categories. Based on the analysis, the chapter develops recommendations on how to strengthen government policies in Hong Kong to support youth transitions from school to work.

One of the ways to support Hong Kong students in their transition from school to work, or further study, is the introduction of 'applied learning' at the upper secondary school. Wai-yan Tang and Wai-lun Tang examine the nature of the applied learning curriculum and changes in its orientation over recent years. The curriculum has shifted from skill-based training to one that emphasizes values and attitudes in order to prepare students for work, as well as lifelong learning. The authors argue that in order to ensure the effective development of an 'applied learning' curriculum, the epistemological basis for it should be founded on Aristotle's *phronesis* (practical knowledge). In addition, the chapter analyzes the recently published government *Report of the Task Force on Promotion of Vocational Education*. This report argues for the need to recognize the value of vocational education as a legitimate destination for school graduates. This is one of the trajectories the government of Hong Kong is promoting for young people; however, it is not popular, so this type of vocational education should be subject to critical evaluation based on Aristotle's *phronesis*.

The chapter by John Chi-Kin Lee and Orlando Nang-Kwok Ho focuses on career guidance and life planning strategies at school level and analyzes how funding associated with policy-level support, provided by the Hong Kong government, influences school practice. The chapter examines two different types of schools and the ways they respond to government policies and students' needs in terms of facilitating transitions to post-school life. Although both types of school provide support through similar mechanisms, such as real work experience, career-related learning in mediated real-life experience, career-related learning beyond the classroom and career-related learning in classrooms, there are some unique activities such a job shadowing and career interest inventory that meet the demands of particular students. The chapter suggests that although some schools have developed support strategies there is a greater need for closer cooperation between different stakeholders, including NGOs and parents to increase their effectiveness. There is also a need to emphasize life satisfaction and non-material happiness, providing individualized support in schools.

Kuen Fung Sin and Joy Lan Yang discuss the importance of post-school transitions for students with special educational needs (SEN). Research has identified tensions between limited choices for further education for SEN students in Hong Kong and the high expectation of parents, inadequate support for SEN students at school level and other barriers for post-school transition. The chapter argues that in order to support these students' engagement in transitions, multiple mechanisms at the mezzo and micro levels should be in place (individual, school and community levels, policy level). An additional emphasis on the development of life skills and career planning is required. For this group of students, setting up realistic achievable post-school goals is particularly important as tensions between personal agency and institutional structures could cause great disparities and limited social integration.

This book, therefore, primarily focuses on structural support at the system-wide and institutional levels at different stages of transition that are designed to expand learners' opportunities within a complex socio-economic landscape in Asia. The book provides a broad overview of challenges that governments and institutions are experiencing in different contexts. It also offers an in-depth analysis of Hong Kong that illustrates both specific and general issues other countries in the region face. The book examines formal and informal approaches of establishing support mechanisms that will empower youth for the future. It fills a gap in the research that is focused on analysis of policies and practices in the region by exploring how education and training systems currently respond to the challenges young people face with transitions to work and life itself.

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Part I
Issues and Models of School to Work/Life Transitions in Asia and the Pacific Region

Chapter 2
Challenges Beyond Schooling: Innovative Models for Youth Skills Development in India

Santosh Mehrotra and Vinay Swarup Mehrotra

Abstract The major drivers of skill demand are economic growth, expansion of primary and secondary education, urbanization, demographic changes and global competitiveness. These call for higher-order competences and employability skills that can use new technologies and perform complex tasks efficiently.

India is one of the youngest nations in the world, with more than 54% of the total population below 25 years of age. The current annual skilling capacity in India is unable to match the skill demand, with many initiatives unaligned and suffering from lack of coordination. Key obstacles include the negative image and low aspirational value of vocational education, as well as a lack of effort to integrate VET with general education. With the current and expected economic growth, these challenges will increase, since more than 75% of new job opportunities are expected to be 'skill-based'.

The paper discusses the steps taken by the government to improve the articulation of vocational education with higher education, thus changing the 'dead end' image of vocational education. The transition from school to work is the main policy focus, especially in relation to the VET reforms. A radical change is taking place under the National Skills Qualification Framework. It will encourage private sector participation in skill development and provide skill development opportunities to youth, allowing a smooth transition to the world of work. Innovative models and schemes to meet the needs of the youth for twenty-first-century skills are also discussed.

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2.1 Introduction

India's education system is divided into different stages, i.e. pre-primary, primary (grades 1–5), upper primary (6–8),[1] secondary (9–10), higher secondary (11–12), undergraduate and postgraduate, wherein up to higher secondary level, it is school education and beyond comes under higher education. The Right to Free and Compulsory Education (RTE) Act, 2009 mandates all children of 6–14 years attend school and places 8 years of elementary education as compulsory education. Although there has been considerable increase in the participation and completion rates of schooling in the past decade, many students still leave school without the requisite qualifications for employment. Students who leave school after Grade 8 (pupils less than 14 years of age) or Grade 9 (pupils less than 16 years of age) often look for an alternative route to learning that suits their interests. Such school leavers may join the labour force directly and acquire informal training on the job or may look for vocational courses, flexible in length and catering to their skill demands. The movement from schooling into the workforce for youths brings with it a new set of challenges for skills development.

A high participation rate in educational programmes, the motivation of individuals, as well as subsequent utilization of the acquired skills in working life, can be expected only if educational activities meet the needs of the labour market and individual participants (Pilz 2016). The current annual skilling capacity in India does not match the skill demand, with many initiatives unaligned and uncoordinated. Only 10% of the labour force aged 15–59 is vocationally trained (66th Round of National Sample Survey for 2009–2010) and of those only a quarter received formal vocational training (Planning Commission 2013). About 2.5 million formal vocational training seats are available in the country (MSD&E 2015), whereas about seven million enter the labour market every year (Mehrotra 2014). The situation is further complicated by the large number of States and UTs[2] with different demographic situations and skill training needs and as such different needs and challenges. With the current and expected economic growth, this challenge will only increase further, since more than 75% of new job opportunities are expected to be 'skill-based'. Mehrotra et al. (2013) estimated that the capacity for skill training to be established by 2022 will be 200 million and not 500 million for vocational skills, as projected in the National Skill Development Policy 2009 (MoL&E 2009) nor is it 400 million as projected by the National Skill Development Policy 2015. More recently, the skill gap study commissioned and released by the Ministry of

[1]The primary and upper-primary grades together are also referred to as elementary school, which cover the ages 6 to 14. The Right to Education Act 2009 applies to elementary level.

[2]India is a federal union of states comprising 29 states and 7 union territories. As per the 42nd amendment of the Constitution of India in 1976, education has been included in the Concurrent list, which means the Central Government shall determine the policies, priorities and programmes related to education and provide funds and leadership for a uniform educational reform in the country..

Skill Development and Entrepreneurship[3] assessed an incremental human resource requirement across 24 sectors as 109.73 million by 2022 (MSD&E 2015).[4] The main skill development areas for low-skilled employees should be generic skills, which include occupational health and safety and information technology (IT) skills, whereas for highly skilled employees, the focus is on productivity and competence-building skill areas (e.g. technical and management skills, entrepreneurship development) and to the extent that they are undertaken at all, green skills. This applies to both manufacturing and service firms (OECD 2013).

The demands of employers, at least in the formal economy, are such that they now expect learners to acquire relevant *twenty-first-century skills* (e.g. critical thinking, problem solving and creativity) before entering the workforce (Ertmer and Newby 2013). India's education system has responded poorly to society's demands for learning, as the learning levels of children completing schooling remain very low (ASER 2014). In addition, there have been enormous challenges of skilling youth. The key obstacles and challenges have been the negative image and low aspirational value of VET and the lack of coordinated effort to integrate VET with general education to meet the twenty-first-century skill demand for current and future labour market needs. The current formal education system does not focus on training young people in *employability skills*[5] that can provide them with employment opportunities. We define skills of three kinds: cognitive ones (reading, writing and numeracy), employability skills (teamwork, computing skill, and communication skills) and vocational skills (trade or occupation related). Schools have proved inefficient in imparting employability skills, especially because of the input-based curriculum, rigid course structure and lack of linkage with workplace learning opportunities. In addition, the major drivers of skill demand, which include economic growth, expansion of primary and secondary education, urbanization, demographic changes and global competitiveness, call for higher-order competences and employability skills that can use new technologies and perform complex tasks efficiently. Schools have not been able to meet the needs of highly skilled workers, even in advanced countries, as there are few opportunities for specialized and hi-tech training due to the lack of industries around the schools.

[3]It was established as a separate Ministry of Skill Development and Entrepreneurship in 2014.

[4]This, however, is a partial estimate since it covers a limited number of sectors. However, the National Skill Development Policy 2015 estimates a larger number to be skilled. The figures were estimated on the basis of the employment base in 2013 and the projected employment by 2022, as given in the skill gap studies reports of the various sectors done by the National Skill Development Corporation.

[5]Employability skills are also sometimes referred to as generic skills, capabilities or key competencies. Employers consider that employability skills are as important as job-specific or technical skills. There are two facets to employability skills: generic skills (skills that apply across a variety of jobs and life contexts) and personal attributes (loyalty, enthusiasm, motivation and sense of humour). Generic skills are also known by other names, such as key skills, core skills, essential skills, key competencies (widely used in Australia, Germany, UK, European Union and OECD countries) and transferable skills.

Syllabi are also too broad to meet the requirements for handling advanced and new technologies (Mehrotra 2012).

The transition from school to work has become the main policy focus, especially in relation to the reform of VET in India. According to Hoppers (1996), vocationalization of education can be referred to as a 'drive' to adjust the structure of education to create opportunities for pre-vocational options or more extensive vocational courses to improve the overall 'employability' of school leavers.

This paper discusses issues of skill development for enhancing youth employability. Section 2.2 deals with the newly introduced National Skills Qualification Framework (NSQF), since December 2013. It highlights the key strategies implemented to encourage private sector participation in VET under the National Skills Qualification Framework.[6] This is necessary as the entire system is heavily government driven and government financed. There is some effort afoot now to make it less so through private sector involvement, which remains systemically weak. Section 2.3 examines how school-to-work transitions are enabled through apprenticeship and short-term training. Section 2.4 discusses how capabilities for a changing work environment are being attempted through modifications in the nature of training and curriculum. Section 2.5 examines how the needs of female and poorer students in the school-to-work transition are met. The last section concludes the paper.

2.2 Aligning Skilling Efforts to Learner's and Labour Market Needs Through a National Skills Qualification Framework

India is one of the youngest nations in the world, with more than 54% of the total population below 25 years of age (MSD & E 2015). Government projections estimate the labour force will increase by 88 to 113 million people between 2010 and 2020, mainly through the entrance of the young, who tend to be better educated. Mehrotra and Parida (2016) consider this to overestimate new entrants, since the Government believes that the rate of increase of new entrants will be the same as 1999–2000 to 2004–2005, when 12 million joined the labour force each year: neither before nor since has such a large increase occurred. In fact, the rate of increase, as estimated by Mehrotra and Parida (2016), should be no more than seven million per annum between 2011–2012 and 2019–2020. In the quest to realize the goal of skilling youth and to promote lifelong learning, the government is now promoting skill development programmes outside schools, besides the vocationalization of secondary and higher secondary stages.

[6]The National Vocational Education Qualifications Framework (NVEQF), which was developed by MHRD (see Mehrotra et al., 2012) was subsumed in NSQF in 2013.

There are 21 central government ministries that offer skill development courses being brought onto the NSQF platform. However, problems of coordination across ministries of central government still remain; different norms exist with regard to eligibility criteria, duration of training, learning outcomes,[7] and monitoring and tracking mechanisms. The National Skill Development Agency (NSDA), now a part of the newly formed Ministry of Skill Development and Entrepreneurship, was created in June 2013 to coordinate and harmonize skill development efforts across various stakeholders. The Ministry of Skill Development and Entrepreneurship works primarily through the NSDA, National Skill Development Corporation (NSDC) and the Directorate of Training (erstwhile Directorate General of Employment and Training of Ministry of Labour and Employment). The role of the new Ministry involves coordinating and evolving skill development activities, mapping of existing skills and certification and developing industry-institute linkages, amongst others.

The government promotes skill development by entering into partnerships with private players in high growth sectors. The National Skill Development and Entrepreneurship Policy 2015 (which supersedes the National Skill Development Policy 2009) aims to align skill supply with demand, bridge existing skill gaps, promote industry engagement, operationalize a quality assurance framework, leverage technology and promote apprenticeship training. In the entrepreneurship domain, the policy seeks to promote entrepreneurial culture through advocacy and integration of entrepreneurship education as part of the formal education. The policy which encourages companies to spend at least 25% of Corporate Social Responsibility (CSR) funds on skill development, seeks to introduce fee-paying model along with skill vouchers and suggests setting up a Credit Guarantee Fund for skill development to meet the specific needs of the learners.

In India, skill acquisition takes place through two basic structural streams – a small formal one and a large informal or non-formal one. The formal structure includes (1) higher technical education imparted through professional colleges in courses that last 1 year (certificate course), 2 years (diploma course) or a 3–4 year degree course,[8] (2) vocational education in schools at the secondary and higher secondary stage, (3) vocational training in industrial training institutes (ITIs) (these were earlier with the Ministry of Labour and Employment but are now managed by the Ministry of Skill Development and Entrepreneurship) and (4) apprenticeship training. Institutional training outside the school is mainly provided through a network of 13,105 industrial training institutes (2293 in government sector and 10812 in the private sector) spread across India with a total seating capacity of 1.86

[7]Learning outcomes are defined in the European Qualifications Framework (EQF) as 'statements of what a learner knows, understands and is able to do on completion of a learning process, which are defined as knowledge, skills and competences'.

[8]The official labour force participation rate for men, which measures the proportion of the total male population in the labour force, stood at 55.6% in 2011–2012, unchanged from its level in 2004–5. For women, already scarcely represented in India's labour market, the labour market participation in the same period dropped from 29.4% to 22.5%.

million in more than 259 trades. The courses conducted by these institutes are open to people 14 to 40 years old, who have passed either Grade 8 or 10, depending on the trade. The duration of these courses ranges from 6 months to 2 years.

A problem that all South Asian TVET systems, including India, face is the lack of articulation between lower- and higher-level TVET institutions (Mehrotra 2015). Integration of long separated tracks of academic and vocational education is now taking place under the NSQF. Since the introduction of the NSQF, vocational subjects have been introduced from secondary stage (Grades 9 and 10) in most of the States/Union Territories for the first time in India's history. It was earlier available only at the senior/higher secondary level (Grades 11 and 12). The qualifications obtained in schools, as well as in ITIs, are now being linked to formal educational qualification at appropriate level through suitable bridge courses, developed in consultation with State/Central Boards of Secondary and Higher Secondary Education, for providing academic equivalence and vertical mobility. The existing vocational courses in ITIs and polytechnics are being aligned to the emerging competencies in the market and the requirements of the NSQF. According to the National Policy on Skill Development and Entrepreneurship 2015, all formal and non-formal skill training programmes must align with the NSQF by December 2018. This is an extremely ambitious agenda, both in its timeline as well as in the assumption that competent vocational trainers would be available to train people as per the National Occupational Standards (NOSs) set by the Sector Skill Councils (SSCs). SSCs are autonomous bodies, incorporated either as Societies under the Societies Registration Act, 1890, or a Section 25 Company under the Company's Act, 1956, with the objective of bringing about necessary connectivity between the education and training providers and industry for development of NOSs and conducting training and assessment of students/trainees (Mehrotra 2016). The process so far has been understandably slow amongst the various stakeholders, including SSCs, as there is little understanding of Qualification Packs (QPs) and NOSs. Development of NOSs by SSCs is examined and reviewed by the National Skills Qualifications Committee (NSQC). Thereafter, they are conferred with the status of 'National Standards'. In setting up the Committees, it is important to find the right people with the expertise to approve NOSs. A Quality Assurance Framework (QAF) is being developed to improve the consistency of outcomes linked to certification and improve the status of skill training. The QAF for certification and assessment will set minimum standards and provide guidance for effective, valid, reliable, fair and transparent assessment within the context of the NSQF.

Skilling is being increasingly integrated in higher education with community colleges under All India Council for Technical Education (AICTE) and University

Grants Commission (UGC) and degree colleges affiliated to universities offering NSQF-aligned[9] vocational courses and Bachelor of Vocational Education (B.Voc.) degrees. These courses are being aligned to a credit framework to provide horizontal and vertical mobility. The Community Colleges have been set up to provide opportunities to access higher education and to bring them on a level with appropriate NSQF levels. There are 248 Community Colleges and 187 B.Voc. degree institutions approved by the University Grants Commission (UGC) to offer skill-based vocational courses.

2.2.1 Private Sector Participation for Meeting Skill Development Demands of the Workplace

In India, a radical change in the skill development landscape is taking place with the involvement of private players, and a paradigm shift from fully public funded to private-funded programmes under the NSQF. The 12th Five-Year Plan (2012–2017) document observes that the skill development programmes in the past are run mainly by the government, with insufficient connection with market demand. It has called for an enabling framework that would attract private investment in VET through Public-Private Partnership (PPP). Involving the private sector in VET has been a successful part of the training systems of many countries for decades. In Germany, the VET system is characterized by a much higher proportion of youth participation, intensity of private participation and a basis in legislation (Mehrotra et al. 2014).

To foster public-private partnerships, the Indian government has set up the NSDC and Sector Skill Councils (SSCs). These have spawned private, for-profit vocational training providers (VTPs) and training service providers (TSPs). Formed in 2010, the NSDC has helped established 2856 skill development centres through 203 training partners in the private sector. These include 1148 mobile training units, operating around half of India's 641 districts (covering 27 States and 4 union territories). The mobile units are fully equipped classrooms on wheels, with laptops/tablets powered by solar panels to provide technology-enhanced training in geographically diverse or remote areas. Around 5,200,000 students have been trained. The NSDC also operates a scholarship to encourage poor youth to take up vocational training (Box 2.1).

[9]The NSQF consists of 10 levels, with level 1 representing the lowest and level 10 the highest level of complexity. It provides an opportunity for enhancing the quality assurance and recognition of skills gained through formal, non-formal and informal learning. As per the NSQF implementation schedule, after the third anniversary date of the notification of the NSQF (i.e. after 27th Dec 2016), government funding would not be available for any training/ educational programme/ course that is not NSQF compliant. All accredited training providers would need to comply with this requirement of the NSQF,failure to do which would lead to their de-listing by the NSDA or the concerned Ministry.

Work experience is a critical component of preparing youth for transition to the world of work. Work-based learning encompasses a diversity of arrangements, including apprenticeships, on-the-job training, internships and work placements that form part of formal vocational qualifications. Managed effectively, it delivers benefits for all participants and contributes to better labour market and economic outcomes (OECD 2014). The discourses of 'learning in the workplace' (Marsick and Watkins 1990), 'work-based learning' (Boud and Solomon 2001) and 'informal learning' (Garrick 1998) all promote learning through work, unmediated by educational institutions or practitioners (Chappell 2003). Potential benefits for youth who participate in work experience include 1) gaining career readiness skills including 'employability skills' that employers look for in entry-level workers, (2) increasing knowledge of specific occupational skills and workplace settings, (3) establishing a work history and connections with employers that can be used in future job searches and (3) developing an understanding of different occupations to make informed career choices. A study found that students who participated in work-based learning were more likely to attend college or go to work, compared to their peers (Jobs for the Future 1997). Although learning support programmes have been found to assist student transitions into higher education or the workforce by offering workplace skills, there are few opportunities to work in small groups and develop teamwork and leadership skills; upscaling such programmes poses a real challenge.

Box 2.1: Pradhan Mantri Kaushal Vikas Yojana (Prime Minister's Skill Development Scheme)

The National Skill Certification and Monetary Reward Scheme or STAR (Standards Training Assessment and Reward) was an incentive-based skill development model. It was unveiled on August 16, 2013, with a budget outlay of INR 1000 crores and a target to motivate 1 million youth to acquire vocational skill during the first year of its implementation. It was replaced by the Pradhan Mantri Kaushal Vikas Yojana (PMKVY) in 2015, started with INR 1,500 crore corpus ($ 225 million). The PMKVY aims to provide a monetary reward of INR 8,000 to trainees on successful completion and certification of a skill training course. It would cover 2.4 million persons, and this includes 1.4 million youth who would be skilled and 1 million workers who would be given recognition for prior learning. A special focus of the scheme is to train Grade 10 and Grade 12 (less than 18 years) drop-outs. Training is imparted against NOSs for specific job roles and formulated by industry-driven bodies, namely, the Sector Skill Councils. All skill training includes employability skill training as part of the training curricula. Third party assessments for skill training are completed on the basis of national and often global standards. Trainees with prior experience or skills and competencies are assessed and given monetary rewards for undergoing assessments.

(continued)

Box 2.1 (continued)
It helps upgrade skills and reskilling of the existing workforce. PMKVY 1 was a candidate reward based scheme, which was designed to provide training in 11 sectors under any job role as desired by the candidate. Under PMKVY 2, only 221 job roles which have high placement demand have been identified with a significantly higher target and revised guidelines and enhanced focus on outcomes in terms of placements, infrastructure mapping and tracking, Aadhaar based enrolments and integration of soft skills, including communication skills, digital skills and financial literacy. Under the PMKVY 2, 946685 candidates are currently enrolled in short term vocational training, with 642133 having completed training and 436075 certified (http://www.pmkvyofficial.org/index.aspx; accessed on 12 September, 2017).

Greater autonomy must be given to VET Institutions to design their own programmes and use flexible delivery models with the involvement of business and industry. To ensure that learners are exposed to workplace-related skills, there is a focus on the structuring, organizing and sequencing of information. This will aid optimal processing, active involvement of the learner in the learning process and metacognitive training in the skill development programmes.

In India, about 78 percent of the working population is employed in the unorganized sector of the economy (Mehrotra et al. 2014). Those traditionally burdened by social and economic responsibilities within the household often prefer informal training, which offers flexibility and participation in terms of entry and the period of training (Mehrotra and Sacheti 2005). The unorganized sector contributes more than a 60 percent share to India's GDP and people working in the unorganized sector need a system to recognize prior learning. This would allow them to obtain certification of their skills acquired through informal learning and enter the formal education system, thus becoming lifelong learners.

Non-formal education programmes provide opportunities to those who have missed schooling and can also open opportunities for further education and training on-the-job. The non-formal VET system is, however, fragmented and largely uncoordinated. Non-governmental organizations (NGOs) and specialized VET Institutions offer short duration vocational courses, but without proper curriculum or adequate teacher training. There are a few successful examples of non-formal VET programmes run by various NGOs or Civil Society Organizations (Mehrotra 2008).

A large number of workers in the informal sector acquire skills through experience or other non-formal learning channels. However, due to lack of formal certification, they are unable to properly market their services. Those who are traditionally burdened with social responsibilities within the household often prefer non-formal training, which offers 'flexibility in terms of entry and period of training' and also enable them to 'earn while they learn' (Mehrotra and Sacheti 2009). However, the 'technical' skills imparted to youth through the system of

informal vocational training does not provide them the 'lifelong learning' opportunity which is necessary to bring about necessary behavioural or attitudinal changes and to make them aware of their social rights. They may wish to study part-time or at a flexible pace; their home and/or workplace may be away from the learning centre, so distance learning options may be attractive.

Adults with limited formal education can re-enter education by validating the skills they have acquired through work. Individuals with prior learning experiences or skills can be assessed and certified through recognition of prior learning (RPL). This has particular relevance for migrants with skills and qualifications formally and informally acquired outside the country (Field et al. 2012). RPL is a process of certifying pre-existing skills and knowledge, used in many Organisation for Economic Cooperation and Development (OECD) countries to make the skills of prospective and current students visible to both education and training institutions and employers (OECD 2014). RPL has been introduced as an integral part of the NSQF, and the provisions have been made to conduct RPL under the PMKVY (Box 2.1). The NSDA had launched pilots on RPL in four sectors: agriculture, domestic work, healthcare and gems and jewellery. A separate pilot for the construction sector has also been initiated by the Ministry of Skill Development and Entrepreneurship. RPL recognizes prior competencies of the assessed candidates and provides a certificate and monetary reward on successful completion of assessments. However, clarity in the role and functions of the various stakeholders is needed for greater acceptance, consistency and impact of RPL. Effective implementation of RPL will help to promote transition for further supplementary education and training.

2.3 Achieving Flexibility to Acquire, Adapt and Transfer Knowledge to Different Contexts through Apprenticeship and Short-Term Training

Industrial Training Institutes (ITIs), which exist both in the public and the private sector, allot about 70% of the training period to practical training and rest to training related to trade theory, workshop calculation, science, engineering drawing and employability skills, including environmental science and family welfare. But a serious problem is that this practical training is imparted within the workshops of ITIs rather than in enterprises or industry (although efforts are being directed to improve upon the programmes by making courses NSQF compliant). Nearly 10,000 private ITIs have been unable to ensure quality of training, as most of them have little infrastructure, and the government has limited capacity to monitor the quality of their training or vouch for placements after training. A survey-based study shows that the aim of flexibility has barely been realized. This is because the participation of industry is limited, and the employment of graduates of such courses is a problem, with 27% remaining unemployed, 18 months after they graduate

Box 2.2: Modular Employable Skills (MES) Programme
Under the Modular Employable Skills programme, 159 trades covering 12 sectors are offered by a large number of vocational training providers (VTPs). There is a flexible delivery mechanism, which includes short-term courses (3 months) to long-term skill-based courses (1 to 2 years) offered in part-time or full-time modes during weekends or onsite/offsite. Testing and certification of skills is done by independent assessors. Emphasis is mainly on skill development for enhancing employability. Courses are also available to those who have completed 5th Grade and are 14 years old. Skill levels of those already employed are also tested and certified under the scheme. Public-private partnership is envisaged at every stage of the implementation of the scheme. Candidates belonging to SC/ST category and women are given relaxation of 25% in fee. (Source: http://dget.nic.in/content/innerpage/list-of-trades-in-mes.php)

(Mehrotra 2014). This study also shows that the aim of flexibility remains a distant dream, as introducing a new course in a government ITI remains an extremely tedious process. Responsiveness of courses to local industry needs is also limited.

The Modular Employable Skills (MES) programme (Box 2.2), offered through the ITIs provides multi-entry and multi-exit options, flexible delivery schedule and lifelong learning opportunities useful for those who have no formal skill certification. The MES scheme aims to provide employable skills to school leavers, existing workers and government/private ITIs graduates. It usually offers short-term training to ensure immediate employability.

Employment adjustment has become common because of economic recessions and changes in occupation/job and employment policies, especially those related to hiring workers. People now increasingly move between different forms of education, training (part-time courses, sandwich courses, etc.) and work (part-time or full-time). Workers must continuously upgrade their competence (knowledge, skills and abilities) through lifelong learning opportunities to become 'knowledge workers' ('Mehrotra 2008). In a bid to expand the access to a variety of short-term courses of various durations and to provide opportunity of earning through services and products, state governments are promoting specific skill development programmes. For example, out of 390 Government ITIs in Maharashtra, 382 ITIs have established *LoksevaKendras*.[10] In these *LoksevaKendras*, there is no entry qualification and no age bar for candidates trained in vocational trades of duration ranging from 15 days to 3 months. The vocational trades include house wiring, painting, fabrication, vehicle maintenance, computer maintenance, plumbing and masonry. Common facility centres are also made available for trainees and can be

[10] http://dveopune.org/scheme/lokseva_kendra.php

used to provide services to the community for a reasonable fee. The number of candidates trained so far under the scheme is 453126.[11]

In India, formal and informal apprenticeship trainings are the major tools used to provide workplace learning. The Apprentices Act 1961 amended in 1986 and then in 2014 makes it obligatory for employers in specified industries to engage apprentices in designated trades for imparting formal apprenticeship training in industry to youth and person having National Trade Certificate issued by National Council for Vocational Training (NCVT). Apprenticeships match the supply of skills with demand from employers much more efficiently than is possible with a system of school-based full-time vocational education.[12] India has three categories of apprentices: (1) trade apprentices[13], (2) graduate or technician apprentices[14] and (3) technician (vocational) apprentices[15] (for an analytical comparison of the three types see Mehrotra 2014).

Some of the challenges that confront the Indian government in its attempts to reform the apprenticeship system include the small size of the apprenticeship system, lack of alignment of expectations of employers and apprentices, uneven quality of curriculum, uneven participation in the apprenticeship system amongst socio-economic groups and other groupings, lack of confidence in the skills of graduate and the difficulties associated with a predominantly informal economy (Planning Commission 2009).

A greater complementarity between general and vocationally oriented education is needed by combining schooling with apprenticeship and work experience. The Apprentice (Amendment) Act, 2014 (Act no. 29 of 2014), has amended the provisions of original Act, i.e. The Apprentice Act, 1961 (Act no. 52 of 1961), to include the non-engineering and short duration courses apart from engineering and vocational courses. Further, the Act will not only include apprentices who have undergone training in a school or institution affiliated or recognized by a state council but also other courses approved by the Central government. At present, there are 28,500 establishments covered throughout the country for trade apprentices under the Apprentices Act, 1961, which is miniscule compared to the number

[11] http://dveopune.org/scheme/lokseva_kendra.php

[12] For a full-scale study of apprenticeships in India, see Mehrotra (2014).

[13] Trade apprentice means an apprentice who undergoes apprenticeship training in any designated trade.

[14] Graduate or technician apprentice means an apprentice who holds or undergoing training in order that the individual may hold a degree or diploma in engineering and non-engineering or technology or equivalent qualification granted by any institution recognized by the Government and undergoes apprenticeship training in any such subject field in engineering and technology as may be prescribed.

[15] Technician (vocational) apprentice means an apprentice who holds or is undergoing training in order that an individual my hold a certificate in vocational course involving 2 years of study after the completion of the secondary stage of school education recognized by the All India Council and undergoes apprenticeship training in any such subject field in any vocational course as may be prescribed.

of establishments in the country. Currently India has only about 300,000 apprentices, across 254 trades (126 subject fields for graduate and technician apprentices and 128 subject field/trades for technician (vocational) apprentices). Only 212,817 training seats for trade apprentices have been used against the 391,625 seats identified. Similarly, 48,122 training seats for graduate, technician and technician (Vocational) apprentices have been utilized against 135,139 seats located for these categories (DGT Annual Report 2014–15, MoL&E 2015).

For a country with a labour force of 475 million (in 2012), the fact that the total number of formal apprentices in the economy is barely over 200,000 is a symptom of the failure of the Act. This failure is compounded by the fact it has taken half a century for the government to recognize that there is a problem with the apprenticeship system, given that only the largest enterprises in the private sector and mainly public enterprises have been willing to take on apprentices (Mehrotra 2014).[16] Attrition rates amongst Apprentices are very high because of long training periods, low stipends and complex procedures (Planning Commission 2009; Mehrotra 2014). There is also concern about the complexity of regulation, the under-representation of women and minority groups in apprenticeships and the availability and quality of sufficient trainers (ILO and OECD 2011). Women's choices of apprenticeship occupations has remained focused primarily on business and service sector occupations, despite campaigns to attract them to predominantly male occupations.

Apprenticeships can meet the specific skill needs of a business more cost-effectively than skilled workers from the external labour market, as apprentices who have been trained to the specific needs of the business can be more immediately productive than workers recruited from outside (Table 2.1).

Youth unemployment is currently much lower in countries with high proportions of young apprentices (under 25 years of age) relative to the employed population, for example, in Austria, Germany and Switzerland (ILO 2014). Germany places two-thirds of its apprentices in full-time jobs with host firms.[17] More than 80% of training costs are met by employers and youth unemployment in Germany is below 8% (by comparison to 56% in Spain and 38% in Italy).[18] The key feature of the dual system of Germany is the cooperation between the two learning sites – the vocational school and the training company.

Informal apprenticeship is a well-established practice in India. Acknowledging the importance of informal apprenticeship by including it in policy frameworks and legislation and developing a national training system might help in improving not

[16]Training and Apprentice Divisions have been transferred from Directorate General of Employment and Training of Ministry of Labour and Employment to the Directorate General of Training under the Ministry of Skill Development and Entrepreneurship from April 2015. Directorate General of Training consists of the Directorate of Training and Directorate of Apprentice Training.

[17]Federal Institute for Vocational Education and Training, 2012; www.bibb.de/en

[18]www.economist.com/news/europe/21578656-germanys-vaunted-dual-education-system-itslatest-export-hit-ein-neuer-deal

Table 2.1 Training statistics of graduate, technician and technician (vocational) apprentices

Position as of September 30, 2014					
S. No.		Graduate	Technician	Technician (vocational)	Total
1.	No. of seats located	56,386	50,106	28,647	135,139
2.	No. of seats utilized	18,699	24,795	4628	48,122
3.	% utilization of seats	33%	49%	16%	36%
Minorities/weaker section					
	Scheduled caste (SC)	811	2238	538	3587
		4%	9%	12%	7%
	Scheduled tribes (ST)	159	319	141	619
		1%	1%	1%	1%
	Minorities	637	749	164	1550
		3%	3%	4%	3%
	Person with disability (PwD)	26	72	13	111
		0.14%	0.29%	0.28%	0.23%
	Women	4731	3247	1982	9960
		25%	13%	43%	21%

Department of Higher Education, Ministry of Human Resource Development Annual Report of the DGE & T, Ministry of Labour & Employment 2014–2015

only technical skills but also employability skills that include the ability to adapt to organizational values, discipline, team work and leadership roles. The work-based learning should be made systematic, quality assured and credit bearing under the NSQF. The learning outcomes expected from the work-based learning component need to be defined, so that what the student has learnt can be assessed and linked to credit (OECD 2014). Greater number of vocational students can be attracted to apprenticeship training by rotating learners through different enterprises over the period of a training programme, creating opportunities for apprentices to take brief pre-apprenticeship courses and can attract to apprenticeship training covering issues, such as occupational health and safety, basic technical skills, and rights and duties at work.

2.4 Addressing Capabilities for a Changing Work Environment Through Modifications in Training and Curricular Reorientation

Generic skills, which apply across a variety of jobs and life contexts, are important in all aspects of life. These are skills that employers expect workers to have from day one. These include communication skills, interpersonal skills, decision making skills and lifelong learning skills. One promising approach is to integrate basic skills with vocational training so that these skills are acquired in meaningful

practical contexts (OECD 2014). To enable youth to be employable and market ready, the National Policy on Skill Development and Entrepreneurship 2015 provides a directive to include basic modules of computer literacy; finance; language; and generic skills like etiquette; appreciating gender diversity in the workplace; building positive health attitudes; and social and life skills in skill development programmes. The curriculum should be designed to develop skills of the levels and quality acceptable to employing agencies; the acid test of effectiveness of the curriculum will lie in the employability of the learner.

Curriculum development partnerships are promoted in India to improve flexibility and acceptability under the NSQF. Raffe (1994) defines four forms of flexibility: individual, curricular, pathway and delivery flexibility. Curricular flexibility may be pursued through modularization or other changes in the structure of the curriculum, through decentralizing control in education, through a greater reliance on the 'market' to ensure responsiveness to economic changes and through promoting closer links with the world of work, at national and local levels (Kämäräinen and Streumer 1998). It should enable the system to cater for and attract students with different backgrounds and circumstances, and especially adults, disadvantaged students and drop-outs or those at risk of dropping out, for whom conventional styles of delivery are less suitable (ibid).

The traditional supply-driven curriculum in the formal education system is increasingly flexible because of modularization of the units and granting leaners more choice. A shift from input-oriented curriculum to outcome-oriented curriculum[19] is taking place to conform to the requirements of the NSQF, where learning outcomes to be achieved by the learner are the key elements of qualifications. Learning outcomes are perceived as an instrument to enhance link VET provision and the labour market. ICT tools are being use to help learners to shift from an acquisition mode of learning to one that engages higher-order thinking, innovation, creativity and collaboration. Various technology and placement-driven VET models are being implemented for youth skill development in India. The NSDC is fostering innovative models and schemes through financial and non-financial partnerships with skill training providers from the Innovation Fund. We present some of these models which have been created to address twenty-first-century skills gaps, especially for people living in remote areas.

[19]Input-oriented curriculum is based on the technical/scientific knowledge assumed to be required to undertake a work task, whereas output-based curriculum is based on analysis of work. Therefore, the input approach separates theory and practice, whereas in outcome approach experiential learning involves the integration of theory and practice (Winterton 2012).

2.4.1 Technology-Based Models

NIIT Yuva Jyoti is a joint venture of National Institute of Information Technology (NIIT) and NSDC. It aims to reach out to the youth of India living in cities, small towns and villages and provide them with job-specific training to enable them to get jobs across different service sectors. The salient features of the venture include skill registry with unique identification, career counselling workshops and industry-endorsed certification or qualification. A mix of 'core' and 'occupational' skills, optimum delivery mix, including collaborative projects, occupational lab/virtual lab and blended learning (technology-based training, self-paced learning, synchronous learning technology) are used to provide learning experiences in a simulated environment. For example, one interactive classroom consists of a projector connected by broadband satellite (VSAT) links to one or more studios where the expert faculty conducts the training activity. Special software is used by the faculty to take training sessions from studios and students located in remote classrooms. Thus, students and expert faculty interact in real time through this software, and the students perform all tasks/actions that they would utilize in a face-to-face teaching environment.[20] (Source: http://www.niityuvajyoti.com/; accessed on May 23, 2016).

i-Saksham is another private initiative that aims to improve the capability of individuals through the use of ICT tools by promoting digital literacy. It enables individuals with ICT tools to become stakeholders in the development process through their improved capabilities. i-Saksham provides in situ education and skill development services in remote, isolated and backward regions using digital technology and content. Low-cost android tablets are used as a platform for delivery. The tablets are loaded with digitized content on elementary education and video lectures on various vocational courses. Solar charger kits are provided in areas without electricity. The services are delivered either by community tutors or school teachers.[21] (Source: http://www.i-saksham.org/; accessed on May 23, 2016).

2.4.2 Placement-Linked Models

Deen DayalUpadhyaya Grameen Kaushalya Yojana, formerly known as *Ajeevika* skills scheme, is the part of the National Rural Livelihood Mission of the Ministry of Rural Development. It follows a three-tier implementation model. The primary tier is the national unit (NU) that functions as the policy-making, technical support, facilitation and investing agency. The next tier is the State Skill Missions (SSMs) under the state government/State Rural Livelihood Missions (SRLM), who coinvest

[20] http://www.niityuvajyoti.com/Synchronous-Learning-Technology.aspx

[21] http://www.i-saksham.org/our-mission.html

as well as directly supervise and/or engage with implementation agencies. The last tier is the Project Implementation Agency (PIA). The funding under the scheme is linked to the placement of the trainees.[22]

The training is divided into three skill components: (1) vocational skills, (2) IT skills and (3) generic skills. Generic skills include English language, communication skills, teamwork and interpersonal skills. The duration of courses ranges from 576 hours (3 months) to 2304 hours (12 months). All courses are certified by National Council for Vocational Training and Sector Skill Councils. The minimum entry age has been reduced from 18 years to 15 years to enhance capacity. There is a provision for mandatory coverage of socially disadvantaged groups (SC/ST 50%; Minority 15%; Women 33%).[23] *Deen Dayal Upadhyaya Grameen Kaushalya Yojana* (DDU-GKY), being implemented by Ministry of Rural Development, provides for placement-linked skill development programmes under which there is a mandatory coverage of 33% women candidates in each skill development projects.

Don Bosco Tech India is a non-governmental network of 300 skill training centres spread across 29 States. It provides employment-linked and market-driven short duration vocational courses to economically and socially marginalized youth. It addresses the training needs of marginalized youth in the age group 18–35 years. With funding from the Ministry of Rural Development, Government of India, DB Tech India aims to empower youth from below the poverty line (BPL) through the Bosco Academy for Skills and Employment (BASE) project. Under this project, around 46,000 underprivileged youth from 24 states will be trained in market-driven courses and placed in entry-level opportunities in various sectors. The number of beneficiaries trained so far is 24,720. Don Bosco Tech has also partnered with NSDC to train 2.2 million youth over the next 10 years and with the Ministry of Rural Development to train 46,000 underprivileged youth from 24 states. (Source: https://www.dbtech.in/; accessed on May 23, 2016).

2.5 Meeting the Needs of Female and Poorer Students to Improve Their Pathways

Children from low socio-economic status (SES) families are more likely to leave school early and have lower retention rates. Low socio-economic status can have a negative effect on a variety of aspects of an individual's life including, physical

[22]The scheme is being implemented currently in 33 States/UTs across 610 districts, partnering with over 202 Project Implementing Agencies (PIAs) covering more than 250 trades across 50 sectors. Till November 30, 2014, about 1.094 million candidates have been trained and the total of 0.851 million candidates have been given placement.

[23]DDU-GKY has a target of skilling 3.4 lakh women during 12th Five-Year Plan period against which 1.7 lakh women candidates have been imparted skill training and 1.32 lakh women candidates have been placed in jobs as of June, 2015.

health (Singh and Yu 1996), mental health (Wight et al. 2006), cognitive functioning and academic achievement (Bradley and Corwyn 2002). Schemes or programmes that aim to match skill training with employment opportunities or align with their career interests and skills have been introduced by the central and state government. Sometimes the availability of VET programmes is driven by student demand and the capacity of training institutions, rather than by industry needs. A majority of the skill development schemes aim at providing short-term training programmes to students with low SES background and unprivileged youth. Gender-wise classification of the enrolment in various courses in ITIs in 2009 showed that a majority of them were males, which implies that enrolment of girls in the courses offered by it is low. Across trades, the proportion of females was the highest in computer-related courses (Mehrotra 2014). To increase participation of girls in male-dominated courses, multi-skill courses are being introduced in schools and skill development centres so that the girls can develop sensitivity and ability to using workshop tools. Special enrolment drives and guidance and counselling are being undertaken to encourage girls to take admission in different vocational courses.

A network of institutes, both under central and state governments, has been set up to extend vocational training facilities solely to women, which aim at stimulating employment opportunities amongst women of various socio-economic levels and different age groups. Training facilities are being offered to women through 11 institutes spread across the country, one national vocational training institute (NVTI) and 10 regional vocational training institutes (RVTIs) financed and managed by the central government. Besides providing regular training under the schemes, short-term training is also provided in areas for which infrastructural facilities are available. The NVTI/RVTI for women provides modular pattern training programmes. These courses are offered to those who have passed Grade 10 or 12 and meet the specified eligibility criteria. Apart from the regular courses, these institutes also organize short-term courses as per the requirements for the industry. Short-term courses include training in employability skill for general women, housewives, students and school drop-outs. Approximately 9000 women are trained annually in long-term and short-term courses in NVTI and RVTIs so as to enable them to secure self and wage employment. Since the inception of the scheme in 1980, NVTI/RVTIs have trained around 117,884 women (till October, 2014) in various training courses. Women's polytechnics offer courses in garment technology, beauty culture, textile design, library science and so on. There are 1292 polytechnics under the aegis of the Ministry of Human Resource Development (MHRD) with a capacity of over 295,000 offering three-year diploma courses in various branches of engineering, with an entry qualification of 10th Grade pass. The training courses are selected by learners based on the availability of seats rather than their competencies. Whilst there is a lack of awareness about certain trades, with only a few trades attracting the majority of the learners, there is also a very strong gender bias in the enrolment for some type of vocational courses. Although there is a provision of reservation of 30% seats for women in ITIs, women participation in vocational education and training is especially low. There are a

few reasons constraining participation, which may be related to social and cultural norms and family responsibilities. Many skills are culturally and historically associated with a specific gender, such as home science and secretarial skills with women and industrial skills with men (FICCI and Ernst & Young 2012). Training is also provided through Skill Development Initiative Scheme (SDI) through 10,000 training providers across the country under which 1.26 million women have benefited since 2013. Similarly, in *Pradhan Mantri Kaushal Vikas Yojana*, there is a significant participation of women for skill training. Training includes generic skills, personal grooming, behavioural change for cleanliness and good work ethic. State governments are being encouraged to setup *Kaushal Vardhan Kendras* (KVKs) at panchayat level to mobilize and impart skills pertaining to local employment/livelihood opportunities to school drop-outs, adolescent girls, housewives and rural youth. Each KVK is linked to the nearest ITI or advanced training institute (ATI) for capacity building, curriculum development, assessment and certification. The KVKs will also function as counselling and guidance centres for youth to help them make informed choices.

The Ministry of Micro, Small and Medium Enterprises (MSME) have been implementing entrepreneurship development programmes (EDP), management development programmes (MDP) and industrial motivational campaign (IMC) for women. Approximately 24,888 women have benefitted under these schemes during the last 3 years.

The private sector also offers some interesting examples of skilling aimed at women. For example, the Hindustan Unilever's Shakti programme, which trains rural women to sell products in nearby villages, has developed a powerful grassroots distribution channel. In the process, it has empowered 70,000 women, – *Shakti* Entrepreneurs (*Shakti Ammas*) – by imparting skills that are transferable and enabling them to become micro-entrepreneurs, earning an average of INR 1000 per month, serving 165,000 villages and four million households. These *Shakti Ammas* are complemented by 48,000 *Shaktimaans*, who are typically the husbands or brothers of the *Shakti Ammas*.[24]

2.6 Conclusion

In spite of the recent upsurge in the enrolment of youth in skill development programmes in India, VET still suffers from social stigma and is rated as second-class education. The low level of skilling in India has been a major impediment to the development of a skilled and productive workforce. The fragmented nature of delivery of VET is a major issue amongst government and private VET providers. Public-private partnership needs to be promoted further to ensure greater

[24] http://www.hul.co.in/sustainable-living-2015/india-sustainability-initiatives/enhancing-livelihoods/index.aspx

participation of private sector and to enhance the relevance of training. Private VET providers need to be carefully monitored to ensure that the VET programmes offered by them conform to the national quality assurance framework.

Employers generally employ general education graduates as they perceive that the graduates from general education stream have the ability to adapt and deal with new situations at work, solve problems on the job and adapt to the new technologies. The transition from school to work is further complicated by the demands for twenty-first-century skills related to applications of information technology and automation. The challenge, therefore, is to prepare vocational graduates with adequate general academic knowledge besides the technical skills in the field. India will have to define its VET priorities and enhance capacities to make VET aspirational and meet the skill demands of twenty-first century.

The learners require a system where a qualification is recognized for horizontal and vertical mobility as well as for entering the world of work, something that many countries have in the form of a National Qualification Framework. Although serious attempts are being made to introduce bridge courses that provide horizontal mobility and multi-entry and exit points, the educationists are still grappling with the issue. In the VET system, there is a need to clearly define agreed 'admission criteria' for students wishing to progress from one qualification to another, e.g. from academic to vocational and vice versa and from one VET provider to another.

The informal sector will continue to absorb the vast majority of new entrants to the workforce in India; therefore, RPL should be emphasized to recognize the skills that are needed to raise the productivity and income of workers in the unorganized sector. Engagement of the private sector in skill training, assessment and certification is crucial to encourage placement and a smooth school-to-work transition of vocational graduates, especially for those who do not aspire to pursue higher education. Information bases on skill demand in various sectors are needed to reduce the skill mismatch between the demand and supply of skilled manpower. Multi-level engagements of private sector with VET providers should take place for a paradigm shift from government-managed institutions to private-funded and managed institutions. The value of India's demographic dividend will depend in great measure on whether the public and private sector have the foresight to address important issues, such as improving the education system, appropriately training the workforce and attracting investment to support innovative models for skill development of youth.

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Chapter 3
Transversal Skills as a Missing Link Between School and Work: Experiences from the Asia-Pacific Region

Antony Tam and Barbara Trzmiel

Abstract This chapter highlights the importance of transversal/twenty-first-century skills in facilitating transitions to life beyond school and for ensuring a closer match between graduates' skills and employers' skill demands. The chapter provides a regional overview of how these skills are categorized and addressed in policies, curricula and pedagogies in Asia and the Pacific region. It argues that economic discourse is prevailing in integrating transversal skills into education and training. The chapter, based on UNESCO research in the Asia-Pacific region, presents policy and institutional levels of analysis and adds a regional perspective to the discourse on twenty-first-century skills. In addition, it urges that guidelines and tools for assessing transversal skills should be relevant to different contexts. Lacking of coherent approaches towards assessment could become a barrier in developing these skills and assisting learners in their transitions to work.

3.1 Introduction

The focus of this paper is on transversal skills – also known as twenty-first-century, non-cognitive, life skills and others – which from the educational perspective are considered skills that are necessary for learners to develop into responsible citizens giving them a comparative advantage in the labour market. From the labour market perspective, these are skills which are increasingly in demand by employers as they allow employees to better cope with daily challenges in changing and increasingly sophisticated workplaces. These are the skills supporting learners' transitions from school to work.

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This is significant because despite important socio-economic development in the *Asia-Pacific region* in the last decades, transitions from school to work remain a concern. In 2016, 11.8% of youth aged 15–24 were without work, available and seeking work. This is a 2% increase compared to a decade before when 9.5% of youth were unemployed (ESCAP 2016). There is therefore concern among governments in the region about a mismatch between skills acquired through education and training and those needed by occupational sectors. The mismatch is affecting employers who are struggling to find qualified employees for increasingly knowledge-based positions. A survey of 7700 hiring managers in eight Asian countries, for example, revealed that more than 48% of employers reported talent shortages posing difficulties in the hiring process (Manpower Group 2015). Nearly three in ten employers (28%) cited low levels of transversal skills among employees as contributing to the prevailing skill mismatches. As a result, some countries in the region are focusing attention on reforming their education and training systems to better respond to the needs of their labour markets.

Many of these important reforms in the Asia-Pacific region however have not been widely documented. As a result, **UNESCO** through its regional bureau in Bangkok embarked on a multi-pronged research examining how transversal skills are integrated in policies and curricula, as well as classroom and school activities in the Asia-Pacific region. Several regional studies were conducted by researchers from a number of countries in the region to examine the development of transversal skills in their school and vocational education systems. The methodology of all the examined studies centred on regional collaborative research whereby researchers, such as members of the Education Research Institutes Network (ERI-Net) hosted at UNESCO Bangkok, collected data using a recommended research framework (and other research tools developed by UNESCO Bangkok) and provided their analysis in the form of country reports that served as basis for the formulation of the synthesis studies. Findings from four[1] such studies are included to a greater or lesser extent in this paper with the aim of adding a regional perspective to the existing research on twenty-first-century skills. According to UNESCO, the Asia-Pacific region is made up of its 48 member states and 2 associate members.[2] The four studies include research conducted in 15 Asia-Pacific countries (such as Australia, Bangladesh, Brunei Darussalam, Cambodia, China, India, Indonesia, Japan, Malaysia, Mongolia, the Philippines, Republic of Korea, Sri Lanka,

[1]Transferable Skills in Technical and Vocational Education and Training (TVET): Policy Implications (2014): http://www.unescobkk.org/fileadmin/user_upload/epr/TVET/AP8_Transferable_Skills_22_Aug.pdf

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Transversal Competencies in Education Policy and Practice (2015): http://unesdoc.unesco.org/images/0023/002319/231907E.pdf

School and Teaching Practices for Twenty-First-Century Challenges: Lessons from the Asia-Pacific Region – Regional Synthesis Report (2016): http://unesdoc.unesco.org/images/0024/002440/244022E.pdf

[2]UNESCO Member States in the Asia and the Pacific region: http://www.unesco.org/new/en/unesco/worldwide/asia-and-the-pacific

Thailand and Viet Nam) depending on the availability of research expertise in the case of each research project. This paper, which is based on document analysis, aims to highlight the common findings of these UNESCO studies and position transversal skills as a key element for youth transitions from school to work and in light of the broader 2030 Agenda for Sustainable Development. In particular, through document analysis, the relevant key findings from these studies, based on case studies and policy reviews on how transversal skills are categorized and addressed in policies, curricula and pedagogies in Asia and the Pacific region, are presented to provide an insight on how the development of transversal skills are supported in countries participating the relevant studies.

3.2 Transversal Skills in Education and Training Policies

The importance of *transversal skills* seems well acknowledged in many Asian countries. There are differences and similarities in the way these countries articulate these skills in their education and training policies, but they can be found, in one form or another, in policy documents across the region. Some countries use specific terms and definition, often modelled on those developed in Australia and the West, such as "twenty-first century-skills" in Malaysia, "life skills" in Thailand and "generic skills" and "values and attitudes" in Hong Kong SAR [China]. Other countries have not yet developed specific terms or definitions for these skills, but competencies often associated with transversal skills can be found in education plans and curricula of these countries. For example, "in Viet Nam there is no clear definition or framework for transferable skills. Instead, the Law on Education (2005) defines the objectives of technical and vocational education and training (TVET) as training potential workers to be equipped with knowledge and skills at different levels, as well as moral values, professional ethics, discipline, awareness, attitudes that are needed for industrialized work and physical health" (UNESCO 2014a).

In terms of education level and type, emphasis on transversal skills in the region seems to focus on primary, secondary and higher education, rather than post-secondary TVET. For example, the Chinese Ministry of Education issued the Secondary Vocational Education Reform and Innovation Action Plan (2010–2012) emphasizing that vocational education at secondary level should enhance students' comprehensive competencies and lifelong development and support transitions from school to work. Similarly, in Indonesia the government regulation on national education standards (2005) states that life skills education should take place in lower as well as upper secondary education and should focus on teaching of personal, social, academic and vocational competencies. In Japan, on the other hand, teaching of transversal skill at post-secondary level focuses on higher education with the five-year basic plan (2011–2015) promoting science, technology and innovation as a way to respond to the damage caused by the Great East Japan Earthquake and a way "to develop human resources that can be actively involved in a variety of areas" (UNESCO 2014a).

Research conducted by UNESCO Bangkok reveals that transversal skills are present in education and training policies in all examined countries but are integrated in a variety of ways, ranging from government legislation to curriculum and education programmes, both explicitly and implicitly. Table 3.1 reveals findings from the ERI-Net research showing that despite considerable variations, transversal skills can be found within each researched education and training system.

Table 3.1 is based on information gathered from country reports and, hence, is subject to the interpretations by the report writers at the time of writing.

The rationale for integrating transversal skills into education and training policies seems to be a mixture of socio-economic, as well as value-based thinking. The rationale can be clustered into three broad areas: (1) economic discourse, (2) social discourse and (3) humanity discourse (Table 3.2).

At the first glance, the economic discourse seems the most prevalent reason for integrating transversal skills into education and training. Japan, Mongolia, Thailand and Malaysia have cited boosting economic development as one of the reasons behind their education reforms aimed at integrating transversal skills into their education and training systems. To achieve growth, governments in the region are striving to counter the mismatch between skills required by their rapidly changing economies and skills imparted by their countries' education and training systems. Current skills mismatches and demographic changes in the region, both aging population in some countries and growing youth numbers in others, deepen the necessity to take active steps in equipping learners with requisite skills and re-/upskilling those out of work. Besides the economic discourse, some countries emphasize the social and humanity discourse in which education is seen as a vehicle for fostering a number of social, ethical and moral attributes among students, such as national identity, respect for diversity, tolerance and empathy. For example, the Republic of Korea's "character education" and Malaysia's strong emphasis on these competencies is evident throughout the curriculum. In some other countries, such as Thailand, where traditions, beliefs and values still play an important role, an effort is being made to integrate transversal skills into education and training in a more systematic way.

In some countries, such as Indonesia, progress in developing national frameworks for teaching and learning of transversal skills is reportedly hampered by the absence of university faculties conducting research to determine their extent for the national context. Despite an understanding and desire to develop learners with a twenty-first-century mindset, governments in the region face a number of other challenges and bottlenecks at different levels. These challenges can be categorized into three groups: (1) definitional, (2) operational and (3) systematic (Table 3.3).

Definitional challenges are the result of a lack of or vague definitions of transversal skills in policy documents. In Mongolia, Shanghai (China) and Australia, some teachers feel that the definition of what constitutes transversal skills and their desired learning outcomes of non-cognitive learning is not made sufficiently clear. This ambiguity can have important implications on teaching practices, such as in the case of the Republic of Korea where there is disagreement between secondary level teachers in charge of imparting a form of transversal skills

Table 3.1 Position of transversal skills in policy documents (ERI-Net, UNESCO 2015)

	Country/ economy	Inclusion in policies		Implementation time frame	Level of education
		Legislation or government document	Curriculum or programmes		
Explicit policy or curriculum	Australia	Melbourne Declaration on Educational Goals for Young Australians (2008)	The Early Years Learning Years Framework for Australia (2009); Australian Curriculum (2008); Senior Secondary Curricula	National Quality Framework (2014); Australian Curriculum (2008–2017); e.g. Senior Secondary Curricula South Australian Certificate of Education (SACE) (senior secondary) 2009–2011	Early childhood, primary, secondary education
	Hong Kong SAR, China	[a]N/A	Basic Education Curriculum Guide; Hong Kong General Education Initiative 2007;	[a]N/A	Primary, secondary, higher education
	India	Right to Education Act 2009	National Curriculum Framework 2005; Continuous and Comprehensive Evaluation 2009	[a]N/A	Primary to secondary education
	Japan	Basic Education Act 2006, School Education Act 2007	1998 Courses of Study; 2008 Courses of Study	2008 Courses of Study (2011–2013); Second Basic Plan 2013–2017	Primary to secondary education
	Republic of Korea		Supplementation of National Curriculum 2012	"Character Education" 2012	

(continued)

Table 3.1 (continued)

	Country/ economy	Inclusion in policies		Implementation time frame	Level of education
		Legislation or government document	Curriculum or programmes		
		Comprehensive Plan for the Prevention of School Violence 2012			Early childhood, primary, secondary education
	Malaysia	National Philosophy of Education; National Education Policy; Malaysian Education Blueprint 2013–2025	KSSR (Primary School Curriculum) 2011, KSSM (Secondary School Curriculum) will be ready for 2017	KSSR 2011–2016, KSSM 2017~	Primary to secondary education
	The Philippines	Republic Act No. 10533 (Enhanced Basic Education Act 2012)	2002 Basic Education Curriculum; 2010 Revised Secondary Education Curriculum; K-12 Enhanced Basic Education Curriculum 2012–2018	2012–2018	Primary to secondary education
	Thailand	National Education Act 1999; National Education Plan 2002–2016; 11th National Economic and Social Development Plan 2012–2016	Core Curriculum of Basic Education 2008	Second Decade of Education Reform 2009–2018	Early childhood, primary, secondary, higher education
Implicit policy or curriculum	Mongolia	aN/A	General Education Curriculum 2013 (reformed), "Upright Mongolian Child" Programme 2013	Mongolian Upright Child Programme 2014–2016	Early childhood, primary, secondary education
	Shanghai, China	Outline of Shanghai's Plan for Medium and Long-term Education Reform and Development (2010–2020)	1988 curriculum reform, 1998 curriculum reform, 2005 national spirit education, students life education	Medium- and Long-term Education Reform Plan 2010–2020	Primary to secondary education

[a]N/A = no specific information was mentioned in the country/economy reports

Table 3.2 Rationale for integration of transversal skills into education (ERI-Net, UNESCO 2015)

	Economic discourse	Social discourse	Humanity discourse
Global perspective	Competitiveness	Understanding and peace	Global citizenship
National perspective	GDP growth	HDI growth	Patriotism
Personal perspective	Employability	Community/harmony	Moral formation

Table 3.3 Categorization of challenges of transversal skills and competencies (ERI-Net, UNESCO 2015)

(1) Definitional	(2) Operational	(3) Systematic
Lack of clarity in scope of transversal competencies	Lack of assessment mechanisms	Large class size
Lack of clarity in the desired outcomes of the teaching of transversal skills	Insufficient teaching/learning materials and teaching guides	Overloaded curricula
	Lack of incentives	Pressure to achieve academic success
	Insufficient capacity of teachers	Inconsistency with high-stake exams
	Lack of budget (policy-budget inconsistency)	Lack of understanding among parents and other stakeholders
	Additional burden on teachers	Overall school/community culture

referred to as vocational basic competency (VBC). Korean language teachers insist that communication skills for work should be taught by 'job-specific' teachers because they are related to the workplace, while job-specific teachers argue that Korean language teachers should focus on these skills as they are mainly related to language use.

Operational challenges refer to the weak link between policies and implementation. Since integration of transversal skills in education and training is considered to require major shifts in teaching practices, it is understood that many operational challenges are related to teachers. "For instance, many case studies reported a lack of accountability or explicit assessment mechanisms as one of the major challenges in integrating transversal competencies into education (e.g. India, Hong Kong SAR [China], and Japan). In addition, most of the countries and economies cited insufficient capacity of teachers as a major bottleneck (e.g. Mongolia, India, Shanghai [China], Japan, and Thailand). Some also mentioned insufficient incentives for teachers (e.g. Mongolia and Australia) and insufficient teaching/learning materials and guidance (e.g. India, Mongolia, Thailand, and Australia)" (UNESCO 2015). Other challenges relate to a lack of funding and frequent policy changes. Examples from the Republic of Korea show that some policies aimed at integrating transversal skills are not appropriately funded or that frequent changes in education policies

and curricula, together with increases in the administrative workload brought on by the reforms, are putting pressure on teachers and limiting teaching time.

Finally, systemic challenges stem from the education and training system as a whole and are not directly related to specific policies. For example, in Japan an inconsistency between the skills and competencies promoted by the education policy and those tested (especially through university entrance examinations) is a challenge for integrating transversal skills into education practices. Such inconsistency may result in overcrowded curricula, as reported by Australia and Thailand, and resistance by parents and students to learn these skills such as reported in India. In the case of the Republic of Korea, "overall school organization culture" may not be conducive to nurturing transversal skills (i.e. character education).

3.3 Teaching and Learning of Transversal Skills

At the school level, similar to the policy level, transversal skills have been found in school documents such as school development plans and school mottos. For example, schools in Australia, India, Japan, Mongolia and Thailand emphasize skills such as teamwork/collaboration, perseverance, self-motivation as well as creativity and critical thinking. Examples of school mottos include "sincerity, creativity and cooperation" in the Republic of Korea and "friendliness, positive thinking and virtue" in Thailand.

In pedagogies, practices considered conducive to developing transversal skills vary given the diverse understandings of transversal skills and differences of education and training systems across the Asia-Pacific region. Generally, however, three different curriculum approaches have been identified in integrating transversal skills into pedagogies (Table 3.4).

Despite recognizing the benefits of applying a number of different approaches to fostering transversal skills, a majority of teachers in the researched countries still rely on the traditional lecture-based delivery (Table 3.5) while realizing that it is not the most effective delivery method. Instead, project- and ICT-based activities are seen as conducive to developing transversal skills but can pose a challenge to teachers who have to leave their comfort zone of frontal instruction, e.g. give away a certain degree of control and shift to student-centred pedagogies that aim to develop students into creative learners. Similarly, students have to learn to adapt to new learning environments where they are required to be active participants who share and learn from each other's experiences.

The status quo of frontal instruction is due to several challenges in integrating transversal skills in pedagogies in the region. The main ones have been identified as the lack of clarity of the scope of transversal skills, lack of adequate preparation and support for teachers and overemphasis on academic progress.

Because of the ambiguity of what constitutes transversal skills and the desired learning outcomes, teachers often feel difficulty in incorporating transversal skills in their lesson plans. In addition, in some countries, rigid curricula and/or

Table 3.4 Curricular approaches identified for integrating transversal skills in pedagogies (ERI-Net, UNESCO 2015)

Country/ economy	Specific subject – transversal skills are taught as a separate theoretical subject	Cross subject – transversal skills run across, infiltrate and/or underpin theoretical and/or practical subjects	Extracurricular – transversal skills are embedded in extracurricular activities within and outside school hours
Australia	✓	✓	–
Hong Kong SAR, China	✓	✓	✓
Shanghai, China	✓	✓	✓
India	✓	✓	✓
Japan	–	✓	✓
Republic of Korea	–	✓	✓
Malaysia	✓	✓	✓
Mongolia	✓	✓	–
The Philippines	✓	✓	✓
Thailand	✓	✓	✓

Table 3.5 Teaching practices most utilized by teachers to integrate transversal skills (ERI-Net, UNESCO 2016)

Teaching practices	Ranking in each researched contry						Overall ranking
	Australia	Shanghai (China)	India		Japan	Thailand	
			GS	PS			
Lectures by teachers	1	2	1	2	1	1	1
Group projects and presentations		4	2	3	3	2	2
Computer-aided activities	4	1	5	1	4		3
Individual projects and presentations		3	3	4	2	5	4
Small group discussions	3		3		–	3	5
Field studies	5	5		5	5	3	6

GS government school, *PS* private school
Australia reported both "others – scaffolding" and "lectures" as the most utilized teaching practices

government regulations on curriculum implementation often prevent teachers from incorporating innovative teaching practices that are usually more flexible and require more time and resources. A clear definition and guidance on transversal skills at the policy level could facilitate implementation. However, defining

transferable skills requires the involvement of all relevant stakeholders, including school leaders and teachers.

Many teachers consider current preparation and support in imparting transversal skills inadequate. There is a need to invest in developing teachers' capacities through pre- and in-service training, as well as out-of-school training and retraining opportunities. Teachers need to understand the need for and the nature of transversal skills to be able to apply them in practice and engage in developing innovative teaching methods to improve learning outcomes. Given the need to adapt to new teaching methods, teachers should be incentivized to encourage them to take responsibility and design their lessons in a way that involves innovative, student-centred pedagogies.

Overemphasis on academic success is confirmed by findings indicating that lessons tend to focus on preparation for high-stakes exams while leaving little room for the application of innovative pedagogies in all countries included in the research. Furthermore, parents and community members do not always show support for devoting lessons to teaching transversal skills, such as in Malaysia, Shanghai (China) and Thailand. Awareness raising among parents and the general public is therefore required to increase understanding and support for teaching transversal skills in practice.

In general, it can be said that awareness and understanding of transversal skills is growing and is supported by teachers and school leaders across the region. However, there is a lack of skills and practical tools to integrate the teaching and learning of transversal skills into practice. To ensure the development of well-rounded graduates, transversal skills need to be developed along with foundation and cognitive skills, which can pose an additional challenge. Ensuring that requirements for these different skill types are defined and pedagogies adapted, further attention to students' existing levels of transversal skills and teachers' preparation is needed in the region.

3.4 Assessment of Transversal Skills

Besides integrating transversal skills in education policies and teaching of these skills, assessing transversal skills can be a complex endeavour. Considering that there are differences in the operational definition of transversal skills in various countries in the region, there seems no one-size-fits-all approach to assessing transversal skills but rather different approaches that are more relevant in a given context to serve as formative or summative assessment.

One particular obstacle for the development of effective assessment methods of transversal skills is the lack of clear guidelines and frameworks. While findings of a number of case studies show that schools have attempted to assess these skills, many teachers find it challenging to conduct assessment without conceptual clarity and effective tools. However, some countries have moved forward to try to develop some standardized achievement levels in transversal skills assessment. For

instance, Brunei Darussalam developed a national guidebook which indicates assessment criteria of transversal skills and associated attainment levels. In Thailand, the national qualification framework sets attainment levels for transversal skills as guidelines for assessing these skills by institutions.

Nonetheless, even if standardized achievement levels in transversal skills assessment are available, methods for assessment are usually underdeveloped in most of the countries. Academic achievement is still the focus of many education and training systems in the region. Teachers and students seem not prepared to put more emphasis on teaching and assessing transversal skills, as they are not necessary linked to academic achievement. The traditional assessment methods, such as paper and pencil tests, are still the most commonly used ones to measure academic achievement.

The Partnership for Twenty-First-Century Skills (P21) has created a framework for conceptualizing different types of skills important for college and the workplace (Partnership for Twenty-First Century Skills 2009). Similarly, the Assessment and Teaching of Twenty-First-Century Skills (ATCS) has developed a framework for categorizing different types of twenty-first-century skills (Binkley et al. 2010). While comprehensive frameworks of transversal skills have been created by these organizations, P21 and ATCS have acknowledged the failure of current assessment models to measure complex transversal skills. According to Voogt and Roblin (2010), "existing assessments and tests focus mostly on measuring discrete knowledge rather than on students' abilities to transfer their understandings to real world situations, to solve problems, to think critically or to work in a collaborative way (Dede 2010)". With a view to addressing the insufficiency of the existing assessments and tests to measure transversal skills, it is important to use a new paradigm to assess transversal skills. As stated by P21 and ATCS, standardized tests and large-scale learning assessments are important for accountability purposes, but they are not enough to assess transversal skills. It is suggested that these tests must be complemented with other forms of assessments that should be aligned with the complex and cross-curricular nature of transversal skills.

Research conducted by UNESCO Bangkok shows that it has been the perception of educators of various countries in the case studies, such as India, Japan, Malaysia, the Philippines, the Republic of Korea and Viet Nam, that existing assessment methods including tests, examinations and classroom assessments with a clear emphasis on academic achievement can be used to measure transversal skills to certain extent. For example, the Republic of Korea introduced a national examination for measuring vocational basic competency; however, the examination has been under criticism as it fails to assess transversal skills effectively.

Due to the lack of clear guidelines and frameworks of assessing transversal skills at the national level, many assessment methods of transversal skills tend to be school-based or classroom-based. Among various transversal skills such as critical thinking, collaboration, communication and self-reflection skills, most of the case studies show that, in addition to those tests, examinations and classroom assessments, the most commonly used methods for assessment include group projects, presentations, targeted writing assignments and observations of student behaviour.

It is considered that these assessment methods can provide more comprehensive evaluation of student learning outcomes than paper and pencil tests.

A number of case studies reveal that teachers themselves have developed their own methods of assessing transversal skills at the school and classroom levels. In Japan, the most common assessment of transversal skills can be the provision of written feedback based on evaluation guidelines developed by the schools. Most teachers believe that evaluation guidelines for Special Activities and Period of Integrated Studies can be used for assessing transversal competencies to some extent. The guidelines suggest that each school develops its own evaluation criteria based on its local educational needs. In India, checklists, observation, anecdotal record and portfolios are tools and techniques of evaluation and are also used as assessment indicators. For instance, in order to evaluate self-awareness, teachers can assess "whether students are aware of their strengths and weaknesses", "whether they have the confidence to face challenges", etc. In terms of attitudes, teachers are suggested to see "whether students treat peers from different social, religious and economic background without any discrimination", etc. (Central Board of Secondary Education 2011). In Malaysia, many school leaders and teachers report that school-based assessments through observations on student performance in group presentations and group work can be used to evaluate critical thinking and interpersonal and innovative thinking skills. In Singapore, application of core academic content, communication, collaboration and learning to learn can be measured through a group project. Students are placed into groups by teachers and can choose a topic for a project and then work for several weeks in its preparation. The project is integrated into regular instructional time, which aims to ensure that it is incorporated into the curriculum, with the intent of reducing time taken from the core instruction (Soland et al. 2013).

Another interesting finding is that in some countries, transversal skills are even not necessarily assessed within classrooms. In the Republic of Korea, some transversal skills education takes place via extracurricular activities, such as experiential learning, for which formal assessment is rare at present. In teaching entrepreneurship, many teachers use competitions and contests among student groups. Other assessment methods of vocational basic competency in the Republic of Korea include portfolios and business plans, among others. In Viet Nam, global citizenship can be assessed through student participation in community projects and music performances.

Regardless of where the assessments of transversal skills take place, there can be formative and summative assessments of transversal skills. It is important to use both types of assessments in assessing transversal skills. Formative assessments can allow teachers to understand students' progress in learning transversal skills and, based on students' needs, teachers can adapt relevant teaching strategies to optimize teaching and learning transversal skills. Summative assessments, which are usually to be conducted at the end of the academic cycle, can measure school progress in promoting achievement in learning transversal skills by students to serve the accountability purposes. For example, in Brunei Darussalam and Thailand, teachers

commonly use a combination of formative and summative assessments in measuring transversal skills.

As stated earlier, there seems no one-size-fits-all approach to assessing transversal skills but rather different approaches that are more relevant in a given context to serve as formative or summative assessment. One main challenge faced by various countries as reflected in the case studies is the lack of guidelines and tools for assessing transversal skills. In India, many school leaders show their concern that teachers lack training in assessing transversal skills through some assessment methods which were not commonly used in the past, such as observation of student behaviour. Due to the lack of time to cover the original curriculum for academic achievement, teacher training on assessing transversal skills may not be easily conducted. In Malaysia, many teachers request that the operational definitions of transversal skills be clarified as it is difficult to assess something that is intangible.

In measuring transversal skills, Soland et al. (2013) provided a good summary of considerations, including:

- The process of selecting an assessment should begin with a determination of what purpose the assessment is intended to serve.
- Context and culture matter and assessments that work in one setting might not work as well in another. It is often necessary to conduct additional research to validate measures locally.
- Acquiring information about students' understanding of transversal skills can make educators and students more intentional about improving the skills.
- Measures of transversal skills should be part of a balanced assessment strategy.

3.5 Implications for the Future of Education and Training

In the Sustainable Development Goals adopted by the UN General Assembly in 2015, under the overarching education goal (Goal 4) of ensuring inclusive and equitable quality education for all and promoting lifelong learning, relevant targets were established in terms of putting a greater emphasis on technical and vocational skills and transversal skills. For instance, it is expected that by 2030 there is a "substantial increase in the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship" (target 4.2) and that by 2030, "all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development" (target 4.7). These targets show clearly the commitment of the UN agencies and the education communities to ensure that skills for work and

life, including those relating to transversal skills, are reflected and promoted in the 2030 Agenda for Sustainable Development.

In order for transversal skills to contribute to sustainable development as envisioned in the Agenda, they need to be reflected and made a priority in national curricula. A study conducted by UNESCO on Learning to Live Together in ten countries shows that some countries have taken steps in this direction by integrating transversal skills across the curriculum as cross-curricular priorities. Others aim to teach these skills as specific, dedicated subjects (UNESCO 2014b).

Teachers are fundamental agents of social change and thus also play a fundamental role in fostering transversal skills in students in the classroom. As critical role models for their students, teachers who can themselves demonstrate competencies such as empathy, communication, leadership and teamwork through participatory and collaborative teaching approaches are more likely to impart these competencies in learners. At the same time, the findings from the study on Learning to Live Together show a deficiency in teacher knowledge and support for the transfer of these skills and competencies in classroom settings, which indicates the need to further embed and promote transversal skills in pre- and in-service teacher training and teacher policies (UNESCO 2014b).

Given the increasing prominence of transversal skills, attention must also be paid to how they can be measured. In assessing these skills, it is hoped that they will become a priority for students, teachers and policymakers alike. In large-scale assessments, increased emphasis on real-life application and understanding of academic content, as well as psychometric assessment of values and attitudes, facilitated by new technologies and growing availability of existing tests, could provide a more holistic form of student assessment. The growing debate at the international level on how transversal skills can be measured is an encouraging step for making them an important part of education systems in the Asia-Pacific region and beyond.

3.6 Conclusion

There has been a growing trend in Asia and the Pacific to integrate and place greater emphasis on transversal skills in education and training. In particular, transversal skills are increasingly in demand by employers as they allow employees to better cope with daily challenges in changing and increasingly sophisticated workplaces.

There is no single or coherent movement for the acquisition of transversal skills. Rather countries and economies in the region have started their movements towards the integration of transversal skills into education and training voluntarily out of their own particular needs, stemming from their particular circumstances. As a consequence, frameworks, contents, competencies, modes, assessments and expectations on the integration of transversal skills vary between different education and training systems to support student transitions from school to work.

Within the realm of transversal skills, a certain degree of ambiguity and vagueness is found. In order to ensure continued progress in this field, there is a need to classify the skills, values and competencies that can be said to fall under transversal skills, which is a valuable first step towards conceptualization. UNESCO has initiated a tentative starting point for classification (and consequently, conceptualization), and we believe it is an ongoing process. A sound definition of transversal competencies will emerge as the domain continues to take form and develop through practice.

With a view to addressing global challenges in the twenty-first century and equipping students with necessary skills to cope with these challenges, it is high time for an important global movement that calls for the need for education to move beyond the acquisition of knowledge and literacy and numeracy skills, which has been the dominant purpose of education in the economic discourse of formal education since the 1960s. This movement, which represents a milestone in education, is indeed appropriate in an era in which we are moving away from a purely manufacturing-based model of economy. In this context, further study of transversal skills in education and training is well positioned to add further to this process of development to support student transitions from school to work.

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Chapter 4
Modern Apprenticeship as an Effective Transition to Working Life: Improvement of the Vocational Education System in China

Zhiqun Zhao

Abstract Massive vocationalization of secondary schooling in China has been aimed to improve the transition from school to work and further studies. However, effective realization of this policy totally depends on the quality of the proposed vocational pathway. In China, school-enterprise cooperation is considered as a key quality factor for the development of the vocational education system. This chapter reports on the study of construction of modern apprenticeship as an effective transition to working life to improve the vocational education system by literature analysis and field research in the framework of a national key research project. The results demonstrate that "modern apprenticeship" is an effective institutional arrangement for integrating the process of learning and work and providing an effective mechanism for participants (schools, businesses, and individuals) to share the cost and benefits of vocational education. Modern apprenticeships can provide effective transfer pathways to solve problems of school-enterprise cooperation and to meet the needs of the economy and society's development in China.

4.1 Institutional Barriers to Skilled Personnel Training

Up to now, China has been focusing on a school-based *vocational education system*, including vocational schools on the upper secondary school level and vocational and technical colleges and universities on the higher education level. Despite of dramatic quantity expansion in the recent decade, the qualification of skilled personnel still falls short to meet the needs of economic, technological, and

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social development. One of the most important reasons is that a purely school-based vocational education approach does not satisfy the demand for skilled personnel in production and service.

In an age of informatization and automatization, traditional divisions of work organization have been replaced by more flexible, holistic, and solution-oriented professional tasking. This posed new challenges for the availability, recruitment, and training of highly qualified skilled personnel. Surveys show that companies in Chinese modern industry do not deliberately seek school-educated staff with higher academic degrees but rather appreciate the well-experienced employees who are capable in planning, judgment, decision-making, and analytical thinking in the work and business process (Yang et al. 2009). Such positions and tasks require more work experience and knowledge, especially the so-called work process knowledge (Boreham et al. 2002), which can only be acquired in work process in production and service. It seems too weak to identify, evaluate, and promote work process knowledge learning that is totally dependent on the school-based vocational education. The approach of "school-enterprise cooperation" (xiao qi he zuo) and "work in company – study in school/college combination" (gong xue jie he) could be an effective solution.

Since the last 20 years, China has put greater efforts on school-enterprise cooperation in vocational education. The *Decision of the State Council on Accelerating the Development of Modern Vocational Education System* (State Council 2014) identified "deepening the integration of production and teaching, cooperation between schools/colleges and enterprises" as one of the guidelines to promote the construction of the modern vocational education system. Vocational schools and colleges are also making a lot of attempts in the practice, for example:

- The central and regional governments and trade associations have issued a wide range of policies and regulations to support school-enterprise cooperation and organized various types of cooperation programs and school-enterprise dialogues.
- Vocational schools, colleges, and enterprises have deepened their cooperation in shaping of training programs. It could be categorized by temporal, spatial, and organizational elements into the following types:
  - Phase training organization according to school years, e.g., "2 years in schools/colleges + 1 year in company" or ex situ, e.g., different training phases in different learning venues
  - The so-called half work, half study (ban gong ban du), e.g., work and study concurrently or alternatively in school/college and company
  - Education and training in schools and colleges according to enterprises' order
  - Construction of in-factory work-study learning facilities or production school
  - School course replacement (ke cheng zhi huan) by the course developed by training service companies (Yu 2009)

- "Vocational Education Cluster" (zhi jiao ji tuan) is a new model of cooperation, which is composed of many vocational schools/colleges and their cooperative enterprises. It aims to:
  - Enable closer interlink in developing and implementation of training programs and better resource sharing in personnel and infrastructure
  - Create a network, where schools/colleges provide enterprises with services of technology transfer and consulting, and enterprises provide schools/colleges with training facilities, part-time lectures, and participation in training program development
  - Promote employment of graduates together and codevelop business projects (Guo 2010)

Despite painstaking efforts of all institutions involved in vocational education, China has not yet established a sustainable school-enterprise cooperation mechanism in the overall sense. Through literature analysis, problems could be identified in the area of school-enterprise cooperation which are described at macro-, meso-, and micro-levels.

4.1.1 At the Macro-level

Chinese vocational education still lacks legal and institutional incentives or protection for school-enterprise cooperation. To be more specific:

- Existing national laws in economic administration do not address personnel training and school-enterprise cooperation, while the laws in education such as the *Vocational Education Law* only provide general principles. The related regulations coming from local governments or sector administration appear helpless for not having enough legally binding effect.
- The local governments lack related experience and effective instruments to guide the training process. In particular, they do not have enough competence in place for implementing the central government's policies. There is no clear-cut definition of tasks and duties among different departments in this regard (Cao and Liu 2014).
- Lacking funding, supervision, and evaluation mechanisms for cooperation, resources of both sides of schools/colleges, and enterprises can't be fully shared and utilized due to ineffective communications.
- Due to the lack of incentives, many valuable school-enterprise cooperation projects have difficulties in getting support from the enterprise's top management or competent authorities (Wu et al. 2014).

School-enterprise cooperation is a systematic task that involves multiple government departments (e.g., education and training, economy, labor, finance, taxation) and requires policy improvement, interdepartmental collaboration, financial backing, and support from the society, all of which are far from readily availability

today. The education and labor authorities, the Ministry of Education, and the Ministry of Human Resource and Social Security (MoHRSS) do not have very efficient coordination because of historical and structural background. The lack of related consulting and service organizations also adds difficulties to the implementation of cooperation.

Surveys find that there is not a high level of satisfaction among enterprises and schools/colleges toward the policy framework, social context, and public services for school-enterprise cooperation, and this holds true even in provinces with relative well-developed vocational education such as Jiangsu and Shandong (Yu 2009). That coincides with the result of international research: "for practical reasons vocational education and training is allocated to one policy area, which leads to the neglect of other policy fields. It is necessary to achieve a balance between the various objectives already at the level of the legal framework" (INAP Commission "Architecture Apprenticeship" 2012: 14).

4.1.2 At the Meso-level

Experience from developed countries shows that trade associations play an essential role in vocational education. The Chinese central government has had high expectations of trade associations and set up 59 "sector teaching-learning steering committees." However, their contributions in practice leave much to be desired. Specifically:

- The functions and legal competence of these associations are not clear due to the absence of related legal framework.
- Trade associations actually have little influence on enterprises and lack effective channels to communicate with vocational schools and colleges because of lower standardization of self-organization (Wang and Pan 2012).
- Due to insufficient expertise (e.g., methodology to identify HR demand and to develop training programs), many trade associations cannot provide qualified services and are hardly recognized by the society (He 2014).
- Some experts sent by the associations come from education institutions registered by the branch administrations, not really from production and service. They are also lacking in-depth insights on overviews and trends in the relevant industry.
- There is a lack of apprenticeship centers or similar service and coordination agencies.

Overall, trade associations mainly provide assistance to organize improvement measures, try to create an external positive environment for school-enterprise cooperation, but usually find themselves powerless to undertake tasks with high demands.

4.1.3 At the Micro-level

Due to a lack of mechanisms at the macro- and meso-level, in most cases, cooperation is mere tokenism, e.g., enterprises recruit graduates or provide donations to schools/colleges; they have little or no desire for long-term cooperation with schools and colleges.

4.1.3.1 Vocational Schools and Colleges

- Vocational schools and colleges are well aware of the importance of school-enterprise cooperation but do not have feasible concepts and experience in implementation of such projects and often end up frustrated in their efforts.
- Many training programs of vocational schools and colleges are oriented toward scientific disciplines and fail to fit with needs of real production and service; weak qualification and experience of teachers and lecturers also turn interested companies away.
- Schools and colleges are not able to help enterprises to jointly establish high-level on-the-job training programs, finally leading to disappointing results for both.

It is sad but true and quite often, many students who participated in school-enterprise programs find themselves sometime at disadvantageous position in terms of work conditions, allowance, and work time. All of these mean that student interns are more vulnerable to discrimination at work. They can't receive proper training during their internship period, and some of them even turn out to be a cheap labor force for companies (Chen 2011).

4.1.3.2 Enterprises

Except a handful of outstanding big companies, most companies, especially the small- and medium-sized enterprises (SME), lack enthusiasm for school-enterprise cooperation:

- Many companies belong to labor-intensive industry. Due to the low level of personnel demand both in quality and quantity, they just offer limited internship opportunities.
- Public organizational support mechanisms are missing, e.g., there are no clear eligibility requirements for companies, no cooperation contracts for reference, and no accreditation or supervision services for signed cooperation or apprenticeship contracts.
- SMEs lack a long-term HR strategy; maintain their traditional ideas that schools should be responsible for training people, while enterprises are just a consumer of the products of vocational education; and have no motivation for participating

in vocational education. Some companies treat school-enterprise cooperation just as a temporary solution to labor shortage.
- Many tentative cooperation arrangements are perfunctory, lacking substantive cooperation in training process. Companies are passive with minimal involvement. Personal relationship factors have a decisive influence on a cooperation attempt: personnel change in management is likely to affect the sustainability of cooperation.

In summary, with the economic development in China entering a new period, companies require a strong core group of well-skilled personnel compared with before, who are able to go with or even guide the innovation process. The government staunch supports the development of vocational education through shaping a better cooperation between vocational institutions and enterprises. This is exactly what *modern apprenticeship* tries to address (Tang et al. 2015). Noble results are obtained by some pilot projects under special experiment policy supports, but there are many problems in the practice because of the lack of sustainable mechanism both at political and implementing level. There are high expectation and disappointment from schools/colleges and enterprises. How to establish a long-term mechanism to ensure the sustainability of these initiatives, shaping a Chinese version of "modern apprenticeship" involving school-enterprise cooperation, would be one of the key and efficient solutions.

4.2 Modern Apprenticeship: A Supplement to the Vocational Education System in China

The rediscovery of the value of modern apprenticeship has been one of the most significant trends in vocational education in recent years and has prompted an array of research and development projects in many countries including China (Rauner and Smith, 2010; Zhao et al. 2011). According to the *National Medium- and Long-Term Educational Reform and Development Guidelines* of the Chinese government, China will "develop school-enterprise cooperation regulations, and promote the institutionalization of school-enterprise cooperation" (Ministry of Education 2010). Since 2014, with the publishing of the *Decision of the State Council on Accelerating the Development of Modern Vocational Education* (State Council 2014), a series of pilot programs of modern apprenticeship have been in implementation. Under this context, there are an increasing number of schools and colleges carrying out various forms of modern apprenticeship experiments.

Apprenticeship is understood in China as an education approach and is a system that sets the position and provided service, work, and service period of apprentices. There are both formal and informal apprenticeships. According to Douglass (1994: 64), the institution can be divided into formal and informal one: formal institution is mandatory rules including political, judicial, and economic rules and informal institution includes customs, ethics, and conventions. Therefore, formal

apprenticeship refers to a designed system by related organizations and has legally binding contract; informal apprenticeship is social convention, unwritten rules, and implied norms generally accepted by the community of practice (Chen 2014a: 6).

4.2.1 Necessity of Modern Apprenticeship

China is entering in a critical age for industrial upgrading and economic restructuring. In the first decade, young unemployed people accounted for 50%–60% of all unemployed population (Gu and Wu 2012), but there are a large number of college graduates unemployed. Reasons for structural unemployment are rather complex. One of the most important factors could be the mismatch between existing education and training system and labor market demand. In order to solve the dilemma of fresh graduate unemployment vs. skilled worker shortage, the government is trying to change a part of the universities into "universities of applied technology" (State Council 2014). In fact, just a transforming of university form is far from enough. A purely college-organized vocational education can hardly train applied talents independently because of the lack of real work situation. It needs a paradigm change of study objectives, study program setting, and faculty development in order to give the students more opportunities of acquiring expertise in the working process.

Facts have proved in European countries with well-established apprenticeship systems, such as Switzerland and Germany, that the youth unemployment rate is lower and less influenced by economic conditions than that of other countries. Modern apprenticeship can help to improve students' professional competence and ease their transition process from school to work (Akoojee et al. 2013). It is gradually accepted in China that the modern apprenticeship is a workable approach to solve problems like poor internship quality and mismatch between graduates and talents needed by enterprises (Guan and Shi 2014) and can help improve the attractiveness and effectiveness of vocational education (Huang et al. 2011). From the point of view of the education economist, vocational training also should better take place outside of orthodox educational institutions, because enterprise-based in-service training is more cost-effective than orthodox vocational schooling (Shi 1995).

4.2.2 The Possibility of Introducing Modern Apprenticeship in China

Historically, apprenticeship was a main avenue for skill development in China, and it has persisted until today although most of them are informal and unregulated. A large number of adolescents and youth mostly from vulnerable families (the

so-called new-generation migrant workers (NGMWs) born in the 1980s and afterward) have learned skills through (informal) apprenticeships before they enter into the labor market.

According to the survey on 80 million NGMWs in ten provinces, NGMWs currently take up 58.4% of all migrant workers, representing the majority of the migrant workforce in China. This group has below average years of schooling (less than 10 years), of whom 71.1% receive only primary education, and a large percentage of them didn't receive proper vocational training before work (National Bureau of Statistics 2011).

Despite the lack of protection for fundamental rights, informal apprentice is still accepted by vulnerable groups as an imperfect but relatively sensible choice because of "limited selected space" (Chen and Zhao 2014). The justice of a social system means it "aims to improve the situations of the 'most vulnerable group' and to increase their chance of success and to narrow social gaps through a variety of institutional arrangements." If a social arrangement has to produce certain inequality which is in favor of the most vulnerable, then we can consider it is justice (Kasper and Streit 2000). It would be in the best interests of vulnerable youth to offer them "cost-effective" vocational education by improving the existing informal apprenticeship and integrating it into the well-regulated, orthodox vocational education and training system.

A study in Guangzhou in Beijing helps explain the "rationale" behind modern apprenticeship. Apprenticeship can integrate the education resources of schools and enterprises and create a win-win scenario better through cost and profit sharing, as well as productive learning. Specifically:

- A good organized apprenticeship project is able to resolve conflicts between enterprises' economic benefits and apprentices' learning needs and then achieve quality-cost-profit balance.
- Apprenticeship could be able to minimize net costs while maximizing net profits of all participants, without prejudice to their respective interests. The study shows that despite higher total costs at 1.5 times of those charged by regular colleges (same grade), apprenticeships have lower net costs than vocational schools (cost ratio at 0.5:1 ~ 0.7:1) due to productive learning.
- Apprenticeship is able to address schools'/colleges' funding shortage, relieve government's financial burden, and lessen student apprentices' individual economic pressure. Enterprises need to pay a large proportion of training costs (37.9%), while student/apprentices get economic income, which in turn lowers their direct education costs (Chen 2014a: 177).
- Apprenticeship is able to inspire enterprises to be enthusiastic toward vocational education. Compared with recruiting skilled workers, apprentices is a more cost-effective way to achieve business success, especially for SMEs and private companies (Chen 2014b: 22).

In summary, modern apprenticeship is a "rational" system that helps resolve the problem of funding shortage, inspire enterprises and enthusiasm, protect apprentices' rights, and improve training quality. To upgrade informal apprenticeship to

modern apprenticeship will enable better protection for the vulnerable group (both apprentices and SMEs) and produce a higher level of social equality. This also proves the truth of the research result of the International Network on Innovative Apprenticeship (INAP): "Innovative apprenticeship is proven an effective vocational training approach to face the challenges posed by global competition and shortened innovation cycle, as long as it's high quality and low cost are guaranteed" (INAP Commission Architecture Apprenticeship 2013).

4.3 History and Current Situation of Chinese Apprenticeship

4.3.1 A Brief Review

Apprenticeship has been a common feature for almost twenty centuries. It is reported that apprenticeship was plentiful during the Tang and Song Dynasties (618–906; 960–1279) and under the Ming and Qing Dynasties (1368–1644; 1644–1911) in China (Risler 1989).

After the founding of the PR China, reform programs with the name of "half work, half study" (ban gong ban du) were launched as an updated version of traditional apprenticeship. At that time, how to strike a balance between quantity and quality has always been a thorny problem.

With the implementation of reform and open policy in 1979, China started an all-round reform of education, labor, and human resources systems and began to introduce the policy of "first train – then employ" (xian pei xun hou jiu ye), where enterprises undertook pre-recruitment training instead of directly recruiting apprentices. After this, formal apprenticeship has been replaced by a school-based vocational education system, which didn't evolve into something similar to Germany's dual education system. Despite this, informal apprenticeships still exist today: some cases involve legally binding contracts but some don't (Chen and Zhao 2014).

4.3.2 Apprenticeship as a Formal Institution

Despite the absence of a nationwide formal apprenticeship system, China does have some regional or sector-specific apprenticeship schemes. For example, the former Ministry of Labor issued the *Notice on the Establishment and Implementation of Master-Apprentice Scheme* in 1998. This initiative aimed to increase the proportion of highly skilled talents and to create a solid contingent of high-level technicians for the adaptation of technological progress (Ministry of Labor 1998). The "master-apprentice" scheme is an extended version of apprenticeship after the abolishment of formal apprenticeship. It is different from the ordinary apprenticeship at the

workplace, e.g., it is supposed to train and evaluate highly qualified technicians; the certificate test is implemented by external bodies outside the enterprise.

Many regional governments and labor authorities have also issued a variety of apprenticeship-related regulations to implement variant forms of apprenticeship. In the sense of formal institution, these apprenticeships are at an initial phase. Its characteristics include:

- Lack of interaction between policymakers (e.g., labor, education, economy authorities) during the policymaking process
- Low institutional level and existing policy is linked to guidelines, notices, measures, and programs, but there is no high-level related legislation
- No standardized implementation mechanism
- Limited sector coverage and low level of cooperation by enterprises and schools/colleges

Just as the Ministry of Labor in his bulletin "Communication" summarized, "The old apprenticeship had been replaced by the vocational school education; it had lost its official recognition (legal status). It was recognized as a priority to renew the recognition of the value of apprenticeship and to focus on the qualification of highly skilled talents. But the need has not caused enough attention, so there was no specific action or support from society" (Ministry of Labor 1998).

4.3.3 Apprenticeship as an Informal Institution

In the sense of informal institution, apprenticeship is widely practiced in China nationwide in those trades, where the manual skill is particularly important, for example, hair cutting in the service sector and masonry and carpentry in the construction industry, and it has made significant contributions to qualifications of skilled personnel. In economically underdeveloped remote and rural regions particularly, apprenticeship was generally accepted by people through implied norms for eligibility of trainers and apprentices and economic relationship between them.

Based on a sample of 65 enterprises, Chen identified the features of informal apprentices in Beijing as follows:

- Male preference (56.7%).
- Low school years and academic requirements (59% no requirements, 40% middle and high school education).
- Minimum wages roughly equal to the income of vocational schools graduates (50% of them nearly RMB 1000–1500 per month).
- Apprenticeships offered mainly focus on the field of metalworking (26.9%) and maintenance and assembly (33.8%), e.g., machinery, instruments, real estate, and merchandising.
- Apprenticeships mostly offered by SMEs (Chen 2011).

Although statistical data do not reveal the reasons why companies offer apprenticeships, one thing is certain: the vulnerable group acquires skills through apprenticeships, and lots of SMEs are willing to offer apprenticeships. This displays a striking resemblance to the situations in the UK during the early twentieth century (Clarke and Winch 2006). It reflects people's expectations toward vocational education and training or employment preparation.

Why apprenticeship can exist in the real world despite the absence of government guidance and legal protection? One of the fundamental reasons should lie in social needs. Apprenticeship is not born for a deliberately designed, compulsory, "rigid" existence form but a social convention, a rule generally accepted by the community of practice, and a tool to guide vocational actions.

4.4 Measures Need to Be Taken in Establishing Modern Apprenticeship

Although there is no official apprenticeship system, China does have a certain kind of apprenticeship tradition, for example, the practice of the "half work, half study" program, etc. On one hand, the core concept of modern apprenticeship is rooted in the society; on the other hand, informal apprenticeship exists continuously nationwide. It is necessary and possible to establish modern apprenticeship of Chinese version.

Recent attempts by the Ministry of Education and the Ministry of Human Resources and Social Security to establish modern or new apprenticeship are still far from satisfactory. Practice shows that quality matters much to the overall success of apprenticeship. Compared to traditional vocational educational structure, modern apprenticeship has many new features, e.g., more stakeholders, innovative and standardized operating mechanism, and wider coverage (including students of vocational schools and colleges, graduates of universities). It integrates apprenticeship into the school-based vocational education system and third-party training agencies or intermediaries. The establishment of modern apprenticeship requires thorough research and experiments into the following two aspects:

4.4.1 Institutional Characteristics

A feasible institution could guarantee the implementation of modern apprenticeship, and it should be shaped at the national level to assure:

- Coordinated and consistent laws and regulations which are established across the country. *The Apprenticeships, Skills, Children and Learning Act 2009* of the UK and *Italian Apprenticeship Consolidation Act 2011*, for example, can be regarded as reference. Relevant mechanisms should secure the realization of

three goals: to balance the interests of all stakeholders through stable and effective interdepartmental collaboration, to provide the rights and interests of both parties through training contracts, and to build a multiparty supervision mechanism (Guan and Shi 2014).
- An apprentices' unique legal status as both "quasi-employees" and "students". It should offer apprentices the chance to obtain national recognized qualification certificates.
- High public acceptance and attractiveness of apprenticeships. A "National Qualification Framework" is of utmost significance. In contrast to traditional on-the-job training, modern apprenticeship focuses on the holistic development of professional competence. With weakened horizontal division of work, the concept of "core occupation" with a wide occupational basis should be introduced to ensure sufficient flexibility and employability of apprentices (Rauner 2005).
- Satisfaction of enterprises' needs. Normally, apprentices are required to work for their employers for a certain period of time, so that from the perspective of employers, it is an economically viable investment to offer apprenticeships (INAP Commission "Architecture Apprenticeship" 2013).
- It is necessary to determine the qualification and statues of trainers in apprenticeship system (like "Ausbilder" in Germany) to guarantee the quality of training and internship.

4.4.2 Relevant Organization Service and Operating Mechanisms

In addition, greater efforts should be made to establish relevant organization and service bodies at the national, local, and branch level, including:

- To set up dedicated institutions both at national and local levels, responsible for interdepartmental collaboration and coordination of stakeholder, e.g., national bodies like German BIBB and IAB and UK National Apprenticeship Service and local bodies like apprenticeship centers directly targeted to apprentices.
- To develop nationwide training programs which closely link to occupational qualification standards to ensure nationwide recognition of apprentices' learning outcomes. Enterprises can have a certain degree of discretion in implementing such programs to protect their own economic interests.
- To delegate more authority to trade associations with respect to apprentice and employers' eligibility management, instruction advisory services, and school-enterprise dispute resolution. Preferably, there should be incentive measures to encourage SMEs to offer apprenticeships and let them know such offering is not only beneficial to their competitiveness but also economically viable.
- To promote vocational education research and dialogue and guide all stakeholders (in particular enterprises and vocational schools/colleges) and research

institutes to participate in the political discussion and shaping process of vocational education and training initiatives.

In 2012, the policy bulletin of the International Labor Organization "The Upgrading of Informal Apprenticeship" presents recommendations on apprenticeship upgrade, some of which are valuable to China, for example, emphasizing the trade associations' guiding role and strengthening their capacity building, conducting comprehensive assessment of the operation of a region's or sector's informal apprenticeship, and incorporating social organizations and other groups into apprenticeship service (ILO 2012).

4.5 Pending Issues

Apprenticeship is an important way to realize an effective transition to working life. It is of time-honored history and practical significance. Though more and more efforts are devoted, a consensus on the connotation, sphere, and features of modern apprenticeships in China fails to reach; even a unified name of modern apprenticeship is absent. Under the Chinese economic, social, and cultural context, a thorough understanding on modern apprenticeship is of a guiding significance.

A smooth running of modern apprenticeship depends on its inherent rules, such as the establishment of contractual relations, status and allowance of apprentice, enterprises' responsibility and obligation, and oversight of the corporate training process. Different from the school-based training, modern apprenticeship presents a daunting challenge for the curriculum and teaching arrangement. It is based on the close collaboration between a company, a workshop, an institution, and a "training provider," which can be a vocational school, college, or training center. Each party's responsibility should be defined clearly in the collaboration (leading, organizing, or coordinating). In order to achieve the desired goal, a quality assurance system has to be established (Zhao 2014). The study of modern apprenticeship is supposed to solve the following tentative problems in the future:

- Existing policies and measures in China are mainly on the local level, but the organizational complexity in an apprenticeship system is serious (varying ownership structures, weak employer organizations, prevailing short-term and monetary orientation, vertically and horizontally differentiated administration, complex regulatory system). Without a strong advisory and technical support structure which is recognized by the authorities, island solutions may not spread over to establishing apprenticeship as a systemic avenue leading youth from school through training to employment.
- It is not enough that only the political and administrative authorities, e.g., the State Council and related ministries, have formulated public statements, which call for closer collaboration among education and training institutions and enterprises. There should be adequate information and technical assistance package available for those companies who are willing to embark on

apprenticeships. Specific services should be offered to students and their parents to understand the connotation and significance of the apprenticeship.

- Relevant laws should be made to acknowledge the legitimacy of apprenticeship. The signing of an apprenticeship contract also helps to protect apprentices' interests, e.g., having rights to receive education, workplace protection, and social welfare. The government should issue more preferential policies in favor of vulnerable youth. Through the apprenticeship, graduates are able to obtain qualification certificates, and at the same time, they have the opportunity to study in university or receive further education. Pilot projects could concern the most needed fields, i.e., manufacturing industry and traditional service sectors, where large numbers of NGMW and informal apprentices are concentrated.
- The government has launched several investment programs and incentives for companies. However, these measures seem to be unilateral actions, instead of being negotiated with the partners in the economy. Is the organizational framework conducive for the expansion of modern apprenticeship? How to introduce the policy of tax reductions and other types of incentives for SME's engaging in apprenticeships needs the involvement and commitment of the executives and staff of companies and branch organizations. There should be a group of technical organizational agencies available outside, like the Chamber of Commerce and Industry, etc. (Risler and Zhao 2014).

Whether the implementation of modern apprenticeship is successful, it needs systematical evaluation in accordance with certain standards. Research in this area is across many disciplines, involving education sciences, economics, sociology, and management.

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Chapter 5
Transitions: Conceptualization of Individual Educational Pathways

Margarita Pavlova and Tatiana Lomakina

Abstract This chapter examines the importance of individual educational pathways (IEPs) for transitions from school to further study, or work, within the paradigm of lifelong learning. A pathway, or trajectory, in lifelong learning recognizes the autonomy of an individual, which is bounded to a large extent by external structural and social constraints, mediated by an internalized view of the value and availability of opportunities. The chapter focuses on the ways IEPs can be conceptualized. A number of factors that influence the development of IEPs in the context of lifelong learning are considered, and the role of pedagogy in the formulation and realization of IEPs is highlighted. The chapter examines personal characteristics required by students for the development and implementation of IEPs and concludes by discussing the advantages of IEPs in ensuring smooth transitions in lifelong learning and in formulating criteria to ensure the quality of IEP development.

5.1 Introduction

Multidimensional challenges that education systems face today are closely related to rapid changes in information and communication and other technological developments that affect many spheres of life, including industry, science, arts, and individual developments. Certain features of the twenty-first century such as the knowledge economy, celebration of diversity, plurality, and equality stimulate communities into providing more opportunities for everyone to learn to meet their individual needs, especially when societal changes occur at a fast pace and in an unpredictable manner (Lee 2014). People are searching for lifelong learning

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opportunities in order to satisfy their professional and personal pursuit for knowledge and skills development. Transition from school to work, or future studies, is one of the most challenging stages in the process of lifelong learning (Pavlova et al. 2017). To ensure successful transitions, different stakeholders must provide support within the education system as well as create intensive follow-up measures for school leavers who are experiencing problems with the process (Lamb and McKenzie 2001). According to Hanemann (2015), when the pace of change accelerates, patterns of living become more complex and less predictable, so the ability to continuously acquire new knowledge and upgrade one's skills through independent learning becomes critically important. Providing lifelong learning opportunities is becoming increasingly necessary for the economic, social, and cultural development of countries; therefore, government involvement increases as lifelong policies evolve (Hodgson 2013). In this context, providing individual opportunities for learning is particularly important in terms of supporting effective transitions from school to work and further studies.

This chapter focuses on the ways individual educational pathways (IEPs) can be conceptualized and examines different aspects of IEP development and realization. We analyze a number of factors that influence the development of IEPs in the context of lifelong learning, as well as the role of pedagogy in the formulation and realization of IEPs. The chapter identifies students' personal characteristics that are important for developing and adapting IEPs and concludes by discussing the advantages of IEPs for smooth transitions through different stages of lifelong learning. It also formulates criteria that ensure the quality of IEP development.

5.2 Lifelong Learning

In modern pedagogical sciences, lifelong learning (LLL) is understood as a system of views on educational practice that recognizes individual learning as an integral part of life at any age and which provides an opportunity for education at each stage of life. Lifelong learning should foster multidimensional personal enhancement in an educational environment and create optimal conditions for development. One of the goals of lifelong learning is to ensure the ongoing advancement of the creative potential of a person, combined with enrichment of the spiritual self. At the same time, LLL enhances the capacity of an individual to orient in the professional field of his/her choice. These can improve the social status of an individual and can be achieved through education. According to Novikov (1997), the backbone of lifelong learning is *integrity*; in other words, it is not a mechanical combination of elements but a deep integration of all subsystems and education processes that support individuals with learning throughout life. Only recently has the importance of learning through practice and life experience been widely recognized by researchers (Jarvis 2009), and this has influenced the ways lifelong learning is interpreted. Rees et al. (1997) stated that in order to be effective, lifelong learning strategies need to take into account the actual processes of change in learning

opportunities that different social groups experience. Thus, although youth and adult transitions and associated patterns of participation in lifelong learning vary and are mainly determined by sociohistorical situations and social stratifications (Evans et al. 2013), it is important to understand ways of improving support for personal development that can influence social mobility.

5.3 Individual Pathways in Lifelong Learning

One of the aims of the modern educational system from a lifelong learning perspective is the development of individual educational pathways, or trajectories. A pathway, or trajectory, in lifelong learning recognizes the autonomy of an individual. That autonomy is bounded to a large extent by external structural and social constraints mediated by an internalized view of the value and availability of opportunities (Gorard et al. 1998). At the senior secondary school level, a number of models that support individualized educational pathways have been adopted, and these include individual curricula and educational programs, individual educational paths that utilize educational networks, cumulative credit-collection systems within modular-based learning, distance learning, and others.

Individual educational pathways are mainly focused on the needs of a person and are considered to be one of the ways of individualizing education and helping leaners to realize their own potential. Students are viewed as subjects of their own education-related activities, and the development of IEPs is based on an understanding of that individual's role in, and responsibility for, learning. Although self-directed learning plays a significant role in developing individualized educational trajectories (Isaev et al. 2013), a purposeful process of designing and implementing an education program where students act as the subject of these activities cannot be realized without strong pedagogical support. The IEPs provide a continuing guideline for a person in an educational space in relation to educational levels and previously acquired knowledge and skills. The creation of individual educational pathways, or trajectories, is one of several possible ways to accelerate the initiation of lifelong learning development that can benefit both an individual and the organization the person is involved in (Sessa and London 2015).

Although the importance of IEPs is well established, IEPs have not yet been fully conceptualized within the paradigm of lifelong learning (e.g., Glotova et al. 2015). In the early 1990s, trajectories were mostly interpreted by defining the impact of training on employment, and only in the late 1990s was this expanded to the broader context of school to work transition (Hannan et al. 1996) (although the issues of transition from school to work had been explored much earlier, e.g., West and Newton 1982; Wehman and Hill 1985). Researchers have identified various factors that influence these transitions. A comparison between educational qualifications and occupational outcomes across a large number of countries revealed that the ways and extent to which success in schools affect occupational prospects vary greatly (Shavit and Muller 1998; Walther 2009). Gender, generation,

ethnicity, military service duty for men, and others are significant factors in school to work transitions. Academic orientation, socioeconomic background, and steady paid work during high schooling assist young people to avoid floundering during the school to work transition (Vuolo et al. 2014).

A large-scale longitudinal study by Gorard et al. (1998), after accounting for regional and temporal variations, developed the notion of a learning "trajectory." The study analyzed people's participation in vocational education in a particular geographical location. Their analysis of the impact of parent/child relations on lifetime participation in education and training, with a particular focus on study to work transitions, found that individual participation trajectories remain very similar within families (Gorard et al. 1999). Although work-related values in the family can predict investment in education, these values also undergo adjustment due to continued schooling (Johnson and Elder 2002). Therefore, learning through life can have an impact on individual trajectories and improve the social mobility of an individual.

Although there have been a number of attempts to conceptualize individual pathways within the context of lifelong learning, there is a further need to explore individualized learning. The central reasons for this are related to the constant changes in industry requirements and a related rise in the importance of professional standards for learning, as well as the expansion of distance education technologies. Glotova et al. (2015) argue that the importance of individual pathways is mostly related to the accessibility and development of e-learning technologies and pedagogies that can synchronize the life cycles of professions, educational programs, and e-learning resources. The influence of e-learning concepts was linked, in particular, to the availability of open educational resources (OERs) that can help create a potential synergy between nonformal education and strengthen the continuum of education and training for people who live in underserved and economically disadvantaged regions of the world (Olcott 2013).

To foster effective personal development that supports transitions from school to work and life, it is vital to raise the level of self-awareness in the modern context, which is characterized by uncertainty and rapid change. In order to understand these new demands in a more comprehensive way, the difference between generations and their specific needs should be taken into account, along with the ways they relate to life, work visions, and expectations. Different researchers (e.g., Kuron et al. 2015) documented that rates of job mobility have vastly increased, particularly among the new generations, such as millennials. Moreover, due to life changes, the importance of school to work transitions has increased. Patterns of attending school or university, entering the labor market, and starting a family have changed (Gebel and Heyne 2016). One of the factors influencing these new patterns is the demand for better market integration by people with various education levels and gender identities, as well as their search for alternative employment opportunities (Heyne and Gebel 2016). Employees, who are professional, flexible, and employable, who have the necessary competencies and who are capable of learning through their lives, are actively sought out (Mulder et al. 2015). These requirements

necessitate the development of different pathways within the framework of lifelong learning.

In establishing methodological frameworks for IEPs within a paradigm of lifelong learning, a number of features related to specific societies, as well as some global trends, should be taken into account. These might include:

- The increased speed and scale of development and, as a consequence, the necessity to prepare people for life in a rapidly changing environment.
- The transition to a postindustrial and information society combined with the expansion of cross-cultural interactions necessitates the cultivation of traits such as sociability and tolerance.
- The emergence and growth of global issues that can only be resolved by cooperation within an international community in turn contribute to the development of a particular type of thinking (e.g., a global citizen) in younger generations.
- The democratization of society and an increase in opportunities for political and social choices lead to a need to improve people's capacity to make choices.
- The dynamics of economic development increases competition and reduces both job market opportunities for unskilled and low-skilled labor and deep structural changes in careers. This requires a continuing improvement of initial and in-service vocational education and training, as well as an increase in professional mobility.
- The growing importance of human capital, which, for countries at the innovation stage of economic development, comprises 70–80 percent of national wealth production, demands the intense and accelerated development of education for both young people and adults (Lomakina 2006).

These changes affect the occupational structure of the labor market and require people to push for their own professional mobility and the updating of their competencies. Many young people have faced challenges with mobility: lengthy educational enrolments and structural economic changes delay entry into the labor market if they follow traditional pathways into adulthood (Buchmann and Solga 2016). Therefore, lifelong learning for personal and professional development that is related to changes in the nature of occupations is required to go beyond narrow, focused training. Educational institutions need to respond quickly to emerging labor market requests, anticipate them, be flexible and receptive to change structures, change criteria for assessment or learning, and take into account individual experiences related to working life. From the psychological point of view, counseling should be offered to help with the challenges of transitions, as it can facilitate the development of personal coping strategies that can reduce stress levels (Fenwick 2013). These strategies should be related to the development of individual pathways and issues of access, content, type, and duration of programs; change of work areas; forms of organization of the education process; and the methods, techniques, and personnel involved in teaching.

5.4 Education Policy

Although policies for lifelong learning are in place in many countries, the pace of their implementation is relatively slow, mainly due to the lack of workable implementation strategies, funding systems, and stakeholders' resistance to change (Bengtsson 2013). In situations where the complexity of the labor market has led to a diversification of transition patterns, policy measures remain inattentive to the needs and aspirations of young people (Walther and Plug 2006; Verdier 2013). This means that the number of unemployed people is increasing, particularly among young people in European countries due to their status or inadequate school achievement (Otto et al. 2015). The transition phase can be very challenging for young adults, especially if they are not engaged in work and study at the same time (Wyn and Dwyer 2000). However, some governments are taking additional measures to improve this situation.

In Russia, for example, a reform of the Soviet school system took place in numerous attempts to carry out development, modernization and reduction, simplification, and a lowering of the cost of the state education system. As a result of these ad hoc policies and changes, the modern Russian educational system is very inconsistent and is not framed systematically (Lomakina et al. 2012). In this context, the development of a lifelong learning system in Russia in particular can help tune the cohesion of the system's elements. More specifically, the development of IEPs is currently one of the state's policy development priorities. Documents such as "The National Doctrine of Education in the Russian Federation for the period till 2025" (Government of the Russian Federation 2000), the national educational initiative "Our New School," and the Federal Law of 29.12.2012, No 273-FZ "About Education in the Russian Federation" (*Rossiyskaya Gazeta* [Russian newspaper] 2012) highlight the necessity of moving to competence-based education and increase the importance of working with gifted and motivated children and adults. In other words, the Russian government does recognize the importance of an individualized approach for learning.

To ensure that IEPs form an intrinsic part of lifelong learning, an education system needs to provide at least three main conditions:

- Continuity of educational standards and programs at various general and professional education levels.
- Opportunities should be provided for an individual to temporarily suspend and then resume education and training, as well as change its form, to choose an individual educational trajectory, to enrol in in-service training for a different occupation in order to maintain a high level of general education and professional competitiveness in order to meet demands of a labor market.
- The rejection of educational programs, educational institutions, areas and types of education that do not provide continuity in both general and vocational education and training, or free mobility between two systems.

Therefore, the system level plays a vital role in providing opportunities for IEP development and implementation. Educational policy has a significant effect on individual students' outcomes and the provision of multiple trajectories supported by the educational system. Educational policies largely determine the destinations and pathways people follow as well as the number of choices they have (Walther et al. 2015).

5.5 IEPs: Further Conceptualization

5.5.1 Principles for Success

A rigorous conceptualization of IEPs is critical to the successful facilitation of transition processes. Both external and internal factors have a significant influence on the development of IEPs. The external factors include (a) access to education (there are at least five types of barrier to equal opportunities in education: institutional, sociocultural, economic, motivational, and informative) and (b) the development of the educational environment (institutional, cultural, and economic), which provides conditions for educational activities. The internal factors include (a) a goal-setting process by an individual that includes designing, organizing, and implementing personal educational activities (with possible pedagogical support) and (b) motivation to reach his/her full potential.

We put forward the following principles that are related to the external factors and form the basis of the successful development of IEPs:

Effective basic education provides an educational basis for successful pathways in the educational space to support individual mobility (Novikov 1997).

Multilevel education – the presence of many levels and stages of education allows individuals to meet their needs and to realize opportunities that can provide a more effective search for niches in the labor market.

Diversification includes an expansion of activities that characterize an education system and the development of its new forms and functions that help to increase a social demand for the higher levels of professional education. There is an additional necessity to satisfy the needs of a much more diverse population and to develop a wide range of alternative programs and training systems (Lomakina 2006).

Economic competence – this is a mandatory component of education, because today everyone is a part of economic relations, either as active participants (they generate workplaces and start business activities) or passive participants (they consume the goods and services offered on the market) (e.g., OECD 2015).

Complementarity between initial and in-service education provides the necessary conditions for an individual to improve his/her professional competencies in the educational space.

Educational programs' agility and continuity – this will empower individuals to be flexible in their career reorientation throughout life.

Integration of educational institutions corresponds to the process of restructuring educational systems and enables the creation of multidisciplinary, multilevel, and multistage institutions based on social partnership.

Flexible forms of organization reflect the need to offer a wide variety of teaching and learning forms, but with flexibility and variability in order to create the conditions necessary for a person's mobility within the educational space (e.g., Maclean and Pavlova 2011; ADB 2009).

Findings of some studies (e.g., McDonald and Benton 2016) demonstrate that workers have fewer mobility pathways into high-wage jobs in high inequality organizations compared to those in low inequality organizations. Therefore, the principle of c*omplementarity between initial and in-service education* has not been adopted in this particular context. High inequality organizations may not provide the necessary conditions for an individual to improve his/her professional competencies and/or do not recognize workplace learning.

Preferences in developing IEPs at the institutional level are determined by a complex number of factors, such as:

- Peculiarities, interests, and needs of learners and parents in achieving desired learning outcomes
- Teaching staff professionalism
- Opportunities available in educational institutions to meet educational needs of students
- Resources available in educational institutions

The development of IEPs should also consider the specificity of the subject area including in-depth learning opportunities in the area; the variety of ways of learning and assessment; self-directed, independent studies; as well as different levels of available study programs and courses.

In addition to formal arrangements, the choice of IEPs in the framework of lifelong learning depends on an individual's decisions (internal factors) that are based on personal values, general orientation in the educational space and labor market, the identification of short- and long-term goals as stages in achieving overall objectives, and an understanding of one's own strengths, weaknesses, and personal characteristics. People's identity helps them manage and control their own pathways; therefore, individual characteristics form the basis of the development of IEPs. When developing IEPs individual preferences toward a certain type of activity such as technical creativity and innovation in engineering and technology, scientific creativity, public social activities, leadership activities in any area, and others should be known and addressed. It is important for learners to develop an understanding of the need for self-orientation in terms of professional intentions – development of professional plans, familiarization with professional training and educational requirements, professionalization, professional adaptation and capability, and finally partial or complete self-actualization in professional activities.

Readiness for self-orientation/motivation that drives an individual to achieve goals and personal growth should be systematically addressed through learning. The selection of pathways can reflect the perspectives and priorities of individual people and enable them to manage and control their own itineraries (Raffe 2003).

5.5.2 *Pedagogical Support of IEP Development and Implementation*

In the development of IEPs, pedagogical support plays a critical role in helping students to plan their life pathways and individual educational trajectories, as well as providing psychological support and resolutions for problematic situations. Teachers and other staff need to respond to the physical and emotional needs of students and provide adequate assistance. Pedagogical support for the development of IEPs includes:

- *Analysis* that takes into account students' characteristics and educational needs and the dynamics of students' development
- *Consultation* with individuals and in small-group discussions
- *Coordination* of teachers' work with activities involving extracurricular education, with the work of psychologists and social workers to build constructive positive relationships between all agents involved in the open educational space
- *Organizational effectiveness* that affects the education process

In order to expand the range of educational services and increase the quality of pedagogical support in implementing IEPs, it is advisable to draw upon resources from different organizations and structures, particularly through networking. A network can provide support in terms of the availability of information, administration, and technical provision. The IEPs, supported by educational networks, can help people stay self-motivated and explore lifelong learning opportunities.

Over the last decade, in different parts of the Russian Federation, for example, various models of educational networks, such as "special partnerships" (Krasnoyarsk region), "community of registered schools" (Penza region), "trajectory-network organization of education in rural areas" (Altai Territory), "modular organization of education in the area," a variety of educational associations, "a network university," and regional and interregional innovation networks (Lobanov et al. 2013) emerged that addressed the issues of individual pathways within the framework of lifelong learning.

5.5.3 Evaluation Criteria: The Quality of IEPs

It is important to highlight the advantages of IEPs and formulate criteria to ensure the quality and effectiveness of them. The main advantages of building IEPs for different stakeholders in terms of lifelong learning include:

- *For an individual* – the ability to make an individual choice relating to content and level, as well as effective ways to complete education at whichever level meets that individual's intellectual, social, and economic needs.
- *For a society* – the ability to receive a professional person with particular characteristics who meets the requirements of different levels of education (this efficiency will help to ensure that tax and/or employers' contributions are wisely spent and achieve the desired results).
- *For teachers* – the most comprehensive realization of teachers' professional potential, as IEPs provide more autonomy in determining the content of learning and teaching approaches. In addition, IEPs protect teachers' rights to work with students who are ready to learn at a particular level and who are interested in obtaining educational services students select themselves.

Thus, individual educational pathways help the educational system to become flexible and respond to society's changing demands as well as meet the educational needs of every individual.

The criteria for evaluating the quality of developed IEPs can include the extent to which individual needs have been met by the developed IEPs, the logic in IEP design, and the breadth of the proposed trajectory. To ensure the effective development of IEPs, several steps should be followed:

The goal-setting step involves setting appropriate goals and a comprehensive analysis of an individual's qualities (such as values, motivation, norms, position, ability to be organized and deal with information, and the ability to control and evaluate). This goal-setting and diagnostic stage is required to "startup" an IEP and involves both a teacher and a student.

The realization step includes the development of an individual educational program as a tool for implementing an IEP in accordance with the established procedures that can be regulated at the local, regional, or national levels.

The feedback step monitors and adjusts an IEP to ensure its effectiveness and relevance to individual needs.

This mechanism of developing IEPs can be applied at various stages of lifelong learning, including senior schooling and workplace learning.

The effective development of IEPs is determined by a number of pedagogical conditions:

- Awareness by the student of the importance of developing an IEP as a means of self-orientation and self-fulfillment as well as the validation of his/her choice of content, form, mode, and level of education

- Involvement of participants in the educational process, in purposeful activity aimed at the development of a stable interest in the process of designing individual educational trajectories
- Provision of psycho-pedagogical support to students and informational support during the process of developing IEPs
- The inclusion of students in the active development of individual educational routes (both as agents who are making choices and as consumers of education)
- Organization of the reflection process as the basis for IEP adjustment and correction

Well-developed and implemented IEPs will help facilitate transitions within selected trajectories (Pallas 2003).

5.6 Conclusions

The development of individual educational pathways and their implementation help learners to understand their interests and motivations and to select the best possible ways to learn and achieve desired goals. Effective IEPs are particularly important for supporting the smooth transition from school to further study, and work, as they enable students to make decisions about their future during the final years of schooling. IEPs play a critical role in learners' transitions through both formal and nonformal/workplace learning during their life span; therefore, the conceptualization of IEPs helps to develop an understanding of planning for a desired result. Both external and internal factors play an important role in the effective development of IEPs. Growth of students' personal qualities and establishing support structures at the system and institutional levels are essential requirements for the development of individual pathways in the context of perpetual sociocultural and technological changes if we are to ensure effective transitions. This chapter has argued that pedagogical support is one of the essential mechanisms at the institutional level that guides students through the development and realization of IEPs as well as students' mobility between different institutions if they are to achieve desired outcomes. Individualization of learning through IEPs is an effective tool that supports the success of transitions within lifelong learning.

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Chapter 6
School to University Transitions for Australian Children of Refugee Background: A Complex Journey

Loshini Naidoo, Jane Wilkinson, Misty Adoniou, and Kip Langat

Abstract Despite strong overall growth in Australian university participation, the representation of individuals from low-socio-economic status (SES) background, as a proportion of the total student population, remains below parity. Indeed, the proportion of domestic undergraduate students studying in Australia decreased between 2001 and 2008 (Universities Australia, A smarter Australia: an agenda for Australian higher education 2013–2016. Universities Australia, Canberra, 2013). As a result of this decline, the federal government adopted a target that by 2020, approximately 20% of all students would be of low-SES origin (Bradley D, Noonan P, Scales B. Review of Australian higher education: final report. Commonwealth of Australia, Canberra, 2009, recommendation 4). Many students in this low-SES category are of refugee backgrounds, and these numbers may accelerate in the future. For instance, in 2012–2013, 64% of applications for humanitarian status came from young people under the age of 30 (Department of Immigration and Citizenship (DIAC), Australia's offshore humanitarian program: 2012–13. Retrieved from https://www.immi.gov.au/media/publications/statistics/immigration-update/australia_offshore_humanitarian_prog_2012-13.pdf, 2013a, 2012–2013: annual report. Retrieved from http://www.immi.gov.au/about/reports/annual/2012-13/pdf/2012-13-diac-annual-report.pdf, 2013b, p. 1). Many refugee background students have high aspirations for educational attainment, a strong desire to succeed academically and demonstrate desirable attributes such as high levels of resilience and problem-solving capacities (Naidoo L, Wilkinson J, Langat K, Adoniou M, Cunneen R, Bolger D, Case study report: supporting school-university pathways for refugee students' access

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and participation in tertiary education. University of Western Sydney Print Services, Kingswood, 2015). However, forced migration, interrupted schooling and significant differences in teaching pedagogy represent major barriers to mainstream pathways to higher education. The pedagogic experience is different for various refugee groups based on the complexity of their journey to Australia and their response to the changes in demography. Refugees are not homogenous, and their life histories therefore cannot be reduced to deficit thinking about their ability to transition. This chapter examines findings from a recent large study of school-to-university transition which examined the barriers and challenges faced by refugee background students transitioning from Australian secondary schools to university. In particular, it focuses on the kinds of enabling practices and structures at school level, which supported this transition, drawing on vignettes to illustrate these pathways. It concludes that although there are examples of exemplary school practices to support transition to university, these pathways are not systemic and are too often dependent on the knowledge, excellent practice and good will of individual schools and teachers.

6.1 Introduction

This chapter discusses the empowering and nurturing practices and structures for refugee background high school students by examining findings from a recent Australian federal government-funded research project of school to university transition. The project 'supporting school-university partnerships for refugee students' access and participation in tertiary education' focused on four main educational sites, Canberra (Australian Capital Territory), Greater Western Sydney (New South Wales), Wagga Wagga and Albury (regional NSW). Each site was chosen for their demonstrated experience in providing targeted programs for refugee background students, their significant refugee support programs with schools in the local area and their high refugee populations (Naidoo et al. 2015).

In particular, this chapter focuses on the kinds of enabling practices and structures at school level, which supported the transition of refugee background students to university, drawing on vignettes to illustrate these pathways. The presence of refugee background students with different cultural perspectives in Australian high schools poses a challenge to schools and classroom teachers. Classroom teachers and schools as a whole have to understand and relate to students who have different experiences, worldviews, values, orientations and viewpoints. Although there are examples of exemplary school practices to support transition to university, these are often dependent on the knowledge, excellent practice and good will of individual schools and teachers. Therefore, this chapter concludes that these pathways are not systemic: the education system still needs to provide collaborative education supports that would lead more refugee background youth to complete high school and pursue and succeed in postsecondary education.

Currently, refugee background students represent a 'high risk group which faces great challenges in terms of adaption to the school system, acculturation, social

adaptation, English language learning, and eventual academic success' (Brown et al. 2006, p. 150). Between 2004 and 2010, the number of refugee background students arriving in Australia increased considerably with almost 43% of all humanitarian arrivals under the age of 18 (Department of Immigration and Citizenship 2012). Many refugee background students arrive from countries having been subjected to:

> civil conflict or war, destruction of their homes and communities, violence and terror, forced separation from loved ones, political and societal instability, food deprivation and malnutrition, conscription and rape and sexual assault. (Naidoo et al. 2015, p. 35; Sigsworth 2008; Victorian Foundation for Survivors of Torture 2002)

As such, refugee background students in Australian secondary schools often encounter significant barriers and challenges in transitioning to tertiary education[1] because they enter the school system from a diversity of cultures and experiences (Naidoo et al. 2015; RCOA 2010a, b, Sidhu and Christie 2007). They have to adapt to the expectations and culture of a formal education system, knowledge of which is taken for granted by those already teaching and learning in the system. They also have to deal with material, personal and cultural loss and have to adapt to an entirely new social, economic and cultural system (Naidoo and Brace forthcoming). The challenges in adapting to the new education system are further compounded for refugee background students by having spent prolonged periods of time living in refugee camps or in a transient existence (Naidoo et al. 2015; Ndhlovu 2013; RCOA 2014).

Moreover, even before beginning their educational experience, refugee background students arriving in Australia are stigmatised with discriminatory labels (Markus 2012). Such discriminatory feelings stem from a societal discourse that has centred on the supposed criminality and deviance of those seeking asylum, where the term 'refugee' has been replaced by terms such as 'asylum seekers', 'suspected unauthorised non-citizens' and 'illegals' (Markus 2012). The framing of refugee arrivals in Australia through an exclusionary rhetoric has had a substantial impact on refugee background students making it increasingly difficult for them to participate and acculturate in Australian society.

Further, the conflation of refugee background students with other categories such as culturally and linguistically diverse (CALD) communities or English as an additional language or dialect (EALD) categories is a significant problem. Refugee background students, particularly those arriving from Africa, are a specific group with greater educational, welfare and support needs (Taylor 2008). While under ideal circumstances, academic language proficiency can be acquired within 3 to 5 years (Hakuta et al. 2000), for refugee background students, often operating within an extremely disadvantaged framework, the process can take up to 10 years to develop (Garcia and Dicerbo 2000). Thus, many refugee background students find that they are expected to acquire social communication, academic writing and communication skills while catching up to their native-speaking peers,

[1] In Australia, the term 'tertiary education' is used as a synonym for universities.

who often themselves are still developing language competency (Naidoo et al. 2015; Contreras 2002).

Importantly, while most refugee background students in Australia attend specialised English language schools where they are able to receive intensive language tuition, some are enrolled directly into the mainstream schooling system, particularly in rural and regional areas where intensive language support is often not available (Wilkinson and Langat 2012; Windle and Miller 2012). This can be problematic, as for many, the time spent and support received in intensive language tuition centres (approximately 6 months) is not enough to ensure a smooth transition into the mainstream schooling system. Academic success at school is dependent on the knowledge of ingrained social norms that are often taken for granted (Trumbull and Rothstein-Fisch 2011). No matter how natural they seem, these behaviours are culturally specific and must be actively learned by students (Nwosu et al. 2014). For example, the manner in which students are expected to sit at their desks, to transition between classes, and to convey educational knowledge in assignments and tests is not immediately obvious to a refugee background student, but learning these social norms (and other more complex practices) is a necessary part of academic success. As refugee background students often come from cultures where educational practices differ widely from those in Australian secondary schools, students with other schooling experiences may not share the learning routines and habits used in Australia (Hurst and Davison 2005). Thus, many refugee background students who are not 'fluent' in the cultural practices of Australian schools can often find the transition to westernised educational practices difficult (Harris and Marlowe 2011; Naidoo et al. 2015).

Thus, there are many barriers that can negatively impact the successful settlement of refugee youth. Schools, however, have the potential to provide valuable and safe spaces where students of refugee background can develop and demonstrate the skills, knowledge, affinities and relationships to participate fully and successfully in the Australian community (Pittaway 2002). Many families and students hold high aspirations of educational and employment success, and there is evidence to indicate that young people demonstrate independence and resilience, despite direct or vicarious experience of trauma (Matthews 2008). There is also evidence to show that some schools and teachers are providing a productive, positive environment to foster the dynamism, capacities and capabilities of refugee background youth in their transition to higher education so that the broader society can benefit from the contributions made by refugee communities to Australian society. Policies and implementation strategies which acknowledged the specific needs of students of refugee origin and have ensured that some funding and support – meagre and unstable though it may be – continue to be directed to refugee background students have also contributed to the enabling culture. This is in contrast to the universities in our case study, where there was a striking policy and implementation silence around students of refugee backgrounds and the existence of only a few specific, targeted programs for their needs (Naidoo et al. 2015).

The remainder of this chapter explores the enabling practices and structures in schools that support young refugee background students' transition to university,

employing vignettes to illustrate their pathways. This is done by drawing on findings from a large study of school-to-university transition which found that a range of factors were crucial in supporting young refugee background students' transition (Naidoo et al. 2015). These factors included the role played by school teachers and, in particular, EAL teachers; specific, targeted education policies in the compulsory education sector in New South Wales [NSW], the state from which the majority of our case study schools and universities were drawn and which rendered visible the needs of young refugee background students by providing funding, clear support structures and forms of accountability; and community and learning engagement programs. We now examine each of these factors further, commencing with the role of teachers as champions.

6.2 Teachers as Student 'Champions'

In urban locations in Australia, newly arrived students who require support with English language learning are placed in government-funded English language programs for the first months of their schooling. These intensive English centres (IECs) provide dedicated English language and social support to students before they move into mainstream school settings. Students are usually funded to stay in these centres for approximately 6 months. Upon exit from the centre, they still require substantial supports in order to achieve in a mainstream school setting. Intensive English centres are rarely available outside of urban settings: therefore, English language learners in regional and rural areas are placed directly into mainstream classes (Wilkinson and Langat 2012).

English additional language (EAL) teachers are usually deployed in mainstream schools to support EAL students. EAL staffing is generally allocated according to the numbers of EAL students in a school. Assigned staff then work in a variety of ways with EAL students, including withdrawing the students to work with them or collaborating with mainstream teachers to work with the students in their mainstream class. In the project reported in this chapter, there were individual EAL teachers and mainstream teachers who featured strongly as important 'champions' for EAL students' academic and social needs. In each school site in the project, there were one or two key people who appeared to go beyond their job description to hold programs together and to whom staff and students referred to as crucial to the welfare of the EAL students:

> A really strong component of all the programs we've probably mentioned is our EAL teacher and I think that she takes it on as a personal responsibility... So I think her passion and her commitment to the kids gets a lot of this stuff done and then it moves into the classroom environment, where she comes in and supports as well. (Mainstream staff member)

These staff were key in the establishment of support programs, as well as in the maintenance of support programs. It appeared that the success, and sometimes the

existence of supports, was due to the commitment of these individuals. Through an analysis of the data gathered in interviews with staff and students, the following were identified as characteristics critical for the successful support of refugee background students: staff were knowledgeable about the students and their life experiences; they were knowledgeable about best practice pedagogies for additional language acquisition; they were mentors for their students and they were advocates for their students.

6.2.1 Knowing the Students

Rafi is 17 years old and from Afghanistan. He arrived in Australia as an unaccompanied minor, having travelled to Australia* via *Malaysia and Indonesia. He has not attended school in Afghanistan due to the ongoing conflict, but he speaks three languages and is rapidly learning English. He worked in construction in Afghanistan and has a strong aptitude for mathematics and the sciences, which has been noted by his teachers in Australia. Rafi shares a house with two other teenagers, also unaccompanied minors. They have no adult supervision at home and limited support for domestic and other day-to-day living tasks. The adults in their lives are substantially the adults they see each day at school.*[2]

Each refugee background student has different life stories, and Rafi's story is just one. However, his story serves to illustrate the complexity of their whole life stories. Most teachers in the study had only general understandings of the life stories of these students they referred in general terms to difficulties the students may have due to their 'refugee backgrounds', 'interrupted schooling' or 'lack of English language'. One teacher, a deputy principal, stated, 'I don't need to know the nitty-gritty of their lives'. However, student 'champions' for the purposes of this chapter were the staff who defined their work as supporting the whole student. Importantly, these staff were cognisant of the varying worlds that students occupied and moved in beyond school.

In Rafi's school there were two staff members who expressed a deeper understanding of Rafi's circumstances: the head of the English as an additional language program in the school and Rafi's mainstream mathematics teacher. They described their work with him in ways that went beyond their assigned duties to provide academic support for Rafi. They not only helped him manage school work but also his day-to-day tasks, which included household and administrative tasks like communicating with the social service agencies in order to receive financial support. Rafi's mathematics teacher provided breakfast snacks for Rafi and his housemates when mathematics was their first lesson of the day because she understood they were three teenage boys living on their own who may not have managed to organise their own food for the morning.

[2]Pseudonym used.

Key staff members exhibiting the characteristics of Rafi's teachers were identifiable in all sites. They understood that they were acting differently from other staff:

> The main thing too with supporting the students is my role is much different to a classroom teacher's role because it's the holistic approach, and with any refugee person or any person, if they're not safe at school or if they're not happy in their environment, they're not going to learn. So we really try and do as much as we can to make them feel comfortable at school, try and help them feel comfortable in the community and support them. (EAL teacher)

This was in contrast to the 'thinner' relationship of classroom teachers (Moll et al. 1992, pp. 133–134) revealed by other staff in schools. Many teachers were more concerned they were providing too much help and that the students received too much support.

> He's [student] falling back into the, if I keep asking questions then all my work gets done for me without me having to do much of it myself, so I've had to draw a line. We're just teaching helplessness. (Mainstream staff member)

Overall, the staff who were effective student 'champions' were more realistic and knowledgeable about the life circumstances of the students. These teachers showed an understanding that refugee background students often bring with them experiences prior to their arrival in Australia which impact upon their learning and which might require adjustments to be made to the learning process.

6.2.2 Knowing Pedagogies for Additional Language Acquisition

As well as holistic support, these key staff worked within the structural parameters of the school, to set up programs of instruction that maximised English language support for the students. All staff in the project were keenly aware of the English language challenges EAL students faced, but mainstream teaching staff in particular appeared to have an unrealistic expectation of how long support would be required, with some indicating they felt the substantial English work had been done in the intensive English centres. This reflects findings of US research where 70% of high school teachers believed that an additional language can be learned in 2 years (Petron et al. 2014). Research consistently shows, however, that additional language proficiency can take between 5 and 10 years (Hukuta 2000). The key staff, that is, the student 'champions', had deeper understandings of the complexities of additional language acquisition. These understandings of language acquisition were evident in their teaching practices. Their teaching focused on explicit modelling of the tasks to be completed (Carney and Indrisano 2013) and careful differentiation of tasks to meet the different starting points of the learners. Rafi's mainstream mathematics teacher described the way in which she catered for his needs while still attending to the learning needs of the mainstream learners in her class. Her practice reflects the three pedagogical principles Gibbons (2006) describes for effective EAL teaching: use authentic curriculum contexts to ensure learning is

purposeful; ensure tasks are intellectually challenging and provide support to meet the challenge.

> They all work at their own pace through different sheets – so it's really, totally individual work at the moment, this semester. I just say, okay, I need to do this with you because you want to do this level course for engineering, for example. And you need to stop doing algebra because you want to go to this level course. (EAL teacher)

The mathematics teacher also changed her instructional processes in dramatic ways in order to meet the specific needs of these learners. Realising Rafi and his colleagues had substantial gaps in their mathematics knowledge, she began using 'concrete' methods to teach some basic mathematical concepts. This was a very different approach to her usual year 12 mathematics classes, which are highly abstract.

> I was trying to teach them how to find the perimeter of a semi-circle. So I coloured it in green, drew a little animal and started talking about, what's the length of the fence? I kept going on and on about this fence. I thought, I'm doing a really good job here; they're really getting it, until one kid puts up his hand and goes, what's a fence? To talk to – they had really quite good English skills, so I just assumed they knew what a fence was. (Mainstream staff member)

This mathematics teacher's efforts to differentiate her teaching and make it more accessible to the EAL students clarified even further for her the challenges these students have in accessing the mathematics language used in the classroom (Adoniou 2014). This anecdote highlights the necessity for teachers of understanding the different language 'types' students must master in order to be successful in the school environment, which Cummins (1981, 2015) had identified broadly as basic interpersonal communicative skills (BICS) and cognitive academic language proficiency (CALP).

Importantly, these key teachers also understood the value of the learners' first language in the learning of English, a language learning principle with an established research base (Cummins 2000; Kiernan 2011; Myers 2014; Pérez-Cañado 2012). Their understanding of the value of the first language was in contrast to the majority of teachers in the project who made no mention of the students' first languages or a minority of teachers who felt the use of the first language was a hindrance to English language learning. Cummins proposes that believing that a first language hinders the learning of English is constructing a disadvantage. On the contrary, having English as an additional language is not an inherent disadvantage. Alternatively, a school can view this as a linguistic asset.

Rafi's mathematics teacher explained:

> Some teachers don't like students to speak in a language other than English in a class, but I think if you encourage them to explain to each other – because usually someone gets what you're talking about and you say, can you tell him the Persian word for that? So rather than just saying, no, you need to learn your English, practise your English, recognise that sometimes it's useful for them to speak in another language. (Mainstream staff member)

6.2.3 Teachers as Mentors

The students themselves frequently mentioned specific teachers – their champions – with whom they had formed a special bond. These teachers supported them in all aspects of school life, both their work within their school subjects and also the processes of school – e.g. class choices, enrolments and assignment submission procedures. These key staff were instrumental in providing vision for these students, urging them to aspire and imagine a better life for themselves. 'Aspiration' is a capacity that is frequently denied students of refugee origin or those from poverty-stricken backgrounds (Appadurai 2004). Rafi's mainstream mathematics teacher recounted a conversation she had with him:

> I've talked to him and asked him what he's interested in, and first of all he said construction and I said, no, you're cleverer than that, so now he's thinking engineering or architecture. I know he hasn't been to school before, but he's really a very clever boy and I've said to him, I'm going to assume, young man, that you're going to go as high as you can go, so I want you to do these subjects. (Mainstream staff member)

6.2.4 Teachers as Advocates

These 'student champions' appeared to work strategically to organise and acquire resources to develop site-specific supports for their students. Rafi's school operates a bridging program, where refugee background students exit their 6–9 months in an intensive English centre into a program which continues to provide them support with their mainstream education. This is achieved through the development of accredited classes specifically for these learners, for example, in maths and science, as well as continued EAL classes. They then move from these classes into mainstream classes when ready – they may be doing both general mainstream classes and bridging classes concurrently across different subject areas dependent upon their needs. This bridging program was initiated by the head EAL teacher at the school. It is a program that is necessarily more costly than simply sending the students into mainstream classes, and it must be funded by the school's overall budget. The program exists due to the Head EAL teacher's strong advocacy for the needs of refugee students. Over the years, the school has had three new principals with whom the EAL teacher has had to negotiate the continued funding of the program. The teacher reflected on her relationship with the principals, and her efforts to have the successful program rolled out in other schools in the jurisdiction:

> I [have] talked about the fact that we need the same program in other high schools, and that's not happened. I have talked to various people in the department about that, and you get lots of mumbles and nods and, yes, but it's about money, and it's about accountability, and it has to start at the principal level, it just does. This would not exist if we hadn't had principals that were willing to take the risks and put the money into it and say, that's okay, keep going. (EAL teacher)

Staff at the school are adamant the program would not exist without this teacher's passion, commitment and advocacy. The deputy principal at the school said:

> Amber* pseudonym (head EAL teacher) is the person who initiated and implemented and continues to develop the program. It's because of the contacts that she has with a whole range of different organisations that are also in the same business as supporting refugee students. Amber is a great operator, but very humble.

All the staff in this study were generally supportive of the aspirations of their refugee background students. However, most teachers felt that the circumstances surrounding the students, particularly their previous educational experiences, inevitably limited their school achievements. Only a small number of teachers championed these students and strove to find pathways and supports that would allow the students to continue to achieve and reach their aspirations. Some of these teachers developed programs and implemented practices that were highly beneficial to their students of refugee background. However the reliance on these dedicated individual professionals makes the ongoing success of their programs they develop fragile. As important as individuals are to the success of students, it is vital that structures and policies are also in place so that programs continue to exist even when the individual 'champion' has moved on. The following sections on policies and funded programs explore ways of implementing long-term support for students of refugee backgrounds in Australian secondary education.

6.3 Education Policies

One of the major enabling structures that can support the transition of young people of refugee background from schools to university is systemic and school-based policies and implementation strategies, which recognise students' particular needs, provide appropriately funded resources to support students and hold systems and stakeholders accountable for the policies' successful implementation. The existence of such policies and strategies can provide an important source of visibility, voice and recognition for equity groups who may otherwise 'fall through the cracks' of mainstream education.

The NSW Department of Education and Communities [DEC] annually enrols between 1000 and 1500 newly arrived students from refugee backgrounds in the Middle East, Africa and Asia in its public school system (DEC, *Refugee Education*, para. 2). The majority of new arrival refugee background students are located in Sydney, but due to a federal government policy to resettle refugees in regional areas, 'significant numbers' are now enrolled in regional cities including our case study sites (DEC, *Refugee Education*, para. 2). The key DEC policy pertaining to students of refugee origin acknowledges the diversity of students in the public system, given that one-third of students come from language backgrounds other than English (LBOTE), speak 'over 230 different languages and hold a range of

religious and spiritual beliefs' (DEC, *Multicultural Education Policy*, Section 3.1). However, there is no mention of students of refugee origin, rather they are subsumed under the more homogenising term of 'culturally and linguistically diverse background' students (DEC, *Multicultural Education Policy*, Section 1.5).

In contrast, the DEC's *Multicultural Plan 2012–2015* specifically names students of refugee background as part of its 5-year strategic plan (2012–2017). In particular, the students are noted in relation to delivering professional learning programs, employing specialist staff, providing high-quality English language programs, providing support programs including settlement and transition programs, allocating resources to schools to support their needs and collection of statewide data to 'determine trends and inform planning' (DEC, *Multicultural Plan 2012–2015*).

Policies and plans can remain espoused, however, unless specific actions are taken to implement them (Walker 2004). Moreover, policy can work to inform and reinforce a perception of 'who counts' in Australian education, with refugees excluded or having their more complex educational needs sidelined (Keddie 2012). At the time of writing, responsibility for funding students from refugee backgrounds still remains a central office function in NSW public schools and is specifically targeted for students of refugee origin (rather than being placed under a more general 'learning needs' banner). The funding is governed by resource allocations, which stipulate an additional equity loading for students on the basis of their English language proficiency (the higher the English language need, the greater the equity loading). Depending on student numbers and eligibility, this loading provides schools with EAL specialist teaching instruction and in some cases, bilingual support (DEC, *English as an Additional Language or Dialect [EALD]: Advice for Schools 2014*; E. Brace, personal communication, February 2, 2015).[3] The specific naming of refugee background students in the DEC's implementation plan, along with clear accountability mechanisms – such as vetting by central office of school expenditure – is a crucial mechanism for ensuring that support is directed to those most in need. Research suggests that the removal of targeted funding for equity groups, combined with a shift to greater school autonomy, may lead to equity considerations being sidelined when principals do not have

[3]Since the completion of our case study, there have been major changes in school governance in the NSW DEC, through its policy of *Local Schools, Local Decisions*, which aims to 'give NSW public schools more authority to make local decisions about how best to meet the needs of their students' (DEC, *Local Schools, Local Decisions*, para. 1). As part of this policy move, specialised consultancy support for refugee students from the regions largely has been eliminated, and schools are now expected to draw on the expertise of 'excellent teachers in schools' to provide this consultancy support (E. Brace, personal communication, February 2, 2015). However, intensive English centres which provide support for newly arrived high school students in metropolitan Sydney and Wollongong are still open, allocation for EALD funding is still managed centrally and responsibility for funding students from refugee background remains at central office level. Beyond 2015, it is unclear whether this will still be the case (DEC, *EALD]: Advice to Schools 2014*; E. Brace, personal communication, February 2, 2015).

the knowledge or expertise to support refugee origin students' particular needs (Keddie in press).

However, how policy and strategies are played out in schools depends on the reality of a 'policy-in-use which is adapted and altered by practitioners to suit their particular constraint structure' (Ball 1990, as cited in Walker 2004, p. 383). We now turn to a vignette from a regional high school to briefly illustrate how this 'policy in use' plays out, particularly when it comes to enabling and/or constraining pathways to university.

River High School

River High School is a large, multicultural public school in country New South Wales. Due to changes in federal government refugee resettlement policy, the town's previously monocultural demographic is now increasingly multicultural. River High School currently has approximately 35 students of refugee origin – the majority are from Bhutan and have spent many years in refugee camps. One student is a 'non-reader', and the others have varying but generally low levels of literacy in their first language. The school has two full-time equivalent EAL teachers and a part-time school learning support officer – ethnic (SLSOE) from the same refugee camp as the majority of students. The school receives targeted support from state and federal governments, but ongoing planning is a 'huge challenge' as the staffing formula is based on student numbers and levels of language proficiency and is subject to policy changes at federal and state levels. Raelene,[4] *the EAL teacher, explains:*

> All our staff are funded through the multicultural unit in Sydney so allocated funding based on numbers. That will change for next year under Local Schools, Local Decisions [see Footnote Two] but currently we get two buckets of money. One comes from the new arrivals program for students newly arrived, refugees up to about 18 months and that funding is semester by semester and then we get targeted support funding based on our phase 2 and 3 students. So students who've been here 18 months up to seven, eight years. (EAL teacher)

In our school I have a full allocation so I'm 5 days a week. We have another male staff who's 5 days a week, and then we have some people doing 2 days a week casual. So our teaching allocation currently is about 3.6 teachers and 0.8 bilingual support, but that's changing for the next term. We're losing 0.5 teaching staff and 0.2 school SLSOE.

Despite these constraints, River High EAL staff worked closely with other key staff such as career advisors and the principal to optimise the students' learning and pathways beyond school. Raelene describes this 'policy in use' below:

> Some of [the students] are now Australian citizens so they've only been here about four years … a fairly quick turnaround from a fairly non-multicultural school to becoming a multicultural school and the principal … has been very welcoming to enrolling the students particularly those post 18 of age … I do try and make sure he's aware because a lot of

[4] All names used in these vignettes are pseudonyms.

> things we do is beyond the normal teaching role but he's been very supportive of that and the whole staff. (EAL teacher)

Finally, there are a range of federal and state policies which recognise alternative pathways for River High School students wishing to transition from school to university. These include university access schemes, such as the Educational Access Scheme [EAS] – which provide bonus points for students of refugee origin applying to university study –and university early entry schemes, which are based on principals' recommendations. As Raelene explains, 'for us here that principal's recommendation early entry program is really important, where the principal can recommend students for early entry to X university'. Raelene also notes why policies that recognise and value the different pathways for university entrance are crucial:

> I think for a refugee person [recognition of alternative pathways is]really important because they may have trouble with writing and yes I need to be supported but some of them have got a wealth of knowledge and experience and skills that they could offer to the community but they've got this barrier and the barrier is the Australian Tertiary Admission Rank [ATAR]. In some ways it's discriminatory because they haven't had the opportunity to get to that level and they've had to make choices which have not really been their own choice in what to do. If it means a mark to get into a course, many of them can't achieve that mark but with extra support they may be very good at that career pathway. (EAL teacher)

Access to informed and strategic support and recognition of alternative pathways of the kind provided by River High School is critical for young people of refugee backgrounds in navigating the myriad of complex paths to university (Refugee Council of Australia 2010a, b).

It has been claimed that without specific policies or strategies for the education of refugee youth, their schooling has largely been 'left to chance' (Sidhu and Taylor 2007). One the one hand, the existence in NSW state education of departmental implementation plans and resources which specifically recognised and resourced support for refugee background students – along with policies and programs which provide alternatives for equity groups when it comes to university entrance – has partially minimised this element of 'chance'. On the other hand, much of the support for students remains heavily reliant on the good will of individual schools and staff, in order to make up for funding shortfalls.[5] Consequently, schools are now turning to non-government, charitable programs to fill the gap.

[5]Despite a 40 per cent increase in EALD students in NSW, the concurrent increase in funding has been 14 per cent (E. Brace, personal communication, February 2, 2015).

6.4 Community and Learning Engagement Programs

As already highlighted, the ability of refugee background students to successful transition from school to university depends largely on how support programs are structured and implemented in schools. The more successful and productive transition programs are those that involve, engage and collaborate with a range of key education stakeholders. Apart from formulating targeted activities that can aid positive education adjustments, the stakeholders that include students, parents, schools, universities and not-for-profit, government and religious agencies create a sense of community and network in which potentially vulnerable students can thrive. In ACT and NSW schools, for example, collaboration among various stakeholders has brought about commendable enabling programs with regard to transition support and pathways for refugee background students.

According to Dickson College (2014), Naidoo (2011), and Department of Education and Communities: New South Wales (2014), programs like the Refugee Action Support (RAS) program, Learning Education Aspiration Participation (LEAP) and the Refugee Bridging Program are some of the more successful school-community/university partnerships that have been implemented to support the transition to school and to university education. Additionally, and on the one hand, there are a number of transition intervention initiatives and programs being implemented at various schools and communities, for example, homework centres, after-school tuition, Refugee Transition Program (RTP) and scholarship programs (e.g. see Ashfield Council 2013; Dickson College 2014; Fairfield High School 2014; Holroyd High School 2014; The Smith Family 2014). On the other hand, there are also university-based transition support programs that target students with disadvantaged education background both entering and during their initials stages at the university. Two of these initiatives are the Higher Education Participation and Partnerships Program (HEPPP), a mentoring and support program for students from low-socio-economic settings, and the Educational Access Scheme (EAS) which provides bonus points for students of refugee origin applying for university study (NCSEHE 2013). What makes some of these programs effective?

One of the key findings from the project 'supporting school-university partnerships for refugee students' access and participation in tertiary education' (Naidoo et al. 2015) is that more successful transition pathways from school to university depend on the extent to which the school-community activities are embedded in the school programs. In the three locations where the study was conducted, many of the participants named a productive school-community engagement as a critical enabling factor which supported the transition processes. This section will draw on responses from the project participants to illustrate the importance or otherwise of a selected whole-school and community approach with regard to supporting refugee background students.

6.4.1 Intensive/Introductory English Centre

During the interviews for this study, most participants reported that IECs can better support refugee background students to have a smooth transition to mainstream education if teachers become more realistic and proactive in the transition process. That is, if IECs can work more collaboratively with other community support programs, for example, the RAS program. The following vignette helps to further illustrate the need for strong school-community ties.

On arrival to Australia from a refugee camp in midyear, Sam who had had interrupted schooling was assisted placed in an intensive/introductory English centre (IEC)…. To further enhance his transition pathways, the school assigned him a RAS tutor (from a local university) to support him with his academic work. During the interview, Sam said that the RAS tutor had become a friend and had not only helped him with his class work but more importantly how to understand the 'kind of education' in Australia, the nature of university education and how to work hard to join university.

Here, the RAS program complements the IEC's work as well as acting like a conduit for both academic and social engagement. It is an enabling practice that provides refugee background students with social capital and the networks needed to disrupt what may appear as a complex education journey. A closer look at the RAS program will help to understand how it has been helpful in the transition process for students from a disadvantaged education background.

6.4.2 The Refugee Action Support Program

The Refugee Action Support (RAS) program is an example of an effective school-university partnership that benefits the local community while improving educational outcomes for students. It is a program that assists refugee background students with homework and study assistance in primary and secondary in NSW and ACT and was established in 2007 (Australian Literacy and Numeracy Foundation 2009). Through the RAS program, a partnership between the Australian Literacy and Numeracy Foundation (ALNF), UWS, CSU, the University of Sydney, UC and the NSW Department of Education and Communities, pre-service university students are recruited, trained and placed in participating schools (Ferfolja and Naidoo 2010). With increasing diversity in Australian schools and the implementation of the Australian Professional Standards for Teachers by the Australian Institute for Teaching and School Leadership (*AITSL*), both the tutors and the refugee background students benefit from the program. For the university tutors, the time they spend with the participating students enables them to deepen their understanding of diverse learners and their learning styles. By the end of a successful tutoring period, the university tutors gain certification that may be used, for example, as part of the evidence against the AITSL's standards. That is,

pre-service teachers may utilise their engagement in the RAS program to 'demonstrate knowledge of teaching strategies that are responsive to the learning strengths and needs of students from diverse linguistic, cultural, religious and socioeconomic backgrounds' (AITSL 2014).

Though literacy and learning support are the prime goals of the RAS program, the university tutors also often end up serving informal mentor roles for the youth. Many of the refugee background students receiving assistance have had their educational paths interrupted on their journey to Australia and come from families with no tertiary education experience (Brace 2011). How is the RAS program supporting school-university transition?

In one of the regional high schools, Mia who was in year 12 at the time of the interview said that she had been working with RAS tutors from a local university since year nine. Initially, the main challenge was how to understand the Australian classroom demands. Mia said that because the teaching and learning approach in Australia was different from what she was used to in Burma, completing assessment tasks was very difficult, but by working with a university tutor and 'asking a lot of questions', she was becoming an independent student. As she was preparing to do the HSC exams, Mia reported that the tutor had helped to decide where and what she wanted to do at the university. The tutor also advised her on how she could work through her class work and managing time, so she can spend enough time on past papers and class work as well as preparing for exams.

The above vignette demonstrates that successful transition agenda such as the RAS program is enabling refugee background students to work towards achieving desired learning outcomes.

Similar observations regarding the need for an effective school-to-university transition support programs for students who are not only new to the Australian education discourse and context but are also from a disadvantaged education background were made by the teachers and the school support staff who participated in the project.

> I think for us that's the main area because the girls need that support. They need the support to see what happens at uni. They need the support in completing university admission forms. They need to see that as a refugee student they actually can achieve some success. (Mainstream staff member)

Responses like the above point to examples where the school and the community including the local universities have combined resources to create enabling practices that support vulnerable students.

Through this win-win partnership and pulling together of resources, 'over 1500 tutors – have volunteered their time to assist children and young people of refugee background settle into school in local communities' (ALNF 2016). In Blacktown area of NSW, for example, more than 30 schools (both primary and secondary schools) have been involved in the RAS program (Brace 2015). In 2012, about 300 tutors were trained to support over 600 vulnerable young learners. Their successful stories of the program were featured in the *Sydney Morning Herald* (e.g. see Han 2012). In a regional location, one high school had had more than

90 tutors working with 130 students by the end of 2013 (Brace 2015). More recently, the Refugee Council of Australia, the Human Rights and Equal Opportunities Commission and the MacJanet Prize for Global Citizenship highlighted the RAS program as an exemplary support network enhancing transition into Australian schooling (ALNF 2016).

The next selected program is another university-driven transition support practice which involves enculturation and immersion of the refugee background students in a university environment.

6.4.3 *Learning Education Aspiration Participation*

Learning Education Aspiration Participation (LEAP) which is part of the social inclusion initiatives at Macquarie University is another successful program for mentoring and supporting refugee background students. The program is one way of 'engaging with schools and communities to ensure that students from disadvantaged backgrounds also have the opportunity to access and succeed in higher education' (LEAP 2012, p. 4).

Like the RAS program, mentoring initiative at Macquarie University is run mainly by university student volunteers. A key aim for the program is to provide a space and conducive environment for the refugee background students to explore available resources, support and pathways accessible to them while making complex choices regarding transition to tertiary education (NCSEHE 2013). Through their engagement with the university mentors, the students develop positive bridging social capital that allows the refugee background students to trust their own university education career decisions by building on the knowledge and the support they gain through the LEAP program networks. The vignette below is an example of how the LEAP program has supported the participating student transition from school to university.

Alex is a student support staff at a girls' high school in Western Sydney. As part of her role, she coordinates the LEAP Macquarie Mentoring Program. Alex wants year 11 and 12 students from a refugee background to actualise their aspirations of having a university education, so she organises mentors from the program to get a good idea of what really happens at university and what it takes to get there. The mentors help the mentees to set goals and time management strategies. They also look up university course information and occasionally arrange visits to the university where the mentees sit in different lectures and have some hands-on science experiments. Mentees' understanding of the university environment and the admission requirements is broadened, and this motivates them to pass their high school certificates.

When asked if some of the girls have been able to enter Macquarie University as a result of working closely with the mentors, the support staff member said, 'the girls who went on to Macquarie Mentoring – quite a few of them. . .have gone on to Macquarie University' (university support staff).

6.4.4 Refugee Bridging Program

The final example of a successful refugee transition initiative is a school-based program being implemented in ACT and alluded to earlier in this chapter. The program, which targets refugee background students aged 16 and over, is an initiative of Dickson College in ACT. In the final years of high school, students who may have had interrupted schooling experience are enrolled in the Refugee Bridging Program to facilitate their transition to further education or into the workforce (Dickson College 2014). Zaida's vignette below further illustrates the strength of the school-based bridging program with regard to supporting exposed students from a refugee background.

Zaida, a year 12 student, said she arrived by boat to Australia and had been living in a detention camp before being released to the community on a temporary visa. She said that upon release, and given the strict and limiting conditions on her visa, she was unable to access any substantial support except at school. Through Zaida's participation in the Refugee Bridging Program, the intensive English classes and the support of the teachers, she had been able to learn many life skills strategies including how to succeed in education. When asked whether she wanted to go to university, Zaida was very positive. She attributes her aspiration to the activities and events delivered as part of the bridging program, for example, speakers from different tertiary institutions had been invited to talk to the students. Through this opportunity, Zaida learned about available scholarships and some pathways to university, and she was more determined to transition to university.

It is, therefore, clear from the selected programs and the vignettes that with effective enabling practices and productive school-community engagement, refugee background students can succeed in transitioning from school to university against the odds.

The success of the highlighted support programs is, however, not without challenges. Any transition support initiatives need to be highly resourced, financially stable and sustainable in order address the complex needs of young refugee background learners. Naidoo et al. (2015) asserted that some of the learners have 'different and acute needs that require structured intervention programs and policies to enhance their education success' (p. 121). Given a number of community support programs are often funded through short-term organisational initiatives, government tenders and/or through philanthropic donations, their longevity is constantly under threat. It is, therefore, critical that any transition agenda takes into consideration potential risks and the implication to the vulnerable Australian children of refugee background should support wind up unexpectedly or a shift in refugee support policies occur drastically (Australian Human Rights Commission 2013; Keddie 2012). Ensuring the learners are supported to manage their own transition to higher education independently within a short period should also be prioritised by support agencies to disrupt a culture of dependency.

6.5 Conclusion

While this chapter highlights the complex barriers that refugee background students have to overcome to be successful at school, it focuses more importantly on the enabling and successful structures and practices that have become distinct markers of and pathways to successful transition in everyday schooling. The three salient themes of teachers as champions, education policies and community and learning programs have all demonstrated the complex nature of schooling for refugee background students.

However, despite evidence of enabling practices in some Australian schools, the delivery of effective, sustainable support for transitioning refugee background students to higher education is not yet an established priority in Australian education. We acknowledge, though not negating the enabling support mechanisms and practices of some schools discussed in this chapter, that an overall shift in refugee rhetoric in Australian education policy is necessary to have positive educational outcomes overall. Part of the problem is that many of the current school support programs are fragmented and located mainly with the EALD teachers, many of whom are student champions. The discussion in this chapter has shown that a reconceptualisation of support is necessary and should involve a shift from a limited focus on generic literacy skills to one that integrates language with intercultural communication and social practices of meaning making and interpretation across the curriculum. The support needs to be fully integrated into disciplinary pedagogic practices, recognising that discipline-based constructed knowledge needs to be mediated as well as modified (Arkoudis 2014). As indicated in the chapter, language is not the only challenge facing educators that work with refugee background students. Cultural differences exist between the teachers and the students as well as cultural differences among the students. Curricular policy and critical literacy strategies will enable teachers to work with the challenge of equity and access and ensure that the issue of refugee education and transition is brought to the forefront. Since critical literacy practices are grounded within the contexts and the lived experiences of the participants, curriculum should grow out of the current issues facing a community so that the focus becomes one of teaching students rather than content.

Moreover, the discussion has shown that with shifting demographics, education policy needs to move beyond the homogenising and uniform approach based on protocols of the past to provide meaningful and enabling strategies for everyday teaching and learning. Additionally, despite the current ongoing support for refugee background students from the New South Wales Department of Education and Communities' equity unit, changes within the NSW Government relating to the new education funding model discussed in this chapter will be a challenge that the schools must confront for the continuing sustainability of any program or initiative that targets and supports refugee background students. A specific policy approach with adequate funding and support for supporting refugee background students in schools throughout Australia is therefore necessary, while 'capacity building' for

all teachers and pre-service teachers working with refugee background students is essential.

Further, the chapter has shown that by developing school-community partnerships, students, teachers and administrative staff have the opportunity to better their understanding of other cultures. Partnerships between schools, community and university can provide new insights into the complexity of the many critical issues facing refugees in education today and provides a method for schools to meet human social and academic needs as well as value the unique contributions of the different cultures and groups in society to our world community (Naidoo 2010).

The partnerships between schools and the community increase student achievement and efficacy, but the unique life circumstances of refugee background students, often rendered invisible except through the work of exceptional teachers, are textured in the everyday fabric of the schools under review in this chapter. It is evident that the complexities of the refugee background students' prior life experiences have enabled them to develop different coping mechanisms with the support of the school and staff as they negotiate and traverse the space of the classroom. In many instances, this is due to the particular school context and environment that enables the students to develop forms of capital to cope despite the adversity that they have endured. Reciprocity between certain staff and students at the school activates bridging capital because it allows the diverse groups to link and for information to be diffused (Putnam 2000). Finally, this chapter has shown that in the global movement of people in Australia and shifting demographics, school structures and practices are enabled and strengthened as transnational individuals navigate and negotiate the crossing of borders while transitioning to post-school options.

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Chapter 7
Informal Education and Learning Pathways: Supporting Livelihood Trajectories of Indian Women in an Urban Slum

Supriya Pattanayak and Narasimham Peri

Abstract How does a school dropout navigate livelihood alternatives? Does transition for an early-school dropout vary from that of a high-school dropout? Recent research in these scenarios of post-school transition to employment has highlighted the influences of extraneous factors like socio-economic status (SES) and influences of the local labour market area (LMA). However, the labour market effects that condition livelihood options may not be the same in the context of a developing country like India, where the proportion of unorganized employment sector is relatively higher with the social context as well as basic education achievement particularly challenging for women.

This chapter examines a unique case study located in an urban slum environment in India that traces the trajectories/pathways adopted by poor urban slum-dwelling women to navigate various livelihood alternatives that are outside the mainstream school education. It further highlights the leadership roles these women assume to traverse these pathways. It traces the gender-related opportunities and constraints, as well as a reliance on life skills, calling into question interventional strategies of education for livelihood outcomes.

7.1 Introduction

The role of women in economic development is vital to achieve inclusive growth. Entrepreneurship is one of the means to involve women in nation building and economic development. Till the 1980s, very few women undertook entrepreneurial activities in India. The decade 1980–1990 witnessed several institutional initiatives towards women entrepreneurship. It is only after the liberalization of Indian

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economy in the 1990s that opportunities poured in, and along with institutional support, women's entrepreneurship started to expand. Since then, much has been written about entrepreneurship, especially about micro-mini-nano entrepreneur (Mohanty 2015). Yet we see a mixed bag of results. Women not only have to work harder than men to prove their credibility and succeed, but they are also faced with discrimination and scepticism by society (Nagammai 2005). In this chapter we not only try to explore entrepreneurship but also have attempted to examine and support the trajectories of school dropouts, particularly women to navigate livelihood alternatives. We explore if education is an intervening factor in livelihood options chosen by women in a slum community. We do this by analysing the life worlds of two entrepreneurs from the Urban Micro Business Centre (UMBC), a unique experiment of informal institutional support – a facilitation centre – to understand what is involved in the transitions for women to adopt different livelihood options in an urban slum area of Bhubaneswar, the capital city of Odisha on the eastern coast of the Indian peninsula.

7.2 Two Case Studies

Mamata Mallick and Mehran Bibi are individuals from marginalized social and economic communities with very little exposure to formal education. With barely any school experience, they go further than the definition used in recent studies (Rumberger and Lamb 2003, p.354) for school dropouts. Their access to school education was limited, for reasons specific to their circumstances. Their livelihood options were personal choices of trade and evolved on their learnings in situ, in their slum environment. They have both benefited extensively from the UMBC, which is covered in more detail later.

Mamata Mallick is a mother of two children – 7 and 6 years old – and her spouse drives an autorickshaw (a three-wheeler on hire) for a living, making about 8 USD (1 USD = 64 Indian rupees) in a day. She is 25 years old; having been married at the age of 17, she dropped out of school – as is the practice in many rural households. She shifted to the city, after her marriage, and, at the time of the interview, was a resident in a slum that provides her a two-room dwelling with power and utilities, although the tenancy rights she enjoys are extremely precarious. She is currently an entrepreneur, trading in ready-made garments, and commands a small premium for her quality products amongst customers from her slum area and the neighbourhood.

Mehran Bibi is 40-something. She cannot remember her correct age as she dropped out of formal school after her fifth year of education. As migrants from the neighbouring Bengal state, her family settled in the city, in the slum area for over 21 years. She is the leading breadwinner for a family of five that includes a spouse who is disabled, two daughters and a son. Her parents' family traded in domestic cleaning products made locally, mostly hand brooms, which are traditionally used to sweep households. However, upon settling in the city, Mehran Bibi ventured to grow her son's business of footwear and leather accessories (the family

lost the earning adult son a year ago, in an accident) that she currently manages with help from her spouse and is looking to expand her business.

We begin with these two anecdotal cases to touch upon the primary issues involved in women's livelihoods and learning transitions and trajectories. This chapter traces the learning pathways for women school dropouts as they navigate livelihood options in a challenging environment. Social and economic privileges permeate through perceived formal education in the Indian society (Dreze and Sen 1995; Rao 2010), and the interventions of learning and education are embedded in a larger policy of social advancement. However once that larger decision point of achievement is reached, livelihood alternatives challenge the formal inputs that are limited in the context; the decontextualized learning permeates the daily experiences – individually and collectively – and our argument is, if channelized through an appropriate institutional mechanism, it can create a learning as well as enabling opportunity for those transitioning schools (completion or interruption) into livelihood. We examine an informal and responsive institutional intervention to enable transitions into livelihood from a uniquely situated experiment in a poor urban locality.

7.2.1 The Demographic Context

The city of Bhubaneswar is the capital of the eastern state of Odisha in the Indian peninsula. It is one of the newer cities in India, developed as a 'planned city' in an originally historically rich landscape. Its culture competes with its commercial importance, and the city boasts of several historical and cultural landmarks. Over the years, its original plan expanded into a vast cluster of suburbs, many of which mushroomed with disregard to the original plan of the city. As a result, several slums developed in pockets across the city. One such slum adjoining the international airport in the city is the location of this study.

Bhubaneswar has a population of a little over 840,000 (Government of India 2011), out of which 397,000 are women. Literacy of the women is pegged at 88.73%, which is substantially higher than the national average.

The slum is predominantly a residential layout of homes for the marginalized or low-income families, who are largely involved in segments of the informal economy (Breman 2013). They include labourers, petty traders, street hawkers and others – very few of them in formal employment with structured benefits. Many of their family members too are involved in secondary vocations, augmenting the family income. Even as some of them are part of the peripheral service economy, they are marginalized to the economic growth and indeed the boom seen in recent years in many Indian cities.

The National Commission for Enterprises in the Unorganized Sector (NCEUS 2007) estimated 73.4% of workers in the sector having an educational attainment of year 8 or below, while 37.4% remained at primary school levels or below. In the urban areas, particularly for women, these numbers stood at 77.8% with 49.3%,

respectively. The report suggests that this situation could be the predominant cause for this segment losing out on the livelihood opportunities from the emerging markets, largely a consequence of liberalized economic policy and globalization.

The respondents to this study, in a way, are a representative sample of this trend. The occupations that they chose are restricted not by any technological barrier but by the scope of their own knowledge in the trades. They do not have the buoyancy that exists in other service sectors, and social mobility is almost unheard of. Even as consumer products have found their way into their lives, their life as earners is severely restricted by (a) a lack of education, (b) lack of access to technology for occupational reasons, (c) risk-bearing capacity and (d) lack of confidence. Their awareness and limited identification of opportunities, as a result, are limited by the products and technology of daily use and sight, not acquired through formal knowledge or peer group interactions, as many of them have attended 5 years of school or less. Their reluctance to grow their business is often due to the lack of access to finance, and therefore their risk-bearing capacity is low. Evidence suggests a strong link between collective action and women's agency which leads to high levels of confidence and gender equality outcomes (Evans and Nambiar 2013). Since many of the women in the urban slum have to supplement the family income to meet their subsistence, collective action as a strategy to harness the power of the group has not been adequately explored by the group leading to a lack of confidence amongst women.

7.2.2 The Urban Micro Business Centre (UMBC)

Eleven women in the slum have been participants of a series of interventions of an informal institutional setup called Urban Micro Business Centre. The UMBC was conceived as a facilitation centre for employment and entrepreneurship – particularly for women in the slums. It was not envisaged as an employer but a training ground for women to transition to an entrepreneurship or seek employment elsewhere with their skills nourished within the UMBC ecosystem. The entire model was a see-learn-do model with an emphasis on hands-on learning. For beneficiaries like Mamata and Mehran Bibi, the UMBC functioned as a microfinance organization financing inventory amounting to $250–300, to support their businesses. The repayments were in small weekly instalments, during a session where all the women came together to share their experiences of the local market, supplies, trends and the challenges they faced in their own businesses. The mindset of repayment to the UMBC was strong and established as a norm by the group; at the same time, there was a sense of empowerment within the group that de Hoop et al. (2014) identified in their studies of women self-help groups in Odisha. In the interviews with the beneficiaries, they talked about the occasional defaulters – who did not turn up for the weekly sessions – and the peer pressure on them to return the monies. The interviews highlighted the feeling amongst the beneficiaries of the repayments being circulated for other deserving members within their group.

The institutional support initially identified vocations easy for women to adopt, which did not require any prerequisite knowledge or skills, and included spice making and tailoring. Some value added in terms of training to supplement the existing rudimentary knowledge only enhanced their abilities further. These were identified as easy-start vocations with minimal investment in allied machinery. Further, a linkage was established with the help of the government agencies for all those who 'trained' at the centre to seek assistance financially. The buy-back arrangements allowed for a guaranteed income for the women. The UMBC facilitated the procurement of raw material and packaging. The facilities of the UMBC were loaned to the women until the time they could establish their own business, mostly at their own homes.

The UMBC was set up under the aegis of the National Urban Livelihoods Mission (NULM) which lists occupational vulnerability as one of the many variables affecting urban poverty (NULM Draft Policy 2013, p.2). The target population for UMBC is precisely this category that is susceptible to precarious livelihoods and a dependence on the lowest form of informal sector occupations. Entrepreneurship is negligible, and financing options are few without support of bank accounts, guarantors, collateral or sometimes even identity documents. The unique positioning of the UMBC seeks to address these very gaps in setting up the beneficiaries in the role of entrepreneurs. The draft policy document goes on to specifically identify women as a disadvantaged subcategory even within this population, given the social structure within which they are located. The UMBC therefore focuses on recruiting women into the enablement programme. This chapter reports on some results of the study on women's transition to entrepreneurship and the influences in navigating livelihood options.

The facilitation in terms of basic business and accounting skills and upgradation of existing technical skills, inventory and linkages to finance, provided by UMBC, have led to 'livelihood transitions' from subsistence oriented to a commercially viable entrepreneurial mode of operation for women in the community. It is expected that such transitions of a few women will lead to a transition at the community level, to both explore the multitude of opportunities, both in terms of flexible educational, employment and entrepreneurship models. Here we have explored the role the UMBC has played in livelihood transitions of women.

7.3 Research Method

The life stories of the participants were recounted through the interviews and the information that was shared at the time of enrolment with the facilitators. The UMBC facilitators were familiar with all the participants, and this comfort level was carried into the formal interview sessions with the researchers. Various sociological studies have underlined the importance of a qualitative, semi-structured form of interviewing and participant observation, to unearth the themes arising from individual stories (Denzin and Lincoln 2011). An ethnographic approach

allowed for shifting the line of enquiry from the known facts at the training site to the unknown narratives at home and the marketplace. The field site, therefore, was an amalgamation of the UMBC, the local market area and the slum surroundings – with the interview comments filling in critical details. The subterranean learning process was inferred from observations of how the participants conducted their lives and livelihoods, on a daily basis, with the cultural, social and gender nuances. de Certeau (1984, p. 117) has pointed out that *space is practiced place*; it is through overlapping and intersecting practices boundaries get blurred. The relationship between the local and the non-local and the manner in which they mould each other thus becomes evident. Ethnographic perspectives are not only processual but also a reflection of historical developments. Thus the researcher becomes the author of a *thick description* (Geertz 1983) that involves an analytical framing of the realities of people, in this instance, women from the slum.

To understand the learning curve traversed by the beneficiaries, it is important to consider the social structure of the slum area itself. Its location alongside a busy road provided access to the other parts of the city; the local labour market area (LMA) was within the vicinity of roughly 1 km^2. The location of the UMBC was across the road from the slum, within easy proximity of the women. A day-care centre set up at the UMBC was a welcome step for the women, who had smaller children. This allowed for informal interaction with the women and provided a neutral ground for the discussion of peripheral issues relating to their lives, enabling the facilitators to establish a relationship of mutual confidence. The research attempted to interweave the lived experiences of the beneficiaries with the influence of the UBMC and to evaluate the learning opportunities presented to them through this institutional structure, with a desired outcome of creating new trajectories.

In the group of 11 participants that constituted the pilot (out of which the detailed case study covers two), two of the women were migrants from Bihar and Bengal – both neighbouring states of Odisha. One of the participants could understand and speak rudimentary Odia (the regional language of the state) while the other was a native speaker of the regional language.

The facilitators used English to make field notes, but the conversations as well as the explanations were in Odia. The participants were familiar with the terms used in their respective trades, as well as the accounting concepts in the local language. The facilitators took care to use the words in the local dialect wherever possible: for instance, the word for interest in the Odia dialects spoken on the southern fringes was *kolontoro* (whereas in other regions the word *suddho* is used) and gave the comfort to the participants in the group who were from that region. The meetings in the UMBC were clearly egalitarian with the people mingling freely and exchanging market information or learning practices.[1]

Critical incidents from their weekly meetings were recounted with the project director, and these were brought up in their individual interviews, for both background checking and confirmation and as increased validation of the ethnographic

[1]Interview with Project Director Subrat Dash, 15 September 2015.

approach. The summary view was in a way not to lose the sequence of learning events for the participants that would otherwise have come in through a longitudinal survey. The aggregation of individual learning and the acceleration through the knowledge mechanism of the UMBC were important in our view, to examine the success factors and the gaps from such an intervention. The latter were evident in the few cases that were in default and picked from the payment registers of the UMBC. During the interviews, attention was paid to the individual backgrounds with respect to their formal education, linguistic background, family sensitivities and financial commitments to the UMBC, even as their consent was sought for using their information. The project facilitator exercised a paternalistic approach to seek information on what their learnings were on money management on a daily basis, why they borrowed beyond a limit, how they accessed market opportunities and the challenges they faced being predominantly women. One of the interviewers being a woman also helped in navigating the conversation on sensitive matters like spousal support in their businesses. This was an important aspect given the social structure existent in the slum. The interviews themselves were in a semi-structured form, to call out the demographic influences as well as subterranean learnings that were not visible to the UMBC facilitators as well.

7.4 Learning Frameworks

In her work regarding the historical impact of vocational enablement in the informal economy, Singh (2001, p.221) highlights the role that a microenterprise can play in addressing the problems of the marginalized in an informal sector. She adds, for women, the need is to be equipped with independent and critical skills. To reach the marginalized, an informal institutional mechanism in the form of peer-help groups goes a long way in empowering women, assisting them in making informed decisions and negotiating for themselves in their daily life situations. The learning pathways associated with non-formal methods are largely experiential in nature. They are additionally bound by social structures and economic realities in which they are situated.

The UMBC was institutionalized in a multitude of roles – as a mentor resource, a meeting place, a semiformal mechanism of financial and market support, as well as a learning organization. It was set up as a partnership venture of the Central Government, India; State Government, Odisha; Centurion University of Technology and Management, Odisha; and with donors, a not-for-profit organizational vehicle. The enablers, both in a real sense and perceived, came from the partner agencies. The ecosystem is represented in Fig. 7.1.

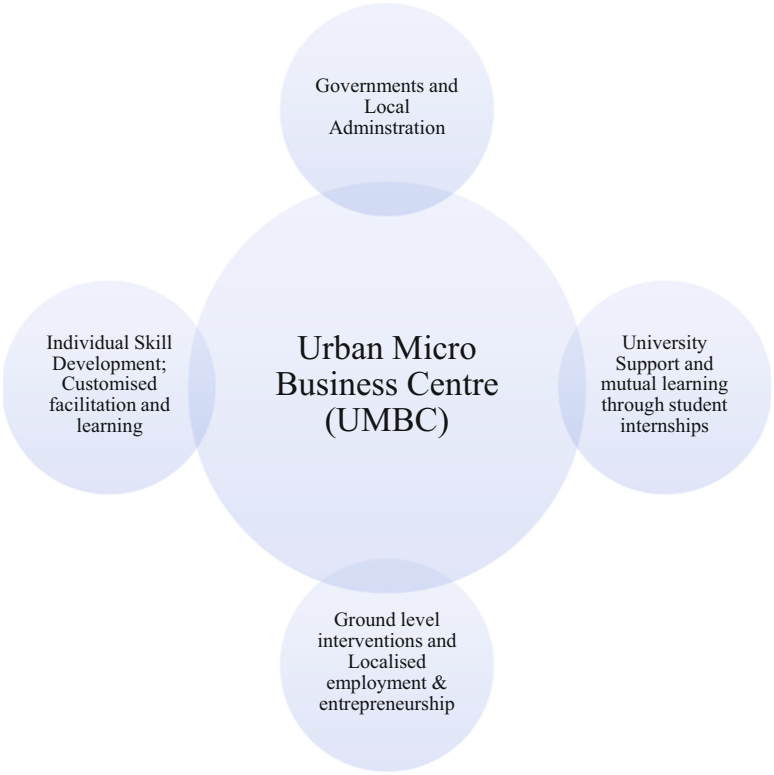

Fig. 7.1 The UMBC ecosystem

7.5 Recruitment and Training

7.5.1 Learning Trajectories

The UMBC relied on the strength of weak ties and the socio-spatial context (Granovetter 1973; Rutten 2014) in recruiting the trainees and adapting their learning methods, such that school dropouts transition to entrepreneurs. All of them were women from amongst whom key role models were identified – those who had started their own businesses in some form or those that were known as articulate influencers. As interested 'applicants' walked in, their 'profile' was carefully vetted. The profile in this case was their economic status (whether sole or supplementary wage earner) and a level of clarity for pursuing a trade or business (the UMBC did not push a business idea; this had to come from the individual). A point to note here is the contrast in a formal education-employment axis, where the level or nature of education is essential criteria for selection to a job or work output. In other words, prior formal education was considered as an enabler, not as criteria for selection. Referral endorsements were key to recruitment, to position the

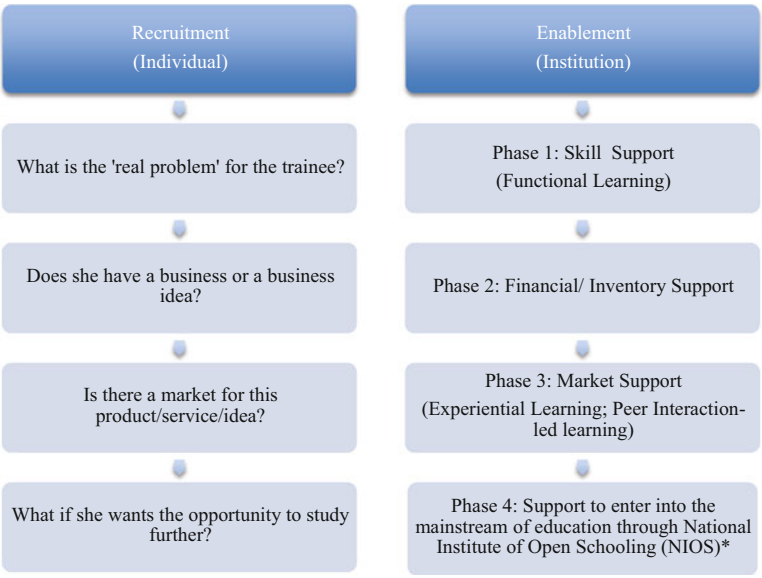

Fig. 7.2 Individual learning and enablement (http://www.nios.ac.in)

UMBC as well as the intervention strategy for high impact. The support staff was also recruited from the slum area, to induce a sense of familiarity, when the beneficiaries walked into new surroundings.

The phases of the intervention by mapping needs of the individual to the actions of the institution are shown in Fig. 7.2.

One of the critical efforts by UMBC is the individual focus of the entrepreneur, without 'boxing' her into any predetermined role or nature of funding. This lack of a generalized classification helped create a separate enablement as well as learning pathway for each individual. This was a necessary step in order to make the individual prepared for the eventual launch into an entrepreneurship trajectory. In varying degrees, the beneficiaries had customized inputs on functional tips of the trade or occupation, to extended market support. In between they were coached on basic financial arrangements and calculating simple workings of principal, interest, margins and costs.

The second phase of learning – indeed adult learning principles based on experience (Ileris 2008; Rutten 2014) – emphasized on the experiential basis of learning from the real-life market situation and face-to-face interactions amongst the women entrepreneurs. The functional skills were reinforced by scenario discussions amongst the women themselves and to an extent by the facilitators who explained the outcome of the scenarios for making possible trade decisions. The UMBC's emphasis on the engagement of the work evolved into a new interpretation of 'learning to earn' (Friere 1973).

Finally, sitting outside the box of this learning framework provides opportunities for women to continue their studies if they so desire. Here the University's role

becomes prominent by facilitating the enrollment of those interested in the open schooling system[2] and then continues in the formal schooling route.

7.5.2 *Assessing the Trainees/Participants (Would-Be Beneficiaries)*

Both Mamata and Mehran Bibi had reconciled to their lack of education to different social factors – predominantly marriage and subsequent migration to the city. To a specific question on whether she would have liked to continue her studies, Mamata replied in the affirmative, but without any rancour or disappointment:

Education is exciting to me, I could have studied in a school if only I could. In the condition that my family was, I don't think I could have continued much further". She continued, "the need however to learn now is different. As much as I would like my children to study because there is respect to education, I think my learning outside of school has been good". "Jethiki hela, sethiki chalibo (what I got, I think it is enough).

To the same question, Mehran Bibi was more indifferent. She mentioned education as a low-priority avenue when livelihood demands were strong for her family:

As all of my family members were expected to contribute to the family income, going to school was not a priority.

Both the situations, seen through Bourdieu's (1974) lens, would accord to education a lesser form of transformative agency. In other words, education as a liberating mechanism driving aspiration and achievement satisfaction is not seen in these contexts. It is a linear explanation of prioritizing availability and needs. Our view is more of a calibration of aspirations to the visibility of realizing them, within the constraints of the prevailing socio-economic conditions. It is not very different from the conclusions drawn from rural studies in the neighbouring state of Chhattisgarh. The social element is also uniquely microeconomic, given the realities of marriages having two expected outcomes: expensive for the families and, ironically, a new source of livelihood for the woman, albeit initially as a dependent. Some of these conclusions regarding education not driving aspiration were because there were no avenues for pursuance of formal education until recently once a student dropped out from school.

[2]National Institute of Open Schooling (NIOS) facilitates re-entry into the formal education system for school dropouts and others who have not had access to prior formal education. A learning credit system allows them to seek high school certification through a structured instruction and examination system. http://www.nios.ac.in

Mehran Bibi: My family comes from Bengal. We used to speak Bengali at home. But after moving to Odisha, we speak Odia more, even though both languages are known to all my family members. When I moved from my village in Bengal, to Cuttack, and then to Bhubaneswar, it was a big shift for me from the village life that I was used to (smiles). It was livelihood after marriage and with my husband not being completely well, I had to initially support my son. . .I then took over the business after he left. There was no time to think of a particular business than the one that I was seeing around me in the house. My husband helped me somewhat, but it was clearly my responsibility. He didn't come in my way. He had no other option, he is sick and cannot go out to work.

Mamata: I was used to the city. Somewhat. My children came early in marriage. As they were growing up, my husband was supportive. He took me to the wholesale markets in his rickshaw, . . .an autorickshaw. He helped me purchase selected garments that I could sell into the local neighbourhood, pakha-pakhi, (nearby). I like his supporting me. I think, (hesitating and smiling) that he is proud of me.

There are a couple of generalizations we have taken into account in this study which we would like to state upfront. First, the spousal support was seen as positive, even complementing the eventual entrepreneurial transformation for the women. Second is the intended outcome of rural to urban migration. The outcome from an education or even a social mobility standpoint may not always be commensurate with the expectations of the migration. While the primary reason is the lack of availability of occupational avenues in the rural areas, seasonal or otherwise, the process and the eventual outcome are fraught with risks and sometimes significant costs, as Rao (2010) points out in the case of education-related expectations. For individuals like Mehran Bibi, the family shifting from the rural Bengal to a (relatively) far off city slum fringes was initially with livelihood hopes from a growing provincial capital. It is interesting to note that the migration itself is in phases. Mehran Bibi mentioned that her family first moved to Cuttack near Bhubaneswar and then again to her current location:

I did not have much problem shifting from Cuttack to Bhubaneswar, there is not much of a difference for me. After the first move, which was more difficult as it was from the village, the second move was much easier. Both are big and have the same challenges for me. (Afterthought) as this is a bigger, and newer city, we felt this has better earning capacity for us" –Mehran Bibi

Likewise, the livelihood options adopted also diversified with the move, obviously meaning that she was doing a market scan at each point in time. In her own assessment, the move was closer to a zero-sum achievement, with the current improvements only to sustain her family on living standards relevant to the city.

7.6 Transitions and Trajectories of Women: From Subsistence to Entrepreneurs

The aggregating of individual experiences into livelihood trajectories has been supported by the work of Rees et al. (2000). They emphasize the influence of social background and the resources that are drawn from it, by the individuals subscribing to the trajectory. In other words, the learner identities are shaped to both the past and the present livelihood circumstances of individuals. In the following section, we discuss how the informal institution of the UMBC enables transitions and trajectories of women from subsistence to entrepreneurship and how they move from being constrained by a multitude of roles and responsibilities and leading a subsistence life to supplementing the household incomes through entrepreneurship.

7.6.1 Knowledge Co-creation as an Imperative for the Urban Poor

The process of facilitation by the UMBC for the beneficiaries involves the co-creation of knowledge around the microenterprises and elements of market integration. The urban poor, particularly women, are seen both as providers and consumers, and their experiences are carefully recorded and encouraged to be shared with the group. The institutionalization of knowledge around the slum environment is both commercial and social, with the dissemination of knowledge and information being experiential and occurring in an informal manner. Recourse to formal learning is minimal, though any attempt to seek formal inputs is encouraged.

The lattice of social, familial and microeconomic fabric of the slum forms the framework of any intervention – the pace of change initiated is gradual, almost incremental to the daily work environment for the women. The UMBC recognizes the significant problem in working on entrepreneurship development for women in urban poor communities that they neither migrate for work opportunities to other cities or states with better market opportunities nor do their domestic constraints (childcare, household responsibilities, social norms) allow them to always work at a full-time job, full-time entrepreneurship that takes them away from home. It is limited to the physical proximity of the business or vocation almost around their residence.

The instructional outcomes from institutionalizing experiences, soft-profiling (for enablement and inclusion rather than filtering for credit or benefits) evolved individual and institutional learnings from a breadth of activities, from skill training to entrepreneur support to digital education. The adult learning principles adopted, with a leaning towards citizen participation and collective identity (Dzur 2008), enabled informed responses towards livelihoods. The pedagogy was two ways and hence co-created knowledge through relationships (Gilligan 1982, p.16) that

accelerated (a) individual learning and contextualization and (b) institutional learning and partial decontextualization. The latter was with an attempt to build scale for the intervention by replicating positive cases, as also to share the knowledge with other similar projects elsewhere.

The policy implication for the decontextual, formal knowledge base is to contribute to the overall sector of micro- and small enterprise (MSE) development by the urban poor.

7.6.2 *Defining an Entrepreneur (More Specifically, the Urban Poor Illiterate Women)*

The UMBC defines an entrepreneur as someone who generates an income for self and household, using individual and household assets, resources and skills in a variety of ways to identify and take advantage of market opportunities. This definition encompasses those who move between wage, self and various kinds of contract-based employment. The definition also calls to attention three channels for supporting entrepreneurs: (1) expanding their asset base (including skills), which necessarily means diversified access to resources; (2) enhancing market opportunities and access; and (3) identifying risk mitigation strategies.

The UMBC recognizes that there are a wide range of (1) motivations and aspirations (Bourdieu 1974), (2) competencies and existing skills (Sullivan 2005) and (3) social customs and obligations (Rao 2010; Froerer 2012), which shape the nature, scope and scale of enterprises operated by the urban poor. Given the gender differences across each of these factors, entrepreneurship development for urban poor men and women requires targeting different sets of constraints. It is from this kind of categorization that the facilitation and the learning/training are imparted.

7.6.3 *Scaling the Learning Model for Future Beneficiaries*

With the selection and mentoring of the women entrepreneurs marking a success (over 90% of the women have subscribed to the funding-learning-enhancing model of livelihood), the UMBC has gained experience in identifying the scale and type of enterprises within its target urban poor communities. The co-creation of learning processes and the inputs for a successful livelihood venture have now been generalized to some extent in the design of its activities targeting specific clusters of entrepreneurs. These clusters are summarized below:

This is an indicative categorization based on the project's experience thus far and not through any quantitative survey. Mohanty, (2015) based on her UMBC experience, has proposed the following scales and associated strategies of entrepreneurs typically observed in urban poor communities.

Nano-entrepreneurship is typically attractive to unemployed adult women in the community, isolated because of the multitude of responsibilities in the home front and therefore having neither the business experience nor exposure. For this category of women, the benefit of short-term exposure to the business cycle and training is adequate for enhancing their earning potential through some part-time vocations. The informal institutional arrangement of the UMBC provides them an opportunity to train and practice based on their needs and time schedules. Over time, the women from the local community would be mentored to start their own individual enterprises or participate more in the management of the UMBC in-house enterprises.

Mini-entrepreneurs who are typically men or women (although UMBC typically focuses on women), are part-time entrepreneurs using the assistance of family members to grow their business. Quite often, these entrepreneurs are looking for more viable business opportunities, looking for financing for existing enterprise activities. These women typically do not have time to participate extensively in training activities and benefit more from UMBC's targeted, tangible business support and market linkage services. They are willing to undertake a limited amount of business-related risk as well, although the facilitating institution needs to build this trust over time. These women entrepreneurs are provided with childcare services, as UMBC's experience shows this to be a significant barrier to women's enterprise. Advanced skill training is also likely to benefit these entrepreneurs. As these women typically seek to scale up their operations, they would benefit most from exposure to business networks and linkages to banks under various collateral-free schemes (particularly under government schemes). Information about mechanization and new kinds of low-cost equipment is useful for these individuals. Further, the UMBC provides access to the storage and production facilities or access to the on-site kiosk for product sales after necessary quality checks.

Microenterprises are suitable for individuals who are already entrepreneurs and require a larger financial assistance to expand their current business. They may be aware of bank-linked government subsidies and schemes but might still need help to access the same. These individuals have rich accumulated experience and hence do not particularly need or welcome business training. These entrepreneurs benefit most from UMBCs support in exposure to business networks and linkages to banks under various collateral-free schemes (particularly under government schemes). Information about mechanization and new kinds of low-cost equipment is useful for these individuals. If financing is available, then access to packaging, branding and marketing services is useful for these individuals.

7.6.4 *Enabling the Transition into Livelihoods Through Occupations*

In the first phase of its entrepreneurship development work, a 2–3-week series of meetings and group workshops were organized at the UMBC. This first set of participants comprised community women that had approached the project team over the past year to seek help with livelihood and enterprise development. These initial events were intended to be as much a learning experience for the UMBC staff as for the workshop participants. Key topics covered were:

- Articulating the business model of the entrepreneurs' existing enterprises
- Articulating a business plan for any proposed new enterprise by the entrepreneurs
- Discussion of entrepreneurship challenges (finances, logistics, social taboos) and solutions
- Assessment of the local city market demand and ideas for new business
- Motivation to identify and form groups in order to collaborate on starting a business

7.7 Where Does Formal Learning Come In?

The UMBC experience challenges the assumptions made at the high school level that influence the transition to work (McNeal 2011). With the demographic dividend (Mehrotra 2014) that a country like India possesses, the mixed bag of challenges and opportunities needs to be considered for any input of education and policies related to employment and entrepreneurship. For socially disadvantaged groups, the assumption of formal learning (as also its access) is not a default option – it is indeed earned, as is reflected in the stories of Mamata Mallick and Mehran Bibi. The last but most significant factor that compounds any interventional strategy is the gender of the individual attempting the transition into livelihood.

The UMBC has largely adopted a learning culture that is tuned to work or an occupation (Mayo 2014) and Giroux's (2004) concept of 'public pedagogy'. The facilitators play multiple roles: educator, mentor, friend, accountant and even task master. These are the cultural workers that Mayo (2014, p.387) describes as working beyond a curriculum. In the context that we studied, the expanse of the subaltern group representing the underprivileged from social, economic and political backgrounds deserves not only an acknowledgement of a different pedagogy but also an ecosystem that is co-creating knowledge and learning. The knowledge (Fig. 7.3) manifests itself as an institutional body eventually, with the subsequent groups of beneficiaries creating a multiplier effect.

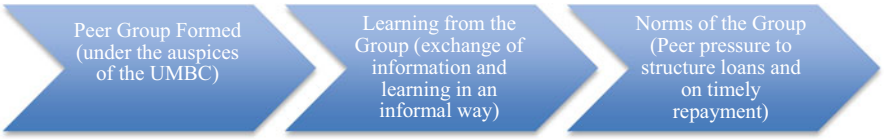

Fig. 7.3 Institutional learning and enablement

7.8 The Emerging Themes in Women's Transition

Transversal Learning (Formal Arithmetic to Livelihood Financials) Having minimal education did not impede their ability to calculate financial concepts like interest and discounts.[3] Their ability to integrate basic arithmetic into the language of business was apparent in their answers on the benefits of getting low-interest finances for longer term and high-interest finances during peak-sales periods (like festivals). Transversal skills were honed through interactions with the group, with learnability extending to comparison of prices and market intelligence processed through casual discussions.

Adaptability Bordering on Transformative Experience Ability to not only foresee current strengths and weaknesses but being able to leverage UMBC facilitation to address their opportunities and overcome challenges. Bookkeeping skills were acquired through the system suggested by the facilitators and improvised to keep credit lists and discount schemes for select customers. The ability to explain *suddho* – interest in the local language, the concept of principal and interest itself and the outcome of profit and loss for the business – was admirable given the construct was alien to them in a larger sense of the term.

Adaptability to technology is a different dimension. For many of the women in the larger group of beneficiaries, the sophisticated bakery equipment was a first, even though some of them had seen a conventional fired-oven bakery. This did not deter them from signing up for learning the new machinery, even before it was fully installed. The willingness to try the new method did not seem a barrier even for the older women.

Learning from Failures Based on experience, Mamta Mallick and Mehran Bibi identified that it was wise not to give any products on credit. Initially they had both had transactions in credit and found it impossible to recover the monies. They also learnt very quickly that they needed to give discounts on their products and that the discounts varied depending on the clients. This was to enable quick movement of their inventory and ensure fresh stocks. This was a very important lesson for them and important to hand down to potential entrepreneurs.

Transitions into Livelihood To a specific question of whether they missed formal education, the respondents were categorical in their responses. They did not miss

[3]Interview with Mamata Mallick on 28 Aug 2015.

formal inputs in *their* business but were wishful in suggesting that their options might have been different with the access of formal education *outside* of their current occupation. In other words, the influence of formal education however small was not felt in the current livelihood option, with an emphasis on the present learning possibilities. A conformation of this perception was received when one of the respondents did not see the need for formal education for her own child. This is a critical gap from a policy perspective on addressing the mainstreaming needs of such marginalized communities.

Peer Learning Irrespective of their individual achievement of past education or current livelihood options, the group formation, even loosely held through the weekly meetings seemed to have created a bond between the women. With varying ages and experiences in business, they reflected upon their experiences in a collective manner, sometimes utilizing their personal expertise for the benefit of the group. The referrals were strong (a criteria established by the institution in recruiting new trainees), and the strong ties reflected a sense of joint success as the individual milestones were addressed. In one of the interviews, the participant proudly talked about the day-care centre as being for 'our children' though her own children were much older.

Entrepreneur Identity Identity as an entrepreneur was important to these women as it gave them 'status' within the household and the community at large. One interviewee took great pride in the fact that she could use the proceeds of her business to support her husband in procuring an autorickshaw, which overall added to the families' wellbeing. She was much more confident, so much so that her extended family was often seeking advice from her on how to be successful as an entrepreneur.

Identity as an Achiever Membership to the UMBC reflected a 'coveted status' for the women (Fig. 7.3). Many of them being early school dropouts and going through a customized learning programme, with specific skills being imparted on accounting, bookkeeping, market trends and communication that assisted their businesses, had another positive outcome. The certificates for them were a symbol of 'formal' achievement.

In an interview, one of the participants felt that she had a sense of 'graduation'. This can be understood in a cultural context like India, where educational achievement is given a pride of place in households across the economic strata, particularly for women. Although the premium on education was not felt early in life, it was much appreciated at this stage of life, as it was embedded in their success as entrepreneurs.

Interestingly only one participant expressed her indifference to the 'formal certification'. She also added that she was not too particular about her children not making it through school.

7.9 Navigating Societal Equations for Larger Outcomes

Spousal Support Needless to say, where there was spousal support, women succeeded as entrepreneurs. With all the constraints women face, which have been enumerated throughout this chapter, support from partners has helped in sourcing raw materials at an optimum cost and an uninterrupted supply of the same and marketing. A collaborative approach to conducting the business has meant a greater risk-bearing ability for the women. It has certainly meant that women's mobility has increased and they have been able to better negotiate the multiple roles in the family that they perform.

Gender Equations Financial independence by and large has meant greater power to women. They are able to take decisions in the family regarding where money can be spent/invested. Most importantly they can invest in the education and health of children. In some instances they have been able to make additions to their living quarters, especially in building toilets. Overall, this has meant increased opportunities for women inter-generationally.

Livelihood Sustainability Critically, institutions like UMBC provide a platform where elements of discontinuity are addressed. The typical UMBC member is highly disadvantaged as she is a migrant from a rural area, from a lower socio-economic background, with little education and limited access to finance, and possesses little or no assets. A centre such as the UMBC which provides an environment of facilitation across many fronts, in a holistic manner, and invokes the agency of women, is perceived as highly beneficial by women in sustaining the livelihoods they have begun with such hardship.

Emergence of a Collective Identity The UMBC-trained tag is an evident 'qualification', an acquired identity that is both complementary to, and consequence of, the women's success in their chosen vocations. They see themselves as part of a successful group and have begun to be, in the words of Mamata Mallick, 'respected in the family' and 'sought after for personal and livelihood advice' (Fig. 7.4).

7.10 Conclusions and Further Scope

For early school dropouts, particularly those from the marginalized groups whose access to schooling is itself restricted, the livelihood options are limited to a space between choice forming and choice constraining. In other words, the women in the Bhubaneswar slums gravitate towards livelihood options offered by some structures of influence and a larger proportion of limitations. The institutional catalyst therefore has to be sensitive to both how they perceive the social structure around them, as well as how the surrounding ecosystem acknowledges the women entrepreneurs. The learning inputs therefore are effective when interactive, rather than being formally prescriptive (as in schooling). However, it is particularly

Fig. 7.4 The participant beneficiaries at UMBC (picture courtesy of UMBC with permission of the participants)

hard to ignore the increasing demand of the society around those individuals, in the words of Eme (2011, p.753), for 'literacy and ability to process information in a profitable manner'. In this context, it is important for policy makers to take note that girls' dropout rates from formal education are determined by their social and economic roles in the informal community. The informal economy (of which these women are a part) is heavily feminized in a developing country like India, and unless 'the binary divide between a small male-dominated formal citizenship/ formal labour market and a large female-dominated informal citizenship/ informal labour market' (Nordensvard 2014) is taken into account, the lives of these women, either in education or in entrepreneurship, are likely to fail or at best remain marginal.

The study is limited in a longitudinal timeframe, and its success eventually would have to be measured in two ways: the emergent themes being relevant to a larger population of successive beneficiaries and the sustained success of the individuals. There could emerge other models of institutions different from the UMBC – as they should – which need to customize themselves to the local population and the demographic character of the respective neighbourhood. The UMBC, meanwhile, focuses on the integration of a knowledge and experience bank, a network of local entrepreneurs and a mechanism to tie in its critical institutional support stakeholders.

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Part II
School to Work Transitions in the Context of Hong Kong

Chapter 8
Life Planning Vocational and Technical Educations and Secondary Schooling in the Context of Educational Reform and Socioeconomic Changes in Hong Kong

John Chi-Kin Lee, Rupert Maclean, and Yang Lan Joy

Abstract Hong Kong has successfully implemented various education and curriculum reforms since 2000. Starting from 2009, the New Academic Structure with a new 6-year secondary (3-year junior secondary and 3-year senior secondary) curriculum and 4 years of undergraduate education has been launched. There was a review of the progress of senior secondary curriculum implementation which showed good progress and a gradual realization of the seven learning goals related to healthy lifestyle, breadth of knowledge, learning and language skills, reading habit, and national identity and responsibility. In May 2014, the Education Bureau (EDB) issued the document "Guide on Life Planning Education and Career Guidance for Secondary Schools" emphasizing that under holistic learning and lifelong education perspectives, students' motivation on pursuing their career/academic pathway should be cultivated.

Concomitant with the education reform, there was a decline or ignorance of vocational and technical education in Hong Kong in past years, but recently the government established a "Task Force on Promotion of Vocational Education" to map out a strategy to raise the awareness and promote vocational education and training in Hong Kong.

Against this background, this chapter discusses how education reform has embedded and contextualized life planning and vocational and technical educations with the emerging socioeconomic changes in Hong Kong. It is argued that in senior secondary education, life planning education should not only focus on career planning and guidance but also embrace a comprehensive perspective linking life education and future-oriented approach promoting entrepreneurship and innovative

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spirit. For vocational and technical education, it needs to be repositioned not only focusing on vocational training but also highlighting the development of students' generic and employment skills in knowledge-based society like Hong Kong.

8.1 Introduction

8.1.1 Post-school Transition in the Context of Socioeconomic Changes in Hong Kong

Post-school transition signifies the transition to adulthood and independent life (Blacher 2001). This transition period is "associated with many major life changes and developmental tasks" (Litalien et al. 2013, p. 444). From a developmental perspective, Parker et al.'s (2012) study found that personality development and psychological well-being benefit significantly from successful transition. Thus, support for post-school transition needs to take into account not only the employability and lifelong learning skills of students but also cater for the educational and psychosocial needs of students such as their emotions and aspirations for study and future career. This provides the underpinning question of this chapter: "How do Hong Kong schools prepare diverse learners for successful post-school transition in the context of education and socio-economic changes in Hong Kong?"

Hong Kong is a well-known service economy with infrastructures for financial and accounting services, legal services, tourism, logistics, construction as well as business and marketing services, etc. (Information Services Department, April 2016). Six industries have also been promoted which comprise "cultural and creative industries," "education services," "medical services," "environmental industries," "innovation and technology," and "testing and certification services" (Research Office, Legislative Council Secretariat 2015a, p.8). Such knowledge- and service-based economy in Hong Kong calls for graduates from schools and institutions and quality work force engaged in continuing education and lifelong learning.

8.1.2 The Role of Life Planning Education and the Reemphasis of Vocational and Technical Educations for Post-school Transition Under the Context of Education Reform in Hong Kong

To enhance students' quality of learning and educational outcomes, Hong Kong has successfully implemented various education and curriculum reforms since 2000 (Education Commission 2000). Apart from the New Academic Structure (a new 6-year secondary curriculum) launched in 2009, in May 2014, the Education

Bureau issued an official document entitled "Guide on Life Planning Education and Career Guidance for Secondary Schools" (Career Guidance Section, School Development Division, Education Bureau 2014, p.4) with a focus on integrating students' "career/academic aspirations with whole-person development and life-long learning." The Secretary for Education, Mr. Eddie Hak-kim Ng also highlighted in his speech that lifelong learning is highly associated with career development. According to Ng (2014), lifelong learners possess three important traits (i.e., "curious," "courageous," and "disciplined") and explicitly exhibit qualities of asking questions, risk taking, and setting targets.

Around 1997, the changeover to the Chinese sovereignty, there was the existence of "grammar schools," "prevocational schools," and "technical schools" in Hong Kong. Later, the review on prevocational and technical schools was published, and it was recommended that the name of the "prevocational" and "technical" schools could be removed and the curriculum needed to emphasize "business and technological subjects" as well as "generic and transferable skills" (Research Office, Legislative Council Secretariat 2015b, p. 9). For post-secondary vocational education, the Vocational Training Council (VTC) has played a key role, but many students tended to view the vocationally oriented programs as second choices of study (Hong Kong Management Association 2016, p. 17).

Recently the government established a "Task Force on Promotion of Vocational Education" (hereafter referred to as "the Task Force Report") to map out a strategy to increase Hong Kong public awareness and promote vocational education and training in Hong Kong (Information Services Department 2014). Recently, the Task Force Report was published (Education Bureau 2015), and two recommendations pertained to the rebranding of "Vocational and Professional Education and Training" (VPET) through career and life and planning education and enhancement of applied learning (Hong Kong Management Association 2016, p. 20).

This chapter, to some extent, provides an overview of other chapters. Based on the above-reviewed reforms of "Life Planning Education and Career Guidance for Secondary Schools" and "Task Force on Promotion of Vocational Education," this chapter discusses the importance of preparing diverse learners' successful post-school transition in both secondary and vocational education settings in Hong Kong. Applied learning (ApL), covering five "areas of studies," namely, "creative studies"; "media and communication"; "business, management, and law"; "services applied science"; and "engineering and production," is considered as a senior secondary subject that on one hand provides workplace-related competencies and on the other hand generic competencies that match the needs of the changing society and economy in Hong Kong. It serves as a curriculum for integrating "practice and theory linked to broad professional and vocational field" (retrieved 18 December 2016 from http://www.edb.gov.hk/en/curriculum-development/cross-kla-studies/applied-learning/index-1.html). The role of ApL in fostering transition from school to work will be discussed in Chap. 9.

As regards life planning education and career guidance, brief case studies of secondary schools in Hong Kong implementing such reform will be elaborated in Chap. 10. For the issue of catering needs for diverse learners, it covers not only

students in mainstream schools but also special needs students as well as non-Chinese-speaking (NCS) students in both mainstream and special schools. Further in-depth analysis of students with special educational needs (SEN) will be discussed in Chap. 11.

It is argued that in senior secondary education, life planning education should focus on not only career planning and guidance but also a comprehensive perspective linking life education and future-oriented approach promoting entrepreneurship and innovative spirit. For vocational and technical education, it needs to be repositioned not only focusing on vocational training but also highlighting the development of students' generic and employment skills in knowledge-based society like Hong Kong under the lifelong learning perspective.

8.2 Theoretical Basis of Lifelong Learning

Under the globalized context, there have been consideration and embedment of lifelong education and learning theories in recent educational reforms. Among different theories, the influence of human capital theory or perspective on educational reform and lifelong learning could be discerned in Asian societies like Hong Kong (Kennedy and Lee 2010). As regards lifelong learning, Young et al. (2009) explained that there have been two complementary categories of lifelong learning theories. The first category, known as the "existential norm theory" (p. 106), is concerned with the "concepts of the realities of the social conditions" such as "a learning organization" and "a learning city" and the related policies. The second category, the "ontological theory," tends to focus on empirical research related to the "lifelong learners" including "groups with special needs" and their ways of "learning to learn" (p. 106). Moreover, from an international perspective, Bagnall (2012, pp. 907–908) reassessed lifelong learning and highlighted five reforms including:

> [A]a heightened educational inclusiveness and participation; the greater breadth of educational curricula; enhanced educational responsiveness; the pervasion of economic, organizational and developmental discourse with lifelong learning theory; and the re-casting of individual and social identity as identities of lifelong learning.

For "a heightened educational inclusiveness and participation," it refers to older citizens' partial engagement or re-engagement in different levels of education with auspices of the public and also the facilitation of individuals into employment and "productive economic and social engagement" (Bagnall 2012, pp. 907–908). "Enhanced educational responsiveness" to some extent is linked with the vocationalization of secondary education (Lee et al. 2016); the enhancement and assessment of "basic skills – not only vocational skills, but also more general social and political skills and those of literacy and numeracy"; as well as the provision of "flexible, open, blended, and other approaches" to learners' needs and engagement. Based on lifelong education theory and practice (for an updated review, see Cropley

2014), an integrative agenda from multiple perspectives (e.g., economics and organization) is needed. This is pertinent to the advocacy and development of "learning organizations, learning communities, and learning towns." The "re-casting of individual and social identity" pertains to whether an individual and collectively the society could embrace and permeate the notion of lifelong learner in their daily practices and living (Bagnall 2012, p. 909).

Regarding vocationalization of schooling, recent literature from a lifelong learning perspective has also provided many examples of vocationalization of secondary education in developing countries of Africa and the Asia-Pacific region (Lauglo 2005; Pavlova and Maclean 2013; Lee and Kong 2015). Asian Development Bank (2009) analyzes the pros and cons of vocationalization of secondary education through inclusion of a vocational track. Objections to vocationalization of secondary education include the issues of cost incurred, some courses being gender-biased (such as "domestic science and secretarial skills with girls and industrial arts skills with boys") and difficulty of implementation and finding qualified instructors and allocating appropriate time to balance the teaching of academic and vocational skills (pp. 26–27).

In the context of Hong Kong, Li and Pinna (2013, p. 19) commented that lifelong learning is inevitably echoing with the globalization process which signifies the practice of knowledge economy. The Hong Kong government tried to maintain its education policy strategically on human capital theory approach, which means the function of education is to enlarge the capability or productivity of individuals through earnings increase.

To sum up, from a globalized perspective, the notion of lifelong education has been integrated into secondary and higher education. There are also increasing examples of implementing vocationalization as a form of lifelong learning in secondary education in the Asia-Pacific region. In Hong Kong, the human capital theory for lifelong learning was mainly adopted.

8.3 Generic Skills, Core Skills, and Career Skills for Lifelong Learning

According to the Act on "Key competencies for lifelong learning" which provides a reference for European Union (EU) countries and the commission as well as applies to different groups including the "disadvantaged groups" (EU Legislation 2006, p. 13), there are eight interdependent key competencies such as "communication in the mother tongue," "communication in foreign languages," "mathematical competence and basic competences in science and technology," "digital competence," "learning to learn," "social and civic competences," "sense of initiative and entrepreneurship," and "cultural awareness and expression." It is noteworthy that all these key competencies highlight "critical thinking, creativity, initiative, problem

solving, risk assessment, decision taking, and constructive management of feelings."

In the context of vocational education and training (VET), there has been an advocacy of "transversal skills" or "soft skills," and with respect to the European Database of Skills, Competences, Qualifications and Occupations (ESCO), there are five groups of "transversal skills": "application of knowledge," "attitudes and values at work," "language and communication," "social skills and competences," and "thinking skills and competences" (Andersen et al. 2014, p. 12). In addition, the "entrepreneurship" skills under the EU Key Competence Framework were highlighted in curricula at different levels, and "entrepreneurship" refers to the abilities of transforming ideas and turning chances into action, planning, and managing initiatives and knowing the work contexts and pertains to "creativity, innovation, and risk taking" (EU Legislation 2006, p. 17).

As regards the "Core Skills Framework" proposed by Scottish Qualification Authority (SQA) (2013), lifelong learning "builds on people's core skills (CS)" which are discernible in education and workplace and are conducive to "tackling issues and problems" and "enabling individuals to function effectively" (p. 1). These core skills (CS) with "Scottish Qualification Framework (SCQF) levels 2–6" are (a) "problem solving" with components of "critical thinking," "planning and organizing," and "reviewing and evaluating" (p. 2); (b) "communication" with components of "oral communication" and "written communication" (p. 3); (c) "numeracy" with components of "using graphical information" and "using number" (p. 4); (d) "information and community technology" with components of "accessing information" and "providing/creating information" (p. 5); and (e) "working with others" with the components of "working cooperatively with others" and "reviewing cooperative contribution" (pp. 5–6).

In Australia, Finn's (1991) report suggested six key areas of competence for school-leavers. They were "personal and interpersonal skills," "language and communication," "problem solving," "cultural understanding," "mathematics," and "scientific and technological understanding" (Yeung et al. 2007, p. 3). Compared with some other lists of generic skills and capabilities, the element of "cultural understanding" was identified, but the importance of self-management and self-learning was not highlighted.

In a similar vein, in Hong Kong, nine generic skills, namely, "collaboration skills," "communication skills," "creativity," "critical thinking skills," "information technology skills," "numeracy skills," "problem-solving skills," "self-management skills," and "study skills," have been promoted in the school curriculum reform (Curriculum Development Council 2001, pp. 24–25; Education Bureau 2014). While there has been an emphasis on "communication skills, creativity, and critical thinking skills" in early years, there is a call for enhancing "students' capabilities to learn independently" and "students' self-management skills and collaboration skills" in primary schools (Education Bureau 2014).

A study of teachers' opinions on their secondary six (equivalent to Grade 12) students' generic skills revealed that about 81% of teacher respondents "express (ed) feelings and views in an appropriate manner" and demonstrated "good

interpersonal and communication skills." Comparatively, around 72% and 67% of teacher respondents perceived that their senior secondary students were able to "think critically" and "propose unique and innovative ideas," respectively (Curriculum Development Council et al. 2013, p. 22).

In a survey of perceptions of generic capabilities for lifelong education by students from a continuing education program known as Project Yi Jin (PYJ), it was found that three factors or dimensions could be identified. The first factor is related to "socio-cognitive" capabilities such as "communication skills," "problem-solving skills," "creativity," and "interpersonal skills." The second factor pertains to "academic" capabilities such as "Chinese language skills," "English language skills," "Putonghua skills," "numerical competency," and "computer knowledge." The third factor comprises "self" capabilities including "sense of responsibility," "initiative," "effort," and "self-learning" (Yeung et al. 2007, p. 5). Another interesting study by Leung and McGrath (2010) identified 21 broadly "competency requirements for colleges and the workplace" (Li and Pinna 2013, p. 36). Some competencies required for college study such as "communication skills," "interpersonal skills," "learning continuously," and "working with others" are broadly compatible or similar with "communication," "interpersonal skills," "willingness to learn," and "good team spirit" which are essential competencies in the recruitment of employees for the workplace. However, college study tended to highlight, for example, the competencies of "work safely," "positive behaviors," "time management," "handling stress," and "implementing changes," while workplace tended to focus on competencies of "business understanding," "professionalism," "leadership," "networking," and "negotiation." This implies that more needs to be done for the educational organizations to review and refine their program delivery (Leung and McGrath 2010, p. 105) or for the workplace to provide on-the-job training.

Up to date, an increasing body of studies have focused on examining professional and vocational education (PVE) and the continuing and lifelong learning system in Hong Kong (Tam 2013; Li and Pinna 2013). A series of key features were summarized (Li and Pinna 2013, p. 23): more stress on education instead of occupational training, less distinct boundaries between "university education" and "vocational education," more emphasis on "learning outcomes and their assessment," enhanced accountability and quality assurance for providers, increased accreditation of "industry-specific qualification frameworks," and need of transferability of "learning attainment across systems or sectors."

8.4 Government's Framework to Provide Diversified Pathways

For providing "a quality, flexible and diversified study pathways with multiple entry and exit points" and realizing "lifelong learning a possibility," the government launched "one single, seven-level" Hong Kong Qualifications Framework

(QF) for all sectors in May 2008. Under the Hong Kong QF for the relevant industries, there are also complementary "Specification of Generic (Foundation) Competencies" which comprises "four strands... namely English, Chinese, information technology, and numeracy" (quoted from the Speech by Mrs. Cherry Tse, JP, On 18 March 2013; the full online text is available at http://www.edb.gov.hk/en/about-edb/press/speeches/psed/2013/20130318171307.html), in addition to establishment of Specifications of Competency Standards.

Nonetheless, a survey (Lee and Cribbin 2011), which tapped views of providers comprising UGC-based institutions' continuing education arms, the Open University of Hong Kong, and other private institutions, showed that many perceived the usefulness of QF at levels 1–3 (sub-degree or below) for the registration of "skills-based and vocational courses" but less so for QF at levels 4–7 (degree level or above). There were also concerns on lacking clear reference of Hong Kong Diploma of School Education (HKDSE) examination with QF level. In addition, it seemed that higher QF 4–7 levels have not closely involved "mature" industry for its development (Lee and Cribbin 2011, p. 66).

8.5 Hong Kong Post-secondary Students' Aspirations for Study and Work

Students may have multiple post-secondary study options. According to a study undertaken by the British Council (2013, p. 20), interestingly the results revealed a hierarchy of priorities for students' post-secondary study options in the following order: (1) enrolling in popular and famous local university programs (University Grants Committee (UGC) funded); (2) studying overseas or attending sub-degree or extended programs articulated to major universities; (3) obtaining qualifications from private, self-funded institutions; and (4) pursuing nonlocal degrees. In mainstream education, to cater for secondary students' capability of career development, the new curricula in sub-degree programs and even university degree programs have paid more attention to the cultivation of "soft skills" or generic capabilities, particularly "analytical and communication skills." All these skills are welcomed by the Hong Kong government and the job market. In vocational education, the Task Force Report showed that over 60% secondary school students, parents, and VET students/graduates held "fairly positive" or "very positive" views (but less so for secondary school teachers) toward VET. This indicates students' aspirations for choosing vocational education as a potential post-school path (Education Bureau 2015, p. 64).

8.6 Life Planning and Career Education: A Hong Kong Perspective

In Programme for International Student Assessment (PISA) 2012, an analysis of students' participation in career development activities revealed that Denmark and Finland have the highest level of participation while Belgium, Macao, Hong Kong, and Shanghai have the lowest level (Sweet et al. 2014, p. 13). The only item for Hong Kong which was above the mean score was "I completed a questionnaire to find out about my interests and abilities," while some other items such as those related to having an "internship," participating in "job shadowing or work-site visits," attending a "job fair," and joining an "organized tour in an education institution" were below the mean. It was notable that Hong Kong students perceived career competence related to acquiring "information on jobs" students were interested in, searching for a job, producing a resume, preparing for a job interview, obtaining information on education programs, and looking for information on student financing that were all below the mean scores. Like many other countries, Hong Kong students considered "out of school sources as more important than the school for perceived career development competence" (Sweet et al. 2014, pp. 18–19).

To foster Hong Kong secondary students' capabilities of life planning and cater for their career development needs, the Hong Kong government has promulgated the "Guide on Life Planning Education and Career Guidance for Secondary Schools" with a focus on integrating students' "career/academic aspirations with whole-person development and life-long learning" (Career Guidance Section, School Development Division, Education Bureau 2014, p. 4). This is consistent with Hong Kong curriculum reform (Curriculum Development Council 2001), in which whole-person development and lifelong learning are main directions of curriculum reform. Apart from educational policy on life planning education and career guidance (Education Bureau 2014) and curriculum reform (Curriculum Development Council 2001) that contribute to students post-school transition, it is also important to highlight that life planning education should try to make alignment with the development of generic skills/capabilities as well as the cultivation of attitudes and values given career experiences as one of five experiences in life planning education (Lee 2017).

Looking deeper, from the perspective of a changing society and a lifelong "narrative," "career" is not confined to pursuing "lifetime" occupation(s) but refers to the individual's regular and continuous reconstruction of his or her own life course in response to dominant circumstances (Reid and West 2010; Sultana 2012, p. 51). Based on this connection, life planning education could be integrated with life education as a kind of values education which partly relates life meanings and aspirations with career and academic aspirations. Moreover, in line with PISA 2012 results related to career development for Hong Kong students, more attention could be given to enhancing career competence and providing more diversified career-related activities not only for senior secondary students (S4–6) but also junior

secondary students (S1–3, aged 13–15). This is in line with the Task Force Report (Education Bureau 2015, p. 93) which mentioned that:

> [D]uring the public engagement activities, different stakeholders have suggested enhancing the career and life planning education for secondary school students, in particular when they are still in junior secondary level.

8.7 Catering the Academic and Career Needs for Diverse Learners Including SEN Non-Chinese-Speaking and New Immigrant Students

Students' successful school learning and academic performance play a salient role in helping their career-related choices and decision making (Lent et al. 1994). However, students may differ in their needs with their different backgrounds, abilities, and interests in school learning. In the following paragraphs, the authors provide an overview of catering for diversity of three vulnerable groups of students in the Hong Kong society. They are students with background of special educational needs, non-Chinese-speaking students, and new immigrants from Mainland China.

8.7.1 Providing Assistance in the Needs of Students with Special Educational Needs (SEN)

From an inclusive education perspective, all students need some support for their development of generic and career-related skills and aspirations for future study and career. It is notable from the Legislative Council of Hong Kong's report (2014) that during the period of 2013 to 2014, the number of students identified with eight major types of SEN (used interchangeably with disabilities) has risen from 17,600 to about 33,830. In response to catering for SEN students' diversity in schooling, the Hong Kong government is also adopting and developing an inclusive education policy to support schools and students (Education Bureau 2008). As a global practice, Inclusive education was defined by United Nation Educational, Scientific and Cultural Organization (UNESCO) (2009) as "a process of strengthening the capacity of the education system to reach out to all learners" (p. 8). In a recent study by Yang et al. (2015) in SEN students integrated in inclusive classrooms, social support from teachers and peers was highly associated with these students' social-emotional competences and academic performance.

Apart from ongoing practices of integrating SEN students in mainstream education of Hong Kong, it is desirable to gain an understanding of post-school outcomes of these SEN students. Together with providing opportunities for SEN students' to learn in regular classrooms with other non-SEN students, effective supporting services to help SEN students' smooth post-school transitions are also

important indicators of successful implementation of inclusive education (Poon-McBrayer 2013). In other words, how well do Hong Kong secondary schools prepare SEN students for smooth post-secondary school transitions after integrating them in usually 6 years' mainstream education? What post-school pathways could these students choose after they graduate from senior secondary schools?

8.7.2 Some Preliminary Findings of Post-school Transition in Hong Kong

In a research project on investigating "Post-School Outcomes of Senior Secondary Graduates with Special Educational Needs" from December 2012 to September 2015, the research team of Centre for Special Educational Needs and Inclusive Education (CSENIE), Kenneth Sin and Joy Yang of the Education University of Hong Kong, interviewed a wide range of stakeholders (e.g., teachers, students, parents, social workers) on their opinions of current support to SEN students' post-secondary school transition. The interview data were collected from in total 40 focus groups across these stakeholders. Major concerns raised by these stakeholders were summarized below. Further details are discussed in Chap. 11.

Based on the interview data, it was found that parents and their children with SEN in both mainstream and special schools reflected they are unsatisfactory to current support to post-secondary transitions. SEN students and their parents felt these activities were not tailored to their needs but mainly for regular students (Sin et al. 2015). Under these circumstances, rather than general seminars/workshops, most interviewed SEN students urged the necessity for individualized consultations or focus-group tutoring on post-secondary school education or employment. Aside from their expectations to schools' provision of tailor-made consultations and training, SEN students in both mainstream school and special schools and their parents also expect schools and teachers would provide more useful recourses and/or career-related guidance tutorials to support them in order to achieve smooth post-secondary transitions (Sin et al. 2015).

To summarize current implementation and challenges of inclusive education in Hong Kong, we quoted Forlin's (2010) remarks based on her years of research on inclusive education in Hong Kong as below (p. 177):

> [I]nclusive education involves developing appropriate government and school providing relevant support; enabling academic and social inclusion; changes to curriculum, pedagogy and assessment; facilitating new teachers recruitment and staff development; enhancing the school management and administration; and developing functional multi-agency collaboration to support all students.

8.8 Catering for the Needs of Non-Chinese-Speaking (NCS) Students

8.8.1 Challenges of NCS Students

Aside from the population of students with SEN, many ethnic minorities (EMs) are also an important part of the Hong Kong community. EMs being in Hong Kong for generations also have important influences on shaping socioeconomic development of Hong Kong. It is of increasing concern for the Hong Kong government to enhance education to support young generation of EMs as well as to increase employment opportunities to support smooth adaptability and social integration of EMs in Hong Kong society. Given the general Chinese-speaking context of Hong Kong, EM students, also known as non-Chinese-speaking (NCS) students, have to face much more challenges in school learning, academic involvement, and social life compared to their peers whose native language is Chinese. In supporting NCS students' learning in regular schools, a compulsory integration of EM students into Chinese-dominated mainstream schools in Hong Kong could be traced back to 2004. Moving forward, in the recent Policy Address, a wide range of measures to support NCS students' Chinese language learning were announced by Hong Kong government (Education Bureau 2014). In a recent in-depth qualitative study of EM students in Hong Kong, Shum et al. (2015) argued that although language challenges are influential to EM students' academic involvement, this population of students also has other unique constraints (e.g., teachers' low expectation, inadequate resources provision) which may have negative impacts on their academic involvement and achievement. Based on their qualitative inquiries, Shum et al. (2015) called for policy improvements to take full consideration of not only Chinese language support but also teacher expectation adjustments and resource provision to facilitate EM students' academic involvement and enhance their academic achievement.

8.8.2 Recent Policy Improvements of Support to NCS Students

Favorably, from 2014 to 2015 school year, the new learning framework to support NCS students was launched by the Hong Kong government. To implement this improved policy, extra funding has been allocated to support local schools to implement this new framework to support NCS students as second language learners in Hong Kong education system. Another important feature of the financial support from 2014 to 2015 school year was to support all schools with ten or more NCS students. Hence, this extra financial support policy is not limited to these schools often called "designated schools" admitting NCS students. With this favorable policy improvement, it is estimated that around 15,000 NCS students

will benefit from the new learning framework supported by the government's additional funding support (Education Bureau 2014)

8.8.3 *Teacher Training Improvements to Cater for NCS Students' Needs*

Apart from the abovementioned financial aids to NCS students' education, teachers' professional development to support this group of students also draws the Hong Kong government's attention. In 2014, Professional Enhancement Grant (PEG) Scheme was launched focusing individual teacher on improving the capability of teaching Chinese Languages as second language. From 2014 to 2016, it is estimated that over 400 teachers would benefit from the PEG Scheme. Meanwhile, the government is aiming to provide around 2000 teachers from about 500 schools admitting NCS students with more training courses on teaching Chinese as a second language. These teachers will also have more learning experiences and sharing opportunities on teaching and supporting NCS students. All these endeavors are important in supporting NC students in the Hong Kong society. An increasing body of studies has also provided preliminary findings of training teachers' professional development of creating culturally responsive classrooms to support ethnic minority students (Hue and Kennedy 2012; Hue and Kennedy 2015).

In summary, with continuous policy improvements to provide comprehensive support to not only NCS students but also teacher training to support these students, it is hoped that NCS students will become more involved in school learning to achieve more desirable educational outcomes from Hong Kong education system. Academic involvement and school success are also important facilitators of their smooth post-school transitions.

8.9 Catering for the Needs of New Immigrant Students from Mainland China to Hong Kong

8.9.1 *New Immigrant Students from Mainland China and Challenges*

Migration is often associated with hardships, challenges, discriminations, economic difficulties, and so forth (Wong et al. 2012). Based on a series of in-depth interviews and a survey study with a sample of 347 new mainland immigrants (18 years old and older), Chou (2012) summarized and highlighted that (p. 63):

> [P]erceived discrimination is a common experience for new Mainland immigrants to Hong Kong, and it predicts depressive symptoms.

Chou's (2012) study was one of the first studies testing the predictive effect of perceived discrimination on depressive symptoms with 1-year interval (from 2007 to 2008). Additionally, the predictive effect of new mainland immigrants' perceived discrimination on their depressive symptoms was significant. Another important feature of Chou's (2012) study was the moderating effects of two social factors: social support and neighborhood collective efficacy. These findings hold important implications to social support provision and improvements in not only schools but also communities in order to reduce discrimination and help new mainland immigrants' social integration in a harmonious society. In the past decades, multiple exclusion (e.g., citizenship, economic, cultural) were consistently reported as difficulties new immigrants have to face in adjusting their lives in Hong Kong (Law and Lee 2006). Not surprisingly, social exclusion by the host society has led to negative impact on new immigrants' quality of life. In order to identify influential factors which determine immigrants' quality of life, Wong et al. (2012) included contextual factors (socioeconomic factors) and a broad range of individual factors (e.g., optimism, perceived social support, perceived control, and depressive symptoms) in a single study. Among these factors, the most significant predictor of new immigrants' quality of life was depressive symptom. Taking account of multiple exclusion from the host society to new immigrants from Mainland China, one might not wonder depressive symptom could become a serious negative consequence. However, taking serious consideration of the negative consequence from depressive symptom which has been continuously caused by multiple exclusion to the new immigrants from Mainland China (e.g., negatively reduce their quality of life), one may wonder why social acceptance and inclusion appear to be hardly achievable to treat new immigrants from China. An interesting finding of Wong et al.'s (2012, p. 373) study supports the importance of social support and positive psychological state to these immigrants; it stated that these depressed immigrants should perceive social support and optimism so as to improve their quality of life.

8.9.2 Support to New Immigrant Students from Mainland China

In response to prevention interventions, services such as professional counseling and psychological support are suggested as helpful to immigrants with depressive symptoms (see also Stice et al. 2009 for a comprehensive review of the effectiveness of prevention programs for depressed children and adolescents). Moving a step further, we would argue these treatments (e.g., professional counseling or psychological support) should not become, most of the time, post hoc ways to support children of new immigrants and immigrant students from Mainland China.

In their study by integrating a perspective of positive psychology, Yu et al. (2014) also provided important insights on the significance of fostering personal

and family resilience of new Chinese immigrants to Hong Kong in coping with depressive symptoms. Moving forward, Yu et al. (2015) extend their previous studies and present important empirical evidence to show the effectiveness of a resilience intervention program to enhance personal resilience of immigrants from Mainland China in terms of four active components: "self-efficacy, positive thinking, altruism, and goal setting" (p. 1). The results of Yu et al.'s (2015) study showed that the intervention program produced larger enhancement effects on the four active components of the experimental group compared to the control group. Taken together, so often migration is associated with various economic difficulties, challenges, as well as hardships. Whenever the government considers policy improvements to enhance social support and resource provision to this population, regular and effective practices to eliminate discriminations and facilitate social acceptance and integration of new immigrants from China should be considered as key elements in policy improvements. As consistently reported in existing literature, discriminations from the Hong Kong society to new immigrants significantly predict their depressive symptoms and difficulties in adapting to local education system (Chou 2012; Rao and Yuen 2001). In other words, when ask what Hong Kong schools and society can do for new immigrants from Mainland China in terms of language, sociocultural, and financial adjustments, it is important to systematically examine how often discriminations from the host society have happened to this population of students and their families. Together with other services from the government, "zero tolerance" of continuous negative discriminations coming from the host society would be promising practices to prevent depressive symptoms which are frequently identified in new Chinese immigrants (Fang et al. 2016; Juang and Cookston 2009; Kim et al. 2009; Noh and Kaspar 2003). With collective efforts from key stakeholders, the Hong Kong society should move from multiple exclusion in order to integrate with new immigrants from Mainland China in multiple aspects (e.g., educational, social and cultural, economic, and political) in this host society (Central Policy Unit 2013; see also Ng et al. 2017, for an updated and in-depth discussion of related issues).

8.10 Discussion

Based on comprehensive review and introduction of life planning and career guidance presented above, implications for vocational education, schooling, life planning, and lifelong education in Hong Kong are discussed as follows:

8.10.1 Post-school Transition: Measures Related to VET

Recently the Task Force recommended three strategies with some suggested measures as follows (Education Bureau 2015):

The first strategy refers to "rebranding VET" in Hong Kong as "Vocational and Professional Education and Training" (VPET) focusing on "programmes up to the degree level with a high percentage of curriculum consisting of specialised contents in vocational skills or professional knowledge" (p. 10). The second strategy entails "strengthening promotion" which consists of enhancing "professional image of VPET," providing enriched "information about VPET and related career" (p. 92), promoting "VPET through Career and Life Planning Education" (p. 93), increasing "contribution from industries" (p. 96), enhancing the status of ApL (pp. 97–98), and offering "financial support by the government" (pp. 99–100). The third strategy relates to "sustaining efforts" which covers increasing "influence by the government," promoting QF, and conducting "track surveys on attitude change." While all these strategies and measures are realistic and commendable, they tend to highlight information sharing, promotion and rebranding of VPET, and influence and support by the government as well as concerted contribution from industries, schools, and program providers. There seemed to mention less about structural and systemic change of quality assurance and accreditation systems which facilitate the clear linkage between VPET and lifelong learning. Also, there is little suggestion of a long-term and bold plan for cultural change which involves the commitment of industries to provide "apprenticeship training" based on the experiences in Germany and Switzerland (Education Bureau 2015).

The above review, while focusing on schooling and touching on post-secondary education and VET/VPET for young people, provides some major pointers for future development of vocational education, schooling, life planning, and lifelong education. The authors would like to suggest that schooling and vocational education as well as continuing education and life planning education could be considered under the broad perspective of lifelong learning and in the context of building up a knowledge-based and lifelong learning society. Lo (2010, pp.107–108) commented that the education (including lifelong learning) policy in Hong Kong tended to adopt "liberal" ideologies which were constrained and "take individual interests as given without being concerned on the formative development of individuals as a matter of public policy" (Li and Pinna 2013, p. 45). It is desirable for the Hong Kong government and other social partners to consider a "human development" rather than predominantly a human capital approach to quality education in which individual people especially the youth's whole-person and all-round development are given more attention and support.

First, in the field of VET, particularly based on the British experiences, it is desirable to integrate career and generic capabilities with vocational education (Luo and Li 2015). For example, the career competencies proposed by Kuijpers and Scheerens (2006) such as "career reflection," "motivation reflection," "work exploration," "career control," and "networking" (p. 305), to some extent, are contextualized generic capabilities with an application to career settings.

In the case of Hong Kong, there has been an emphasis on generic skills in basic and secondary education as well as the compatible "Generic (Foundation) Competencies" in the Hong Kong Qualifications Framework (Tse 2013). However, some other countries (e.g., the United States, the United Kingdom) have already enacted

"lifelong learning law," and the European Union has also set up the "European Lifelong Learning Qualifications Framework" which encompasses "compulsory education, higher education, continuing education, vocational education and technical training" (Young et al. 2011, p. iii). Echoing this trend, more could be done to enhance both the alignment of generic skills/competencies across levels (and if possible sectors) and the linkage between generic skills and specific competency for different industries and work sectors so that it could better inform curriculum development as well as vocational and continuing education.

8.10.2 Articulation Pathways for Post-school Transition

Secondly, in the recent Task Force Report, it is recommended that "Articulation pathways for lifelong learning and progression pathways for different industries under QF should also be further promoted" (Education Bureau 2015, p. 103). Nonetheless, Poon-McBrayer (2010) commented that there was a relative lack of confidence on the quality monitoring of the QF mechanisms. Compared with the Australian Qualifications Framework (AQF), Hong Kong seemed to fall short of "accredited vocational training as a part of VET" in senior secondary school programs as well as a "credit transfer system" to cope with the recognition of prior learning (RPL) mechanism and vocational and academic programs (p. 74).

Eggers and Hagel (2012, p. 15) in the United States advocated that there is an imperative to launch "talent-boosting reforms" which entail an alignment of "education of career pathways," an expansion of "vocational education" in K–12 reform, the support of "apprenticeships" in different professions, as well as the promotion and accreditation of "peer-to-peer networks" such as online and self-learning. Also, in a review of VET systems around the system, dual VET and apprenticeship system combining "general transferable skills acquired during class-based VET with structured learning on the job and actual work experience within a training company" is implemented in Austria, Denmark, Germany, and Switzerland (Eichhorst et al. 2012, pp. 14–16). This approach could be more adaptable to societal changes and attractive to youth in transition from education to work, but based on Germany's experiences, it demands a commitment of firms to become accredited training firms and the government to provide resources to vocational institutions for offering "the school-based part of the dual apprenticeships." In Australia, both the higher education and VET sectors have collaborated to develop programs that provide "dual sector award titles, combining qualifications from both vocational and academic studies" (Poon-McBrayer 2010, p. 74).

The implementation of dual apprenticeship and VET system as well as dual sector-recognized programs based on the European and Australian experiences, respectively, could be adapted in the context of Hong Kong. This necessitates, however, a heavy engagement of social partners, the establishment of a highly formalized training content, and technical standards for accreditation as well as

positive receptivity of young people and parents to this dual VET arrangement as an alternative to further study (Eichhorst et al. 2012).

8.10.3 Measures Supporting Post-school Transition for Diverse Learners

Thirdly, given the initial evidences of positive impact of "business-school partnership" activities on underprivileged students' career-related skills (Ho et al. 2015), the government could provide more supports and incentives for business and industrial enterprises to provide opportunities such as job shadowing, internships, and workplace visits for students. Meanwhile, business and industrial enterprises are encouraged to include the provision of career and entrepreneurship education for students as part of their "corporate social responsibility" and performance indicators in the domain of social services (Lee et al. 2016). It is hoped that the call in the Task Force Report for support by the major chambers of commerce to work with "VET providers. . .on the design and development of VET programmes," "encourage their members to devise comprehensive human resource strategy," and "make reference to QF in recruitment and promotion" could be fully realized and provide further impetus for future development (Education Bureau 2015, p. 97).

All these endeavors call upon the joint commitment, concerted efforts, and partnership of all relevant stakeholders for both the public good and the private good – building up a lifelong learning society with various aligned and articulated frameworks, quality assurances and enhancement mechanisms, and support measures; enhancing the capacities and capabilities of individuals and collective groups especially the deprived and underprivileged people as well as enabling the realization of individuals' aspirations for academic study, life, and work; and fulfilling public and private institutions' mission for making our society better (Lee et al. 2016).

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Chapter 9
In Search of an Epistemological Underpinning for Applied Learning in Hong Kong: Insights from the Aristotelian *Phronesis* and Its Contribution to Facilitating a Sustainable Transition from School to Work

Wai-yan Tang and Wai-lun Tang

Abstract In 2006, vocational education at the upper secondary level of schooling in Hong Kong adopted the name "Applied Learning", as the proposed curriculum moved away from skill-based training to one that comprised values and attitudes aimed at preparing students for work, as well as for lifelong learning. The modification was intended to eliminate the old classification of the curriculum – known as *pre-vocational* – which suggested the curriculum was only suitable for *nonacademic* young people. After 8 years of implementation, the government decided that raising awareness of Applied Learning was necessary. A task force was formed in the mid-2014 to provide both strategic advice and concrete proposals on how to take this forward. This study argues that success of the Applied Learning can significantly contribute to smooth transition from school to work. This study also maintains that the integration of school and work or education and employment at an epistemological level is crucial to the success of any curriculum. This paper begins by presenting a brief sketch of the current state of Hong Kong's vocational education sector, followed by a discussion of how Applied Learning can be conceptualised in light of Aristotle's *phronesis*. The implications of these insights for teaching, learning, curriculum design, content and research are discussed, followed by recommendations on how workplaces and universities can work together to raise awareness and recognition of Applied Learning (vocational education) in the community, leading to a smooth transition from school to work.

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9.1 Introduction

A task force was established by the government of Hong Kong in the mid-2014 to raise awareness of vocational education in Hong Kong in response to the policy address given by the Chief Executive (CE) of the Hong Kong Special Administration Region (HKSAR) earlier that year. The address maintained that "[m]ainstream education is not a one-size-fits-all solution for all young people as everyone has his or her own interests and abilities". It concluded that the "government should re-establish the positioning of vocational education" (EDB 2014, item 102). A year later, the task force made a series of recommendations to the government regarding the rebranding of vocational education and training (VET) (EDB 2015b). These recommendations were based on the ideas from another document published nearly 10 years earlier, in 2006, emphasising that a new name, "Applied Learning", would be used to replace the old title of career-oriented studies (COS). This change was made in order to achieve "better positioning of COS [Applied Learning] under NSS [(New Senior Secondary Academic Structure)] in the interests of clarity for parents and the community". The Education and Manpower Bureau (EMB) would also take steps "to ensure the quality, and promote the recognition of, COS/Applied Learning" (EMB 2006, Message from the Secretary for Education and Manpower). The objective of all these measures was highlighted in the Executive Summary of the *Action for the Future* document, which noted that "COS [Applied Learning] courses are not intended to be a *pre-vocational* [emphasis added] curriculum", (EMB 2006, p. iii) targeting a "nonacademic" youth.

The *task force's report on the promotion of vocational education* intended to capture the spirit of Applied Learning, as described in the *Action for the Future* document; this includes recommendations aimed at establishing a professional image of vocational education (EDB 2015b, p. 10) by eliminating the "common misperception that vocational education is confined to education of the lower levels" (EDB 2015b, p. 4). Furthermore, its ultimate goals included integrating education and employment (EDB 2015a, b, p. 8) and raising "recognition of [the] value [of vocational education]" (EDB 2015b, p. 4). However, achieving these goals may simply have been seen as a matter of rebranding, suggesting that the reason for the entrenched bias against vocational education was merely down to a marketing issue. Limited attention was paid to societal change, nor to any implications this might have for shifts in epistemological understandings. This chapter attempts to address the deficit by examining relevant documents to see how the issue has been discursively constructed. Relevant literature is consulted to identify alternative views. Then, a discussion enlightened by Aristotle's concept of *phronesis* (i.e. practical wisdom) is conducted to suggest how the goals of integrating education and employment and raising the awareness and recognition of vocational education in the community could be achieved in a sustainable manner and in an epistemologically justifiable way.

9.2 Background of the Issue: Repositioning Vocational Education

Two related messages with regard to the repositioning of vocational education were identified as relevant to this paper. First, the Vocational Training Council (VTC), the largest provider of vocational education in Hong Kong, was invited to "draw up a strategic development plan for its campuses to foster synergy and provide state-of-the-art facilities pivotal to enhancing the image and quality of vocational education" (HKSAR 2014, item 103). Second is the CE of HKSAR's emphasis that education is not a one-size-fits-all solution (HKSAR 2014, item 102). In brief, although mainstream education was acknowledged as being privileged and the status of vocational education perceived as inferior, it was not without value, as captured by the Chinese proverb "every trade has its masters" (HKSAR 2014, item 101). This is a positive approach towards understanding the potential of what vocational education could contribute to society, with the notion of integrating vocational education and employment in order to advance Hong Kong's economic development also having been clearly stated (HKSAR 2014, item 106). However, relevant research in other parts of the world demonstrates that the most promising results came from adapting vocational education in line with the changing nature of society (Cantor 1989, p. 131; Young 1999, p. 213; Moodie 2002, p. 260). The extent to which recent developments in Hong Kong's vocational education can contribute to this discussion will be explored.

9.2.1 Applied Learning

As early as 2006, *Action for the Future*, a policy document from the Secretary for Education and Manpower, stated that "a new name 'Applied Learning' would be used as a general term for all COS [Career-oriented Studies] courses" (EMB 2006). Whilst this was considered helpful for strengthening the position of COS, it needs to be understood in the context of the New Senior Secondary (NSS) curriculum. Although COS and/or Applied Learning were offered from 2009 as part of the NSS, it was without an accompanying paradigm shift in epistemological understanding as to what counts as workplace knowledge and learning in the post-industrial era (Marsick 1988). Without this shift, it was going to be difficult to fulfil the promise that "[s]teps will be taken to ensure the quality" (EMB 2006) of "Applied Learning".

At the beginning of *Action for the Future*, the impression given was that COS and Applied Learning were to "share" the common aim of NSS and that a bridge was to be built between vocational and mainstream education to facilitate this. The "sharing" rhetoric in the NSS was intended to eliminate the negative association, deeply rooted in the minds of Hong Kong citizens, of the term "pre-vocational" with schools which only "nonacademic" youth are "destined" to attend. Liberal

Studies was introduced into the new curriculum as one of the four core subjects (Deng 2009). *Liberal Studies: Curriculum and Assessment Guide* states that "(it) aims to broaden students' knowledge base and enhance their social awareness through the study of a wide range of issues" (CDC/HKEAA 2007, p. 1). For Applied Learning to reflect this aim, the traditional understanding of vocational education, which focused merely on technical knowledge and had become too narrow, needed to be revised.

This observation supports claims made in the document that "COS[/Applied Learning] courses are designed to achieve as many of the five essential learning experiences[1] as possible, and will include the generic skills[2] that underpin Hong Kong's curriculum framework". In addition to foundation, cognitive and social skills, values, attitudes and career-related competencies would also be emphasised "in order to prepare students for further studies and/or for work as well as for life-long learning" (EMB 2006, p. iii). It thus seems fair to assume that the whole document has taken pains to rebrand vocational education in order to elevate its status and attract students, with the ultimate goal of integrating vocational education and employment. This goal was clearly specified both in the policy address of the chief executive and in the *Report of the Task Force on Promotion of Vocational Education* (HKSAR 2014; EMB 2015b).

That the initiative was intended to blur the boundaries between mainstream or academic schools and vocational education cannot be denied. The intention was that whichever stream a student chose, prior understanding of workplace conditions would enhance their employability. The goals stated in the document were admirable in terms of their approach to tackling the changing needs of society as a whole. However, the epistemological underpinnings attached to the terms "applied" and "workplace" require further exploration, the outcome of which as this paper would postulate help eliminate a major obstacle hindering the success of the rebranding exercise in a short run and the initiative of a smooth transition from school to work or integration of education and employment in a long term.

This major obstacle can be identified in one of the recommendations made in the task force report; that is, VPET providers were advised to consider engaging "in (more) research activities (which could be action research, applied research, technology-oriented research other than academic research) to inform teaching and learning" (EDB 2015b, p. 11). In the statement, the notion of "academic" was constructed as "oppositional" to, for example, action research. Whilst it is not clear whether this was simply the result of a perceived difference in terms of the differing natures of research methodologies, it could also be a manifestation of the entrenched bias that academic research is theory based and action research is

[1]The five essential learning experiences include moral and civic education, intellectual development, community service, physical and aesthetic development and career-related experiences.

[2]The generic skills are communication skills, critical thinking skills, creativity, collaboration skills, information technology skills, numeracy skills, problem-solving skills, self-management skills and study skills.

practice based. A review of the perceptions of vocation education may help shed light on these ambiguities.

9.3 The "Ills" of Vocational Education and Its Alternative

According to Moodie (2002), vocational education is traditionally associated with concrete actions that produce visible outcomes. The nature of these outcomes contrasts with those in traditional academic education, characterised by the cultivation of theoretical or abstract thought. Another binary oppositional construct is that the former is perceived as being "concerned with training to do repetitive tasks", whereas the latter is tied to high-level education that offers "adaptive, generative and innovative" knowledge (Moodie 2002, p. 251). This kind of dualistic distinction between practically and theoretically oriented approaches to learning and knowing is deeply rooted in our minds. According to Young (1999), the academic/vocational division has its origin "both in a culture which associates manual work as of low status and in an economy which was based on the separation of mental and manual labour" (p. 208). With reference to England and Wales, Young emphasises that "vocational qualifications are judged by employers and university admission tutors as inferior" (p. 105). Cantor (1989) also notes that the ills associated with vocational education include not only "its low status" but also "a lack of sufficient high quality teachers, inadequate and outdated resources, and declining enrolments" (Cantor 1989, p. 131). According to Billett, "this standing continues to be intractably low" (Billett 2014, p. 1).

We may deduce from the preceding discussion that the basic principle that sets mainstream and vocational education apart is one that concerns differences in degrees of autonomy and independence expected of the students in the different educational arenas. In theory, it might be expected that mainstream academic students demonstrate heightened levels of self-directedness, whereas students in vocational education are more likely to be directed by others (Moodie 2002, p. 254). Autonomy is the fundamental quality with which the other qualities of excellence, such as creativity, critical discernment and a capacity for "initiatory trying" (Beckett 2001), are associated. People who do not have them are considered less capable of leadership. Contributing to the negative image of vocational education, according to Beckett, is the preoccupation with learning in the workplace "(being) identified formally through a narrow training function, where specific skills ... were encouraged, typically, through 'in-house' provision of repetition and role modelling" according to behaviourist principles (Beckett 1992, p. 131).

Treating vocational education and work as merely a means of making a living for the purpose of enhancing the economic growth of a society has received considerable criticism. Counterarguments suggest that "the workplace ought not to be just a business where people develop products, provide services, and collect a paycheck, but one in which they continuously learn, grow, and create" (Hartoonian and van Scotter 1996 p. 556). This view also holds that the excessive emphasis on

vocational skills and the implicit linkage of these skills to economic value fails to cultivate the other aspects of education that contribute to a healthy, well-balanced community. With regard to the role of schooling, Cantor (1989) doubts "the efficacy of high school vocational education in terms of either enhancing productivity generally or of improving the quality of the labour force" (p. 127). Mobilising such a narrow definition of vocationalism by emphasising inadequate job training is considered by Grubb dangerous because of "the mistaken belief that the economic well-being and power of [a society] are closely related to its supposedly well-developed system of vocational education" (Grubb 1987, quoted in Cantor 1989, p. 131).

Moodie (2002) offers a further argument that the changing notion of vocational education may require us to reconceptualise its meaning and identity. A dualistic mentality may not be useful in guiding us to face the challenges of the future in this post-industrial era where mere specialised training is inadequate (Moodie 2002). Cantor holds similar views, noting that "[v]ocational education, whether provided by high schools or in post-secondary institutions is particularly subject to changes in society at large; and, for this reason alone, any reappraisal of its functions and purpose should take into account likely forthcoming changes in [a society's] economy and in the nature of its workforce" (Cantor 1989, p. 131). Otherwise, as Goldberger and Kazis note "[t]he more occupation-specific the training, the greater the risk that what one learns may never be put to use in a future job" (Goldberger and Kazis 1996, p. 549). Hartoonian and van Scotter made similar remarks (Hartoonian and van Scotter 1996, p. 556) 20 years ago. In the case of Hong Kong, it was not until 2006 (EMB) that the government began to come round to the idea that contextual learning or drawing input from the workplace context is what makes vocational education sustainable since it is only when there is interaction with the environment that it becomes possible to adapt to change as it occurs. For this reason, focusing merely on skill-based training specific for a specific occupation is not considered sustainable.

That the economy no longer relies on occupation-specific skill-based training in this fast-changing world should not come as a surprise. In this regard, Young's worry that the traditional academic/vocational division may hinder "the potential of innovative curriculum reforms" (Young 1999, pp. 206–208) deserves our attention. In addition, Cantor's observation is also worth noting: some "employers . . . prefer to hire personnel with general literacy skills and good work habits rather than specific vocational skills" (Cantor 1989, p. 130). Williams also notes that employers prefer potential employees with an academic education background to those with one of direct vocational relevance (Williams 1994, p. 93). However, we should not rule out the possibility that some employers still adhere to the mentality of what Williams has coined "direct vocationalism" in conceiving the operation of their industries. That is, schools are expected to teach materials that are directly relevant to work. Despite this, the fact that the nature of workplace learning is "informal, incidental and practice-bound", conditioned by the "rapidly changing situations of working life", is seen by scholars to be something that stakeholders, employers and course providers alike should consider in conceiving the future

development of vocational education (Collin 2006, p. 404). In Hong Kong, the curriculum content, recently proposed in the *Action for the Future* document (EMB 2006), has partly responded to these insights by situating applied learning within the context of NSS, where Liberal Studies becomes one of the core subjects (CDC/HKEAA 2007).

Young's "curriculum for the future", characterised by the idea of "connective specialisation", is ambitious and inspiring. "Connectiveness" is the key word here; its emergence relies on the flexibility of the specialists with the ultimate goal of overcoming the academic/vocational divisions (Young 1999). By this it means the willingness to cross the boundaries of the knowledge divide and towards integration. Young explains that "changes from a system of mass production to one based on flexible specialisation makes quite new intellectual demands on employees at all levels". He anticipates new criteria for the curriculum built "on new and innovative kinds of connectiveness between knowledge areas and different forms of specialised study interwoven with a generic core of knowledge, skills and processes" (Young 1999, p. 213). He emphasises specialisation freed "from its association with divisions and the insulation of subject areas" rather than "anti-specialisation" (Young 1999, p. 214). This emphasis is important because Young is not against specialisation but rather the barrier created by an insular mindset not open to new knowledge.

On a different level, Young's proposal attempts to "transcend the traditional dichotomy of 'the educated person' and 'the competent employee' which define the purposes of the two tracks of a divided curriculum" (Young 1999, p. 218). To achieve these goals, all specialists are expected to share "an overall sense of the relationship between their specialisation and the whole curriculum". The main concern is "the links between combinations of knowledge and skills ... and wider democratic and social goals". The learner, guided by this concept of education, is endowed with "the need for an understanding of the social, cultural, political and economic implications for any knowledge or skill in its context, and how ... an individual can learn both specific skills and knowledge and the capacity to take initiatives, whatever their specific occupation or position" (Young 1999, p. 218). In this sense, workers become agents of change. They are expected to be proficient practitioners in the process of transformation through their experience in practice (Hager 2000, p. 281).

In a similar vein, Beckett, attempting to overcome the traditional academic/vocational division through insights drawn from Dewey, asserts that "vocational education and liberal education are one and the same". "The essential 'unity' of human experience" (Beckett 1992, p. 134; Dewey 1916) should be maintained both in our daily life and workplace. Beckett concludes that "it is our common integrative experience which makes sense of life" (Beckett 1992, p. 134). The traditional perception of vocational education lacks this understanding. It fails to grasp the concept that our life, of which the workplace is a constitutive part, is dynamic. With this understanding, Beckett calls for an "epistemological convergence" that helps cultivate "competences in the integrated or holistic sense" (Beckett 1992, p. 134). With Young, Beckett also supports the idea that "'higher order' social and cognitive

competencies" are needed in the workplace (Beckett 1992, p. 134). The curriculum of vocational education must therefore respond to these competencies.

According to Williams, the tension associated with the academic/vocational divide is about the choice between what he has coined "direct vocationalism and indirect vocationalism" (Williams 1994). Two important insights provided by Williams are helpful in concluding the preceding discussion. First, all subject knowledge(s) that students learn in schools has "a vocational import". That is, the potential for use in the workplace. However, the justification for learning them "is not based on their potential vocational usefulness". Second, the term "vocational" is used, according to Williams, "quasi synonymously for 'practical'" (Williams 1994, p. 90). Given that we are situated in a post-industrial era, where workers are considered resourceful agents instead of robots operating within a machine-like organisation, support for direct vocationalism becomes much less common and even unrealistic. But how can the notion of indirect vocationalism be conceptualised? Aristotle's *phronesis* may help shed light on this issue.

9.4 Aristotle's Notion of *Phronesis*

Scholars who advocate the concept of *phronesis* – or "practical wisdom" – share a common understanding that practical knowledge, which has been marginalised, must be reinvented to shed light on all activity relating to ethics, politics and oratory, the art of speaking in public (Dunne 1997, p. 261). The positive effect of *phronesis* has also been explored to inform practitioners in the workplace on what can be considered a favourable professional judgement. This recognition has gained momentum and the concept has been widely appropriated for use in the fields of teaching (Breier and Ralphs 2009; Graaff 2004; Eisner 2002; Noel 1999), health education (Tyreman 2000), service-learning pedagogy (Lukenchuk 2009), school leadership (Halverson 2004), pedagogical reflection (Birmingham 2004), psychoanalysis (Zeddies 2001), organisational inquiry and research (Cairns and Sliwa 2008; Flyvbjerg 2003), education (Kristjansson 1999), theatre studies (Berkeley 2005), managers' workplaces (Beckett et al. 2002), technical education (Hooley 2005), postmodern hermeneutics (Gallagher 1993), action research (Eikeland 2006) and musical performance (O'Dea 1993), just to name a few. Following Aristotle, scholars juxtapose *phronesis* against *episteme* (scientific knowledge) and *techne* (craft knowledge), which represent three kinds of reality and experience that require different accounts (Hohler 2007, p. 349). According to Flyvbjerg, "[w]hereas *episteme* concerns theoretical know why and *techne* denotes technical knowhow, *phronesis* emphasises practical knowledge and practical ethics" (Flyvbjerg 2003, p. 360).

Episteme refers to the kind of knowledge that is certain (Hager 2000, p. 282) and "about things that are necessarily true" (Birmingham 2004, p. 314). This knowledge "seeks to discover the regularities of nature as they truly are" (Eisner 2002, p. 383). In other words, *episteme* concerns the reality in which "things that seem never to

change... or cannot vary" (Hohler 2007, p. 349) and are therefore timeless. According to Graaff, *episteme* appeals to pure theory (Graaff 2004, p. 297) or to pure contemplative thinking (Kristjansson 1999, p. 456) that can be "expressed in propositions true across particular contexts" (Halverson 2004, p. 93). According to Aristotle, this kind of knowledge "does not even admit of being otherwise" (Aristotle 1999, p. 88). Therefore, Aristotle considers *episteme* as "teachable and capable of being learned by anyone". Scientific deductive knowledge (Tyreman 2000, p. 120) or theoretical knowledge of first principles (Moodie 2002, p. 250) constitutes one of many kinds of this knowledge. Flyvberg contends that *episteme* "corresponds to the modern scientific ideal as expressed in natural science" (Flyvberg 2003, p. 359).

Techne resembles *episteme* by appealing to some theoretical principles. However, in contrast to *episteme*, *techne* involves activities "of making and the art of doing" (Hooley 2005, p. 47). This type of craft knowledge deals with things that range "from the arts of construction to the creation of states of affairs" (Halverson 2004, p. 93). According to Zeddies, *techne* "refers to technical know-how, or a person's capacity to bring about a desired product or result". This type of knowledge "has an end beyond itself" (Hager 2000, p. 282), and the producer must identify "the means causally necessary for the achievement of certain separately specifiable ends" (Carr 1995, p. 141). According to Halverson, given that *techne* or technical knowledge can be expressed through routines and procedures, this knowledge "captures a reproducible procedure that will lead to predictable results despite variations in context" (Halverson 2004, p. 93). In this sense, *techne* "is primarily instrumental" (Tyreman 2000, p. 120) and is driven by a pragmatic rationality (Flyvberg 2003, p. 360). The involved activities are directed by a plan or blueprint (Kristjansson 1999, p. 456) that is "independent of interaction with others" (Berkeley 2005, p. 219). Generally speaking, *techne* corresponds to the art of applied science that we know today (Moodie 2002, p. 250). However, *techne* is becoming more associated "with the notion of a restricted technical rationality" (Hooley 2005, p. 47). *Techne* is therefore not considered a virtue because this knowledge "can be used to promote moral or immoral ends" (Birmingham 2004, p. 314). The extent to which *techne* can be taught and learnt depends on the degree of the craft component, which remains an integral part of such knowledge because, by definition, craft involves creativity that cannot be manipulated and transmitted.

Phronesis contrasts with *techne* in many ways, except that they are both regarded as practical knowledge (Dunne 1997, p. 237). They "are both committed to the ends and means of reasoning, but they organise the relationship between them differently" (Berkeley 2005, p. 220; Gadamer 1975, pp. 320–322). Unlike *techne*, *phronesis* does not lead to a "particular thing or product... but to complete ethical rectitude of a lifetime" (Gadamer 1979, p. 140, quoted in Berkeley 2005, p. 220). In the words of Graaff, a phronetic mode of life "is more than just cognitive learning" and always challenges itself to "see how his/her assumptions are continually challenged, how life provides a continuing series of new experiences and of self-transformation" (Graaff 2004, p. 297). *Phronesis* concerns what must be done (Moodie 2002, p. 250), namely, action, (Hager 2000, p. 282) which is manifested

in the capacity of individuals to make the right choice for the benefit of both the individual and society as a whole. Sellman also contends that *phronesis* is not just "concerned with merely getting through the work", but rather aspires "toward... doing the right thing to the right person at the right time in the right way and for the right reason" (Sellman 2002, p. 127). Hager considers *phronesis* a distinctive type of wisdom or capacity for reasoning that enables a person to know what to do in practice (Hager 2000, p. 282), though very often "for purposes that are not predetermined" (Hooley 2005, p. 47). Therefore, *phronesis* cannot be taught and learnt in its narrow sense.

9.5 Discussion

We hope that the above account sufficiently explains the major characteristics of each type of knowledge in Aristotle's framework. The following sections focus on *techne* and *phronesis* for comparative purposes, to address the three main questions that are raised in this paper, namely, to what extent is the entrenched bias towards the vocational education in Hong Kong justified, to what extent does the rebranding campaign help tackle the problem and whether there are alternative approaches. The main issues and their origins are revisited before addressing these questions.

9.5.1 The Epistemology of Workplace Learning

In 1992, David Beckett has noted that "[l]earning in, and from, the workplace has moved centre-stage", arguing that creativity and initiative are new workforce requirements that are "essential to an evolving national and international enterprise culture". For this reason, a new understanding or paradigm shift in conceiving the value of workplace knowledge has to be considered. The crux lies in "the educability of workers" (Beckett 1992, p. 130). Beckett further elaborates that converting the work experiences of people into valuable learning has become an international phenomenon. However, the following question remains unanswered: "how is the knowledge that arises from such learning being identified?" (Beckett 1992, p. 131).

Beckett notes the following types of workplace-associated knowledge: (1) what people do at work, (2) what people bring to those tasks and (3) what is site-specific about the work. The first type refers to the task itself, the second type refers to the attributes of the worker, and the third type refers to the context within which the task is performed (Beckett 1992, p. 132). However, the last type is mostly neglected in traditional vocational learning, the first receiving much more attention. According to Beckett, the latter two types of knowledge differentiate a professional from a vocational worker. A professional is shaped by his/her ability to take initiatives proactively and respond creatively to contextual changes. Therefore, the capacity of managing or mastering inevitable dynamics requires a strong

interpretive power, which enables an individual to identify connections between the parts and the whole. Meanwhile, the site-specific aspect entails the importance of culture where human factors, specifically how individuals make sense out of their workplace, must be considered. Therefore, as Beckett argues, "staff everywhere within the enterprise must be involved in the decision-making" (Beckett 1992, p. 133).

The nature of the first type of knowledge mentioned above (i.e. what people do at work) concerns the skills (i.e. *techne*) that are required for the worker to contribute to his/her task, whilst that of the other two types concern those dimensions that involve ethical insights (i.e. *phronesis)* where the cultural factors of the actor are considered. In other words, the completion of a task in the workplace must involve all three types of knowledge, which are different from those types that are conceived in the traditional vocational education curriculum in which the worker is treated as part of a technical system with the assumption that *techne*, on its own, will facilitate efficiency. Advocating for the importance of *phronesis* in the workplace, Beckett argues that "the value of the practice lies beyond the mere exercise of technique itself". Given the relationship between *techne* and *phronesis*, Beckett suggests that "telos (the purpose) [derived from *phronesis*] informs *techne* (the skill), and conversely *techne* – the skilful means – is turned to value-laden ends – telos" (Beckett et al. 2002, p. 333).

By referring to Dewey, Beckett contends that the traditional dualistic thought between theory and practice – as well as between thinking and doing – is misleading. According to Dewey, these elements are "experientially inseparable in the flux of life". He reiterates that "it is our common integrative experience which makes sense of life" (Beckett 1992, p. 134). "Vocational education and liberation education are one and the same" because an individual does not only learn vocationally for a living in the workplace but also grows (Dewey 1916) holistically within a dynamic environment. Based on this argument, Beckett suggests that workplaces now require their workers to have "competences in the integrated or holistic sense" (Beckett 1992, p. 134). He also emphasises that both sides, namely, tertiary institutions and workplaces, must work together to achieve this end. Based on this conclusion, the entrenched bias towards vocational education can be eliminated and a professional image cultivated.

A smooth transition from school to work with the focus on establishing direct links, or in Bell's words, connections "between wealth creation and the need to produce resourceful workforce" (Bell 1981, p. 175) was once a primary concern. Those schools that provided this type of vocational education could make themselves "become servants of technocratic efficiency needs" (Wirth 1974, p. 169). This view has been challenged on the grounds that society is always in a state of flux; this "social efficiency philosophy" (Wirth 1974, p. 170) is no longer relevant. Even worse, those who are enrolled in these schools have been labelled as "second class" (Cantor 1989, p. 127), as is the case in Hong Kong. One report states that "the Vocational Training Council received more than 15,000 applications, mainly from students who failed to achieve the minimum requirement for university entrance" (Lau 2015).

A new paradigm is required to provide all students with equal opportunities, to refresh our understanding of the nature of vocational education in the post-industrial era, and to benefit more students. Pratzner forms an alternative paradigm by perceiving vocational education as "an integral part of general education" (Pratzner 1985, p. 9). Williams uses the term, "indirect vocationalism" (Williams 1994). Beckett echoes Dewey by saying that "vocational education and liberation education are one and the same" and by mentioning the idea of "integrative, senses of vocationalism" (Beckett 1992, p. 134; Dewey 1916). According to Bell, schools are assigned to prepare students "for the world of work" rather than "for employment" (Bell 1981 p. 177–8). In short, these initiatives attempt to "humanise" vocational education, attempting to move away from the widespread bias towards both vocational education and the demographics that make up its student body.

In Hong Kong, the Applied Learning initiative responded to the call for a new paradigm by emphasising that students of vocational education are expected to achieve "as many of the five essential learning experiences as possible" through courses which "will include generic skills" (EMB 2006, p. iii). The ambiguities in the Policy Address and the Task Force Report with regard to their academic/vocational and theory/practice divisions, respectively, have cast doubts on whether the ideology that underpins such initiatives has been understood in the same way by relevant stakeholders. The worst scenario is that *phronesis* (i.e. practical knowledge), despite being included in the aims of the new curriculum, will still be approached with a technical mentality, believing that it can be processed according to a set of rules without contextual or situational considerations. This paper argues that a proper understanding of *phronesis* and its importance in the workplace not only improves the image of vocational education in the community but also creates a new horizon for conceiving the design of its curriculum, teaching, learning and research.

9.5.2 Implications of Phronesis for a Renewed Understanding of Vocational Education

The idea that the workplace is a space where "telos (the purpose) [derived from *phronesis*] informs *techne* (the skill)" (Beckett et al. 2002, p. 333) opens up conceptual space within which to consider the nature of vocational education. What makes a worker competent is not merely his/her technical knowledge but also his/her capacity to cope with and proactively involve himself/herself in the relational dynamics of the workplace from which new insights are acquired, and possible future scenarios are anticipated. Therefore, the workplace becomes a space not just for knowledge transfer or application in the traditional sense, but also for knowledge generation in a more holistic and integrative manner. This refreshed outlook propels us to reconsider the dualistic divisions, such as theory/practice,

academic/vocational and mental/manual, that have facilitated and deepened the entrenched bias towards vocational education.

In the past, only those things that are certain and independent of context (i.e. *episteme* in Aristotle's categorisation) were considered knowledge. In contrast, practice has been translated into activities that merely implement what has been prescribed by a blueprint with reference to a certain theoretical framework. Habitual experience that is accumulated through practice is not considered knowledge. A consideration of Aristotle's *phronesis* can change this entrenched bias by enabling us to reconsider the value of practice as a form of knowledge, to help us balance the technical and humanistic rationality that fosters the cultivation of an environment for work and personal growth (Dewey 1916). In practice, this accumulated experience will become practical knowledge or tentative theoretical frames of reference that can be used to inform new actions that are subject to continuous revision within new contexts. In this sense, the boundary between theory and practice is dissolved and these elements are mutually informed.

The mutuality between theory and practice has significant implications for the redesign of the vocational education curriculum, teaching, learning and research. Given that practice is a source of knowledge that concerns not only technical know-how but also knowledge that can benefit not only an individual beyond his/her professional engagement, but also organisations and communities, then workplaces must provide "legitimate" grounds or an "authentic context" (EMB 2006, p. iv) for a broad knowledge cultivation. The claim that workplace inquiry is an important part of academic activity should be widely accepted.

If the above argument is accepted, the curriculum content of vocational education must include what actually happens in the workplace and the redesigning of such curricula must involve employers. However, this implication does not rule out the possibility that employers are prone to adopting what Williams terms "direct vocationalism". Therefore, university or post-secondary VET providers must work closely with employers and proactively introduce them to a broader vision of vocational education that comprises the components of *phronesis*, *techne* and, if possible, *episteme* in order to provide students with a richer vocational experience. Eventually, students will be able to develop their professional expertise and their recognition of the workplace simultaneously.

Teaching and learning styles need also to undergo a paradigmatic shift. The authentic context deserves as much attention as the technical skills that are required for both teachers and students to develop their practical knowledge on how to accomplish tasks. This knowledge includes the competence of interpreting the dialectical relationship between the parts and the whole that constitute the working environment. Therefore, unpredictability, the main feature characterising the ethical and aesthetic dimensions of a workplace, is expected and is a significant part of its reality. This has significant implications for teaching and learning because the transmission model or formulaic method that only reinforces the passivity of student learning is no longer applicable when it comes to providing a rich vocational experience. Instead, a dialogic approach that fosters the spirit of discovery

and deliberation, whilst simultaneously enhancing fusion across disciplines, is more promising and viable.

9.6 Conclusion

This paper examined two policy documents related to vocational education in Hong Kong. The recent developments in this type of education call for a curriculum with a broader vocational component in response to societal changes in the post-industrial era. However, from an epistemological perspective, there are ambiguities which cast on the extent to which this has been achieved and the capacity of the changes outlined in the documents to promote vocational education through the elimination of entrenched bias. Drawing on Aristotle's *phronesis*, the complexity of the workplace, which is considered the foundation upon which the epistemology of vocational education is based, has been discussed followed by the suggestion that a refreshed outlook on vocational education – one enlightened by an understanding of *phronesis* – would also enhance the professional image and status of vocation education in Hong Kong. This is reliant upon a number of premises that (1) the theory/practice and academic/vocational divisions need to be dissolved, (2) workplace practice is recognised as an important source of knowledge and (3) practitioners actively participate by acting as knowledge creators. Based on this understanding, a paradigm shift with regard to research, curriculum content, teaching and learning is suggested, the underlying principles of which are summarised by Marsick, who argues for "a fundamental shift in thinking... from simplicity to complexity, from hierarchy to heterarchy, from a mechanical model to a holographic one, from predictability to ambiguity, from direct to mutual causality, from planned assembly to complex systems to their spontaneous creation through interaction, and from objectivity to an awareness of multiple perspectives" (Marsick 1988, p. 190).

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Chapter 10
Schools' Support for Postschool Planning: A Hong Kong Perspective

John Chi-Kin Lee and Orlando Nang-Kwok Ho

Abstract How schools could play a role in facilitating youngsters' transition from school to work or from secondary school to post-secondary institution has become an important educational issue. Against this backdrop, this chapter intends to examine the means of two different secondary schools in Hong Kong of providing support for postschool planning and how these two schools and their teachers make use of the funding from the government to strengthen their support for students' postschool planning. The two schools under review promoted classroom-based career education programmes which operated from S1 to S6. Talks and visits to businesses, companies and local universities were also organised. However, authentic career-related learning was relatively not dominant in these two schools. The implications for promoting school's support for postschool planning are discussed.

10.1 Introduction

The transition from school to work or from secondary school to post-secondary institution is one of the most important transitions in people's lives. A research in Australia revealed that students' educational and occupational expectations are often influenced by parents, schools and teachers (Marks et al. 2011, p. 1). This Australian study found that, in each of the four socioeconomic quartiles, the expectations of students and their parents for university education were broadly similar (p. 11).

Despite the efforts of the Hong Kong Government in expanding post-secondary education partly through the adoption of the 'community college model' (Asian Development Bank 2012, p. 26) and the provision of self-financed associate degree programmes, students tend to prefer entering a degree programme under a

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government-funded institution. In Hong Kong, a comparative review of secondary transition before the launch of the new senior secondary (NSS) system (with 3 years in junior secondary and 4 years in senior secondary education) in 2009 revealed that vocational education remained an inferior choice compared with higher education (Metzger et al. 2010). This trend continues as the recent South China Morning Post (Lau and Chan, 15 July 2015) wrote that most of the students would apply for higher diploma or associate degree programmes when they are unable to enter local universities, especially after the urging called by the government advisers to enhance the practical training in a higher value.

By contrast, a local study demonstrated a consistent pattern of educational aspiration during secondary education and a significant decrease and increase of career aspirations among Grades 9 and 11 students, respectively. That study prompted the attention on adolescents' sceptical views on the relevance of schooling in their future career development. A decline in 'task and effort orientations from Grade 7' was also evident, which raised issues related to the attractiveness of the curriculum content to the students and the extent of pleasant schooling experiences (Yeung and McInerney 2005, p. 550).

Moreover, from the analysis of the Programme for International Student Assessment (PISA), it reported that there were a relative large proportion of academically strong students who could not progress to post-secondary study (the Organisation for Economic Co-operation and Development (OECD) 2012). As early as the beginning of the new century, the curriculum reform has incorporated 'career-related experiences', which bridge 'studies with career aspirations and job opportunities' as one of the 'five essential learning experiences' (Curriculum Development Council (CDC) 2001, p. 20). Career-related experiences have also been regarded as one of the five other learning experiences (OLEs) in the NSS curriculum. The CDC prepared a booklet on *Student Guidance on Careers and Further Studies* and suggested that 'career guidance' from a broad perspective could encompass dimensions such as 'understanding self and individual planning', 'a guidance programme for further studies and career exploration with career-related experiences' and 'accelerated and remedial counselling for individual students' in their life planning and career education activates (CDC 2009, p. 1). In addition, Hong Kong Association of Career Masters and Guidance Masters (HKACMGM) has suggested a framework to encourage secondary school students facilitating their career-related experiences. (The Hong Kong Association of Career Masters and Guidance Masters 2008, p.4, 2009, p. 59). This framework contained different 'dimensions of intervention' ranging from 'remedial and accelerated counselling', 'individual student planning', 'field experiences in the workplace', 'school-wide career guidance activities', 'cross-curricular career education' and 'career guidance curriculum' (Career Guidance Section School Development Division, Education Bureau 2014, p. 27, CDC 2008, Chap. 2, p. 4, 2009, Appendix I, p. 14). The booklet also provided suggested activities that covered 'real work experience' (e.g. work placement), 'career-related learning in mediated real-life experience' (e.g. operating real businesses or participating in real-life work), 'career-related learning beyond the classroom' (e.g. organising meetings, visits and projects) and

'career-related learning in the classrooms' (e.g. learning through subjects, class teacher's periods, Moral and Civic Education or life skills lessons) (CDC 2009, Appendix II, p. 15). Other scholars, such as Ho (2008, p. 187), highlighted career-related experiences are to 'understand work ethics in various occupations', 'provide job-related knowledge training' as well as 'build up understanding of the world of work'.

On the basis of Kahne's (1996) views, Ho (2008, p. 195) proposed a whole-person-oriented development or a 'humanistic' approach to enrich students' equipping broad range of qualities leading to the development of their true nature in different aspects, such as social, cognitive and affective aspect.

The 105th paragraph of the Policy Address 2014 highlighted that 'life planning' would be strengthened in schools (Leung 2014). In May 2014, echoing the Chief Executive's Policy Address, the Education Bureau issued the document 'Guide on Life Planning Education and Career Guidance for Secondary Schools' with a concept of integrating students' 'career/academic aspirations with whole-person development and life-long learning' (p. 4). In other words, life planning education and career guidance are to enable the students formulating informed decision based on their personal abilities, interests as well as orientation, besides facilitating a smooth and fruitful transition from school to work (Education Bureau 2015, p. 2). In the 2014/2015 school year, the government launched a new supporting grant to further develop Career and Life Planning (CLP). The Education Bureau arranged advisory visits to about 100 schools, which revealed that many schools encompassed elements of self-awareness, self-understanding and goal-setting in their life planning and career education activities (Education Bureau 2015, pp. 2–3). Recently, The Boys' and Girls' Clubs Association of Hong Kong and Dr. Cherry Hau Lin Tam of City University of Hong Kong organised a survey on the life planning and career orientations of secondary 6 (S6) students in Hong Kong (「全港中六學生生涯規劃及擇業取向」), which received more than 2000 valid questionnaires from 19 secondary schools. The findings revealed that approximately 84% of S6 respondents planned to continue their study. A high proportion of S6 respondents (approximately 76%) had definite academic study orientation. Nonetheless, approximately 56% of the respondents had set their own career orientation. Moreover, although 90% of S6 students responded that they had set up their own career goals, approximately 80% and 65% of them did not have confidence in making career choices and decisions, respectively. These findings indicated that comprehensive and diversified life planning and career guidance would be desirable (Tam 2015). While Chap. 8 focuses on the macro and policy contexts of Hong Kong education, this chapter will highlight how recent life planning and career education-related policy measures have been perceived and implemented at the school level.

10.2 Background of the Study

We were involved in a project entitled 'Preparing urban youth for further study and careers: An international study involving Hong Kong' (HKIEd 843212) supported by the Research Grants Council. The study focused on one of the cities with a large-scale international study for secondary 4 (S4) students (equivalent to Grade 10 in the United States (USA)). One of the objectives of the Hong Kong study was to fully study how is the current practice of support structures, programmes and activities and how can it effectively facilitate different learners to their completion in secondary school or undertake various courses.

Conducted in 2013 in Hong Kong, the study involved a sample of approximately 5900 S4 students (approximately 3500 boys and 2300 girls) from more than 50 secondary schools (approximately 10% of the secondary schools in Hong Kong). The analysis of the Hong Kong data of the International Study of City Youth (ISCY-HK) revealed that approximately 66% of the parents' preference for their children's plans after leaving school was university, whereas only approximately 16% was for undertaking either post-secondary education or vocational education and training (Lee et al. 2016).

These findings appeared to correspond rather positively to those of other survey results that NSS graduates are inclined to study a bachelor degree or enrol in courses leading to post-secondary qualification (CDC et al. 2013, pp. 27–28). With regard to the ISCY-HK data on students' perceptions of their school's support for their career plans, approximately 51% of the students responded 'good', whereas 23% and 8% of the students responded 'very good' and 'excellent', respectively (Lee et al. 2016).

Under this condition, this chapter aims to explore the means of two different secondary schools in Hong Kong of providing support for postschool planning and how these two schools and its teachers utilise the CLP grant from the government to enhance their support for students' postschool planning (Xu and Lee n.d.).

Out of the secondary schools participating in the ISCY-HK project, approximately ten schools were invited for teacher and student interviews. In this chapter, two schools were selected as examples to illustrate how they implemented the policy to develop career guidance and life planning education and how teachers viewed the arrangement in schools. The criteria for choosing these two schools were related to the quality of student intake in terms of academic attainment and also the geographical location of the school in Hong Kong (Lee 2017). School A is a city school with a long history and a good admission of students. School B is a school in one of the new towns in the New Territories that admit students of low to moderate academic ability. In school A, only a few students remain idle for a year and not study or work, whereas most of the students apply for university or post-secondary programmes. Approximately 20% of the students go to universities overseas, particularly those in the United Kingdom (UK), Australia, the United States or Canada. The remainder of the students study locally (teacher interview). In school B, only approximately 10% of the students opt for work. Approximately

70% continue their study, among which approximately 40% enrol in universities in Mainland China, Taiwan and Hong Kong, approximately 10% apply for higher diploma programmes and approximately 20% participate in other self-financed and Yi Jin programmes (teacher interview).

In each school, a focus group comprising the vice principal, the career guidance counsellor, members of the career guidance and life planning team (or equivalent name) and senior class form teachers were interviewed for approximately 35–40 min. All interviews were transcribed verbatim, and selected quotes were later translated to English. Although these two schools cannot be representatives of most secondary schools in Hong Kong, their experiences can clarify what could be further accomplished to enhance the impact of career guidance and life planning education on supporting students' postschool planning.

10.3 Schools' Arrangement of Life Planning and Career Education

The main objectives of school A are to extend career guidance to embrace life planning and career guidance education, bridge the notion of life-long learning with students' academic and career aspirations and help students make informed decisions on their further education and future careers while considering their own attributes and capabilities. The school recruited a new teacher to be the career assistant (CA). In addition, a careers education programme was established for secondary 1 to 6 (S1–6) students and involved the form teacher, career coordinator and careers team member.

Based on the school documents, at the junior (S1–3) and the senior (S4–6) secondary levels, discussions about studying overseas were arranged to brief students on university application in the United States and the United Kingdom. In addition, the form teachers were engaged in running the careers education programme. At the junior secondary level, the emphases were on facilitating students to appreciate the importance of early career planning, become aware of different professions, set goals, uncover their own preferred interests and work towards their study goals and plans related to their own personal and social development. At the senior secondary level, supporting the students to distinguish their own talents, concerns and identities became the focus. In addition to the S4 placement talk and the career talks organised for S3–5 students, S4–5 students would participate in career visits and success skills workshop, whereas S6 students would participate in interview workshop, medicine workshop, job shadowing and Joint University Programmes Admissions System (JUPAS) talk.

Based on school B's documents, the objectives of using CLP are to strengthen the involvement of teachers in career guidance and life planning education, provide information on further study and employment as well as improve the elements of life planning education for students. Similar to school A and other schools in Hong

Table 10.1 Brief comparison of life planning and career education in schools A and B

	School A	School B
Use of CLP grant	Recruitment of a CA	Employment of two full-time teachers
	Employment of NGO services	Organisation of teachers' professional development activities as well as school-based life planning education activities for parents and students
	Development of CLP programmes	
	Administrative support	
JUPAS talk	For S6 students, provision of individual counselling to students on their JUPAS choices	For S6 students, provision of information and figures of last year's graduates' further study and employment
Interview and medicine workshop	Helping S6 students prepare for university interview	Simulated interview games for S6 students to enhance their interview skills
	Providing feedback	
Job shadowing	Learning about the workplace of different professions supported by the alumni network (for S6 students)	No explicit arrangement
Careers talk	Introducing different professions for S3–5 students and enriching their exposure	Inviting alumni to introduce different occupations
	Creating a mentor relationship between the speakers and students	Students joining groups that match their interests
Career visit	Enriching S4–5 students' understanding of the working environment of different industries	Participating in business–school partnership projects and learning about the business world (for S5 students)
Success skills workshop (junior achievement Hong Kong)	Learning how practical success, interpersonal and teamwork skills can be applied in workplace	Learning about resume writing (Chinese and English) and preparing job application letters
	Learning from successful role models in the business sector	
	Skills on resume preparation and interviews for S4–5 students	
Overseas studies talk	Learning about different options in the UK and US universities and their articulations (for S1–6 students)	Mainly for S5–6 students
		Different academic pathways covering JUPAS programmes, associate degrees, high diploma and certificate programmes as well as overseas, Taiwan and mainland Chinese universities
		Inviting alumni to share their experiences of academic study

(continued)

Table 10.1 (continued)

	School A	School B
Talk on S4 placement	Helping S3 students make informed decisions on selecting core and elective subjects in relation to their further study and future career opportunities	Talk and life planning camp arranged for S3 students
		Supporting students and parents to select choices
Others		Using career interest inventory to help S2 students understand their character and possible associated occupations
		Employing personality analysis and 'self-directed search' to help S3 students understand the type (s) of career and academic subject (s) that match their aptitudes/ personalities
		Adopting 'role theory' assessment to evaluate S4 students' roles, strengths and values in teamwork
		Facilitating overseas visit for S5 students to learn about different programmes and their admission requirements
		Using 'DISC profile' helping S6 students to assess their personalities

Sources: school documents; Career Guidance Section School Development Division, Education Bureau 2014, p. 27; CDC 2008, Chap. 2, p. 4

Kong, school B has developed a 6-year interconnected CLP programme for S1–6. S1 and S2 focus on self-understanding and knowing the career world, respectively. S3 highlights understanding the external environment and the career world. S4–6 commonly emphasise the areas of understanding the academic pathways, general career development skills and career world, respectively. Individual guidance and support are provided to students with special education needs, students lacking motivation to study and students with a poor family background through community resources. The CLP Grant was used to employ two full-time teachers. All these CLP-related activities were operated by the career guidance team with support from non-governmental organisations (NGOs) and business and community organisations. The arrangement of activities use weekly assembly, form teacher period, Ethics and Religion class and OLE lessons as well as after-school, post-examination and summer vacation sessions.

Table 10.1 shows a brief comparison of life planning and career education in schools A and B. This comparison is partly based on the framework by the Hong Kong Association of Career and Guidance Masters for improving career-related experiences (Career Guidance Section School Development Division, Education

Bureau 2014, p. 27; CDC 2008, Chap. 2, p. 4; Lee 2017). School A, which consists of many students with good academic ability, tended to benefit from a sizable support from elite alumni and focused on local and overseas university education as well as interview and success skills workshops. School B, which consists of less academically skilled students, was distinctive in offering support to students with special education needs and monitoring the progress and effectiveness of the plan through surveys, attendance and performance in activities, feedback from instructors as well as students' reflection and feedback. In addition, a parents' handbook for selecting NSS elective subjects was prepared. Parents with less academically skilled children or children with diverse ability are offered advice for selecting applied learning courses and specialised/vocational education. Moreover, school B tended to adopt different types of tests and assessments for gauging students' interests and aptitudes. A 'searching for dreams' project was planned for students with average ability to help them understand the market situation and set up targets and plans according to their own interests and abilities. It appears that School B has paid more attention to the aspect of facilitating individual student planning through assessment while School A has provided slightly more emphasis on reinforcing workplace learning experiences through job shadowing.

10.3.1 Teacher Views on Career Guidance and Life Planning Education

Life planning and career guidance education is part of the lessons of the form teacher and includes values education, sex education and life skills. The career mistress in school A considered that, in terms of the academic aspect, the focus was not on academic counselling. Rather, the career guidance team provided questionnaires and worksheets to facilitate senior secondary students' reflection on their potential for improvement and their own interests and strengths. Teachers also refer to publications of HKACMGM, such as *Finding Your Colours of Life* and *Career Mapping (2009)*. With the funding support from the CLP Grant, teachers from the career guidance team shifted from a passive to an active approach. They arranged group sessions to meet all students. In addition, NGOs were involved to arrange large-scale activities and simulated job activities to enhance students' understanding of life planning and the career world (interview).

The vice principal in school B remarked that life planning education is not aimed to steer students to specific occupations. Rather, its role is to facilitate students in the discovery of their own interests and potentials, which may lead to specific careers. However, he commented that 'after we have harnessed students' potentials, do we provide pathways or opportunities for them? This is the issue which I think the government should consider'. He also suggested that the curriculum framework and content of life planning education should be 'standardised' after a few years of implementation. Different schools can subsequently adapt the curriculum

framework and content according to their school contexts and needs. Another teacher echoed that, for weak students or students with special education needs, the government and schools should provide a 'gap year' for them to search for jobs and understand the professional world. If they wish, then these students can return to a secondary school or another educational institution. He also highlighted the important role of NGOs and private firms in providing life planning activities for students. He considered that 'life mentors' can be useful for students' development and that these mentors can establish a longer relationship (2 years to 3 years) than those in one-off activities.

10.3.2 Influences on Students' Choices of Subjects

When students reach the senior secondary level (S4–6), they need to select two to three elective subjects, depending on the school's policies and the students' choices and abilities. In the past, students preparing for the HKCEE examinations could select up to seven to eight subjects. For the current HKDSE examinations, students can only opt for two to three subjects because of the four core subjects they need to study (i.e. Chinese Language, English Language, Mathematics and Liberal Studies). In school A, subjects such as 'physics, chemistry, biology, economics, business, accounting and financial studies and geography' are prioritised. Other subjects, such as Chinese history, information and communications technology and integrated science, are less popular. This is partly related to the 'science stream' or 'business stream' related subject combinations provided to students because of teachers' expertise and track record in teaching senior classes. Students have often been persuaded by parents to give up subjects that they were interested in (e.g. Chinese history). These students end up being less motivated to study (teacher interview, school A). In selecting elective subjects, parents exert the most influence on students in schools A and B, followed by peer students and class teacher.

Given its locality in the new town (away from the city centre), students in school B should have selected a vocational course offered by a post-secondary or vocational college, which may be more suitable for them than a secondary school offering an academic track. However, parents did not support this option, and students were usually reluctant to travel a long distance for education. Parents and students viewed education as studying in a secondary school and taking the Hong Kong Diploma of Secondary Education (DSE) examinations. A teacher explained that 'this is an entrenched idea for parents. They insist that this should be done even though they felt this is impossible [for their children to do well in secondary education and DSE]'.

10.3.3 Challenges in Providing Students' Postschool Planning and Catering for Diversity

A teacher in school A remarked that the school could only recruit one assistant to help teachers to administer approximately 200 students in one cohort/class because of limited resources. He considered that an individualised planning would be desirable, and if resources were available, then three assistants would be necessary to provide enhanced services and support. He further explained that:

> [I]f we wish to adopt a comprehensive [approach] and view the issue from the perspective of fairness, we need to think why some students are able to enjoy one-to-one treatment [interview]. . . Some average students fall between two stools but they also deserve these services.

Another teacher echoed that a number of bright students would search for teachers' advice and school support proactively, whereas the teachers and school staff would actively approach less able students to offer support. Often, the students in the middle tended to be neglected.

A teacher in school B explained that students with high academic ability would be provided with a 'top student' (*jianzi*) programme in which they could discover their own abilities and potentials and be able to construct and realise their dreams. Students with weak academic ability usually had vague dreams. The school would liaise with networks of community organisations that could provide these weak students with skills training, particularly in the areas of coffee making, food and catering and beauty. However, the attention and resources devoted to the students in the middle or those with moderate ability have been insufficient, except with the recent launch of the 'searching for dreams' project.

A teacher in school B mentioned that several students might be uninterested in exploring their future academic or career plans. When students were provided with an aptitude test, some felt bored and annoyed; thus, the questionnaire was not filled in seriously. She elaborated that:

> [S]ome weaker students already spot certain kinds of career. They do not feel the need to plan and think that just going out to work will be fine. Nonetheless, some students with stronger ability do not have self-confidence. Even though the teacher has helped him/her to plan ahead, they know it but they do not have confidence. They consider that they do not have the ability . . . They do not follow teacher's guidance . . . and so the outcomes are not as good as we have expected.

As another teacher elucidated, students in school B were academically average compared with those in other schools in Hong Kong, and some of them felt 'helplessness'. Although they wished to study in university programmes, several students understood the reality that they might not have good chances in selecting their preferred disciplines and programmes. Therefore, they were not keen to explore different pathways and choices of education further.

Regarding life planning education, a teacher in school B commented that several lessons from the planned moral education lessons had to be arranged for life planning activities. In certain circumstances, the aptitude test was conducted by

university students, but teachers might lack time to follow-up and deepen students' understanding. He further explained that sharing 'life stories' (e.g. illustrating the context of how a secondary student entered Yin Ji and then became a nurse) would be desirable. Individual consultations with the form teacher were increased, but three or four meetings should be required to initiate changes in students' beliefs (teacher interview).

10.4 Discussion

Through these two secondary schools, we could discern the initial effect of using the CLP Grant in promoting life planning and career education. Regarding the activities suggested by the CDC (2009, Appendix II, p. 15), the two schools fostered 'career-related learning in the classrooms' with career education programmes running from S1 to S6. 'Career-related learning beyond the classroom' was also offered mainly through talks delivered by credible people and alumni and visits to businesses, companies and local universities. The area of 'career-related learning in mediated real-life experience' was not conspicuous in the two schools. For 'real work experience', school A only arranged job shadowing rather than work placement, whereas school B had no explicit arrangement on job placement. In the future, taster programmes or work experience projects could be considered to enrich students' authentic field experiences in the workplace (CDC 2009, Appendix I, p. 14). The direct advice and guidance from the career guidance team and form teachers and the activities related to interviewing people and experts in different fields can be enhanced through various means. Organising entrepreneurial-oriented activities (e.g. running a tuck shop or a Lunar New Year Fair Stall by students) under the guidance of teachers, experts or alumni could enhance 'career-related learning in mediated real-life experience' (CDC 2009, Appendix II, p. 15).

For different types of intervention (CDC 2009, Appendix I, p. 14), the two schools devoted efforts to developing 'school-wide career guidance activities' and 'career guidance curriculum'. Several activities were derived from business–school partnership programmes and applied learning courses in the area of 'field experiences in the workplace'. Planned efforts for the areas of 'remedial and accelerated counselling' and 'individual student planning' should be increased to cater for student diversity and adopt a personalised approach to life planning and career education.

From the experiences drawn from the two schools as well as our observations, many schools are currently moving towards providing a diversified CLP education under the support of the CLP Grant starting from the junior secondary years (S1–3). These schools are also utilising valuable connections and resources from community projects, witnessing the joint efforts of the government and businesses in launching the business–school partnership programme, which comprised 'talks, workshops, workplace visits and work experience programmes' and explored the

possible arrangement of 'a variety of activities, such as work shadowing and adopt-a-school programmes (Education Bureau 2015, p. 6).

Nonetheless, whole-school approach has its limitation on the implementation of CLP education. One of the key concerns is the workload of senior secondary class teachers arising from consulting with students and organising activities. The other concern is that, even when teachers attend training activities and programmes, they have relatively limited updated experiences and knowledge in specific occupations and dynamic market demands. For schools far from the city, the commuting cost and time for life planning activities are burdensome. Activities would be attractive to students and parents if they could be arranged by NGOs on a district basis.

The psychological 'trait and factor' approach, which resorts to the use of career assessment, has been dominant in career counselling (McMahon and Yuen 2009, p. 99). Several secondary schools (e.g. school B) would like to employ different personality, aptitude or career tests to diagnose students' personality traits and strengths. Although the trait and factor approach is popular, career advisers and form teachers should seek advice from certified assessment experts on using these tests for students as it might be misleading and cause 'inappropriate interpretation of self' (HKACMGM 2008, Chap. 2, p. 23). The constructivist approach, which tends to be 'multi-storied' as well as culturally and contextually sensitive, is emerging (McMahon and Yuen 2009, p. 100). Under the effect of globalisation, Savickas and others (2009, pp. 244–246) advocated the paradigm of 'life designing interventions which are "life-long", "holistic", "contextual" and "preventive"; embrace the goals of "adaptability", "narratability", "activity" and "intentionality" and are "both as a process and an outcome"' (p. 249). Local academics, in collaboration with overseas scholars, should explore various social constructivist and multidisciplinary approaches to career education in the Asian and Chinese contexts (e.g. Hong Kong) through research and development endeavours.

From the case study, parents are noted to influence students' choices of elective subjects in the senior secondary level, which may then shape their academic and career aspirations and decisions (Cheng 2012, p.155). This finding is comparatively in line with a survey research, which reported that 'career related parental support' could significantly affect students' career (Cheng and Yuen 2012, pp. 160–161). This result indicated that collaborative and coordinated support among teachers, professionals and parents' 'verbal encouragement and career modeling' is desirable for enhancing 'students' self efficacy' (pp. 160–161). Additional efforts should be exerted to enhance home–school collaboration and advise parents' communication and support to their children (Cheng and Yuen 2012).

Regarding the macro context, the interface between secondary and post-secondary systems deserves increased systematic connections. Hong Kong may refer to the experiences of Japan, South Korea and the United States, which provide 'multi-dimensional admissions criteria policies for the prestigious post-secondary education options' (Metzger et al. 2010, p. 1518) as well as the example of Switzerland where students can enrol in 'full-time academic school or dual vocational education' and then in a 'university system' or 'higher continuing vocational education' (p. 1513). This action would require a consensual understanding and

support from different stakeholders, namely, the government, vocational education institutions and schools and, more importantly, parents and students.

In the medium to long term, if the government considers life planning and career guidance as a high-priority item in the educational agenda, then the possibility of adopting an 'individual student planning' approach from the United States, which entails strategies of 'individual appraisal', 'individual advisement' and 'transition planning', should be explored (Gysbers 2008, pp. 123–124).

Two philosophical observations may also be made as an outcome to the aforementioned recommendations. Among approximately 450 secondary schools in Hong Kong, approximately 270 are affiliated with religious denominations. Many students have acquired experience of seeking union with the inner self through their schools' subject-based curricula (e.g. relating to teachings based on their respective sacred texts) and their informal curricula (e.g. school assemblies, prayer groups and breath or meditation training). At the pivotal moments of searching for self-knowledge and perhaps of facing their hitherto unprecedented stress when making strategic life plans, the young learners' attention should be refocused on these latent skills and the availability of these acculturated resources. Observations from other schools revealed that many students with backgrounds of religious immersions agreed that such acquired spiritual exercises and routines significantly facilitate the easing of stress. Several students even develop internal peace at significant moments. These existing knowledge and positive psychological traits can help them to regain courage and confidence when making important decisions. Not fully utilising these activities in CLP programmes is negligence. The existing inner strengths of the youth are overlooked, and the invested efforts of the teachers and schools in this educational domain of spirituality are misused. Moreover, in the long term, *lived* spirituality at the critically decisive moments can be a life-long blessing, which is conducive to one's non-material happiness and satisfaction in life. A career is not simply about a job. Life planning can be considered the discovery and unfolding of ones' calling and destiny.

In terms of sociopolitical philosophy, although the best CLP programmes may be or have been designed to enrich ones' self-understanding, a healthy degree of social sense is necessary. Social sense should be integrated into the CLP programmes at schools. On one hand, the vision of a society with a concern for the weak and less fortunate should be instituted at schools with academically capable students. Living in a highly condensed metropolis such as Hong Kong, work and life are not merely for one's economic success and atomised 'lifestyle'. Life in Hong Kong has made everyone related to one another, voluntarily and involuntarily. On the other hand, the less academically capable students should learn the existence of dignity in one's future independence as well as happiness in genuine satisfaction. For the long-term sustainable peace, prosperity and productivity of Hong Kong, the future upper and lower classes should acquire a balanced social philosophy. This philosophy will enhance the likelihood of a socioculturally robust, dynamic and upright community beyond the individual life and career dilemmas juggled by the youth. Meanwhile, maintaining great horizontal and vertical inter-pathway flexibility is essential. This strategy minimises wasted

potential talents, particularly of 'late developers' as well as special needs, new immigrant and ethnic minority students which are discussed in Chaps. 8 and 11. Every effort should be made to keep the educational pathways open as equal opportunities to all eligible would-be first-career takers. The life planning-related curricula can lead to long-term and macro social and spiritual consequences among the youth.

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Chapter 11
Post-school Transition of Students with Special Educational Needs in Hong Kong

Sin Kuen Fung and Yang Lan

Abstract In Hong Kong, students with special educational needs (SEN) are able to access the senior secondary education in the 12-year free education. Teachers teaching students with SEN have to prepare their students with knowledge, skills, and competency for overcoming the challenges of lifelong learning and career planning. It is well noted the post-school transition period signifies the transition to adulthood and independent life. A successful transition may lead to students' adaptive motivation to continuing higher education or employment opportunities, which contributes to good quality of life. However, for students with SEN, they often need to face more challenges than regular students do. This chapter first discusses the contextual analysis for the education of students with SEN in Hong Kong schools by analyzing the increasing number and complexity of disabilities, concerted effort in school support and pathways of postsecondary education. However, teachers always reported the uncertainties and difficulties in supporting the smooth transition of the SEN graduates. By taking account of the research done by the authors specifically through a series of focus group interviews to a wide range of stakeholders, the chapter identifies variables affecting the post-school transition outcomes of students with SEN in Hong Kong. With reference to the contextual needs, the identified variables inform the policy change in career guidance and support for students with SEN. Implications and recommendations at individual, school, community, and policy levels are discussed. In regard to the development of career guidance and planning in schools, this chapter will finally conclude the intensive support, supporting strategies, and multiple pathways for students with SEN in Hong Kong.

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11.1 The Significance of Post-school Transition for SEN Students

Post-school transition is important for secondary students' career development. During the post-school transition period such as post-school education, career choices, and living arrangement, many decisions have to be made by regular senior secondary graduates and their peers with disabilities (Clark and Unruh 2010; Kohler 1993). This period also signifies the important transition to adulthood and independent life (Blacher 2001). This transition period for young people with SEN is often more complicated than that of their peers without disabilities (Flexer et al. 2008; Halpern 1994; Janiga and Costenbader 2002). Students with SEN are often faced with a range of problems, such as unemployment, low community participation, and inactive adult life (Wagner and Blackorby 1996; Madaus 2005). The increasing number of secondary students with disabilities integrated in regular classrooms calls for effective transition programs between senior secondary schools and higher education/post-school employment (Eckes and Ochoa 2005; Rabren et al. 2002). How do the schools prepare students with disabilities for a successful post-school transition? An increasing number of studies have made preliminary efforts to explore effective transition programs and services (e.g., Gil 2007; Janiga and Costenbader 2002; Sitlington et al. 2000; Wehman et al. 1985). However, this area of post-school transition to higher education or to employment among students with SEN is under-researched in Asian societies, particularly in Hong Kong.

11.2 The Increasing Number of Students with SEN in Hong Kong Secondary Schools

With the development of inclusive education and advances in assessment in Hong Kong, the number of secondary students identified with disabilities increases sharply. Up to 2014, 16,440 students with SEN across 8 types of disabilities (i.e., speech disorder (SD), hearing impairment (HI), visual impairment (VI), physical disabilities (PD), attention deficit and hyperactivity disorder (ADHD), autistic spectrum disorder (ASD), intellectual disabilities (ID), and specific learning disabilities (SpLD) have been identified and integrated in the mainstream secondary schools. Table 11.1 displays detailed number for each type of disabilities ranging from 2009 to 2014. It is important to note that for secondary students integrated in regular classrooms, they are mostly identified at the mild or medium level of disabilities, receiving support levels at tiers 2 or 3 on the basis of whole-school approach. Severe cases with multiple disabilities are usually placed in special schools, so that they will receive rehabilitation, training, and education appropriately. For extreme cases (particularly those with severe and complicated problems), they are usually placed in hospital schools. In regard to the policies of early identification and early intervention, referral and assessment speed up the

Table 11.1 Number distribution of students with different types of disabilities in Hong Kong secondary schools from 2009 to 2014 (Hong Kong Legislative Council 2014)

	SpLD	ID	ASD	ADHD	PD	VI	HI	SD	*Total*
2009–2010	5050	710	570	740	190	90	470	180	*8,000*
2010–2011	6430	810	780	1250	230	90	450	230	*10,270*
2011–2012	7850	940	1050	1790	250	110	490	210	*12,690*
2012–2013	9050	930	1310	2330	250	100	420	190	*14,580*
2013–2014	9890	930	1660	3010	240	100	400	210	*16,440*

Note. Total number for each school year was highlighted in italic

identification of students with SEN in mainstreaming schools. The success of intensive support helps a huge number of students with SEN complete education up to senior secondary level. However, the features of disabilities and wide range of needs signify the complexity of school-based support. Teachers have to be empowered with the necessary skills and knowledge in catering for the diversity. In addition to attitude change, curriculum differentiation, appropriate pedagogical practice, and assessment accommodation are the key factors of success for including the students with SEN into the inclusive setting.

11.3 The Impact of New Academic Structure to Students with SEN in Hong Kong

Since 2009, the 3-3-4 scheme has been launched as a new academic structure for senior secondary education (i.e., 3-year junior secondary, 3-year senior secondary education, and 4-year higher education) in Hong Kong (Hong Kong Educational Bureau 2009). In 2012, the Diploma of Secondary Education Examination (DSE) replaced the two public examinations: Certificate of Education Examination (CEE) and Advanced Level Examination (ALE). Under the new secondary school (NSS) academic structure, thousands of students with SEN in the year complete the senior secondary curriculum and attend the Diploma of Secondary Education Examination (DSE). In the public examination, specific arrangement, extra time allowance, and other practices of support are considered by the Hong Kong Examinations and Assessment Authority. Students with SEN possibly gain the recognized learning outcome and ability for future development. With the achievement, these graduates need to make their post-school choices for further education or employment. For further education, the choices, on competitive basis, will be limited mainly to (a) degree programs, (b) nonlocal courses, (c) the mainland/overseas studies, (d) Project Yi Jin diploma, (e) associate degree courses, and (f) vocational courses. The post-school arrangement and transition of SEN integrators are thus always the concern. For vocational education for persons with disabilities, the Vocational Training Council runs courses for those with relatively higher cognitive abilities, while NGOs funded by the government provide training to persons with disabilities

at mild levels in different schemes, training programs, or sheltered workshops. In short, the new academic structure brings about implications for school practice for preparing students with SEN for further education, vocational training, or open employment. Individual lifelong learning and career planning for students with SEN are increasing concerns to be addressed in mainstream senior secondary schools.

11.4 Small Number of Students with SEN Studying in the Public-Funded Universities

Among the current eight public-funded universities in Hong Kong, the annual intake is always around 18% of the student population taking the public examination, e.g., the Diploma of Secondary Education Examination (DSE). Students with SEN are always the disadvantaged group in this competitive examination. From the government statistics submitted to Legislative Council, the ratio of SEN integrators at S.6 student population in public-funded schools increases from 1.81% at 2012/2013 and 2.49% at 2013/2014 to 2.77% at 2014/2015. Each year, thousands of students with SEN will sit for the public examinations, with the accommodation in the assessment or special arrangement approved by the examination and assessment authority. However, the statistics of SEN integrators studying in full-time degree and associate degree programs is undesirable, with 252 in 2012/2013, 270 in 2013/2014, and 412 in 2014/2015. Only a small number of students with SEN with remarkable achievement will be admitted into universities. For example, there are reported cases for students with visual impairment studying in programs of education, social work, and translation, for students with physical disabilities studying in psychological studies, and for students with ASD studying in programs of science, medical science, or mathematics. Indeed, all students including with SEN and non-SEN experience the same selective admission exercises for a place in a university. Without the special pathway, exemption, and explicit arrangement, a majority of students with SEN are always the losers.

11.5 The Current Study: A Study on Post-school Transition for Students with SEN

In regard to the contextual development in Hong Kong schools, how is post-school transition going for students with SEN in Hong Kong in reality? The current study was conducted to find answers to this question. The study is qualitative and exploratory in nature.

More specifically, this study aimed to achieve four key objectives as follows: to examine available post-school transition opportunities for students with SEN, to

Table 11.2 Summary of participants' distribution in focus group interviews

School	Student	Parent	Teacher	Social workers/professional	Total
Mainstream	38	6	27	4	75
Special	35	31	37	11	114
Total	73	37	64	15	189

identify the barriers encountered and problem-solving strategies adopted by students with SEN in this transition period, to gather information about the existing guidance and support from schools and families to students with SEN in this transition period, and to make recommendations for improvements in order to achieve equal opportunities in education and transition support to students with SEN in senior secondary schools in Hong Kong.

Focus group interviews were conducted with a wide range of stakeholders (i.e., students, parents, teachers, social workers, and professional). Seven major interview questions to probe these stakeholders' understanding and experiences of post-school transition support to SEN students were asked to gather insightful information from these stakeholders. In total, 189 stakeholders participated in interviews (for details of sample distribution, please see Table 11.2). Interview guidelines in relation to the four key research objectives listed above were also constructed to assist our research team in focus group interviews to collect information from these interviewees concerning current education and job options for students with SEN, external support they have received, barriers and difficulties encountered, and their solving strategies and suggestions to policy and education to support SEN students' post-school transition. After completion of all focus groups of interview, all the interviews' data were transcribed. Three research assistants were invited to accurately discriminate between voices of the members who participated in each focus group interview and to ensure that the contents of each interview were accurately transcribed. They did double checks, made thematic codes, and achieved good inter-rater reliability of the interview data.

Based on interview transcripts of these stakeholders, three main themes emerged: choices of post-school paths for SEN students, factors affecting post-school outcomes of SEN students, and support to post-school transition to SEN students. The following paragraphs present and discuss key findings in relation to these key themes. It is worth noting that frequently reported inadequacies, barriers, and difficulties by these interviewed stakeholders in relation to the three key themes on post-school transition of SEN students have also been summarized and presented in the following sections to reflect the status quo and call for future endeavors to this field.

11.6 Factors Affecting Post-school Outcomes of Students with SEN

The paragraphs below present research findings from the focus group interviews among parents, students, and teachers regarding their perceptions of the current state of post-school transition for SEN students. This section aims to provide in-depth interview data to inform policy and support for post-school transition and recently launched life planning education and career guidance for integrators in mainstream schools. Based on our data analyses of the interview data from these stakeholders, the key findings regarding post-school outcomes of secondary students with SEN were summarized as follows:

11.6.1 Limited Choices of Further Education for SEN Students

Overall, most students with SEN do not have very clear individual plans for post-school transition. Some may possibly apply for local or overseas tertiary institutions and make choice on their favorite majors, e.g., education, social work, music, design, hotel management, etc., in their application. However, they were also fully aware of their limitations and tended to choose the vocational courses provided by Hong Kong Vocational Training Council (VTC) and NGOs. Consistently, all interviewed students with SEN shared the similar concern that their low academic achievement is always the barriers for them to plan their post-school transition. They agreed that they lack the coping strategies for managing their poor achievement. They needed to work harder and some frequently attended the after-class tutorials. In short, due to individual competency and difficulties, students with SEN had limited choices in further education. They lacked the motivation or confidence to make attempts for career goals or further education. Their post-school transition opportunities will be more vocational training orientated.

11.6.2 High Expectation of Parents of Students with SEN for Further Education

Overall, parents of students with SEN perceived further education as the best choice for their children after secondary graduation. They expected their children to have the chance of studying in degree courses, associate degrees, or vocational training courses. These parents indicated that they expect their children with SEN would be able to continue their learning in higher education by all means available to them. They did not mind what majors their children with SEN would take. Among alternative choices after graduation, seeking jobs would be the last choice.

However, some parents were also fully aware of the poor academic scores of their children in schools. In regard to this disadvantage, they understood the difficulties for enrolling in tertiary institutions and for seeking jobs as well. They often felt hopeless or helpless in supporting their SEN children for post-school transition. They expect more opportunities of further education for their children. However, the opportunities and channels of information are always limited.

11.6.3 Barriers and Difficulties for Students with SEN for Post-school Transition

In regard to SEN students' post-school transition, teachers and professionals shared some school-based activities to support SEN students' post-school transition. Teachers also introduced some successful cases of students with SEN who were able to enroll in local universities, mainland Chinese tertiary institutions, or overseas universities. However, they also emphasized that not many students with SEN had higher education opportunities in universities. Many students with SEN might choose vocational institutes. For those who were with post-school employment, most of them were reported to get jobs without training, e.g., office workers, waiters/waitress, or site workers.

Teachers concluded that students with SEN always faced a lot of difficulties in post-school education or employment. These difficulties came from individual, families, and community. Some students with SEN were often reported to have low confidence, weak cognitive abilities, physical disabilities, or immature emotional problems, which affected their interpersonal relationships and adaptability to post-school transition and work. For the importance of adaptive emotion competence, Yang et al. (2015) found significant positive relationships between emotion competence, interpersonal relationships, and academic performance among SEN students. Yang et al.'s (2015) study also showed the predictive effect of social support on SEN students' emotion and social competences. However, based on the current qualitative study, some secondary students with SEN were found to have inadequate family support as some parents did not recognize the special educational needs of their children. Moreover, children with SEN in families with low socioeconomic status were less likely to have lifelong learning and career planning or guidance services. Consequently, these students with SEN are more likely to have great difficulties in seeking jobs or working steadily, after they completed the 12-year free education compared to their peers without SEN. Reports always illustrated the frequent change of job among persons with disabilities. A number of NGOs has to offer aftercare services to persons with SEN in the first 3 months after they got the job.

11.6.4 Inadequate Support to Students with SEN

When students with SEN in mainstream schools were asked about current support from schools for lifelong planning and career guidance, this group of students could at least set some examples: after-class learning groups, tertiary institution visits, or counseling. However, for students with SEN, they had difficulties in identifying examples and were of the view that school support on organizing activities relating to post-school transition and career guidance was not tailor-made for meeting their real needs. Teachers have no knowledge of the community support and resources for students with SEN. They have difficulties to identify the resources, training, exposure, and opportunities for meeting the needs of students with SEN.

11.6.5 Lacking Home-School Partnership in Supporting Students with SEN

From the interviews, many parents of students with SEN had little knowledge of the support from schools, government, and nongovernment organizations (NGOs). Although they knew some details of the government grants for students with SEN, they lacked the full information of the funding support to their children in post-school education. For the support from NGOs to their SEN children's post-school education, they were not clear what courses would be helpful to the learning of their children. Some parents perceived their inability to advise their children with SEN for both post-school education and employment. They relied much on the support and advice from the teachers. However, some parents were not satisfied with the post-school-related support provided by schools, government, and NGOs. They were of the view that the support was not appropriate to the needs of their children with SEN.

11.6.6 Difficulties in Providing Appropriate Support and Guidance in Schools

Teachers and professionals noted that some tertiary institutions organized a team for supporting students with SEN. However, inadequate professional training in special education for the staff in these tertiary institutions was their major concern. It was noted that many teaching staff were without special education training and unable to take good care of students with SEN. Some teachers worked collaboratively with different nongovernmental organizations (NGOs) to arrange the services and training their students with SEN in schools. These services would be the peripatetic support services from resource schools (e.g., special school for the

blind or special school for the deaf), NGOs for persons with disabilities, or educational psychologists for preparing the transition life of the SEN students.

In view of the difficulties, teachers summarized some practices that support students with SEN for post-school transition. Firstly, early identification and intervention are crucial. In July of each year, the school will send letters to parents of all the new students for the information of special educational needs. If the replies were positive, schools would contact the parents again for the follow-up support. Secondly, home-school collaboration should be built up. Parents were always reported to be lacking the understanding of special learning needs. When their children were referred to assessment or training by schools, they felt unacceptable or discriminated against. Teachers had great concern for gaining the support and participation from parents, particularly the collaboration in the post-school planning. Thirdly, teachers should be empowered with the knowledge and skills in supporting students with SEN. Professional development is necessary. It is also suggested to hire dedicated professional teachers, e.g., SEN coordinator, to support students with emotional problems for learning and training. Lastly, schools should set up courses with the necessary practical skills and coping skills for students with SEN for the employment needs and post-school transition.

11.7 Discussion

Smooth transitions from high schools to postsecondary education and employment would play a determining role in SEN students' independent adult life and their quality life (Halpern 1994; Janiga, and Costenbader 2002; Rabren et al. 2002). However, the body of existing literature in this area has been mainly established by research studies in Western countries and by more studies in non-SEN students. Equal opportunity and equity in education become the major concerns. The present study took a special focus in one of the Asian regions and aimed to investigate the current state of post-school transition and outcomes for students with SEN in Hong Kong. Based on the analysis of the interview data from a wide range of stakeholders, the following key results emerged: (a) students with SEN have limited choices for further education and post-school employment; (b) parents of students with SEN consistently reflected their high expectation on SEN students' further education; (c) available career-related guidance and activities have not been tailored to suit SEN students' diverse needs; (d) home-school partnership in supporting the SEN students' post-school transition was weak. Although teachers could list more post-school paths and school-based support to SEN students, they also concluded that students with SEN so often face challenges and have a lot of difficulties in achieving post-school education or employment. Teachers also reflected that these difficulties came from individuals, families, and the local community. Teachers summarized that according to their observation and teaching experiences, most students with SEN have low confidence in learning, weak cognitive abilities, feeble physical disabilities, or immature emotional problems.

Parents, teachers, social workers, and professional have strong concern for more job opportunities for SEN graduates. Jobs with less training or in sheltered workshops are undesirable. The school education, instead of academic pursuits, should be more focused on training students with SEN with academic skills, communication skills, social and interpersonal skills, and occupational and vocational skills, which are closely related to the life learning and career planning in schools. In short, concerning post-school transition outcomes for students with SEN in Hong Kong, the interviewed stakeholders do not view that schools have prepared students with SEN adequately for smooth post-school transitions. Many students with SEN are with the false hope to go to university for their further education, irrespective of the high entrance requirement, limited places, and competitive application. The choices for the vocational training are limited, while open employment is impossible for most SEN graduates.

11.8 Recommendations to Improve SEN Post-school Outcomes

With regard to these findings from the present qualitative study, uncertain and worrisome post-school outcomes are frequently reported by the interviewed stakeholders. Schools play a significant role in responding to the individual, social, and economic needs of SEN students. Recommendations for support, policy change, and strategies to improve SEN students' well-being, achievement outcomes, and quality of life in the long term are specified as below:

At the individual level, the students with SEN in senior secondary should be supported with lifelong learning and career planning, with substantial training in academic skills, communication skills, social and interpersonal skills, and occupational and vocational skills. Currently, a number of NGOs offer services, training, and mentorship to students with SEN. With additional funding support, a wide range of training and exposure in career planning is found to be effective. The students with SEN should be well informed of their identified strengths, capacity, and limitations for the needs of post-school transition and career choice. In regard to the capacity enhancement, more choices of the Applied Learning subjects should be the alternatives for the study of the SEN students.

At school level, instead of academic pursuits for university education, the school should formulate policy and take measures for supporting the post-school transition of students with different abilities. On top of the basic training in understanding the special needs, staff should be well trained and capable to adopt a wide range of supporting strategies in identifying the needs and strengths of the SEN students. More importantly, home-school collaboration should be built up for lining up the parental expectations and students capability/interest in further studies or vocational training. All parties should be communicated with frequently and be well

informed. The Special Educational Needs Coordinator (SENCo) plays a significant role in planning and implementing the career education for students with SEN.

At the community level, the government should uphold the right of persons with disabilities in education and disseminate the significance of lifelong learning and career planning. Through cross-sector collaboration, policy and resources for education, rehabilitation, training, and open employment for students with SEN are expected to be improved. Concerted efforts with NGOs on offering community resources, training opportunities, professional support, and job mentoring will be helpful to support the students with SEN and parents. In fact, in partnership with caring companies, many students with SEN are able to gain the training and exposure in the workplace.

At the policy level, although there is no legislation for Special Education Law in Hong Kong, the government also responded to the United Nations Convention on the Rights of Persons with Disabilities in 2008. The core value is to promote, protect, and ensure the full access and engagement of all persons with disabilities in all aspects, e.g., education, leisure and employment. In fact, the Disability Discrimination Ordinance (DDO), enacted in 1995, helps eliminate and prevent discrimination against persons with disabilities. The Code of Practice on Education in 2001 also guides the school practice for developing policies and procedures that prevent and eliminate disability discrimination. Therefore, in regard to the current contextual development, special considerations should be paid to those capable students with SEN for studying in universities. Accommodation in learning and assessment, support in learning, and subject exemptions should be considered to a great extent. Such positive discrimination should not be criticized as unfairness to other students. We are looking forward to the concerted effort for offering more learning opportunities for SEN graduates, in the areas of further education and vocational training.

11.9 Conclusion and the Way Forward

In summary, the post-school transition period is important to all students, particularly the group of students with SEN who often meet with much more challenges compared with nonstudents with SEN (Blacher 2001; Halpern 1994; Janiga and Costenbader 2002). For school stakeholders, to develop effective ways and improve available practices to facilitate smooth post-school transitions and achievable post-school outcomes are important for these students' quality of life in the long run (see also Chap. 8 for insightful discussion of career guidance and life planning among diverse students). According to the present study, we found that it would also be important for schools and teachers to help this population of students to set manageable and achievable post-school goals, for example, to select further education or post-school employment by taking account of SEN students' personal needs, interests, and capabilities as well. In regard to the identified variables, changes and support should be provided at individual, school, community, and policy level. The role of a SENCo becomes significant and important in

coordinating the career planning, guidance, and education to the group of students with SEN. School support to prepare SEN students' post-school transitions plays a salient role in their career development and social integration (Chen and Chan 2014; Flexer et al. 2008). The present study made important attempts to investigate the status quo of post-school transition in Hong Kong by collecting the in-depth data through a qualitative approach. It is hoped that the key findings of this study will contribute to researchers' and practitioners' understanding of post-school transition practices for students with disabilities in the Chinese context and hold practical implications for ongoing and further improvements of inclusive education in Asian regions from not only the perspective of innovative instruction (Wade 2014) but also the perspective of policy refinement (Colley and Jamison 1998) and implementations to achieve the core goal of education for all (EFA) through inclusive practices (UNESCO 2009; Sin 2010; Sin and Law 2012).

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