Education in the Asia-Pacific Region: Issues, Concerns and Prospects 33

Chi-hung Clarence Ng Robert Fox Michiko Nakano *Editors*

Reforming Learning and Teaching in Asia-Pacific Universities

Influences of Globalised Processes in Japan, Hong Kong and Australia







EDUCATION IN THE ASIA-PACIFIC REGION: ISSUES, CONCERNS AND PROSPECTS

Volume 33

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Editors

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Series Editors' Introduction

The increasing internationalisation and globalisation of services have brought new challenges to the higher education sector along with the ever-persistent and broadly defined issue of education and quality delivery. From teacher training to pedagogical approaches, reforms have been proposed as to how the sector can meet the demands of modern society.

We can clearly see from available evidence how various governments have repositioned their education policy orientations to equip their citizens with the range of skills deemed relevant to meeting the demands of the times. Along with this, a more fluid flow of knowledge is also documented through increased student mobility and the ever-widening use of information and communications technologies, among others. More than ever before, the contest to education for development has never seen a more diverse and evolving set of measures from society at large and to the learner at the centre of it all.

This book expounds and enlightens readers concerning the myriad issues, influences and challenges of the 'global processes' in teaching and learning reform. Through a range of perspectives provided by contributions, this volume highlights a wide range of issues in higher education ranging from student mobility, new technological practices, the use and role of English language for international communication and challenges in quality assurance and assessment. With case studies from Japan, Hong Kong and Australia, Chi-Hung Clarence Ng, Robert Fox and Michiko Nakano have engaged with, and meaningfully contributed to, the discourse concerning the internationalisation of higher education. As they also point out, the nexus between such 'global processes' and educational practices is vital for a 'better

understanding of current challenges and options available for charting future development'. This book is an invaluable contribution to available literature given steadfast race to quality education which is aspired to by all.

College of the North Atlantic - Qatar University of Malaya October 2015 Rupert Maclean Lorraine Symaco

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Part I New Contexts for Reforming Learning and Teaching

Chapter 1 Globalised Processes and Their Influences on University Learning and Teaching in Advanced Knowledge Economies in the Asia-Pacific Region

Chi-hung Clarence Ng, Michiko Nakano, and Robert Fox

Abstract This chapter situates learning and teaching in various globalised processes. We argue that major globalised processes have resulted in the development of a new learning and teaching context in the Asia-Pacific region. Within this new context, this chapter discusses issues and challenges in four important areas: new student groups, technological change, using English as a mode of communication, and finally, assessment and quality assurance practices. We have integrated a brief introduction to the chapters in this book in the discussion of these four focal areas in the new context of learning and teaching.

1.1 Introduction

There are multiple entry points into the debate and discussion of globalisation and higher education. In this book, we focus on learning and teaching as the core business of higher education and explore reformative efforts responding to the influences of globalised processes in three advanced economies in the Asia-Pacific region: Japan, Hong Kong and Australia. This is significant, not just because limited discussion on globalisation has taken a learning perspective, but also because

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scholarly reflection on the linkage between globalised processes and changing educational practices at the university is critical for a better understanding of current challenges and options available for charting future development. Focusing on advanced economies at the forefront of globalised changes will provide insights for universities in other countries within the Asia-Pacific region to engage successfully in reforming their learning and teaching practices.

Globalisation, with its characteristic compression of time and space, is seen as the most fundamental challenge confronting higher education in the twenty-first century (Scott, 2000). As a mega-force widening, deepening, and speeding up all forms of interconnectedness (Held, McGrew, Goldblatt, & Perraton, 1999), globalisation is reshaping contemporary higher education in the Asia-Pacific region and beyond. Globalised processes such as marketization, massification, and the pursuit of world class status through competitive ranking are currently operative in Asia-Pacific universities and those in other parts of the world. In response, large scale project initiatives such as Global 30 in Japan and Brian Korea 21 in South Korea have focused on internationalising and improving learning opportunities and research capacities in order to ensure competitiveness at individual, institutional and national levels. Additional and diverse reformative efforts initiated by reformminded lecturers and professors are constantly being trialled out in university lecture theatres, tutorial rooms, laboratories and online platforms. These formal and informal reform activities show no sign of abating. The global recession in 2008 did not slow down these globalised processes and begotten changes in high education practices, but has provided further impulse for Asia-Pacific universities to continue their reforms (Postiglione, 2011).

Structural reforms related to governance, financing, and quality assurance are common features in higher education institutions within the region. Periodic review of administrative, teaching and research units is fast becoming an established practice. Subsequently, the scholarly literature on these change phenomena has proliferated in the past decade (e.g. Marginson, 2006; Mazzarol & Soutar, 2001; Mok, 2007). While critical and important, attending solely to matters such as financing and governance reforms and performance reviews will not be sufficient for developing effective learning and teaching practices to take on diverse challenges posed by globalisation and its associated processes. Elmore (2004) reminded us of an important lesson about educational reforms, that is, structural reforms including change in policy rhetoric and regulatory structures may not necessarily lead to improvement in learning and teaching. There is always a gap between policy rhetoric and classroom practices. It is therefore inappropriate to conceptualise the relationship between policy and practice in a linear fashion, assuming that the intended effects will flow through from reformative policies to learning and teaching practices. In other words, focusing on structural reforms will not necessarily lead to improvement in learning and teaching. However, extant literature on globalisation and higher education predominantly concentrates on structural changes without giving due attention to researching the relationship between globalisation, learning and teaching. There is certainly a need to focus on learning and teaching and to understand how current changes and reformative efforts respond to globalised processes and associated changes they bring forth. The authors in this book addressed this

research gap. The conceptual and empirical discussion in the chapters situate learning and teaching reforms within an overarching context of globalised changes and maintain that learning, teaching and assessment practices are not immune from influences originated from the global level.

Writers on globalisation have argued that the advancement of knowledge economies calls for a paradigm shift in learning and teaching that involves reforms of goals, content and practice at all educational levels. The unprecedented demand for changes in learning and teaching at higher education is exacerbated by the exponential rate of changes made possible by the efficient flow of ideas, people and goods by improved technologies and means of transport. At the university level, these flows bring forth new student groups, new curriculum areas and degree programs, and new ways of arranging learning. In addition, these flows are associated closely with the use of new technologies, the importance of English as a *Lingua Franca* in academia, and new ways of conducting assessment and quality assurance. Clearly, these new elements will have significant impact on what counts as knowledge and how it is being created, taught, acquired and assessed through research, learning and teaching activities at the university. The current book is significant in bringing our attention to the influences of globalised processes onto learning and teaching processes in higher education in three developed countries within the Asia-Pacific region. Explicating the link between globalisation and learning reforms in higher education in this chosen context can provide a foundation for reflecting on our past and designing for the future, and offers lessons for other countries within the Asia-Pacific region and beyond.

1.2 Three Performing Systems

To reflect on the influences of globalised processes on learning and teaching in Asia-pacific universities, we have focussed specifically on the higher education sectors in three advanced economies within the Asia-Pacific region, Japan, Hong Kong and Australia. Several considerations have led our attention to these selected places. First, globalisation and its impact cannot be assumed as having uniform impact in every society regardless its economic, cultural and political conditions. Highly developed knowledge economies in the region such as those selected for this book lead the ways in educational reforms in facing challenges brought by globalisation and the evolution of knowledge economies. Hong Kong, Japan and Australia are among the most developed and wealthy countries in the world. According to the World Bank online data, these Asia-Pacific economies enjoy the highest GDP per capita in the region. Expectedly, economic growth and continuing economic development are significant national concerns in these economies. Producing knowledge workers for these advanced knowledge economies is undoubtedly an important justification for reforming learning and teaching in their higher education systems in order to maintain economic competitiveness at both individual and national levels.

Educational systems in Hong Kong, Japan, and Australia are indeed highly competitive at the global level. Students from these advanced economies have been

constantly ranked among those from other top-performing nations in international testings on literacy, science and mathematics. Their higher education systems are equally competitive at the world scale. Many universities in Hong Kong, Japan and Australia are of world-class status and have been ranked highly among the top universities in other parts of the world. In other words, these three advanced economies are being supported by the world's most competitive education systems measured using international comparative testing and rankings.

While globalisation can be seen as posing both threats and opportunities to development, different countries may respond in diverse ways according to their economic strength. Advanced economies such as those covered in this book have taken globalisation as an opportunity for development and reform (cf. Enders, 2004). In response to globalisation, Hong Kong, Japan and Australia, as well as other advanced economies in the region have already conducted comprehensive reviews of their education systems and a variety of reformative initiatives and projects have been implemented within their education sectors to take on challenges and opportunities derived from globalised processes. At the university level in these advanced economies, considerable convergence in learning and teaching reforms brought about by the globalised influences can be observed.

1.3 Major Globalised Processes

While the concept of globalisation is complex, contested and often contradictory (Marginson, 2006; Stromquist, 2007), it commonly refers to increased interconnectedness of the world in all sorts of economic, cultural, technological and scientific activities. At the higher education sector, major globalised processes including massification and marketization are at work, promoting interconnectedness through the increased flow of students and academics, cross-institutional cooperation through collaborative research and teaching programs, and increased competition for university rankings and market share in international education. One the one hand, massification referring to the rapid expansion of the enrolment in higher education has led to the presence of new student groups drawn within and beyond the national boundary. One the other hand, marketisation begets neoliberal ideas of management and administration that have contributed to privatisation of higher education service, corporationisation of management, and commodification of education. Alongside marketization is the keen competition between universities for ranking in relation to teaching quality and research productivity. Marginson and Consideine (2000) have summarised these influences succinctly in the development of 'Enterprise University' where

Money is a key objective, but it is also the means to a more fundamental mission: to advance the prestige and competitiveness of the university as an end in itself. At the same time, academic identities, in their variations, are subordinated to the mission, marketing and strategic development of the institution and its leaders. (p. 5)

Increasingly, it is difficult to understand university policies, practices and their changes without referencing to major globalised processes such as massification

and marketization (Crossley, 2000). Altbach argued that the effects of globalised processes on higher education are direct and largely inevitable (2004, p. 5).

In Hong Kong, Japan and Australia, these globalised processes played out in different ways. In relation to massification, Hong Kong has begun the journey, moving from an elite higher education system to a mass system. With the introduction of the associate degree programs and additional enrolment spaces through adult and distance education, a great number of secondary students is able to take tertiary education. A current issue in Hong Kong is the lack of articulation opportunities and pathways between sub-degree programs and undergraduate degree programs. Japan has built one of the largest higher education systems in the Asia-Pacific region. According to Huang (Chap. 2), Japan has already achieved universal access to higher education. The current challenge is the issue of oversupply of tertiary education places. In Australia, over 70 % of secondary students are enrolled in a university degree. The recently introduced demand-driven enrolment system has contributed to an increase in student enrolment in many Australian universities. The current effort in Australia is to promote university education for minority groups including low SES students and those from Indigenous backgrounds.

In relation to marketization, Australia in particular has taken higher education as a major export industry and has been actively recruiting international students. In 2014, there were 249,990 international students enrolled in Australian universities. The coalition government's newly proposed plan to de-regulating university fee, if approved, will inevitably drive competition and diversity in the higher education sector. In Hong Kong, there has been a discussion to build a regional hub of education to attract international students. Currently, there is an increased flow of crossborder student mobility from the mainland China to this Asian city. Japan has also sought to recruit international students and considers it an important step for internationalising its higher education sector. Alongside these persistent efforts in capturing the market share in international education, marketization of higher education has led to the establishment of overseas campuses of major Australian universities, the offering of offshore degree programs in Hong Kong and Japan, and the development of transnational university networks (e.g. Universita 21) involving major universities from Australia, Hong Kong, Japan and other parts of the world. National initiatives and reforms have been developed in response to challenges posed by globalised changes in these advanced economies, and corporate development plans are commonly found in their universities (Gray & Radloff, 2010).

1.4 New Context and New Models for Learning and Teaching

Massification, marketization and their derivative processes have created a new context for learning and teaching in which the notion of knowledge, and its delivery and assessment needs to be re-established. What counts as knowledge or what type of knowledge is being valued is an important consideration in this new context. In light

of globalised economies, generic skills such as problem-solving skills, critical thinking, collaboration and effective communication are considered significant twenty-first century capabilities that university graduates need to develop in order to remain competitive (e.g. Griffin, McGaw, & Care, 2012). One of the current efforts in reforming university courses and programs in the region is to integrate generic twenty-first century attributes and promote a global outlook as part of graduate outcomes (e.g. Gamble, Patrick, & Peach, 2010; Kember, 2009). This requires not just an adjustment of curriculum design but it also calls for effective learning and teaching practices to promote the development of these graduate capabilities. Appropriate assessment strategies are also required for assessing these learning outcomes. Closely related to this focus of twenty-first century skills is the promotion of different forms of work-based learning in order to prepare students for future work challenges (e.g. Litchfield, Frawley, & Nettleton, 2010). To do this effectively, redesigning curricula, reforming learning and teaching practices, and developing appropriate assessment strategies are critical.

Several inherent properties of this new context of learning and teaching, however, have further complicated these reforming efforts and processes. In addition to rapid and constant changes, this new context is more complex as it involves layers of stakeholders often holding incompatible interests and varied concerns in the process of delivering higher education. University teaching is no longer a matter of the lecturers and is not under their full control. In this new context, marketization brings in new student groups from overseas and local sources. For example, most Australian universities are now serving international students, mature-aged students and those from low SES and other disadvantaged backgrounds. These universities face the persistent challenge of accommodating the needs of these student populations and also facilitating learning and teaching in such a way that diverse student groups can learn and work together. In addition, programs and courses are constantly under review in order to meet both internal and external quality assurance requirements. Effective use of information technologies as part of the learning or teaching tool is not just required for online courses or distance learning programs; it is expected in every course and therefore blended learning or mixed mode delivery has already become the norm. Nevertheless, the challenge of effective integration of information technologies in learning and teaching remains a priority item in the reform agenda. In managing fierce competition for capable local and international students, university administrators, deans and program leaders constantly ask for innovations in curriculum design, learning and teaching reforms, and new assessment strategies. In short, effective learning and teaching within a globalised context is expected to address new knowledge and skills, accommodate diverse student groups, integrate information technologies, maintain high quality and meet both institutional requirements and those of relevant external associations.

On the upside, the expectations and demand for quality education from different stakeholders can be taken as a drive for improving learning and teaching practices. Various researchers have also discussed opportunities that globalised processes can bring along to university education. Nevertheless, this new context of learning and teaching has also brought forth threats and constraints. Marginalisation of teaching

is one of the main threats to effective reforms. Institutional priority on research over teaching means that university lecturers need to respond to these changes and reform their practices with limited resources and reduced funding support. In response to the prioritised status of research in university, many academics, willingly or unwillingly, have limited their time on teaching and sought support for 'teaching-buyout' in order to spend more time on research. The recruitment of causal teaching staff, use of mass delivery methods, and reduced interaction between students and lecturers collectively build an increasingly impersonalised learning environment.

Another major threat is derived from commodification of education that packages university courses and programs as an educational product that can be sold to students, both residing locally and overseas. In the course of commodifying education, the relationship between university lecturers and students is also commodified. Students are increasingly positioning themselves as customers affording to their side limited responsibility in the learning process. On the opposite side, university lecturers are expected to deliver courses and programs that meet certain quality standards and win student satisfaction. Students' evaluation of teaching, irrespective of repeated calls that challenge its validity, is commonly used in Australia, Hong Kong, Japan and beyond for various evaluation purposes including validating program quality and lecturer effectiveness. In short, market-oriented principles and considerations such as efficiency, customer satisfaction, standardisation and competitive ranking have contributed to marginalising and commodifying university learning and teaching.

Within this changing context, special attention is required for students' motivation and learning processes. Students increasingly see themselves as consumers, giving low priority to learning, and often engaging in many other commitments. White (2007), in an interview study with Australian students, reported that students experienced higher education as an "impersonal efficiency driven industry" where they perceived undergraduate teaching as marginalised. Large classes, a lack of personal identity, difficulties establishing meaningful relationship with teachers, and lecturers' low priority on teaching were reported characteristics of this commodified education. Their view that teachers were distant and inaccessible has forced students to either rely on peer assistance for overcoming learning difficulties or simply withdraw altogether. Such positioning invites passivity and can generate low levels of motivation, which can be seen through the reported last-minute work and minimal effort in White's study.

...almost all the students interviewed reported that they made minimal effort with their university work, except in the last minute. More than half the students interviewed described themselves as 'lazy' or 'not good students' who give little time to their studies. They reported that the time they allocated to study ranged from zero to five percent of the work for most of the study period and increases to 80 % to 90 % when assignments are to be submitted. Of those interviewed, 65 % reported spending on average approximately 35 % or less of their week on university work. They also reported that they do not complete weekly prescribed reading. (White, 2007, p. 600)

At this critical juncture, many thoughtful academics have already begun the journey to reform their practices and develop innovative models to guide them through

the constraints within this new context of learning and teaching. Recognising the nature of this new context, learning and teaching innovations are becoming critical, and existing practices need to be scrutinized constantly in order to meet the needs of new student groups, incorporate new technologies, and ensure high quality learning processes and outcomes. Empirical studies in higher education have developed an emergent set of literature and empirical evidence indicating the evolvement of these new forms of learning and teaching in higher education in different parts of the world. Currently, many reformative ways of learning and teaching are evolving and no one single model or practice can be taken as the solution or the best model within this new context under globalised influences. It can be firmly said that it is insufficient for university professors and lecturers to just "stand and deliver", distribute a list of reference materials and expect students to be able to delve them and complete their learning through writing several essays. Current studies on university learning and teaching focuses on designing new ways to promote reflective learning, collaboration, engagement and participation, authentic learning and assessment, diversity and effective use of students' funds of knowledge, the development of graduate outcomes, attributes and capabilities, practice-based learning and work-integrated learning, blended and flexible learning, and innovative curriculum design. Another important concern arising for these changes is the need to develop reliable ways to assess teaching and learning performances (e.g. Ryan & Ryan, 2013; Smith, 2012) and to find new ways to reinforce further connection and participation from business and international partners (e.g. Gamble et al., 2010).

In this book, we argue that these new changes and developments are to a great extent a response to and outcome of globalised changes and trends. Linking this larger context to learning and teaching reforms will provide a new way to understand these new developments and the goals behind these reformative efforts. Below, we discuss globalised processes and influences in relation to four important dimensions of learning and teaching in higher education in Hong Kong, Japan and Australia: supporting a diversity of student groups, effective use of information technology, promoting the learning of English as an international language, and finally, enhancing learning through innovative assessment and quality assurance processes.

1.5 New Student Groups

Globalised processes have brought new student groups into the university campus. International students are by far the most dominant group among these new student members. Internationalising universities is not a new phenomenon. What is new today are the intensity and the extent of internationalisation activities taking place in contemporary universities. Globalisation forces have accelerated the pace of internationalisation of higher education, especially now contemporary universities are increasingly influenced by diversification, expansion, privatisation, and marketisation (Altbach & Teichler, 2001; Mok, 2006).

Student mobility is currently a major trend within Asia-Pacific universities (Huang, Chap. 2). What is interesting here is that while Asian countries remain the main source of international students to many Western universities including those in Australia and New Zealand, many advanced countries within Asia have developed policy plans and initiatives to recruit international students as well. Various Asian states such as Japan, Malaysia, Hong Kong and Singapore have also tried to develop themselves into regional hubs of higher education by capturing the opportunities to turn higher education into a service industry (Mok, 2006; Morshidi et al., 2006; Tsuruta, 2006).

Universities not only in Hong Kong and Singapore but also in Taiwan, South Korea, Japan, and even the mainland China are very keen to expand their international student exchange programs. Burn (2002) indicates that studying abroad and student exchanges are powerful tools for internationalising in higher education. For example, Japan has actively promoted internationalisation of higher education. According to the Japan Association for Student Support Organisation (JASSO), around 121,812 international students studied at Japanese universities and colleges in 2005, and about 35,379 students studied at Japanese language educational institutions in 2004. In the recent report, Development of New Policies for International Student Exchanges by Central Council of Education, the Japanese government has installed a policy initiative to promote more international student exchanges. More recently, this plan has been revised with a new target of recruiting 300,000 international students to Japanese universities by 2020 (Burgess, Gibson, Klaphake, & Selzer, 2010). In Australia, the New Columbo Plan (Mason, 2014) is a new government initiative to support and promote international student exchange in order to prepare Australian graduates for an Asian century. Under this plan, Australian students are supported through scholarships to undertake undergraduate courses at universities in selected Asian countries, including Hong Kong, Japan, Singapore and China. In Hong Kong, student mobility is basically driven by cultural emphasis on education and keen competition for limited places at local universities. Hong Kong parents actively seek out educational opportunities for their children, mostly in British, American and Australian universities. While local students in Hong Kong seek educational opportunities in Western universities, many cross-border students from China undertake their undergraduate and graduate studies at Hong Kong universities.

Altbach (1998) presented a push-pull model explaining student mobility. In line with this explanatory model, Li and Bray (2007) found that cross-border students from China studying in Hong Kong valued academic strengths of universities in Hong Kong as the most important consideration for their enrolment. Similarly, international students have chosen to study at selected universities in Australia and Japan for their reputation for quality education. While this is a vote of confidence, mostly supported by the competitive ranking of Hong Kong, Japanese and Australian universities, serving diverse groups of international students poses a great challenge to higher education in these places. Maintaining a high quality of teaching is undoubtedly an important way to maintaining competitiveness in the internationalised higher education market.

Many studies on international education have examined international students' experiences and adjustments, but limited research has explored how local academics adjust their teaching practices in response to student diversity as a result of the presence of international students (e.g. Doiza, Lasagabastera, & Sierraa, 2013; Sawir, 2011). There is a lack of research in relation to academics' involvement in internationalisation, their perceptions of other cultures and people (Harman, 2005), and their understanding of different new student groups. Limited research has been conducted in relation to pedagogy renewal and curriculum design (Lee, 2005). Much work is still required in relation to promoting interaction between teaching staff members and international students (Leask, 2009). To a great extent this means that more research is required not just to track the trend of student mobility and flow of international students, but also to look into how new students groups can be supported in the learning and teaching processes. To avoid a deficit perspective, both local students and lecturers can learn much from international students in order to promote learning and teaching (Singh, 2011) and intercultural understanding (Volet & Ang, 1998). While most studies on international students have involved Asian students in Australia and other English speaking countries, limited research has been conducted on Western international students learning in Asian countries (Chen, 2014). With active programs of student exchange, the past decade has witnessed an increased number of Western students studying at Asian universities in Japan, South Korea, China and Taiwan. Researching these students' adjustment and experiences in Asian classrooms will definitely give Asian academics a chance to reflect on their teaching practices.

In Part II of this book, five chapters are presented focusing on various issues related to student mobility, internationalisation, supporting international students, interaction between local and international students and improving retention of students in distance education programs. In Chap. 2, Huang describes the new policies governing internationalisation of higher education in Asia and presents a general picture of international mobility of students, faculty members, and cross-border educational programs and -campuses at tertiary level in Asia. Building on this dynamic picture, Huang raises the important question of how the quality of teaching and research activities can be promoted within the context of student mobility.

Lassegard (Chap. 3) situates the discussion of improving quality education for international within the Japanese context. He argues that the Japanese internationalisation experience has been lopsided towards increasing the number of international students or sending Japanese students overseas without giving a thorough consideration of how learning and teaching should be reformed in view of the impact of internationalisation. Using a case study of smaller universities in Japan, Lassegard shows that there is a certain level of reluctance in reforming teaching practices within the higher education sector. In this case, he concludes that student diversity had not been utilised for promoting practice renewal and reform in Japanese universities.

A critical question is then how student diversity can be used for reforming learning and teaching. Gu (Chap. 4) provides important insights to this question. Based on a qualitative study of learning experience of mainland Chinese students in Hong

Kong, Gu explains the conflict derived from language differences between mainland Chinese and local students at a Hong Kong university. Gu discusses various problems and issues academics in Hong Kong universities need to take into consideration in the process of improving learning and teaching. A main argument is the need to address language diversity in an era of globalisation.

While Japan and Hong Kong are new to the international education market, Australia has long been a major player and its experiences in meeting the needs of diverse students can provide further insights for utilising international students' perspectives in reforming learning and teaching. Tran (Chap. 5) addresses the pressing need to capitalise on international students' dual strengths of diverse knowledge and transformative capacity as a meaningful and valuable approach to optimising their personal, intercultural and academic development. She also argues that international students' learning should be conceptualised from a relational approach considering how these diverse and intangible dimensions of the mobility landscape affect their learning experience rather than merely locating their learning in cultural, institutional or individual parameters.

New student groups do not just come from overseas. With expansion in the higher education sectors in Hong Kong, Japan, and Australia, new student groups include those coming from low SES backgrounds, mature students, and distance learners. The chapter by Ng (Chap. 6) focuses on distance learners and the urgent need to sustain their participation in distance learning. Ng reviews briefly the rise of distance education in Hong Kong, Japan and Australia and argues that much attention is needed to look into effective ways to improve retention. He states that the effectiveness of distance education in widening higher education participation in globalised economies will be compromised if the number of dropouts continues unchecked. Based on research on achievement goals, he proposes a new model for sustaining distance learners' continual participation in distance learning.

1.6 New Technological Practices for Change in the Globalised World

Universities in the Asia-Pacific region are faced with unprecedented challenges in a time of socio-economic and technological growth and change. Until recently, universities have offered predominantly an educational service for the small elite, but now they are facing the demand to provide for more mass higher education and a resultant major increase in student diversification to meet the needs of their growing knowledge-based economies and broad complexities of their societies. Internal and external pressures on universities are creating opportunities for significant changes to occur in the sector as a whole and in learning and teaching practices specifically, supported by new technologies. Based on a synthesis of research into the increased role of technology in Asia-Pacific universities, the following pressures are highlighted: a demand for more flexible higher education places, often not with

corresponding increases in funding; a growing trend to seek partnerships with other educational organisations and external corporate bodies; a larger clientele of learners with diverse needs, from varied backgrounds, with different motivations, capabilities, learning preferences, time availability and course content requirements; a demand to offer courses and programs that are more learner-centred and future employer responsive; an expectation by students that new and emerging technologies and practices will be adopted in university programs; an expectation that the use of new technologies will result in changes in teacher and student practices as well as professional and support staff practices; escalating pressures on academic staff to increase the quality and quantity of their research output; and finally, the impact of research into the use of new technologies into student learning.

Chapters in Part III reflect these pressures for change from the perspective of new technological practices and provide examples and findings that support ways institutions in the region can move forward to address the multiple pressures and challenges they face. An overarching pressure in universities is to focus on how new technologies can address the many demands and complexities, and this chapter explores some of the questions that need to be addressed. Senior managers often look to ambitious technological solutions, without focussing on broader ecological factors that need to be addressed simultaneously. For example, managers might try to ensure that the institution has the required technological infrastructure to support major new technology initiatives, and needs to recognise that planning novel technology solutions must take into account scalability and sustainability factors. Are there appropriate business processes and procedures in place to enable and support the technology initiatives? Does the institution have clear policies in place to address issues of copyright and intellectual property with technology teaching and learning open education resources publicly available? Are there institutional strategies in place to deal with illegal commercialising of its OER resources by third parties? Does institutional policy support appropriate new program and course design that takes best advantage of new technology solutions and changing needs for physical learning spaces, affected by new technology adoption? Are academic, technical and other support staff provided with appropriate and ongoing professional development opportunities and incentives to ensure they have the capability and ongoing capacity to learn and apply new technology solutions? Are academic staff engaged with and do they understand recent research into student learning influenced by the use of new technologies? Does the institution have a pool of educational design experts supported by staff developers and trainers both at the centre and embedded in all faculties to ensure ongoing quality renewal? Does the institution have adequate evaluative mechanisms and just-in-time learning analytics data that can monitor the effectiveness of the technology impact as well as provide for personalised learning feedback for students? Are there adequate policies, guidelines and implementation strategies on quality assurance and improvement, examining technology solutions in place? Are there mechanisms to recognise and reward staff for performance and promotion, based on excellence in using new technologies to improve student learning? Are students equipped with the necessary facilities, training, skills and knowledge to use any new technology solutions to best advantage? Are student expectations met regarding the roles technology will play in enriching their learning experiences at university? Has the university secured special deals with industry partners for students to obtain technology equipment and services at low prices? Answering the above questions can be overwhelming for most universities. This section explores cases where some of these questions have been acknowledged and answered.

Institutions, with their desire to be agile and make changes to practices, often leave out structured changes to professional and support staff practices and the management of administrative, organisational and cultural change needed for sustainable and successful implementation of change. Law (Chap. 7) explores one faculty's experiences and solutions in meeting the needs for changed roles of staff. While the pressures and mechanisms of change at the institutional level, including the tenure and promotion system, are generally high on academic and top level administrative staff in universities, technical and support staff are not subjected to the same forces. Yet the latter plays a crucial role in supporting the process of change in higher education. This chapter describes how one faculty of education in Hong Kong has applied an ecological model of change to rejuvenate its technical team progressively by building in self-organising mechanisms to ensure that the success can be sustainable.

Blended learning, flipped classrooms, and open and flexible programs and courses are frequent phrases discussed in universities in the Asia-Pacific region. At the centre of these discussions is the role that new technologies are playing in providing new opportunities for radical changes in practices. In Chap. 8, Fox focuses on the role Massive Open Online Courses (MOOCs) can play in creating these new opportunities for new practices, processes and ways of working and in building capability and capacity within the higher education sector. The chapter examines new arrangements in developing curricula and governance in offering MOOCs and related technology solutions in sustainable ways. MOOCs are seen as a catalyst to unbundle higher education in a new way. They are not seen as necessarily innovative but do provide the opportunity for new thinking and working and in offering courses in non-traditional ways, open to all, anywhere, with potential links to the institution's conventional award bearing programs.

Thibault and King (Chap. 9) focuses on research into how students learn. Everyone in the Asia-Pacific region's higher education sector is concerned with the student learner, with learning outcomes, and with the evaluation of the student learner. However, it is not always clear what is meant by words such as 'learning' and the 'learner'. The authors build on recent theories of distributed cognition and ecological psychology to show how learning is an interactive process. They investigate how participants' multimodal interactivity with the changing affordance arrays of the learning situation is not only a form of action, but also a form of publicly enacted thinking that occurs when people are coupled to external resources, as they engage in problem solving and other cognitive tasks. They integrate various theories as fertile starting points for developing new understandings of human learning as a values-realizing activity that is shaped and guided by the culturally-saturated interactivity in which it is embedded.

Nakano (Chap. 10) based on a case study of how one university in Japan has capitalised on Internet and new technologies in order to affect change and improvements to educational provision. The chapter describes how the university, over time, has made use of new technologies as a catalyst for change to improve learning opportunities and prepare students to engage in multiple global economies. Initiatives such as flipping the classroom, open education, the sharing of open educational resources, and real-time exchange between students from different Asian countries has enabled major change within and beyond the institution. The chapter describes how a strong visionary leader of the University has created many new opportunities for change through the use of new technologies. The chapter concludes by examining the University's future development plans and ways the institution intends to continue to use new technologies to promote learning in an increasingly competitive globalised world.

1.7 English as an International Language for Communication in the Globalised World

The term 'English as an International Language' (EIL) was first introduced by Larry Smith (1976). Based on his teaching experiences with Asian students, he claimed that other than Native Speaker English, there exists English as an International Language in the world. Building on this thinking, Kachru proposed the three-concentric circle model of World Englishes (Kachru, 1992). The inner-circle English encompasses Native Speaker (NS) Englishes in the UK, USA, Canada, Australia and New Zealand. The outer circle countries include all the former colonies by the British Empire where English as a second language (ESL) had been introduced as a tool of communication due to British rule. The expanding circle includes such countries as China, Japan, Korea, and Thailand, where English is learned as a foreign language (EFL). Kachru's three-concentric circles can be used to understand the historical spread of English and it fits our common idea of the three divisions of NS norm-providing Englishes, ESL norm-independent Englishes and EFL norm-dependent Englishes. His model received great popularity among English Language Teaching practitioners.

In the era of globalisation, English has become one of the most significant languages for various forms of communication. Many Asian countries such as Japan (Bulter & Iino, 2005; Park & Nakano, 2007) and Hong Kong (Lin & Man, 2009; Poon, 2010) have developed reform initiatives to develop students' English language abilities. However, the learning and teaching of this important language resource is not without challenge. While there is a general understanding that the ownership of English is not limited to native speakers, English language learners often feel inferior in using English according to native speaker norms. This Native Speaker Syndrome is often found among students who take courses and programs in English as a Foreign Language that adopts native speaker norms as their curricu-

lum goals or assessment criteria. This sets a power relationship, affording native speaker English a superior status to those used by English language learners.

Research into World Englishes challenges this power relationship issue. Previous studies established that there are systematic rules in each variety in the outer circle Englishes. Thus, each variety should be treated as an independent language system, gaining the linguistic independence from native speaker norms. The notion of World Englishes has drawn European researchers' attention especially since the establishment in European Union (EU) where English is used as an official language for communication. Within the Asia-Pacific region, the British colonial rule and American's sustained influences have contributed to the spread of English. Globalisation simply quickens and intensifies the spread: currently, one fourth of the world's population is estimated as users of English, and by 2050, half of the world's population will be able to speak English. The rapid spread of English led Barbara Seidlhofer and Jennifer Jenkins to promote the notion of 'English as a Lingua Franca' (ELF). ELF stands for non-native speaker interactions whose first languages are different from each other; in this sense, ELF include interactions between a group of non-native speakers (NNS) and another group of non-native speakers, or between a group of non-native speakers and native speakers (NS).

As a legitimate part of the field of World Englishes, the study of intra-national communication in the form of ELF is an important research area in a globalised world where English is used as a common medium of communication, especially in Europe and most parts of the Asia-Pacific region. ELF researchers compiled various corpora, for example, Oxford-Vienna Corpus of English (VOICE), International Corpus of English (ICE), and Asian Corpus of English (ACE), in order to investigate the nature of ELF interactions and focusing on accommodation processes and co-operative strategies which reflect symmetrical power relations among interlocutors. Based on these corpora, ELF researchers investigate pragmatics in NNS-NNS interactions in the global context, how they negotiate meaning continuously during the on-going process of communication dynamics; the conceptualization of ELF is functional, but not formal. ELF researches demonstrate accommodation processes in interactions. In ELF, the power relationship is typically symmetrical.

Hung (2007) argued that for NNS speakers, NS competence and NS spoken fluency are unattainable and thus an unrealistic goal of learning; particularly the size of vocabulary and idiomatic knowledge and pronunciation accuracy is beyond the ability range of most learners of English. Kirkpatrick (2010) thus proposed the realistic goal of English Language Learning as successful bilinguals, due to two factors: the underlying universal simplification of syntax learning and the fact that NS competence and fluency is an unattainable goal of English language education. Kirkpatrick (2012) mentions that the goal of English education among the outer circle and expanding circle-countries should be set at the level of successful ELF users rather than that of Native Speakers. This suggests the radical paradigm shift of the traditional model of English Language Education, which is heavily dependent on native speaker norms, to a bilingual or multilingual model.

ELF studies recently began to pay attention to the dominance of NS norms in high-stake encounters such as asylum procedures in immigration offices and

international publishing. In addition, NS norms can be seen in gate-keeping educational policies in the Common European Framework of Reference for Languages (CEFR), as well as in various international tests in all of which native-like proficiency is regarded as the goal and the target of English education. CEFR is influential in language policy-making, planning and assessment. The use of ELF is bound to reflect the speaker's L1 rhetorical structures and communication styles which are not equivalent to NS norms. According to Seidlhofer (2004), the similar gate-keeping NS dominance is seen in IELTS, TOEFL and TOEIC in which ELF perspectives are not maintained; anachronistic assumptions are also seen in International Journals. The researches into ELF would benefit the largest number of English users in the global context.

Part IV of this book focuses on the learning and teaching of English as a critical language resource in globalised economies. The Asia-Pacific region contains the world's dominant population of English language learners. Within the region, especially in the Asian countries, the ability to communicate using English has been recognised as one of the most important educational achievements for measuring individual success. Nevertheless, students in Asian countries are struggling in the course of learning this important language source. The chapters in this book section examine effective ways for promoting the learning of English as an international language in Asian-Pacific universities.

Kirkpatrick (Chap. 11) provides an overview of this section and reviews the current trends of learning and teaching of English as an international language within Asia-Pacific universities. Important issues originated from the interplay between globalised and local processes and contexts in promoting the learning and teaching of English as an international language is discussed. This chapter provides an important conceptual foundation for understanding challenges and issues in promoting the learning and teaching of English in Asia.

Given the significant role of English language in globalised economies, the Hong Kong Government has commenced a monitoring program to benchmark English language teachers' English proficiency. Expectedly, promoting the learning of English has become one of the most important issues in teacher education programs for preparing English language teachers for their professional practice. Poon (Chap. 12) discusses this case and describes the design, content and operation of an immersion program for English language teachers in an Australian university. The central question is to examine the effectiveness of this initiative in promoting the development of language proficiency for various cohorts of Hong Kong English teachers.

Nevertheless, not every English language learner is motivated to learn the language despite the general perception of the significance of English in knowledge economies. Ng (Chap. 13) explores the motivational issue of learning English among Japanese students and situated their lack of interest within the sociocultural context of Japan where the learning of English is constrained by various important demotivating influences including the reliance on examination as the main source of motivation. Based on the results from an ethnographic study of an Internet based pedagogical model for teaching English as a lingua franca between Japanese and other Asian students, Ng explains how a motivating course environment can be

developed to redirect students' motivational attention from extrinsic considerations to intrinsic reasons including a genuine need for intercultural understanding.

In Australia, the learning and teaching of English to international students has recently gained some media attention over international graduates' language abilities and their capabilities of meeting the language demand in the highly competitive job market in Australia and overseas. As a major exporter in the market of international education, Australian universities have put in place substantial efforts in searching for effective ways to support international students' mastery of English for both academic and communicative purposes. Arkoudis and Doughney (Chap. 14) review major approaches of teaching English to international students in Australian universities and criticise the effectiveness of these approaches in promoting deep learning. They argue that integrating English language requirements in assessment across all the courses within a degree program can be an effective strategy to sustain international students' learning and interest in mastering this important language resource in a globalised world.

1.8 Challenges to Assessment and Quality Assurance

Reforming learning and teaching can never be complete without a discussion on changes in assessment and quality assurance processes. In the context of globalisation, assessment and quality assurance are significant because of an unprecedented concern about the offering of quality university education. An important consideration is that university degree programs should enable students to acquire important knowledge and skills relevant to knowledge economies, and that university credentials should empower graduates to compete for jobs in local and international markets. In addition to this economic consideration, the presence of international students, off-shore offerings of learning programs, and the use of flexible modes of delivery are equally significant factors contributing to sustained efforts on reviewing and improving assessment and quality control mechanisms.

The conduct of assessment is challenging due to reduced time and resources available to university lecturers and tutors, relating to budget constraints under the influence of neo-liberal management practices. In response, Australian universities use assessment rubrics detailing description of standards in each grade and qualitative differences between them to facilitate the assessment process. Using assessment rubrics is generally considered a fair way to assessing students' performance in an objective manner based on specified standards. As part of the outcome-based education initiative, universities in Hong Kong have adopted the use of rubrics in assessment and for informing the curriculum design based on the notion of constructive alignment between curriculum, teaching and assessment (Biggs, 2012).

In addition to the use of assessment rubrics to ensure a fair judgement based on standards, the current assessment practice is littered with a range of procedures and steps – such as the moderation process and policies governing appeal and extension – that align with neoliberal principles of competition, performativity and standard.

Rooted in these assessment practices is the notion of 'assessment as measurement' and the assumption that assessment of learning outcomes can be carried out in an objective manner. Nevertheless, the extent to which twenty-first century higher order skills such as collaboration, communication, critical thinking and creativity and its associated graduate attributes can be measured objectively is debatable. In addition, university learning is no longer confined to lecture theatres or tutorial rooms. Increasingly, more learning and teaching activities take place on online platforms in a continuous form. This begets the requirement and importance of involving students in the process of self and peer assessment. Another observable trend is the integration of community-based and work-integrated learning in courses and degree programs. This happens not just in degree programs that train professionals but also frequently observable in non-profession related degrees. In line with the call for knowledge workers, this progressive practice ensures applicability of knowledge in work and real world settings. However it also challenges the validity of the notion of 'assessment as measurement' as unstructured higher order learning is involved within a specific context where learning outcomes cannot be easily captured using an assessment rubric.

In addition to the difficulties of assessing work-integrated learning, Smith in Part V, Chap. 16 takes a step back and raises a fundamental question about the possibility (and undesirability) of narrowing university education to a work focus with the advance of work-integrated learning. Smith traces the development of work-integrated learning by explicating an economic discourse driven by globalisation and its focus on the economic functions of universities. He argues that there is a need to rethink the diverse functions of university education and suggests to incorporate a moral dimension to work-integrated learning. This would avoid an overt focus on the economic function of learning and decrease the risk of losing sight of other important functions that universities serve. This proposal of course will make assessment reforms in higher education even more disorganised, as multiple viewpoints, including one that derived from ethics consideration, are required to be developed, acquired as well as to be evaluated.

Smith's reflection effectively brings our attention to two important functions of assessment – 'assessment of learning' and 'assessment for learning'. Underpinning Smith's discussion is the necessity of simultaneous attention to both functions and questions how assessment (and it results) can be used to promote learning. In relation to this reflection, there is a call for attention on assessment for learning in Australian and Hong Kong universities. Recent findings derived from this initiative have produced usable guidelines and methods for advancing assessment in higher education from the perspective of promoting learning for learners (e.g. Carless, 2007). In their chapter, Joughin and Hughes (Chap. 15) discuss the centrality of assessment for learning and explain how assessment can be used for promoting learning. An important part in their discussion is their review of international concerted efforts in promoting this important function of assessment and description of national frameworks in Australia, the UK and USA for guiding practices associated with assessment for learning. Despite these guidelines and frameworks, Joughin and Hughes draw our attention to 'complexity of assessment' and a wide range of

interrelated factors that may have influenced assessment, its design, implementation, and interpretation.

Closely associated with assessment is the concept and practice on quality assurance. In its broadest sense, quality assurance is a specific form of assessment that can operate at different levels and contexts within a university. In essence, quality assurance is an all-embracing term covering all the policies, processes, and actions through which the quality of higher education is maintained and developed (Campbell & Rozsnyai, 2002). As part of assessment, quality assurance operates at both course and program levels to ensure that promised learning outcomes are effectively delivered. In addition to this main focus, quality assurance is also operated at school or faculty levels and within specific disciplines. Other administrative and supporting units within a university are subjected to a similar process of quality assurance as well.

Quality assurance has gained traction in the past decade in Hong Kong and Australian universities, while Japan has modelled its quality assurance system on the American experience shortly after the end of WWII. As part of the quality assurance process, periodic program reviews and annual reviews of course development are established practices in universities in Hong Kong, Japan and Australia, and other parts of the world. More often than not, external assessor panels are involved in the quality assurance process in order to maintain a high level of objectivity in the assessment process. The program review process usually includes a focused assessment of important data such as student demand, attrition, retention, success, evaluation, satisfaction, and graduate destinations. A course review will focus more on students' learning, curriculum and assessment design, students' evaluation of teaching and the need for course improvement. Basically, irrespective of levels of review, the whole quality assurance process is a cycle of assessment involving presentation of relevant data, evaluation of these data, and making suggestions for improvement with an expectation that they will be duly implemented before another cycle of review commences.

The final two chapters focus on quality assurance at different levels in Japanese universities. The chapter by Nakano and colleagues (Chap. 17) provides us with a historical perspective on the development of quality assurance. In this chapter, the authors situate the Japanese quality assurance system within its historic and socioeconomic context and highlight how quality assurance has been a response to changing conditions in political and socio-economic development. In concluding this chapter, Nakano and colleagues highlight briefly how global trends such as the advancement of online learning and increased popularity of MOOCs will pose a constant challenge to Japan's quality assurance system. Reforms will be necessary in order to respond to these global influences and make sure that university programs and courses deliver the intended outcomes.

The chapter by Yamazui (Chap. 18) continues the discussion of quality assurance from this important perspective – ensuring the effective delivery of learning outcomes within a degree program for teacher education in Japan. In light of globalised changes, Yamazui discusses the importance of ensuring that teacher education graduates should develop the required professional capabilities and have the abilities to

use them effectively to promote learning for children in a networked society. Taking a sociocultural perspective, Yamazui explains the situated nature of learning and elaborated its implications for assessment. His theoretical discussion and the follow-up illustration using an innovative professional learning program challenges the validity of the 'objective' measurement in quality assurance based on student data and program reports. Thus far, quality assurance processes in Japan and other parts of the world have not yet considered sufficiently the situated and dynamic nature of learning and learning outcomes. Without this consideration, it will be difficult to ascertain that university courses and programs effectively produce graduates who have acquired capabilities in higher order twenty-first century skills and are capable of using them within various work and sociocultural settings in both local and international contexts.

1.9 Concluding Comments

Globalised influences through megatrends will undoubtedly continue to give rise to new waves of learning reforms in the higher education sector within the Asia-pacific region. Altbach (2004) warns that universities trying to avoid such global trends may become moribund and irrelevant (p. 6). In this book, we have discussed reformative aspects related to the use of technology, student diversity, English as an international language, assessment, and quality assurance. Globalised processes will continue to exert strong influences on other aspects of learning and teaching in the higher education sector within the region. What is clear from our discussion is that these processes and influences will not and should not give rise to a single model of reform uniformly adoptable to different countries within the region. Other Asia-Pacific countries may have responded differently and are facing a different set of barriers (and opportunities). Specific localised issues have to be taken into consideration when reforming learning and teaching. The current book will serve as a starting point to inform such a discussion.

In concluding our introductory discussion, we consider that globalised influences on the higher education sector in advanced economies like Hong Kong, Japan and Australia point to the development of universal access to higher education, which essentially is about opening up opportunities in knowledge economies and making sense of the globalised world: understanding, exploring and developing possibilities, both current and future, in local and international markets. The crunch question is how learning and teaching can be reformed to assist both local and international students to seek out and embrace these possibilities and opportunities. To help students explore these possibilities, university lecturers need a reformative pedagogical repertoire that includes elements of risk and transformation, prepares for uncertainties, dilemma and disturbance (cf. Barnett, 2012), and embraces opportunities and threats present in the new context of learning and teaching which is crafted by university responses to globalised processes. It is in the process of engag-

ing in this professional endeavour that university lecturers can move beyond the commodification stage of higher education and regain professional autonomy.

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Part II Student Mobility and Meeting the Needs of New Student Groups

Chapter 2 International Mobility of Students, Academics, Educational Programs, and Campuses in Asia

Futao Huang

Abstract Since the 1990s, economic globalisation has led to tremendous changes in higher education in East and Southeast Asia. This resulted in the implementation of new policies and strategies in higher education and an increasing emphasis on the international mobility of students and faculty members, as well as on mobility of educational programs and campuses in this region. This chapter focuses on the international mobility of students, faculty members, educational programs, and higher education campuses in selected countries in Asia. The chapter first introduces the changing policies of internationalisation of higher education in Asia in recent years. It then presents a general portrait of the international mobility of students and faculty members, cross-border educational programs and campuses at tertiary education in Asia. The chapter concludes by outlining characteristics of the international mobility of students, faculty members, educational programs and campuses and identifies challenges facing Asia.

2.1 Introduction

Despite the fact that the origins and early history of internationalisation of higher education are disputed, it is generally acknowledged that international mobility of students and scholars or academics is the oldest form of internationalisation of higher education from the perspective of Europe. With the emergence of medieval universities in Europe in the twelfth century, there was already frequent mobility of students and academics between different regions in Europe. According to existing research, prior to the establishment of nation-state in Europe in the nineteenth century, it was very common for students and academics to move from one university to another. For example, students might travel to Bologna University in Italy to learn law after having completed their studies in theology in the University of Paris.

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The same is true for students from Italian or German universities that learn theology or medicine in Paris (De Ridder-Symoens, 1992). Although personal movement across borders is traditionally viewed as one of the most important aspects of internationalisation in higher education, in recent years, international mobility of both educational programs and campuses have come into focus. These new forms of mobility have gradually constituted integral parts of internationalisation of higher education in Europe and Asia in particular.

With an increased economic and political impact of several Asian countries and especially Asia's growing importance in the education market worldwide, more research has been conducted on higher education in Asia, including on the internationalisation of higher education in Asia (Cummings, 2009). A brief review of the relevant literature suggests that a majority of studies concerns changes in higher education and internationalisation of higher education in individual Asian countries at policy or institutional levels. However, little is known about the key characteristics of the entire aspect of international mobility in Asia (Huang, 2014, 2015).

Internationalisation of higher education can be practically divided into two dimensions: internationalisation at home and internationalisation abroad. The former includes the acceptance of international students and academics, hosting international conferences, integrating international perspective and content into teaching and research activities, and the use of foreign language in both teaching and research. Chapters 3 and 5 in this volume (Lassegard, 2016; Tran, 2016) provided a thorough discussion on issues and strategies related to recruitment and retention of international students in Japan and Australia. The latter denotes transnational and borderless education, as well as cross-border education (Crowther et al., 2001). In Chap. 4, Gu (2016) reported a case study of learning adjustment in cross-border education experienced by a group of Chinese students studying in a university in Hong Kong where English was used as the medium of instruction. Although there may be some conceptual differences between these terms, they are often used interchangeably; they are being used to describe real or virtual movement of students, teachers, knowledge and educational programs from one country to another (Knight, 2002). As indicated in Table 2.1, the OECD report illustrates the international mobility of people, programs and institutions with various examples. The report also discusses other forms of mobility, such as project mobility. This involves joint curriculum development, research, bench-marking, technical assistance, e-learning platforms, professional development and other capacity-building initiatives especially in the information technology area (OECD, 2004).

It should be noted that the cross-border mobility of academics is more complex than the students' movement across borders. According to previous studies (OECD-SOPEMI, 2007; Rostan & Höhle, 2014; Teichler, 2011), the international mobility of academics includes at least two dimensions. The first dimension comprises immigrant academics born abroad who leave their host country at different stages of their life and for different purposes. The second dimension consists of mobile academics who work where they were born but have experienced border crossing either for study or professional purposes.

This chapter attempts to conduct a comparative study on the international mobility of people, including students and academics, and programs as well as institutions

| Type of mobility | | Examples |
|--------------------------|--------------------|--|
| 1. People | Students/trainers | Full study abroad: for a foreign degree or qualification |
| | | Part of academic partnership for home degree or joint degree |
| | | Exchange programs |
| | Academics/trainers | For professional development |
| | | Part of academic partnership |
| | | Employment in a foreign university |
| | | Teaching in a branch institution abroad |
| 2. Programs | | Joint course or program with a foreign institution |
| | | E-learning programs |
| | | Selling/franchising a course to a foreign institution |
| 3. Institution/providers | | Opening of a foreign campus |
| | | Buying (part of) a foreign educational institution |

Table 2.1 International mobility of people, programs and institutions

Source: OECD (2004)

focused on East and Southeast Asia. Although the meaning of 'Asia' varies depending on how it is defined from different perspectives, this chapter only concentrates on the discussion of the international mobility of higher education in East Asia – including countries and societies such as China, Hong Kong, Japan, South Korea and Taiwan – and Southeast Asia – taking into account Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam. By using data on international mobility of people, programs and institutions from OECD, UNESCO, individual countries and the international survey on Changing Academic Profession (CAP) in 2007–2008, this chapter aims to provide an overview of international mobility in East and Southeast Asia and intents to identify mobility challenges facing these regions.

First, this chapter will give a brief introduction to the changing policies of internationalisation of higher education in selected countries and societies in Asia in recent years, followed by a general portrait of the international mobility of students and faculty members, cross-border educational programs and campuses at tertiary education in countries such as China, Japan, South Korea, Singapore, and Malaysia. The chapter concludes by clarifying striking characteristics of the international mobility of students, faculty members and institutions, and outlines key challenges facing selected countries and societies in Asia from the perspective of supporting international students and faculty members, and promoting cross-border educational programs.

2.2 Policies and Strategies

Since the 1960s, several initiatives of stimulating personal mobility across borders have emerged throughout East and Southeast Asia, mainly driven by political factors. From the perspective of higher education or tertiary education, however, one of the

most important strategies on facilitating the movement of students, academics and programs at this regional level is the Campus Asia Project (MEXT, 2014a). This project, launched by China, Japan and South Korea in 2010, aims to stimulate the regional mobility of students, faculties and researchers, and focuses on developing further collaboration in higher education. Students and academics from other Asian countries are encouraged to be involved in this project, although relevant activities are primarily implemented within the three countries in charge of the Campus Asia Project. Based on this project, it is expected that universities in China, Japan and South Korea will become places where students and professors from diverse cultural and regional backgrounds can come together and acknowledge the merits of each university. In the framework of this project, these three countries have formulated national policies and strategies to further integrate their higher education systems. These initiatives include the provision of financial support to build intra-region university networks, as well as designing joint curricula and joint degree programs that combine the three countries' cultural and academic strengths, and providing more English-taught degree programs. Currently, universities in China, Japan, and South Korea have expanded their English language lectures and degree programs for undergraduate and graduate studies in order to attract more students from other Asian countries.

At national levels, the number of policies and strategies on attracting international students and dispatching local students to foreign countries has been increasing since the 1990s. Differing from what had happened prior to the 1990s, one of the most striking characteristics in this regard is the difference in funding of personal mobility. Many countries have continuously encouraged local students to go abroad at their own expense besides attracting foreign students to their educational institutions at their own cost as well, whereas other countries have developed national policies that allow domestic students to study abroad on public funding and invite increasing numbers of inbound international students using public funding as well.

One example of this change in the funding of mobility can be found in China, where the government carried out a national strategy to dispatch 5000 university students every year, starting in 2007, to foreign leading universities for further study and research on a public budget. These students were selected from approximately 100 leading universities in China. Previously, increasing numbers of Chinese students were undertaking the advanced studies abroad at their own expense. In the meantime, numerous efforts have also been made to attract more foreign students to come to Chinese campuses (China Scholarship Council, 2014). Table 2.2 shows the Chinese government has also endeavoured to accept more diverse international students by providing various national scholarship programs. A majority of these students are supported by a full scholarship from the Chinese government.

The importance of developing national policies on transnational higher education as has happened in China since the mid-1990s cannot be overestimated, for these policies have significantly facilitated a rapid expansion in numbers of both transnational (or cross-border) programs and institutions in China. They include not only the incorporation of foreign programs and branch campuses in China, but also imbed programs and campuses which are provided and established by Chinese

Scholarship Scholarship programs Place to apply Program category coverage Full or partial Bilateral Dispatching authorities in Degree and non-degree applicant's home country Program programs scholarship Chinese Designated Chinese Graduate programs Full scholarship universities University Program Great Wall National Commissions for Non-degree programs Full scholarship Program UNESCO in applicant's home country EU Program Office for Education and Graduate programs Full scholarship Culture, Mission of P.R. China to the European Union AUN Program ASEAN University Graduate programs Full scholarship Network (AUN Secretariat) PIF Program Pacific Island Forum (PIF) Degree and non-degree Full scholarship Secretariat programs WMO Program World Meteorological Master's and undergraduate Partial Organization (WMO) programs of meteorology, scholarship Secretariat hydrology, and water resources supervision and management

Table 2.2 Overview of the Chinese Government Scholar programs

Source: The Chinese Government Scholar programs. Retrieved from http://www.csc.edu.cn/Laihua/newsdetailen.aspx?cid=66&id=3074

universities going abroad. As early as 1995, the Chinese government promulgated the 'Contemporary Regulation on Operation of Higher Education Institutions in Cooperation with Foreign Partners'. This was followed by the 'Notice of Strengthening Degree-Granting Management in Activities concerning Operation of Institutions in Cooperation with Foreign Partners' in 1997, issued by the Degree-Granting Commission of the State Council. These two policies are fundamental in regulating and expanding the development of transnational education in China. In 2003, 'Regulations of the People's Republic of China on Chinese-Foreign Cooperation in Running Schools' were issued, which should further stimulate the growth of transnational education. Like the earlier regulations, the new legislation is also designed to encourage a larger number of leading Western educational institutions to come to China - thereby bringing teaching and research systems and staff – to carry out research-led, English language teaching in order to establish undergraduate and postgraduate degrees of international excellence. These three regulations have approved and encouraged the cooperation and joint operation of Chinese higher education institutions with foreign institutional partners. It clearly states that cooperation with foreign higher education institutions should become an important component in China's education policy and should constitute a supplementary part of China's higher education.

In recent years, internationalisation of higher education in Japan has also been subject to change. Since the early 2000s, the Japanese government has revised the legislation concerning foreign institutions acting in Japan and adopted new strategies for recognising cross-border or transnational branches and programs. These new policies make it possible for foreign educational activities or services to be recognised by Japanese universities and allows Japanese students to apply to foreign educational programs or institutions based in Japan. Meanwhile, an increasing number of Japanese institutions have attempted to export their educational activities by offering transnational programs in other countries. Further, in 2009 the government launched the ambitious 'Global 30' program. Its primary aim is to attract 300,000 foreign students by 2020, thereby tripling the current number of foreign students studying in Japan. In order to achieve this goal, 13 universities, including seven national and six private universities, were selected to play a central role in implementing the Global 30 program. This program allocated an additional budget provided by the government to these universities and required them to accept more international students, employ more foreign staff, and provide more English-taught subjects (MEXT, 2009).

In South Korea, the policy of internationalisation of higher education has been characterised with a one-way movement of students and academics for a long time. Both government and individual higher education institutions have encouraged South Korean students and academics to go abroad, especially to advanced Englishspeaking countries like the USA, the UK and Australia to obtain degrees or to conduct research in collaboration with foreign partners. Some of these students are financed by the South Korean government or by an individual institution; others are supported based on exchange programs with partner institutions or scholarship programs provided by hosting countries. According to Major Policies and Plans for 2011 which was formulated by the South Korean Ministry of Education, Science and Technology, South Korean teachers can receive more support for going overseas and for overseas training. An exchange program for teachers is being carried forward between major countries including the USA, Japan, and China, and a special training is being promoted at global large-scale research facilities, including CERN (Conseil Européen pour la Recherche Nucléaire) (Korea R. Ministry of Education, Science and Technology, 2010). In recent years, the South Korean government has made huge efforts to host international students and staff. Since the mid-1990s, the South Korean government has launched at least two projects aimed at attracting international students to South Korean campuses. The first and most important project was the 'Study Korea Project', which was implemented in 2005. The objective of this project is to accept 50,000 international students in South Korean universities. From 2008, a second round of the 'Study Korea Project' was put into effect, with the aim of increasing foreign student enrolments to over 100,000 by 2012. Moreover, in 2008, another national-level strategy called the 'World Class University Project' (WCU Project) was implemented in South Korea. Differing from previous national projects, this project focuses on inviting and attracting internationally renowned scholars to South Korean universities. By doing so, the South Korean government expects to deal with the issues of South Korea's 'brain drain', enhance South Korean teaching and research quality, and provide South Korean students and researchers with a superior study and research environment linked to an international knowledge network (Byun & Kim, 2010).

Similar phenomena can be found in South East Asian countries. In 1997, the government of Singapore announced the objective of attracting ten world-class universities to Singapore by 2008, to set up centres of excellence in education and research with strong industry linkages. This was achieved 5 years ahead of schedule. The Global Schoolhouse Vision launched in 2002 and envisions Singapore as a world-class education hub offering a diverse and distinctive mix of quality education to students and faculty from around the globe. In 1991, the Malaysian government issued Vision 2020 which is conceived as a Malaysian ideal. In terms of internationalisation, the Vision calls for the envisioning of Malaysia as a regional hub for higher education. According to the Vision, the Ninth Malaysia Plan (2006–2010) aims at attracting 100,000 international students. Similarly, the Malaysian government exercised a new strategy on internationalisation in higher education in 2011. One of its targets is to accept 150,000 international students by 2015 and 200,000 international students by 2020 (Yean, 2013).

2.3 Realities and Trends

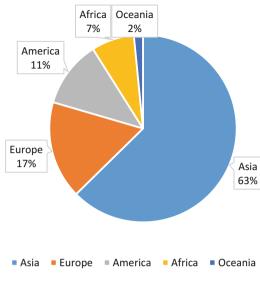
2.3.1 International Mobility of Students and Academics

In terms of international mobility of students in East and Southeast Asia, two features are notable. First, as discussed earlier, due to the fact that some Asian countries have developed national strategies of attracting international students, there has been a massive expansion in numbers of inbound international students in major Asian countries. In China, the total number of international students, including those students who only stayed in China less than 6 months and without pursuing any academic degrees, increased from 61,869 in 2001 to over 290,000 in 2011 (MOE, 2013). In Japan, the number of international students studying in Japanese universities grew from 53,608 in 2000 to 110,518 in 2012 (MEXT, 2014b). In South Korea, the total number of foreign students increased from 49,270 in 2007 to 86,878 in 2012, with the number of foreign students enrolled in degree programs increasing from 32,056 to 60,589 over the same period (MEXT, 2012, p. 49).

Second, there has been a rise in the number of international students within the region of origin. The UNESCO data suggests that, in 2013, nearly half of the students from Asia and the Pacific region studying abroad actually did so within this region, compared to 36 % in 1999. In some countries and territories in the region, students from Asia had accounted for approximately 70 % of their international students. In China, Japan, and South Korea, the lists of the top five countries of origin of foreign students show that most foreign, non-American students come from Vietnam, Thailand, Malaysia, Mongolia, Taipei and China. To illustrate, Fig. 2.1

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Fig. 2.1 International students in China's universities by region (2012) (Source: MOE, 2012)



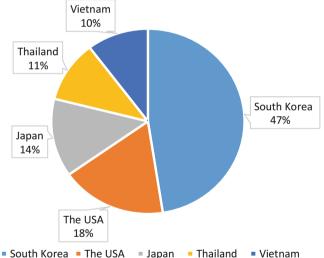


Fig. 2.2 International students from top five countries in China's universities (2012) (Source: MOE, 2012)

reveals that the proportion of international students from Asia at Chinese campuses amounted to 63 %, holding the largest share of the total in 2012. Relatedly, Fig. 2.2 shows the top five countries from which international students came to China, with four countries belonging to Asia. The percentage of international students from South Korea was 47 %, occupying the largest share, followed by those from the USA (18 %), Japan (14 %), Thailand (11 %) and Vietnam (10 %).

Table 2.3 International students in Japan's universities by region (2013)

| | Total | (%) |
|----------------|---------|---------|
| Total | 108,442 | 100.0 % |
| Asia | 98,197 | 90.6 % |
| China | 66,911 | 61.7 % |
| South Korea | 13,107 | 12.1 % |
| Vietnam | 3715 | 3.4 % |
| Taiwan | 3059 | 2.8 % |
| Malaysia | 1975 | 1.8 % |
| Others | 9430 | 8.7 % |
| Oceania | 474 | 0.4 % |
| North America | 2310 | 2.1 % |
| Middle & South | 889 | 0.8 % |
| America | | |
| Europe | 4389 | 4.0 % |
| Middle East | 1110 | 1.0 % |
| Africa | 1073 | 1.0 % |

Source: MEXT (2014c)

Similar to China, Table 2.3 indicates that more than 90 % of international students from Asia studied at Japanese universities in 2013. Among these students, over 60 % came from China, making up for the largest share of the total. The second largest group came from South Korea, though their percentage (12.1 %) is far lower than that of China. The proportion of international students from Vietnam, Taiwan and Malaysia accounted for less than 10 % of the total Asian students.

With respect to the international movement of academics, it appears that little information is available of the overall situation of the international mobility of academics or faculty members throughout the region of East and Southeast Asia. The international survey of the Changing Academic Profession (CAP) project, conducted among 22 countries and societies, provides a valuable source of the mobility of academics over their lifespan. With China, Hong Kong, Japan, South Korea and Malaysia participating in the international survey, the CAP data shows that 39 % of the academics surveyed in these five Asian societies have crossed borders for study or research. Interestingly, this rate is higher than the mobility rate of academics surveyed in North America (25 %) and Europe (22 %). However, in contrast to the other regions surveyed, most of the border crossings of Asian academics have been between Asia and other regions (notably for study and doctoral training); the intraregional migration and mobility of academics surveyed in Asia is slightly lower (9 %) than among those surveyed in North America and Europe (Huang, Teichler, & Galaz-Fontes, 2014).

Compared to many other emerging countries in the Asia region, Japan and South Korea have made rapid progress in hosting international academics in their universities. This is partly because both countries are regarded as advanced countries in which academics can enjoy more favourable teaching and research conditions, and

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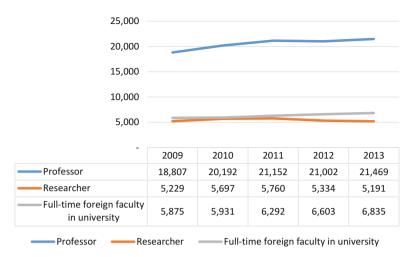


Fig. 2.3 Changes in numbers of foreigners with a status of professor and researcher and full-time foreign faculty in Japanese universities (Source: Statistics Bureau, Ministry of Internal Affairs and Communication, n.d.)

partly because they consider the employment of international academics as an important means to further internationalise their higher education system. Figure 2.3 shows that, although the number of foreign researchers in Japan has declined since 2011, the number of both foreign professors and the full-time foreign faculty members in Japanese universities has increased in a steady way from 2009 to 2012. In addition, Fig. 2.4 shows that among all foreigners with a status of both professor and researcher, the number of those from Asia was the largest and surpassed the total number of professors and researchers from all other regions.

In South Korea, there has been an increase in the number of foreign full-time faculty members. Especially in university, the proportion of foreign full-time faculty members in South Korea increased from 2.4 % in 2000 to 7.5 % in 2012, as can be seen in Fig. 2.5.

At a national level, the number of professors who were employed as full-time faculty members in South Korean higher education institutions has seen a gradual growth in recent years. The number of foreign faculty members from China and Japan has increased from 244 in 2000 to 728 in 2008, although their share among all foreign professors (24 % and 23 %) has not changed (MEST & KEDI, 2009).

Although it is extremely difficult to obtain the Japanese national data on the number of full-time foreign university faculty members in terms of their country of origin, as shown in Fig. 2.6, statistics of the University of Tokyo (2013) has revealed that as of 2013 the University of Tokyo accepted the largest number of inbound faculty members² from Asia in an absolute term (1393). The number of outbound faculty members from the University of Tokyo going to Europe is larger (3534), however if the Middle East is counted as part of Asia, then the total number of

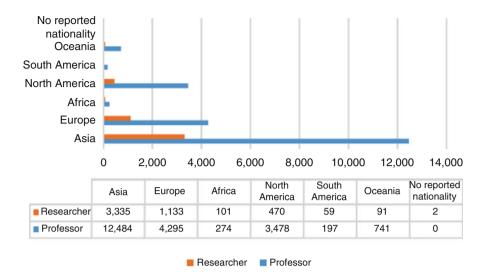


Fig. 2.4 Numbers of foreign professors and researchers in Japan by region (2012) (Source: Statistics Bureau, Ministry of Internal Affairs and Communication, n.d.)

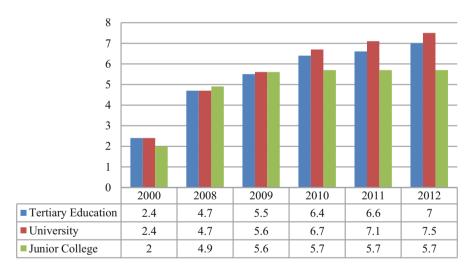


Fig. 2.5 Changes in foreign full-time faculty members ration in South Korean tertiary education (%) (Source: MEXT, 2012)

faculty members from the University of Tokyo moving to Asian countries will amount to 3587. This indicates that not only did the University of Tokyo welcome the largest number of foreign faculty from Asia, but the number of its own faculty members visiting other Asian countries is the largest as well (University of Tokyo, 2013). Further, Fig. 2.7 suggests that among those inbound faculty members coming

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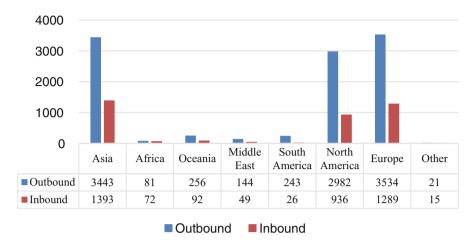


Fig. 2.6 Numbers of inbound foreign faculty members and outbound Japanese faculty members of the University of Tokyo by region (2013) (Source: University of Tokyo, 2013)

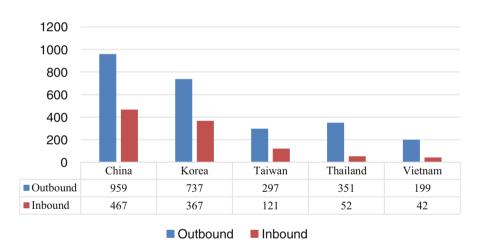


Fig. 2.7 International exchange of faculty members and researchers in the University of Tokyo by country (Source: University of Tokyo, 2013)

from Asia, members coming from China, Korea, Taiwan, Thailand, and Vietnam are well represented. The same five countries are also most often destination of Japanese faculty members of the University of Tokyo. The only difference is that the number of faculty members from the University of Tokyo going to Thailand doubled that of faculty members going to Taiwan, indicating that the top three countries or societies for outbound mobility all belong to East Asia.

Table 2.4 Numbers of branch campuses of foreign universities in selected Asian countries

| | Branch |
|--------------|----------|
| Country | campuses |
| Cambodia | 1 |
| China (2011) | 13 |
| Malaysia | 9 |
| Singapore | 16 |
| South Korea | 2 |
| Thailand | 2 |
| Vietnam | 1 |
| (2011) | |

Source: UNESCO Institute for Statistics (2014) with author's modifications

2.3.2 International Mobility of Programs and Campuses

In addition to a growing movement of students, faculty members and researchers across-borders, there has also been a rapid expansion in the cross-border movement of educational programs and campuses in several countries in Asia. By 2014, several branch campuses had been established in selected Asian countries, as is shown in Table 2.4. It is interesting to note that Singapore has the largest number of branch campuses and even surpassed China in this matter. Malaysia also has a relatively large number of branch campuses, despite having a relatively small higher education system.

China provides a typical example of how cross-border programs and campuses have been integrated into the entire higher education system and how they have become an integral part of the internationalisation of China's higher education. As mentioned earlier, the Chinese government carried out national strategies to encourage the development of both cross-border or transnational programs and institutions as early as the mid-1990s. According to the national data, as of October 2013, Chinese universities provided 702 undergraduate programs and 169 programs at a graduate level in collaboration with foreign universities. With regards to the number of Chinese universities which are involved in the delivery of cross-border or transnational educational programs, 40 Chinese universities were concerned with undergraduate programs, 16 of them provided graduate programs in partnership with foreign universities such as universities from Hong Kong and Macao. A huge majority of foreign partners are English-speaking countries; the United Kingdom, the United States and Australia are all considerable and evident partners in terms of both programs and campuses, as can be seen in Fig. 2.8. However, it is noteworthy that the number of Russian universities which offered jointly-operated programs with Chinese universities had known a remarkable growth in 2013 (Huang, 2014).

It is noteworthy that in recent years, the Chinese government has made a great effort to provide a higher education service for local Chinese students in foreign countries. A typical example is a significant growth in numbers of Chinese government affiliated 'Confucius Colleges' worldwide. These colleges are non-profit

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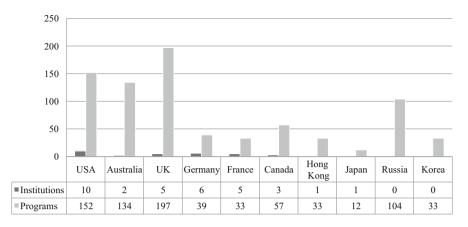


Fig. 2.8 Numbers of foreign universities and universities of Hong Kong in collaboration with Chinese universities (as of October 2013) (Source: MOE, 2014)

public educational institutions aimed at promoting Chinese language and culture and support Chinese teaching internationally. The national data (MOE, 2012) shows that, by the end of 2011, China had established 358 Confucius Colleges and 500 Confucius Classrooms. Around 500,000 students were registered in Confucius Colleges and Confucius Classrooms, an increase of 39 % in comparison with the previous year. Not only was there an astonishingly rapid expansion of both Confucius Colleges and Confucius Classrooms, there has also been an increase in the number of leading universities founding Confucius Colleges and Confucius Classrooms. For instance, among the top 200 universities based on major global university ranking systems, 70 of them have founded Confucius Colleges at their campuses.

Although the number of degree-conferring programs offered outside China is much smaller than the number of degree programs provided at Chinese campuses, rapid progress has been made recently. For example, the Chinese Xiamen University and the government of Malaysia have agreed to establish branch campuses of Xiamen University in Kuala Lumpur. By providing degree-conferring programs, the branch campus is awarded with a qualification to confer degree programs and to recruit both local students in Malaysia and international students from other countries. Other Chinese universities, including Furan University and Shanghai Jiao Tong University, have been engaged in such activities as early as the end of the twentieth century. They have been cooperating with foreign partners by recruiting students and by mutual recognition of some of the curricula, credits, diplomas, and degrees.

Such outgoing education activities not only take place in countries such as Japan, South Korea, and some Southeast Asian countries that used to be greatly influenced by Chinese culture; they can also be found in some Western countries like Germany, the UK, and Spain. More importantly, compared with the situation prior to the 1990s, transnational programs exported by Chinese universities are no longer

confined to studies in the Chinese language, but now also include some professional programs, such as international trade, management, science and engineering.

Several countries in South East Asia have also been actively involved in crossborder or transnational higher education programs and campuses in recent years. As shown in Table 2.4, by 2014, Singapore had the largest number of branch campuses established in collaboration with foreign universities. This is partly due to EDB's Global Schoolhouse Initiative, which has led to ten foreign institutions establishing branch campuses in Singapore since 2002. They include highly respected names such as INSEAD, Tisch School of the Arts, and the University of Nevada, Las Vegas; these universities have all set up their first overseas campuses in Singapore. Others such as Duke University's School of Medicine have collaborations with local universities offering joint academic programs. The most recently established university is EDHEC Risk Institute-Asia by the French EDHEC Business School in 2010. These ten institutions offer undergraduate, postgraduate, and executive education programs (Waring, 2014). Additionally, reports show that at the end of 2011, 31 universities were collaborating with local universities (the National University of Singapore, Singapore Management University, and Nanyang Technological University) to provide joint programs from a bachelor's degree level to PhD level in areas such as business management, law, economics, liberal arts, social administration, medical science, and engineering sub-disciplines (Toh, 2012).

2.4 Conclusion

This study has suggested that in recent years, selected Asian countries and societies have not only formulated new policies and strategies to stimulate a further mobility of students, faculty members, researchers, educational programs and higher education institutions or campuses, but also that the progress that some countries have made is significant as well. It is important to note that the encouragement of international mobility of people and programs and campuses is not a merely rhetorical topic in selected countries and societies in East and Southeast Asia. In countries like China, Japan, South Korea, Singapore, and Malaysia, it has been implemented in reality and more importantly, it has achieved a great expansion.

It has become apparent that some Asian countries have developed policies and strategies leading to hosting more international students and employing more foreign faculty members and they have made vast efforts to change the situation of the so-called one-way internationalisation of higher education in Asia. However, a large majority of the international mobility of Asian students and faculty members has been within Asia and more accurately, between China, Japan and South Korea. In contrast, a large number of English-speaking branch campuses of Western universities have settled in Asia. This development cannot be witnessed the other way round; except for a very few cases, Asian campuses and higher education institutions hardly expand to other regions.

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In the Asia region or even within East Asia alone, there seems to be a prominent unbalance of the cross-border mobility of people and programs as well as campuses. At a vertical level, it appears that several well-established educational systems have come to be major destinations of both international students and academics; China and Japan have hosted the largest number of Asian students, and Japan has attracted the largest number of Asian academics. At a horizontal level, some countries, like Malaysia, have devoted more time and effort to the acceptance of international students or worked hard on attracting both students and faculty members, as did Japan and South Korea. Other countries, like China and Singapore, have tried to form collaborative partnerships with foreign partners to introduce more educational programs and branch campuses.

Finally, this study argues that there are several challenges and issues facing Asian countries that need to be addressed. The following questions should be asked:

- 1. How should we further stimulate mobility of students and academics between Asia and other regions?
- 2. How can we achieve a better balance of the international mobility of people, programs and campuses between different countries within the Asia region and improve the level of internationalisation of higher education in some emerging countries?
- 3. How can we attract more international students and academics from other regions to Asian campuses?
- 4. How can we provide Asian higher education services abroad?
- 5. How can we enhance the quality of teaching and research activities and form the identity of Asian higher education through the mobility of people, programs and institutions?

Notes

- 1. The terms professor and researcher refer to those foreigners who come to Japan for academic purposes in a broad sense, with a visa of professor or researcher. However, it does not necessarily mean that all of them stay or are employed in universities or research institutes. Normally, visiting scholars and post-doctoral students are issues with a visa of professor or researcher.
- 2. 'Inbound faculty members' refers to those foreign faculty members and researchers who visited the University of Tokyo and stayed there temporarily for research, conferences or other academic purposes. They are not employed as full-time faculty members in the university. 'Outbound faculty members' refers to the faculty members from the University of Tokyo who visited other countries with an academic purpose.

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Chapter 3 Educational Diversification Strategies: Japanese Universities' Efforts to Attract International Students

James P. Lassegard

Abstract Japan announced in 2008 that it would more than double its number of international students to 300,000 by the year 2020. Despite initiatives of the Ministry of Education (MEXT) and universities that had been designated as leaders in internationalisation known as the 'Global 30', this goal will be difficult to achieve. This paper discusses international education reforms that MEXT and the higher education sector have implemented in recent years, including the strategies universities have used for attracting more international students to Japan. A disastrous earthquake and tsunami in 2011, the rise of Chinese higher education, in addition to intensifying worldwide competition for international students, have among other factors deeply impacted international student mobility to Japan. This research uses a case study approach to describe and assess the ways in which Japanese international higher education is expanding and diversifying, attending as well to the inherent educational quality issues that invariably arise from such reform.

3.1 Student Mobility in Global Higher Education

The number of students of all levels who cross borders for higher education has continued to rapidly increase to over four million, approximately double the number compared to the year 2000, despite the recent global economic downturn (OECD, 2013). By 2025 this figure is expected to reach eight million (Guttenplan, 2010; IIE, 2011). Accompanying the rise in numbers of students is the competition for these students by nations and individual universities. The United States has been the country accepting the largest number of students, and it still is, but its proportion of the world's international students has fallen from 23 to 18 % in 2000, according to the OECD. Other countries such as Australia, New Zealand, China, Korea, and

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Japan are all striving to acquire a piece of the lucrative international student market. In Chap. 2 of this volume, Huang (2016) described the trend of international mobility across a number of Asian countries. This trend has become particularly prominent since many of these countries are experiencing declining birth rates; an influx of international students is viewed as a potential means to prevent institutions from downsizing and in some instances may save them from having to cease operations entirely (Guruz, 2008). According to Sawa (2013) nearly 46 % of private 4-year Japanese universities were unable to enrol enough students to fill their quotas.

In the global competition for students, some European countries, including France and the UK, might have a more difficult time in maintaining their leading roles in international education. Japan, which has made gains over the last two decades in terms of numbers of international students, will also face difficulties in the future. According to De Witt (2012) the economies of European countries and Japan "...face bigger challenges, budget cuts in higher education are more likely than investments, and there is more popular pressure against immigration, skilled or not" (Questions for the Future, para. 6). Furthermore, the quality assurance of international educational offerings has become of increasing importance as more countries and universities set ambitious objectives for international education and exchange of students and scholars (MEXT, 2009). Not only have more countries and universities worldwide begun to think seriously about attracting greater numbers of students to their shores, they are employing diverse strategies to do so. Paul Davidson, President of the Association of Universities and Colleges of Canada, now a major receiving country for international students, states "(w)e're seeing a much greater sophistication now by universities in developing internationalisation strategies that combine student mobility, faculty mobility, and research collaboration in a targeted and prioritized way" (Labi, 2011, Changes Pay Off, para.3).

Certainly globalisation and the challenges it poses is currently influencing higher education in profound ways that were virtually unimaginable in the past. The terms 'globalisation' and 'internationalisation' have sometimes been used interchangeably, a practice which has been criticized (Katz, 2014). For purposes of this chapter, a distinction will be made between these two terms. Globalisation is defined as "the ongoing process of intensifying economic, social and cultural exchanges across the planet" (Suarez-Orozco & Sattin, 2007, p. 7). Jane Knight's definition for internationalisation in higher education is one that is often quoted: "... the process of integrating an international, intercultural or global dimension into the purpose, functions or delivery of higher education at the institutional and national levels" (Knight, 2008, p. 21). Most scholars have discussed internationalisation of higher education as part of an ongoing process that typically includes activities such as study abroad, outcomes for student learning, and the integration of international content in the university curriculum (Jackson, 2008; Paige, 2003). Indeed, the university curriculum, while a crucial component, has often gone overlooked as a means of assessing internationalisation. Killick (2011) aptly states that "it is the curriculum that most significantly shapes (international students') engagement with the university" (p. 83). The author further sees the internationalisation of higher education as a process of development and growth, both in response to and a reflection of the pressures of globalisation on systemic and institutional levels. Individual

students themselves are part of this process as well, as they are motivated to become more 'international' or globally minded in how they perceive the world.

The presence of international students on campus and the education they receive is a common theme within the discourse of globalisation and the internationalisation of higher education (Guruz, 2008; Hugonnier, 2007). The literature on mobility of students and scholars has increasingly referred to such exchanges as 'transnational education' (Kim, 2009; Sugimura, 2011), which places more emphasis on mutually reciprocal exchanges between countries and universities, and have become more common than one-way exchange. The predominant traditional pattern for extended study abroad has been for students from developing countries, Asia in particular, to study in more developed countries. While these kinds of students may still comprise the lion's share of student mobility throughout the world, increasingly a more diverse pattern may be seen: students from outside of Asia are studying abroad in Asia at higher levels, while inter-regional student exchange within Asia is also on the rise (Altbach, 2012; Kuroda, 2012). Particularly noteworthy is the sharp increase in the number and variety of academic programs and countries that are sending and receiving international students. From a comparative perspective, Kuroda (2012) observes that while the number of foreign students going to the leading destinations of US, UK, and France has doubled between 1986 and 2008, the number of foreign students studying in China, Japan, and Korea has increased by nearly twenty times during the same period (p. 144).

3.2 Internationalisation of Higher Education: The Japanese Context

Japan is the eighth largest host country for international students, comprising approximately four percent of the total international student mobility in the world (IIE, 2013). For sake of comparison, the seventh ranking country, Canada, which has only one quarter the population of Japan, has 80,000 more international students within its borders. Through a number of both global and domestic push and pull factors, Japanese higher education was thrust into an "era of fundamental change", in which universities are "actively implementing internationalisation to stay competitive" (Ishikawa, 2011, p. 194). In particular, government policies implemented for purposes of creating universities that are 'world class', as well as the impact of a decreasing population of Japanese students have greatly contributed to universities' gradual acceptance of more overseas students.

Globalisation of student mobility in Asia is having a similar impact on systems of higher education compared to other countries, but there may be dissimilarities as well. Sugimura (2011) argues that present-day student exchanges do not only represent efforts to promote mutual understanding and friendly relations with other countries. Rather, "countries think about how sending students abroad or hosting foreign students can help them secure their international presence and establish a

position as a base for educational and cultural exchange" (p. 46). Indeed, such motivations are perhaps more closely related to an obsession with university rankings, which has prevailed particularly in Japan. Traditionally, domestic universities have been ranked based largely on their history, prestige, and more quantitatively the publicly announced *hensachi* scores, which measure students' basic academic ability, and also their ability to perform on high-stakes examinations (McVeigh, 2002). Presently, the various international league tables have forced Japanese institutions to consider a more global presence, and many have not been satisfied with how they rank internationally.

Many observers both within and outside Japan have commented at length on the fundamental problems prevalent in Japanese higher education, including problems with educational accountability and efficient ways to evaluate educational quality, a traditional overemphasis on research to the neglect of teaching and student learning, as well as an admissions system that has relied almost entirely on high-stakes entrance examinations (Birmingham, 2012; Goodman, 2010; Kariya, 2011; McVeigh, 2002; Yamada, 2012). Such issues are typically related to broader concerns with educational quality assurance measures worldwide, but only in recent years have they been taken under earnest consideration by the whole Japanese higher education sector. Indeed, international education goals and the quality of educational offerings have been linked in the literature and are found to be at least to some degree interrelated (Horie, 2003; Lassegard, 2006; Yamada, 2012). Internationalisation of higher education has been an on-going process since the mid-1980s when the then Nakasone administration took steps to increase the numbers of international students by means of the '100,000 plan', which was eventually achieved in 2003. The tempo has increased since 2008, when the plan to have 300,000 students by the year 2020 took effect. These quota driven plans, as well as the declining number of Japanese students have contributed to the notion in Japan that "internationalisation of higher education is no longer a matter of choice or domestic contemplations" (Ishikawa, 2011, p. 195). Notwithstanding, the perceived urgency for internationalisation of higher education, as well as increases in student mobility have not yet contributed toward a large-scale paradigm shift in terms of corresponding reforms of Japanese higher education, which are likely to be indispensable if Japan is poised to become a world leader in international education.

Although it is difficult to measure comprehensively, there are some signs that globalisation and even internationalisation have contributed to more attention being paid to reform in Japanese higher education. Japan's third party higher educational assessment organisation states that "(i)nternational educational exchange must involve the issue of quality of education and research" (Kawaguchi, 2012, p. 3). Walker (2005) argues that the exodus of Japanese students from Japanese universities to attend foreign universities in the 1990s was at least in part fuelled by "flaws in the Japanese system", including student and parent dissatisfaction with high-stakes entrance exams as well as "a demonstrable lack of opportunity, choice, and level at Japanese universities" (p. 174). Using a similar argument, we may surmise that, although there are certainly many factors involved in why fewer Japanese are

now choosing to study abroad than in the past, it can be extrapolated that quality improvements in Japanese university education may indeed be a factor in students' decision to stay in Japan (Lassegard, 2013). And according to Yamada (2012) "... Japanese universities now feel obliged to ensure greater quality in undergraduate education....such 'quality assurance' has rushed higher education into curricular, program, and pedagogical reforms that have forced universities to adapt to the demands of massification as well as the emergence of something like global educational standards" (p. 84).

A situation exists in which at least incremental reforms are currently being undertaken by different kinds of Japanese universities in diverse settings, yet it remains difficult to gauge how widespread this trend is, partly due to a lack of an effective and comprehensive means of evaluating the impact of these reforms. As Ota (2012) asserts, "one of the crucial challenges for Japanese universities is to develop an effective evaluation process of their internationalisation efforts" (para. 9). Due to a lack of such evaluation, there has been an (over) emphasis in Japanese universities on quantitative measure and numerical targets, such as the number and percentage of students and faculty who are non-Japanese. Even though domestic rankings and comparisons between the educational activities of similar universities have served as benchmarks for quality in the past, the Ministry of Education, Science, Culture and Technology (hereafter MEXT) and Japanese universities themselves have become more concerned with how they may fare in international rankings. This has prompted the Abe administration in 2013 to announce that Japan would strive to place ten Japanese universities within the top 100 universities in the world by the early 2020s (Kakuchi, 2013).

Traditionally, educational offerings and curriculum provided at a particular university had very little influence on its domestic ranking. However, in a globalised world the number and degree of international exchanges of students and faculty does play a role in international rankings of universities, such as the Times Higher Education ranking (UNESCO, 2013). There are some indications that Japan is taking a broader view of quality that also includes measures of internationalisation. Asahi Shimbun, which has published a volume entitled *University Ranking* since 1994, presently uses 84 different indicators to rank universities, including calculations of foreign students and faculty (Hirota, 2013), and the number of domestic students going overseas for study (Horie, 2013). Additionally, other methods of ranking domestic universities have been developed, specifically by the newspaper company Yomiuri Shimbun, which from 2008 began to publish *Daigaku no Jitsuryoku* [*The Real Power of Universities*], utilising rankings that focus more on the quality of education, provision, teaching improvement, and curriculum design (Yonezawa, 2013).

It is relatively easier to gather quantifiable data for ranking purposes on the national universities, which operate primarily on government funding, are more research-oriented, and whose output is easily quantifiable. Private universities, on the other hand, are more oriented toward teaching and learning, and some do not make their financial data public. These universities have kept their tuition fees low

to compete with top national universities. This limited access to funds compared to national universities puts a "significant limit on the ability to improve quality of education activities to attract high-level international students" (Yonezawa, 2013, p. 179). Indeed, Japanese universities until quite recently did not view international students as bringing in much financial benefit, unlike institutions in the US, UK or Australia, which are much more likely to regard international students as an important revenue stream (Reddin, 2013). In stark contrast, Ishikawa (2011) notes that "having more international students puts a greater financial strain on (Japanese) universities" (p. 205). Most students from developing countries in Asia, who are the vast majority of international students admitted to universities in Japan, would find it very difficult to live and study in Japan if they did not have financial support from the Japanese government or their universities. In some more extreme cases, such as the Ritsumeikan Asian Pacific University (APU), 95 % of international students pay reduced or no tuition and fees, while Japanese students make up the difference for the opportunity to receive an international education in an academic environment in which half of all APU students are from overseas, and half of the courses offered are taught in English (Sato & Hashimoto, 2011).

Nevertheless, the international rankings, and in particular, the presence of international students and scholars as part of the rankings, have continued to influence and inform efforts by Japanese universities to 'internationalise' or 'globalise' their campuses and the education that is offered there. As Yonezawa (2013) asserts, "Japanese universities will continue to strive to enhance their global status" and "... rankings [will] continue to be influential for the institutional behaviors of Japanese top universities" (p. 181). Hence, the drive to bring more international students to Japan continues to be a fundamental priority for Japanese higher education as a whole.

Contrary to the past, Japan is increasingly viewing internationalisation of higher education as a vehicle for future economic growth, and in part the strategies used by universities to attract international students are a means of increasing its own access to global human resources or globaru jinzai. This is something of a buzzword in Japanese higher education today, which also refers to a parallel scheme by the government to enhance the academic abilities of domestic students by helping to prepare them for work in an increasingly globalised Japanese economy (Rivers, 2010; Birmingham, 2012). Ota (2012) refers to this latter trend as a skilled migration approach, which in combination with a revenue generating approach, particularly for students from China, has gradually replaced the more traditional co-operation and mutual understanding approach to international mobility and exchange that has characterised Japanese international (or global) higher education until recently. In the previous approach, characterised by cooperation and mutual understanding, hosting Asian international students was considered a form of overseas developmental assistance, or ODA. While this framework had some benefits for Japan, its high expense was not sustainable, particularly when the number of international students began to increase at a rapid pace.

3.3 International Students at Japanese Universities

In 2012 the number of all international students at universities in Japan was approximately 138,000 (Fig. 3.1). International students had increased steadily throughout the first decade of the twenty-first century, and the disastrous earthquake and tsunami that struck Northern Japan in 2011 contributed to a decline that had actually already had begun prior to 2011. By 2012, however, student levels had rebounded to pre-earthquake levels so the disaster ultimately did not appear to have sizeable long-terms effects on international student flows to Japan (Connell, 2013).

As seen in Table 3.1, Asian students still comprise the vast majority of international students at universities, and most of these are regular degree students as opposed to short-term exchanges. Indeed, an important trend in Japanese higher education is the development and increased student participation in short-term programs ($tanpur\bar{o}$), in which over 11,000 students participated in 2012, amounting to 12 % of the total, or a 22 % increase over 2011 (JASSO, 2013a). Many universities, both national and private, are hoping to attract international students by establishing new short-visit, short-stay programs, and some are providing substantial scholarships toward enrolment. One potential expectation that has motivated the development of such programs is that students who come to Japan for a short visit will want to

Fig. 3.1 Flows of international students to Japan

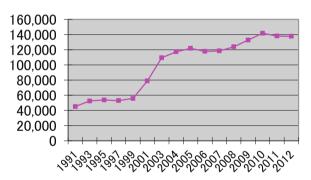


Table 3.1 International students in Japan in 2012

| | Number of | |
|---------|-----------|------------|
| Region | students | % of total |
| Asia | 127,178 | 92.3 |
| | (129,163) | (93.5) |
| Europe | 4456 | 3.2 |
| | (3722) | (2.7) |
| North | 2435 | 1.8 |
| America | (1742) | (1.3) |
| Other | 3687 | 2.6 |
| | (3448) | (2.4) |
| Totals | 137,756 | 100 |
| | (138,075) | (100) |

Numbers in parenthesis are from 2011

return again to further their study of language and culture, or to enrol in a degree program, often at the graduate level.

Another significant development is the rapid increase in the number of English-medium content courses offered for academic credit at many major Japanese universities. Although designed primarily for short-term exchange students, Japanese degree students doing courses in different faculties who are proficient at English are also eligible to enrol in English content courses and may obtain academic credit. Some international students from Asian countries are proficient enough in both Japanese and English and they are now free to take courses in multiple faculties, which was not always possible in the past due to strict curricular requirements and faculties not opening up their curriculum to students of other faculties. Thus, classroom diversity is increasing both as a result of implementing English as a language of instruction, as well as allowing both international and Japanese students the relative freedom to take courses in different languages and, in many cases, for credit.

The Global 30 program, which had the development of English language content courses as one of its main objectives, ran from 2008 to 2013 and its formation coincided with the ambitious aim to bring 300,000 international students to Japan. Only 13, mostly large, prestigious universities were ultimately selected for Global 30, and one of the requirements from MEXT was that these institutions would be able to develop academic programs in which students could realistically complete an entire degree while taking only English-medium courses (MEXT, 2012b). Prior to the start of the Global 30 program these 13 universities had enrolled approximately 12 % of all international students in Japan (Ishikawa, 2011). However, this percentage will undoubtedly continue to increase dramatically as many of the 13 universities are expected to more than double their numbers of international students in the future. For example, Waseda University, which is a Global 30 member, has plans to increase its international students to at least 8000 by the year 2020, more than double the number compared to 2012. The goals held by G30 and other universities will ideally raise the percentage of international students as a proportion of the student population, which in most cases has been less than 2 % (Ishikawa, 2011).

The universities that accept the largest numbers of international students tend to be among the oldest and most highly regarded in Japan, and they host nearly one third of the total number of students. However, many other less prestigious but large Japanese private universities also enrol large numbers of international students. Table 3.2 shows a number of universities that accept large numbers of international students (note that some of the national G30 universities are not listed). In most cases the number of international students at universities rebounded and even increased from 2011, the year of the disaster in Northern Japan. Although it is likely that the top accepting universities will continue to gain an even larger proportion of international students among Japanese universities, if the 300,000 goal is to be realized, then many more receiving universities will have to raise their acceptance goals. Indeed the 'Super Global 30' Program, which is the successor to G30 and will be discussed below, is the latest government initiative to be implemented for achieving these goals.

| Institution (national-N/private-P) | Global 30/ non-global 30 | Number of international students |
|---|-----------------------------|----------------------------------|
| Waseda University (P) | G30 | 3771 (3393) |
| Japan University of Economics (P) | NG30 | 3135 (3378) |
| Tokyo University (N) | G30 | 2873 (2877) |
| Ritsumeikan Asia Pacific University (P) | G30 | 2526 (2692) |
| Kyushu University (N) | NG30 | 1931 (1866) |
| Nagoya University (N) | G30 | 1611 (1556) |
| Nihon University (P) | NG30 | 1378 (1340) |
| Keio University (P) | G30 | 1203 (1072) |
| Doshisha University (P) | G30 | 1131 (877) |
| Meiji University (M) | G30 | 1089 (1046) |
| Sophia University (P) | G30 | 757 (520) |

Table 3.2 Numbers of international students for some major receiving universities (2012)

Numbers in parentheses are for 2011

One criticism made of the G30 universities, was that they were selected based on their size or academic ranking, rather than on a solid record of achievements in international education (McNeill, 2010). Rivers (2010), in a harsh critique of the Global 30 program, is dubious of the international motivations behind this program, asserting it actually masks "a predominantly self-serving nationalistic agenda" (p. 441). Among other criticisms, the author discusses the program's insistency on the use of English for non-native (mostly Japanese) speakers, as well as a supposed lack of opportunities for interaction between international students and domestic Japanese students.

Regardless, many other Japanese universities that are not part of Global 30 are stepping up efforts to emulate and adopt G30 goals and policies, albeit on a smaller scale, and they are making similar plans to internationalise by increasing the number of international students, as well as by sending more Japanese overseas for study. The latter has been another important component to the post-Global 30 internationalisation endeavours of universities, due to concern with the steep decline in Japanese students going abroad (Kawai, 2011; Lassegard, 2013). Indeed, much of the government's emphasis on developing global human resources has been to justify increasing expenditures going toward the promotion of overseas study for Japanese students.

The amount and variety of funding for international education that MEXT proposed for the 2014 academic year represented an interest in maintaining the flow of funding, and what may become a more comprehensive approach toward internationalisation of higher education than in the past. The announcement Prime Minister Abe made in 2013, which included the aim of placing ten Japanese universities within the top 100 universities in the world, precipitated an increased level of funding to achieve this objective. The budget request proposed by MEXT was to spend 48.2 billion yen (approximately \$472 million US) for university internationalisation and exchange for purposes of cultivating global human resources, which represents a slight increase from the previous year (MEXT, 2013).

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Specifically, the plan for 2014 and beyond is divided into several areas of funding. The first major category, 'Strengthening of the Global Development of University Education' is comprised of the Super Global University initiative, which allocates 9.9 billion yen in funding for thirty universities. Another category 'The Promotion of International Student Exchange at Universities' comprises the largest proportion of the budget, and allocates 35.5 billion yen to enhance support for international students, as well as to provide financial support for the so-called 'Strategic Acceptance of Foreign students of Excellent Academic Ability' (*Yuushuu na Gaikokujin Ryuugakusei no Senryakuteki na Ukeire*) and mainly consists of funding for scholarships (MEXT, 2013, p. 1).

The consistent funding being allocated suggests that, at least on the surface, the government is recognising the necessity of providing sustainable funding on the national level to accomplish its international education goals. It is also very likely that comparisons have been made with Japan's neighbours in East Asia, namely South Korea and China, who by some estimates have been more successful than Japan in meeting and exceeding their internationalisation objectives (Rappleye, 2013). Another point that can be made from examining the comprehensive nature of the funding initiatives is that Japan, regardless of its motives, has begun to accept that international education policy should ideally be implemented in a concerted and integrated way, although the 30 universities who are selected for funding will still make up a small proportion of the higher education sector.

Private universities comprise 75 % of all universities in Japan, and most of them are not as prestigious or highly ranked as national universities. Yet, there is perhaps nearly as much pressure on private institutions to recruit more students as there is on the G30 universities. 46 % of private universities are reported to be falling short of their enrolment targets, and international students are seen as a potential means to help fill empty classroom seats so that universities can remain viable (ICEF, 2013; Tanikawa, 2013). Some lower-tiered universities have even resorted to using commission-paid agents to recruit students, a practice which resulted in concerns over verification of credentials and students' academic abilities.

Data purporting to measure institutional degree of interest and support toward internationalisation is not difficult to find. However, the available data reveals a mixed message. Most surveys of university presidents have indicated that motivation to internationalise, in terms of increasing numbers of international students and faculty as well as sending more Japanese overseas, is substantial and has been growing over the years. However, reports from individual faculties and their members often tell a very different and often contradictory story about internationalisation, particularly when it may involve curricular reform (Klaphake, 2010). Huang (2009) cited data from surveys taken of faculty views on a number of items, including the following statements:

- It's important for my professional activities to involve exchanges with foreign scholars:
- It is necessary to read foreign books or journals to further advance my discipline;

- Universities should facilitate further exchange activities with foreign students or faculty members; and
- The curriculum in my university should be further developed from an international perspective. (p. 155)

For all four statements, the proportion of faculty who agreed actually declined in the 10 year period between 1997 and 2007. In fact, only one quarter of academics agreed that the curriculum should become more international.

3.4 Challenges Facing International Student Mobility to Japan

Over the last decade, a number of factors and circumstances have not made it easy for Japanese universities to dramatically increase the number of international students. The financial cost of studying in Japan has been one obstacle for overseas students. The yen had remained consistently high until it began to depreciate substantially against the dollar in 2012. Therefore, although Japan still may be considered an expensive country to live in for international students, it is perhaps less so than previously.

The 'triple disaster' of earthquake, tsunami, and problems with the Fukushima nuclear reactors in March 2011 certainly impacted international student mobility, at least in the short term. By some estimates, up to half of Japan's international students fled the country, although most regular students eventually returned to complete their studies (Connell, 2012, 2013). Nevertheless, the short-term international student programs at universities, which suffered large and sudden declines in 2011, have since rebounded and have met or exceeded their pre-disaster numbers (JASSO, 2013a). Hence, it would seem that many universities have been able to mediate the 2011 disaster so that it would not have a lasting effect on international student recruitment. That notwithstanding, even after the establishment of Global 30 and more proactive recruitment procedures adopted by Japanese universities (Kuwamura, 2009), there was no substantial increase in international student numbers in 2012 that went above and beyond pre-disaster numbers.

The Global 30 Program, in which selected universities initially received 200–400 million yen for up to 5 years, set up around 30 new undergraduate and over 100 graduate courses by the end of the first project period. In contrast, its successor, the Global 30 Plus program which runs from 2012 to 2017, aims to increase the number of Japanese studying overseas in addition to attracting international students to Japan. Yet another factor is that while Japan and its institutions have been busy making reforms to higher education with Global 30 and other programs, other countries in Asia are engaging in similar activities. Chinese higher education has grown very rapidly over the last decade, and is now hosting approximately 320,000 students from overseas, making China a formidable player in the competition for international students (Xinhua, 2013). Indeed, China may be competing directly with

Japan for some of the same students. This trend is reflected in the popularity of the country as a study abroad destination for American students, whose numbers to China continue to increase at an annual rate of 18 % (Belyavina, 2013). A reported 15,647 American students studied in China for academic credit in the 2010–2011 year, nearly four times the number in Japan, which had experienced a sharp decrease at least in part due to the triple disasters in 2011. In the case of the US, the 100,000 Strong Initiative announced by President Obama, is likely to further increase the number of Americans studying in China for academic credit.

Additionally, internationalisation of Korean universities has proceeded and has even exceeded Japan in some respects. With a population approximately half of Japan's, Korea hosted over 80,000 international students in 2010, a number that is likely to grow in the future (NIIED, 2013). One distinct advantage for both China and Korea is the autumn start of their academic year, which coincides with most universities in the world. In contrast, the University of Tokyo and other universities had taken autumn admission under serious consideration, but this idea was officially abandoned (Internationalising University Terms, 2013).

Since Japanese language schools serve as feeder schools for universities, they are a good predictor of the numbers of international students who will enter higher education, particularly for Chinese and Korean students. As Chinese students have comprised the majority of students in Japan, the sharp decline is seen as particularly alarming. According to the Association for the Promotion of Japanese Language Education, the number of Chinese students enrolled in its 400 member Japanese language schools has declined nearly 40 % between 2010 and 2012. The trend has been explained as a result of several events, such as concerns over the Fukushima nuclear plants, and persistent friction between Japan and its neighbours over territorial and other disputes (Asakura, 2013). JASSO (2013a) also noted a decline of 23 % between 2011 and 2012 in the data it maintains on foreign student enrolment in Japanese language schools.

What seems somewhat evident and consistent with internationalisation policies proposed by the government and implemented by MEXT, is the top-down approach it has pursued (Kitagawa & Oba, 2009). One would expect this to be the case with the 86 national universities in Japan, but this is also generally true for the much larger private sector. Indeed, since the Ministry of Education enacted the Private Schools Development and Assistance Law in 1975, the state has funded private schools and universities on average between 14 and 30 % of total operating costs (Kariya, 2013). MEXT issues its *shidō*, [official guidance] to the various universities, who then propose solutions in terms of program development, which is subsequently funded by the MEXT based on a process of approval. As the result of overt control by MEXT many universities tend to develop programs and functions that are very similar to one another and often differ in name only. Furthermore, programs or initiatives that may hold promise are often not considered because of the somewhat strict conditions proposed by MEXT, and funding may not be sustainable (Goodman, 2010; Tanikawa, 2013). This is a problem that has no easy solution. As Yonezawa (2009) asserts, "It is imperative that universities and academics themselves display some initiative of their own. In order to sustain a continuous internationalisation process, dynamic initiatives by academics and universities for knowledge creation and exchange are indispensable" (p. 216). Such initiatives may be difficult to achieve when universities are constantly forced to look over their shoulder and are under pressure to conform to somewhat strict government procedures and regulations.

As mentioned, the 13 universities selected for inclusion in Global 30 are among the most highly-ranked and prestigious in Japan. As such, the media regularly follows the activities and educational practices of this elite group, and less prestigious universities make comparisons and often try to emulate or imitate the educational practices of higher ranked institutions. Therefore, it can be said that in addition to MEXT pronouncements, G30 universities themselves have influence on Japanese higher education in general. The international missions of the G30 are now intact and virtually guaranteed, but the same thing cannot be said for universities who are not part of this elite group. These so-called 2nd-tier universities must also strive to achieve their internationalisation targets, often without the expertise and resources available to G30 universities.

The literature has predominantly focused on examining the educational endeavours of the thirteen G30 universities, which are clearly a minority in terms of student population, and not very representative of Japanese higher education as a whole. Although these elite universities have considerable influence on the direction of international education in Japan and serve as leaders or templates for internationalisation, they alone will not be able to increase their numbers of international students sufficiently to reach the national targets. As such, this research focuses on the non-Global university sector – large universities with substantial international education ambitions, yet that do not have access to a similar level of funding that is allocated to G30 universities. The universities chosen for this research study, therefore, are arguably more closely representative of the 'average' Japanese university and their level of internationalisation, and this provides a main rationale for their inclusion in this study.

The author uses a case study approach to examine some of the major policies and strategies currently being implemented by non-G30 universities to develop and maintain their internationalisation activities, which includes the overarching objective of continuing to attract more international students to their campuses. In this quest, this study hopes to shed light on the effects (real and potential) these policies have on various universities in terms of a wider perspective of internationalisation of higher education, particularly the area of curriculum and instruction. Specifically, case studies were conducted at three private non-G30 universities in the Kanto (Tokyo) and Kansai (Osaka) areas, which make up the most populated regions in Japan. A multitude of media were utilised, including news media, university websites and other documents in Japanese and English. In addition, semi-structured interviews were conducted in both languages with both international administrative staff and international students at several universities. Follow-up questions were done with key staff in the international centres via e-mail in most cases.

As a result of the inquiry, six categories or areas were identified from the interviews relating to the strategies and activities universities engage in for internation-

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| | A-U | B-U | C-U |
|--|---------------|---------------|--------|
| Location of main campus | Central Tokyo | Western Tokyo | Kansai |
| Approx. total number of students | 37,300 | 25,700 | 12,700 |
| Number of faculties | 16 | 6 | 3 |
| Total number of international students | 470 | 758 | 603 |
| Number of short-term exchange students | 50 | 100 | 400 |

Table 3.3 Overview of case study (three private, non-global 30) universities

alisation: (1) international student education and support at these universities; (2) the enhanced role of the international centres in efforts for campus-wide internationalisation; (3) goal-setting for numbers of international students on campus; (4) changes in recruitment and admission procedures for international students; (5) new efforts to increase and/or enhance exchange agreements with overseas universities; and (6) changes in scholarship provision for international students. As is shown in Table 3.3, the two Kanto universities (A-U and B-U) surveyed are quite large, and have a diverse number of faculties and majors, particularly A-U. In contrast, C-U's curriculum is largely devoted to the study of humanities. All universities differ somewhat in terms of the international student presence on campus, and there is a mix of regular degree-seeking international students as well as students from an overseas partner university who are studying in a short-term exchange program operated by the universities.

3.5 Institutional Strategies for Attracting and Supporting International Students

The following section details six main areas of development, or 'strategies', which were derived from interviews and follow-up correspondence with key staff members overseeing the activities of international exchange centres within the three universities during the 2012–2013 academic year. This list is not meant to be considered exhaustive, but the following categories are seen to represent the main activities universities are engaged in to promote and support international student education.

3.5.1 The Roles of International Exchange Centres (IEC)

University International Exchange Centres (IEC) and their staff members are assuming a larger role and responsibility for accepting larger numbers of international students, as well as for overall internationalisation efforts for the university. In most cases, a campus-wide international policy committee ($kokusai\ senryaku\ kik\bar{o}$) exists, consisting of faculty members as well as staff. According to the international director at B-U this committee, comprised of deans, President, and the IEC,

| A-U | B-U | C-U |
|--|---|---|
| 1000 by 2015 (600 degree- seeking and 400 short-term exchange students | 1200 by 2015 (both degree-seeking and short-term) | No particular goal, university must have 400–450 each year to sustain short-term exchange program |

Table 3.4 Numerical goals for international students

makes international policy decisions at a higher level together from the beginning. A variety of staff functions exists at the centres, some of which focus exclusively on international students; others manage policies and programs related to Japanese students studying abroad. Striking was the degree of integration, centralization and consolidation taking place in some of these centres. In the case of A-U, the Study Abroad Centre had just recently been combined with the IEC, where formerly they had been separate. The reason for this merger according to one of the managing staff interviewed was that "(t)here are multiple functions necessary for supporting students overseas, thus moving and consolidating these helps to promote internationalisation policies at the University" (personal communication with Coordinator, Exchange Students Program).

Administrative posts at Japanese universities are generally held for approximately 3 years before the staff is then rotated to another post within the university, often unrelated to the previous post. However, in the case of international centre posts it has become common for certain exceptions to be made. Often centre staff will remain in the same position for 5 years or longer, and in many cases they can be subsequently rotated to another internationally-oriented post. There were both advantages and disadvantages related to the traditional procedure of rotation:

I am concerned about rotating out those who have valuable experience, but I also want to rotate staff to other parts of the university to spread the gospel of internationalization...I think it is good to maintain the rotation system, but with some controls, so that talent is not abruptly lost to the detriment of the International Centre. (Director of International Exchange Centre, B-U)

In the special case of C-U, the international student program has a long history and is almost a full-fledged faculty in some respects. According to the director, "... we recruit those staff members who are committed to international education. So we seldom rotate" (C-U Director).

3.5.2 Establishment of Numerical Goals for International Students

It is perhaps no surprise that these universities have set ambitious numerical targets for increasing the international student presence on campus (Table 3.4). This directive is highly influenced by guidance from MEXT, and although these universities are not G30 members, they still receive various funding for international activities, including those from the Global Human Resources budget. Moreover, universities

are implicitly made aware that they need to make efforts to promote the national agenda to increase international students as dictated by the 300,000 plan, or they could risk losing future funding from MEXT.

In the cases of both A-U and B-U, quotas to increase the number of international students were seen as an efficient, if not a positive means of internationalising the campus. A-U appeared the most confident about the possibility of achieving this target. In contrast, the director at B-U was not entirely confident, yet stressed the importance of goal-setting, stating that "...we really needed a target to get people motivated. In the past 3 years, the sense of urgency for internationalisation has increased. All the faculty, all the deans recognise that we need to be working more internationally". In C-U's case, the short-term exchange program has had a long history of operating somewhat separately from the rest of the university system, and the minimum quota that is in place is necessary to support the operating costs of the program. At one time, C-U had a target to recruit 1000 students, but this was abandoned because of the cost that expansion would require in terms of classrooms and faculty, and the potential negative impact it might have on quality control.

3.5.3 Reform of Recruitment and Admission Procedures

Nearly all Japanese universities have required that international students applying for regular admission be on campus to take a special entrance exam or undergo an interview at the faculty that the applicant has applied to. Recently, however, some of these requirements are becoming more flexible. The proficiency exams most commonly taken for university admission, including the Test of Japanese Proficiency (JPT) and the Examination for Japanese Universities (EJU) can now be taken incountry in many cases. The EJU, implemented in 2002, is offered twice a year in 17 different locations throughout Asia, with the exception of the People's Republic of China, in addition to 16 locations in Japan. The majority of 4-year universities now accept EJU test results for admission. In July, 2013, 15,613 students took the EJU; most of whom took the Japanese version, while only 6 % took the English version of the exam. In spite of the fact that the majority of Japanese universities now accept the EJU for admission, only 97, or 12 %, of all Japanese universities accept it for pre-arrival admission. In most cases, international students still must visit Japan to undergo an interview prior to being formerly admitted to a faculty (JASSO, 2013b).

Despite incremental improvements in the admission procedures, the fact that the EJU is only offered twice a year in Asian countries serves to limit diversity and flexibility in terms of potential applicants and countries (Kuwamura, 2013). Nevertheless, some universities are autonomously choosing to simplify their admission procedures for international students. For example, many university faculties have eased or eliminated English language test requirements for international student admission, which removes an obstacle for Asian students in particular. Another obstacle to admission has been the short period during which international students could apply. In the case of A-U the application period was only 5 days in 2011, which

negatively impacted the number of applicants. This period was subsequently extended to 12 days in 2012.

One of the biggest changes taking place at many universities concerns the methods of recruitment and the time and energy being spent to enrol new international students (Choudaha, Chang, & Kono, 2013). In the past, universities relied almost solely on their perceived domestic ranking to attract new students, or they left it to Japanese language preparatory schools to disseminate information about the university. In fact, many prestigious universities considered it beneath them to engage in marketing or branding activities (Connell, 2013). Universities are slowly realizing that international students are a commodity to be sought after. For example, they are participating more actively in periodic informational sessions (setsumeikai) held at Japanese language schools, as well as consultation sessions sōdankai held by private companies often in conjunction with the Japan Student Support Organisation (JASSO). This sentiment was strongly echoed by the international exchange staff: "In the future, if we receive word from the Japanese language school that foreign students are interested in (our university)...we will definitely follow-up more proactively" (A-U staff). In another effort to provide current information, universities are revamping their websites for prospective students, and are including more information in English.

3.5.4 The New 'International Faculties' and Internationalisation of the Curriculum

University courses at most Japanese universities have generally followed a lecture-based Prussian model adopted from European countries during the Meiji era. The United States made attempts to introduce a liberal arts curriculum during the occupation, but with varying results. Specifically, courses under this model are 90 minlong, meet once a week, and, on average, students typically take 11–13 of them each semester for the first 3 years. Faculty professors lecture to large groups of students, and a minimum of discussion or interaction takes place between professor and students. Although it may depend somewhat on the faculty, many senior professors do not regularly make use of Power Point or other audiovisual media in their courses. Such aspects are rather common at Japanese universities, and can be viewed in relative contrast with the small class sizes, and student-centred, interactive learning that have become the norm at many colleges and universities in the United States and other countries.

Besides the difference in organisation of instruction, another potential obstacle involves the earning of course credit as well as credit transfer. In Japanese universities students taking courses in their major, or *senmon* courses, typically earn two credits per course, while language and culture courses are considered to be $ky\bar{o}y\bar{o}$, a word that has been variously translated as 'liberal arts' or 'general education' (Hasegawa, 2013). Typically students earn only one credit for $ky\bar{o}y\bar{o}$ courses, or half

of credits earned from *senmon* courses. The unequal credit situation can be somewhat problematic when international exchange students who study at Japanese universities need to transfer a certain number of credits back to their home universities. Most foreign university agreements certainly have reasonable credit transfer arrangements in place for exchange students. However, a problem with credit transfer may arise if the home university's system of allocating credits does not take into account this credit disparity between *senmon* and *kyoyo* courses.

Japanese universities on the whole have not kept up with reforming their curriculum to become more international (Ota, 2012). Partly because traditional faculties are reluctant to change their domestic focus to integrate international content into their courses, many universities have created entirely separate interdisciplinary faculties, whose core curriculum has an international policy study focus (Tanikawa, 2013). Some faculties actively recruit Japanese students who have resided overseas for long periods of time, also known as returnee students, or *kikokusei*, and who may not have either the ability or the inclination to sit for a competitive entrance admission exam within a traditional faculty at a Japanese university. A-U has such a faculty, which is small in scale – only approximately 80 students are enrolled. However, despite the fact that the course curriculum is entirely in English, the faculty has not actively recruited international students. The author found this to be somewhat curious and asked a tenured professor belonging to the faculty the reason why this was the case.

Foreign students who are interested in coming to Japan have very specific reasons for doing so – either they are interested in Japanese culture, or in some specific areas that Japan is famous for. Unfortunately at (our faculty), we offer courses that are not tailored to foreign students, as in the (short-term exchange program) course). Also, they do not have any incentive for getting a degree from A-U. (personal e-mail correspondence with the author, June 15, 2012)

While the professor's comments may reflect the reality, the faculty does offer at least 150 courses taught in English (many cross-listed with other faculties) which could essentially be developed into an interdisciplinary policy studies major that may be of interest to international students. Although through no fault of the professor, the almost lack of recognition of the potential for enrolling international students in this case struck the author as being indicative of a missed opportunity for A-U.

Perhaps until recently, the internationalisation of curriculum at Japanese universities has focused on select individual faculties and not as a meta-concept throughout the university (Tanikawa, 2012). As one director remarked, "the level of commitment (*sekkyokusei*) toward internationalisation varies substantially from faculty to faculty" (A-U). Hence, internationalisation is something that happens at select points, i.e. new faculties designed to have an international emphasis and content. Some expressed scepticism with this kind of arrangement,

There's always this discussion about starting an international faculty at B-U. My feeling is that every faculty should be integrating domestic and international considerations. What is not touched by the international sphere? Everyone is pushing for internationalization, but

| | A-U | B-U | C-U |
|---|------|------|-----|
| Number of agreements with overseas universities | 97 | 125 | 330 |
| Number of English-medium subject courses | 150+ | 100+ | 50+ |

Table 3.5 Indicators of university internationalization

they sort of want to compartmentalize it. My sense is that internationalization needs to inform the entire content of education. (B-U International Center Director)

Nevertheless, universities are more frequently including components of internationalisation within their publicly announced mission statements. For example, relevant language pertaining to internationalisation of education occurs quite frequently in the A-university's Mission, Purpose and Objectives, a 20-page document in which we find such terms as 'international' or 'internationalisation' (14 times), 'global' or 'globalisation' (six times), and 'world' (five times). However, as mentioned previously, the terms internationalisation and globalisation are often used interchangeably, and they do not necessarily refer to the integration of international comparative or intercultural content into the courses curriculum.

3.5.5 Expansion of Overseas Partnerships and English-Medium Courses

Revamping and enhancing the short-term exchange programs have been made important priorities of many Japanese universities. It is common for international students to study in Japan for a year, a semester or less, and this is one way universities can potentially increase the total number of international students on campus. To accomplish this, universities are actively seeking more overseas university partnerships, and are often making use of faculty connections to establish relationships with universities and colleges prior to entering into a formal exchange agreement, or memo of understanding (MOU). Table 3.5 shows the approximately number of exchange agreements each university has established with overseas universities. In the case of C-U, its long history (since 1971) of student and faculty mobility has contributed to this university having many partners. Regardless of the number of agreements held by universities, some are more active in exchanging students and faculty than others. Yet the competition to develop exchange agreements is becoming as pronounced as efforts to recruit international students.

One of the predominant trends in terms of delivery of curriculum over the last decade, particularly since the selection of the Global 30 universities, has been to increase and expand the number of English-medium course offerings. This is one of the more controversial policies, but it is seen as a necessary step to bring more and more diverse international students to Japan. As mentioned earlier, approximately 60 % of international students are Chinese, and many Asian students have familiarity with Chinese characters, a minimum of 2000 which must be mastered in order to

study at a traditional Japanese faculty. The issue of English-medium or English content courses has been somewhat controversial due to the fact that English is not spoken widely as a second language in Japan. Even though many academics must have some proficiency in English for research purposes, their ability to communicate using English is generally not very high. Japanese as a group have some of the lowest recorded average scores on standard tests of English, even compared with other Asian countries (ETS, 2012).

Regardless of the difficulties inherent to this endeavour, universities, under the guidance of MEXT, have taken it upon themselves to increase the number of English content courses they offer. Realistically speaking, however, many courses are not offered every semester or even every academic year. In this regard, A-U and B-U are large universities with multiple faculties and therefore have more access to diverse subject content that smaller specialised universities, such as C-U, may not. In spite of the expertise available at larger universities with multiple faculties, it is often difficult to find instructors who are able and willing to teach courses in English. Most Japanese professors must spend a disproportionate amount of time preparing to teach in English, which takes time away from research and other academic duties. Even though professors often are well-compensated for the English courses they teach, the additional burden may outweigh the benefits for many full-time Japanese faculty members.

3.5.6 The Availability of Scholarships for International Students

To reiterate, international education for Japanese universities has often been seen as a costly endeavour with little hope for much financial return. When the numbers of international students declined in the late 1990s, budgeting was revised so that more students could receive funding for their studies in Japan, which resulted in a subsequent upswing of the number of international students (Lassegard, 2006). Global 30 funding, which was proposed by Prime Minister Fukuda in 2008, was subsequently substantially reduced by the Democratic Party of Japan when they came into power in 2009. However, after LDP candidate Shinzō Abe was elected as Prime Minister in 2012, the government showed more willingness to promote internationalisation, with MEXT encouraging universities to find creative ways of bringing more students to Japan, as well as promoting the study abroad of Japanese students.

According to government figures, the majority of international students in Japan are self-financed, or *jihi* (MEXT, 2012a; Rajan, 2013). However, there exist many other kinds of scholarships and grants available to international students in Japan, both from governmental and institutional sources. Students receiving the national (*kokuhi*) scholarships, approximately 10 % of all international students in Japan, typically must apply for this at the Japanese embassy or consulate in their home country (Rajan, 2013). Incidentally, this scholarship, which also waives university tuition, has been reduced from 180,000 yen a month in the 1990s to a basic stipend

| A University | B University | C University | | |
|--|--|--|--|--|
| 80 % of degree-seeking students receive scholarships and/or tuition | 3 basic kinds of scholarships: | Short-term exchange students pay to home university | | |
| reduction | Overall 30 % tuition reduction | | | |
| | New undergrad tuition reduction | | | |
| Over 30 different funds (university, foundation, etc.). | 2nd year+students get 50 % tuition reduction | Students entitled to 50 % tuition waiver based on meri (GPA) | | |
| Approx. ¼ of international student handbook devoted to scholarship application information | | Few JASSO scholarships available | | |

Table 3.6 Financial assistance for self-pay international students

of 150,000 yen per month (MEXT, 2012a). There has also been a change in monetary support for international students in Japan. Where support was first given to the 11,406 students receiving the national JASSO Honours scholarship, the focus has been shifting to funding for new short-term stay/study scholarships, to which 7740 students were entitled in 2012 (JASSO, 2013a). These trends suggest the financial pressure that institutions are under to provide adequate financial support for a greater number of international students, even though government funding has been shifting focus from international students to allocating more funds toward sending Japanese students overseas for study (Kameda, 2013).

Table 3.6 shows details for scholarship information provided by universities, mostly in the form of tuition waivers or reductions, which the vast majority of degree-seeking students receive. There are different sources for some scholarships, such as foundations or companies, but they are all administered by the university. Since the largest number of international students at C-University study within the short-term exchange program, they tend to pay tuition directly to their home institutions. Students who are self-paid, however, are entitled to a 50 % waiver on their tuition if they maintain a high GPA in their academic program. In addition to these tuition reductions, most international students are eligible to live in discounted housing, which are typically dormitories either owned or contracted by the university. In examination of the financial support data on international students we can see a general trend where there is a shift from national government funding toward institutional and corporate funding sources, providing a more diversified funding base.

3.6 Conclusions and Future Implications

The universities surveyed in this study appear to differ somewhat in terms of their international ambitions, as well as strengths and weaknesses in terms of their resources available to increase the number of international students. Each university

also employs multiple, often similar, strategies to accomplish these aims. However, administrators expressed some concern over their ability to achieve goals of substantially increasing the number of international students at their respective universities. One common strategy employed by universities is to increase the number of short-term and short-stay international students, and to accomplish this, expand and enhance the exchange agreements and partnerships with overseas institutions. While in some cases there could be successful rewards to this strategy, many universities are seeking the same kinds of partnerships, leading to competition for what may be a shrinking number of students who are willing to study abroad in Japan. At least in the case of the United States, the number of students choosing Japan for study abroad has declined somewhat in recent years.

Additionally, Japanese universities have endeavoured to develop and expand their English content courses offerings. This is perhaps a chance to utilise the diverse academic expertise among faculty in the university, although finding suitable instructors to teach English-medium content courses may prove difficult for universities who lack the resources and financial or other incentives. In Chap. 13 of this volume, Ng (2016) examined an innovative pedagogical model for teaching English in a leading Japanese university and showcased how computing technologies can be utilised effectively to promote interactive learning between Japanese and overseas students at partner universities in other parts of world. Perhaps, this is another form of internationalisation strategy that Japanese universities operating with a tightened budget need to explore. Another major change taking place at many Japanese universities is that there is growing recognition that international education requires special expertise and experience among the administrative staff. Given this new paradigm of administrative practices, staff are much less likely to be rotated, or are rotated to another position also overseeing an aspect of international exchange, in order to maintain and develop this expertise.

Nevertheless, the so-called internationalisation of higher education has heretofore focused almost exclusively on bringing in larger numbers of international students, and making inroads in developing a curriculum that is appropriate for these
students. In short, rather than broad attempts to internationalise the university, or to
provide a setting conducive for global learning, the focus has been almost exclusively on international student exchange, and its goals are numbers driven, or quantitative. A 2012 survey conducted by Asahi Shimbun of university presidents
entitled Opening of Japanese Universities posed seven questions to determine what
the most important characteristics for the internationalisation of the university are.
Most of the items pertained to quantitative changes, such as efforts to increase the
number of foreign instructors, saw a quite high level of agreement among presidents
(Kaneko, 2013). However, none of the survey items directly referred to such qualitative measures as teaching students of diverse backgrounds, or to the integration of
international perspectives into the curriculum.

While some qualitative changes have taken place at some universities, such as the establishment of international-oriented faculties, it is difficult to measure the impact of these changes, and thus the adoption of a broad and diverse curriculum that integrates global perspectives into the traditional curriculum is not a reality at this point in most universities. The expenditures represented by the international education budget for 2014, which includes provision for Super Global Universities as discussed in the previous section, is certainly a step toward a more comprehensive attempt at university internationalisation, although the motives still appear to be largely rankings and numbers driven. Nevertheless, even the non-G30 universities in this study have been engaged in discussions and deliberations over the extent to which they need to be internationalised, as well as the meaning of this internationalisation for the faculty and students, and also the role curricular reform must plays in this process. Indeed, the prospect of many more Japanese faculties having to teach their courses in English is itself a huge obstacle that even MEXT has not acknowledged in a meaningful way.

Even though universities in this study had expressed sincere interest in continuing to strive for progress in internationalisation, the success of such endeavours was seen to be at least somewhat contingent on additional funding from the university and the government. According to the director at A-U, "If we are not granted these (government) funds, we probably won't be able to proceed quickly with a large-scale expansion of the (short-term) exchange program". Therefore, at least some universities' future plans are largely dependent on continued funding from MEXT.

The steady stream of tuition-paying Japanese students had provided enough capital to offset universities' investment in internationalisation. However, with the steeply declining birth rate leading to fewer 18 year olds graduating from high school, universities will continue to be hard-pressed to fill seats in classrooms. Many institutions may invariably be forced to scale down or give up their internationalisation endeavours, at least in terms of student mobility, to remain financial viable. It has been predicted that up to 40 % of Japanese universities could very well close or merge by 2020, if comprehensive measures are not taken to increase the numbers of fee-paying students (Shepherd, 2008). Growth in the number of partnership agreements formed with overseas universities has been one strategy to increase student numbers for many universities that does not require an enormous outlay of funds. However, in the long run, if quality of instruction is not improved for both English and Japanese language curricular offerings, partnership agreements alone will not suffice in making Japanese education more attractive to students from overseas.

In some cases, the solution for universities may mean the recruitment of international students of lower or insufficient academic ability, a worrying trend that has been given some attention in the past (Somushō [Internal Affairs and Communications Ministry], 2005). Based on the author's own conversations with instructors at various universities over the years, a lower academic standard is often implicitly employed for international degree students, some of whom are unable or unwilling to perform in their courses at the same level of their peers. Such accounts of academic dishonesty and misconduct, while perhaps not endemic to Japanese higher education, certainly cannot be considered unusual (Goodman, 2010). Nevertheless, the issue of universities accepting students of inadequate academic ability to fill classrooms or for the inherent financial benefits has become widespread in recent

years and further research need to be conducted to determine the extent of such practices in the context of Japanese universities. As one administrator remarked,

Quality control is the most important and crucial to maintain the number of students. And when those students go home, if the quality of education in Japan is not great then (Japanese universities) may not be able to attract new students to Japan. (C-U Director of International Education)

These sentiments are echoed even by those working in G30 or Super Global universities, which supposedly possess more resources and have been provided more funding to revamp and improve their international programs and recruitment. Essentially, the ambitious quotas they have set are likely to place a burden on existing systems of education and support for international students. According to one sceptical insider at Waseda University, "I personally think that increasing the number of international students without quality control would create serious problems in the maintenance of quality of educational programs." (personal e-mail correspondence with tenured Waseda professor, February 14, 2013) The exchange agreements formed with overseas universities will provide valuable opportunities for Japanese universities to revisit the concept and perception of 'quality' in teaching and learning, as universities will be obliged to provide explanation and justification for outdated practices and procedures, as well as a lack of flexibility. These may include course hours, numbers of required credits, the qualifications of instructors, and the availability of supplemental educational and social support for international students. For many Asian students, Japan was not their first choice country to study abroad (Kakuchi, 2014). In the past, it has been the case that Asian students sought admission to Japanese universities after they had failed to gain admission to a prestigious university in a Western country. This may be particularly true for Chinese students, whose number of applicants has declined in some countries, including Japan, and will likely continue to decline in the future (Aspinall, 2013; Kakuchi, 2014). The decline of the population of students who have familiarity with Chinese characters or kanji used in the Japanese language will necessitate even further Englishisation of the curriculum, since this trend will require that more universities shift from Japanese to English as a language of instruction for international students, if they have not done so already.

This relates to the issue of whether or not Japanese universities will be able to diversify and expand their international student populations to make up for drastic declines in Chinese and Korean students, on which universities still depend in order to internationalise their campuses (JASSO, 2013a). However, given the data trends, there are some signs that the number of students from South East Asia, Europe and elsewhere has begun to rise and can help to compensate for the decline of East Asian students. Likewise, the diversity of international students in short-term exchange programs also looks poised to grow and expand due to university drives to establish further exchange partnerships with overseas universities, as well as to better utilise the partnerships by deepening relationships between universities through mutually beneficial international exchange activities. Diversifying student enrolment to include students from other parts of the world may precipitate further edu-

cational reforms, as these students may not adapt as easily to a traditional Japanese educational environment, and will have higher expectations that not only the university, but the education they receive will be 'world class'. The extent to which Japanese universities are willing to embrace such reforms, in addition to the number of measures they are willing to take in order to increase the number of English language courses still remains to be seen. A paradigm shift still needs to occur. According to Kuwamura (2013)

....for Japanese universities to proceed further with internationalization and to resolve the many problems that have yet to be resolved, it will require step-by-step improvements in the acceptance of the entire university as essentially intercultural – that embraces an educational curriculum and university organization that is becoming increasingly diversified. (p. 211)

As a result of these globalising forces taking place simultaneously, Japanese universities are at a crucial turning point in how internationalised they choose to become, i.e. whether or not they have the resources, the expertise, as well as the inclination to become major recipient countries for international students. The Global 30 was the impetus for several major Japanese universities to spearhead some of these reforms, but it also served as a wake-up call for other major universities that have an interest in maintaining or increasing their efforts toward international education. Japanese universities, over the last few decades, have undergone a process of curriculum expansion, in the form of establishing new faculties and majors, but financial tightening and the shrinking student population will force universities to consolidate their resources into areas of proven success. Regardless of the misplaced influence that international rankings, or the quest to become 'world class', have had on Japanese higher education, universities will need to continue to pursue their international ambitions by engaging in a comprehensive process of educational innovation and diversification, and through an on-going process of assessment that includes reflection on what it means to provide both domestic and international students with international education in the twenty-first century.

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Chapter 4 Identity Re-construction in a New Habitus: An Investigation of the Language-Related Educational Experiences of Immigrant Mainland Chinese Students in a Multilingual University in Hong Kong

Mingyue (Michelle) Gu

Abstract This chapter presents a qualitative study of the language-related educational experiences of a group of immigrant mainland Chinese students in a multilingual university in Hong Kong. Drawing on interview data, this study explored the construction process of the language ideologies of these students and the social, contextual and interpersonal factors that may influence the construction. This study identified the problems and issues that Hong Kong university academics need to address in order to build a more inclusive learning environment to accommodate the language needs of these Chinese students. Furthermore, this study explored effective ways of maintaining cultural and linguistic diversity in the multilingual universities in an era of globalisation. This study provided implications as to how the immigrant students can employ the multilingual practices as a symbolic resource instead of as a disadvantage constructed by the institutional ideologies.

4.1 Introduction

The internationalisation of higher education was dramatically expanded during the past two decades (Altbach & Knight, 2007). Naidoo (2006, p. 234) defined internationalisation as "the policy-based responses that educational institutions adopt as a result of the impact of globalisation". All the East Asian governments have placed internationalisation of higher education "at the top of their education reform agenda" (Mok, 2007, p. 442). In the context of Hong Kong, efforts have been made to position the place as 'a regional educational hub' through engaging with international

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teaching and research benchmarks, and through recruiting overseas students and students from mainland China (University Grants University Grants Committee, 2002).

Cross-border student mobility is an essential component of internationalisation for Hong Kong given its specific historic and political relation with mainland China. In recent years, there has been an increasing number of non-local students from mainland China studying at the universities in Hong Kong (HK). The number of non-local students studying in HK universities rose from 536 in 2001 to 3979 in 2007 (University Grant Committee, Hong Kong, 2008) with the majority coming from mainland China. Only those students who are qualified for first tier universities in China will meet the baseline for undergraduate programs in universities in HK. Despite the shared ancestral origin with Chinese in HK, these high achievers from mainland China are found to experience linguistic and cross-cultural obstacles to their socialization during their studies in universities in HK (e.g. Gu, 2014; Gu & Tong, 2012).

The number of cross-border students from mainland China is expected to increase in the coming future and will have significant implications for changing learning and teaching practices in Hong Kong universities. Previous studies indicate that, while mainland Chinese and Hong Kong students share the same ethnicity, the significant linguistic, socio-cultural, and political differences between the mainland and Hong Kong have impeded mainland Chinese students' integration into the local community, resulting in clear group divisions between the two groups on university campuses (Gu, 2011a, 2011b, 2014; Gu & Tong, 2012). While Putonghua is the only official language in mainland China, Cantonese is the dominant language in daily life and is favourably used in most political, social and cultural occasions among indigenous Chinese people of HK. Widely used in the business and professional sectors, English is also regarded as a critical symbol of HK's international image and as an important asset to individuals' career and social development. While HK was being integrated into the rising global economy and many people in HK were turning to the West and Western culture for inspiration and influence from 1949 until the mid-1980s, the Chinese mainland was in a state of political and cultural turmoil. In recent years, economic development on the Chinese mainland and frequent business transactions between HK and mainland China has gradually diminished the differences. However, it is fair to say that the sociocultural differences between the two societies with the same ethnicity causes barriers to the socialisation process of mainland Chinese students in HK. The linguistic, sociocultural, and political differences between mainland China and HK will be further elaborated in Sect. 4.3.1.

There is a need to enhance and enrich our understanding of cross-border students' educational experiences and socialisation processes at tertiary level. What also needs to be considered is the role of identity (re)construction of these students in a new multilingual environment. The multilingual university context was found to provide both the cross-border and local students an environment in which language ideologies are shaped and hybrid language use is practiced, and in which linguistic resources are employed to perform a range of subject positions and to play

a number of roles (Gu, 2014). Therefore, a deepened understanding of the identity construction and language ideologies of the cross-border students will facilitate the teachers' and university's accommodation of these students' needs, and will offer practical implications for how to improve teaching and learning for these students in multilingual educational settings in a globalised world.

Drawing on interview data, this study explores the construction process of the language ideologies of these students and the social, contextual and interpersonal factors that may influence this construction. This study also investigates how the students negotiate the legitimacy of their linguistic resources and examines how the students censor their use of the native language through internalisation of the language attitudes which are held by the teachers and peers and which are dominant in social discourse. It is expected the study will shed light on the negotiation of and limitations on identity formation in multilingual settings. In the following sections, the notions of language ideology and linguistic misrecognition that guide the study are discussed. The methodology is then introduced before the findings are presented and discussed.

4.2 Language Ideology and Linguistic Misrecognition

The notion of language ideology can be used to "characterise the development of beliefs and attitudes towards the learning and use of a particular language" (Martinez-Roldán & Malave, 2004, p. 161). According to Van Dijk (1996, p. 8), the members of a social group use ideologies to "guide their interpretations, discourses and other social practices in a specific social domain". Because beliefs about languages are socially and culturally constructed, language ideologies are not fixed or static, but multiple and diverse across cultures and individuals (Kroskrity, 2004). The relationship between ideologies and language practices is thus far from straightforward, as "their impact on everyday experience cannot easily be predicted" (Rampton, 2006, p. 19).

A monoglot ideology is characterised by the dominance of a single language in a language community, and emphasises the singular, unified image of a standardised, denotationally-defined 'language' (Blommaert, 2005; Silverstein, 1996). Monoglot ideology addresses the legitimacy and illegitimacy of language and language use – that is, the legitimisation of one language with one standard accent and the disqualification of other languages and accents. Therefore, mixing, code-switching and hybridity are regarded as breaking the rules, in that they do not produce 'singular meanings in one singular language'. Similarly, the multilingualism found in school or social contexts is often seen as problematic, a source of potential conflict in need of regulation (e.g., Agha, 2007; Blommaert, 1996; Blommaert & Verschueren, 1998; Silverstein, 1998).

In addition, non-standard accents are also marginalised, as can be illustrated by the naturalisation and commoditisation of Standard English in American society; as Silverstein (1996) argues, in the US, a person can increase their overall value and worth by possessing Standard English. As reflected in many newspaper and magazine articles collected by Silverstein (1996), regional English accents have often been portrayed as amusing; defects of accent and dialect are underscored in popular presentations and are disqualified in relation to Standard English. Kirkpatrick (2016, Chap. 11 of this volume) points out that a monoglot ideology exists in language education policies in many Asian universities, which unintentionally, reinforces native speaker norms in English and marginalises a variety of Asian Englishes. A similar case can be found in the author's study (Gu, 2011c), in which immigrant mainland Chinese students in a secondary school in Hong Kong are silenced by the misrecognition of their accented Cantonese in the host context. Dong and Blommaert's (2009) study on identity construction among migrants in Beijing, China, finds that, in a monoglot ideology in which Putonghua becomes a homogeneous language that overlays other dialects, migrants' linguistic resources are regarded as peripheral and their accents, when speaking Putonghua, are regarded as obstacles to their full integration in school and society, and to their upward social mobility.

Language ideologies contribute to constructing some languages and varieties as of greater worth than other languages and varieties, and produce misrecognition, which in turn reinforces hegemonic ideologies. Misrecognition is bidirectional – on one hand, while the non-dominant languages and varieties are regarded as being of less value, the official languages and standard varieties often come to be misrecognised as "having greater moral, aesthetic and/or intellectual worth than contesting languages and varieties" (Blackledge, 2010, p. 304). Similarities exist in the ways ideologies misrecognise differences among linguistic practices in different contexts, where linguistic varieties were identified with 'typical' persons and activities and the differences are accounted for among them. In the sense of Bourdieu (1990), in spite of the intrinsic value people's symbolic resources have, their values are not recognised in particular social contexts, and speakers are left without resources. In some cases, monoglot ideology functions as a silencing instrument that misrecognises the resources of some people. Therefore, misrecognition is "a power tacit that forces the inferior party to adjust and adapt to the rules of the superior one", and "the superior one, in turn, has no obligation to reciprocate this accommodating move" (Dong & Blommaert, 2009, p. 11). The "magical frontiers" (Bourdieu, 2000, p. 69) between the dominant and the dominated, which are reinforced in discursive acts of recognition and misrecognition, have a crucial role in constructing and maintaining social worlds in which one language is held to be superior to others and speakers of that language held to be superior to speakers of other languages (Blackledge, 2006).

Sometimes in multilingual societies, where heterogeneity is apparently promoted or tolerated, the linguistic diversity of its population tends to be ignored. Blackledge (2010, p. 304) states that a liberal orientation to the equality of opportunities for all may mask "an ideological drive towards homogeneity, a drive which potentially marginalises or excludes those who either refuse, or are unwilling, to confirm". In recent years, the increasing number of non-local students has been a key indicator of internationalisation in higher education and the universities are becoming more and more multilingual. While the monoglot ideology and language misrecognition

may constraint students' multilingual practices, the identity positions they construct and present, as well as the social spaces they jointly establish, a flexible language ideology and a flexible view to multilingualism may help them establish a broad, global outlook and a flexible view on language use (Gu, 2014). Take the crossborder students from mainland China studying in Hong Kong universities as an example. Understanding the issues of language ideologies and language misrecognition, as well as looking into the development of these students' language ideologies, is important in order to provide better and more opportunities for these students, many of whom are linguistically and socially marginalised due to their cultural and linguistic backgrounds in Hong Kong.

4.3 Method

4.3.1 Social Setting

Hong Kong, after being colonised by Britain for over 150 years, returned to China in 1997 as a 'Special Administrative Region' and was granted the opportunity to retain its pre-existing economic and social systems. The special complexity of Hong Kong's past and present circumstances has rendered Hong Kong a culturally different place from mainland China (Simpson, 2007). Hong Kong was isolated from mainland China from 1949 until the mid-1980s. During this time, traditional Chinese thoughts and culture, which could mainly be reinforced through regular contact with China, were therefore largely inaccessible to Hong Kong people. Furthermore, the status of Hong Kong as a cosmopolitan centre for international commerce and an increasingly urban society reinforced the feeling that Hong Kong was more advanced than the rest of China. Despite the fact that the recent economic growth has reduced the differences between Hong Kong and mainland China to a certain degree, significant cultural and economic disparities still exist. While Hong Kong people tended to distance and distinguish themselves from China and mainland Chinese prior to 1997, this attitude began to change in the post-handover period (Lee & Chan, 2005). Nonetheless, the strong sense of Chinese ethnicity, territory, history and cultural traditions shared by many Hong Kong people tends to be ethnic and cultural in nature, rather than political (Tse, 2007).

A number of studies have investigated the complex linguistic situation in Hong Kong (e.g., Bolton & Lim, 2000; Lin, 1999). Throughout most of its history, English was the former colony's sole official language; not until 1974 did Cantonese become its second and equal official language. English has maintained a socioeconomically dominant status in postcolonial Hong Kong, and plays important gatekeeping roles in educational and occupational advancement. In Hong Kong, students require adequate English resources to qualify for decent and well-paid professions (Lin, 1999).

Following the introduction of the Open Door Policy in the mid-1970s, China began a new era of widespread English language learning and teaching. English language proficiency is regarded as a prerequisite for a host of opportunities,

including admission to and graduation from university, postgraduate studies and studies abroad and for employment with high-income professions (Jeon & Lee, 2006). While Putonghua, as the language of public life in China, is translocal and allows for social and geographic mobility, English is more closely linked to income level, social status and career and education opportunities. As in many other English learning contexts, British and American English spelling, grammar, syntax and pronunciations have been adopted as standard (Blommaert, Collins, & Slembrouck, 2005), and many people expend enormous amounts of time and energy attempting to acquire a British or American accent, which they see as an important symbolic resource in their quest for more and greater opportunities (Blommaert, 2009).

Joseph (2004) argues that the development of Hong Kong English has a potential role in the formation of a Hong Kong linguistic identity. Since 1997, Hong Kong people are under the influences from the colonial past and the efforts from the Chinese government to develop a Beijing version of Chinese identity in Hong Kong. As a result, this has reinforced a particular Hong Kong identity that differentiates those of mainland Chinese and others (Flowerdew, Li, & Tran, 2002).

4.3.2 Participants, Data Collection and Analysis

This study was conducted at a multilingual university in Hong Kong with an enrolment of around 7500 students; when the study began, this number included nearly 400 students from mainland China and around 60 international exchange students. All participants in this study were recruited from the Department of English. When the study was conducted, in academic year 2010–2011, mainland students accounted for 27.1 % of the year four cohort (22 of 81 students) and 24.4 % of the year three cohort (22 of 90 students). To present a more holistic picture of the educational experiences of cross-border mainland Chinese students in tertiary education, both the voices of mainland Chinese students and their Hong Kong peers were elicited. This chapter draws on individual interviews with 8 year three students, and 8 year four students (four each from Hong Kong and mainland China). All participants agreed to participate by responding to an invitation from the author.

The participants were interviewed individually and, with their consent, the interviews were video-taped and transcribed. With the help of a semi-structured interview guide, the interviews elicited the participants' views on the use of languages in university context and their identification with languages and language varieties. The interviews were conducted in either Putonghua, Cantonese or English, depending on each student's preference, and the Chinese parts were translated into English by the researcher. The interviews lasted about 45 min each. Table 4.1 briefly overviews the participants' backgrounds; all names are pseudonyms.

Data analysis was a gradually evolving process in which the dataset, theoretical framework, related research literature on identity, and coded categories were constantly evaluated, re-evaluated, and reformulated (Strauss & Corbin, 1998). As soon

| Mainland Chinese participants | | HK participants | | | | | | |
|-------------------------------|---------------|-----------------|--------|------|---------------|-----------------|--------|------------|
| Name | Year level | Place of origin | Gender | Name | Year level | Place of origin | Gender | Department |
| S1 | Year 3 | Shanghai | F | S9 | Year 1 | HK | F | English |
| S2 | Year 3 | Fujian | M | S10 | Year 1 | HK | F | English |
| S3 | Year 3 | Hebei | F | S11 | Year 1 | HK | M | English |
| S4 | Year 3 | Zhejiang | F | S12 | Year 1 | HK | F | English |
| S5 | Year 4 | Fujian | M | S13 | Year 1 | HK | M | English |
| S 6 | Year 4 | Zhejiang | F | S14 | Year 4 | HK | F | English |
| S7 | Year 4 | Guangdong | M | S15 | Year 4 | HK | F | English |
| S 8 | Year 4 | Yunnan | F | S16 | Year 4 | HK | M | English |

Table 4.1 Participants' background

as an interview was conducted, the data were subjected to preliminary analysis; this initial analysis often generated new questions, which were posed in subsequent interviews. When analysing the data, special attention was paid to their attitudes towards diversity in language use among the students, and to their reflective comments on their own linguistic behaviours in the university context. The findings were cross-checked with the participants for clarification and modification.

4.4 Findings

4.4.1 Recognition and Misrecognition of Different Languages and Linguistic Varieties

Since all the participants are studying in the English Department, the accent of English seems to be one important concern for them. Recalling their experiences when they first came to the university, the comments from the mainland Chinese participants indicated that English accents played an important role in communication. The following extracts are representative:

- S5 (mainland): When I first came to study there three year ago, I thought Hong Kong students' English sounds local and not comfortable. But gradually I found although Hong Kong students admire those who can speak English with British accent, their own Hong Kong English was important for their group. (Y4)
- S6 (mainland): I didn't like Hong Kong English or Chinese English. They are not standard. I prefer American accent. But if you want to become one of them, especially during some activities, speaking in their way is useful. It is not easy because they could easily recognize you are not local. (Y4)
- S3 (mainland): I have a Chinese accent. If I was in a group discussion with Hong Kong students, especially when I was in Year one, I was not brave enough to speak out, because I cannot speak a standard American or British English, and cannot speak their own language, Hong Kong English. (Y3)

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The above extracts indicate that the participants misrecognised both Hong Kong English and Chinese English as non-standard, compared to American or British English. While S3 was aware of the important role Hong Kong English played in group connection, Chinese English seemed to impede his interaction with local students and prevented him from effectively voicing his own ideas in group discussions with local students. S6's strategy was to attempt to speak English in a local way to gain a legitimate position. However, both being silent and imitating the local way of speaking English had marginalised both students' own linguistic resources. It seemed that they held a rather ambivalent attitude towards Hong Kong and Chinese English. For them, Hong Kong English was an in-group symbol of Hong Kong students and Chinese English was regarded as socially inappropriate in communication with local students. The lack of confidence among mainland Chinese students in Chinese English to a certain extent influenced their participation in English-related activities and therefore limited their chances of practice and social communication in English, especially during their early days of studying in Hong Kong.

When asked to recall their communication experiences with mainland Chinese students in the first and/or second year, Hong Kong participants stated that Chinese accent of English was symbolic of an 'other' identity. For example,

- S14 (HK): Three years ago, I started studying in this university and met a lot of students from mainland China. It was almost the first time for me to talk with mainland students in English. Their English was different from ours. I was not used to that and felt it weird. At that time, most Hong Kong students thought we spoke our English and they spoke theirs. (Y4)
- S15 (HK): I guess most of us were not comfortable with the English accent of mainland students at that time. We speak in our own way. They have their own pronunciation, strongly influenced by Putonghua. Likewise, they thought our Putonghua was strange. Interviewer: Do you think the different accents influenced your communication?
 S15: Yes, especially in the early years. (Y4)

The data extracts reflect that English spoken by mainland Chinese students with Putonghua accent was 'other-ised' by Hong Kong students, especially in the early years of university. It seemed that they associated Hong Kong-accented English with a Hong Kong identity. The Hong Kong participants emphasized the different speaking styles of the two groups and established a division between 'us' and 'others'. As indicated by S15, the different accents spoken by Hong Kong and mainland Chinese students created group boundary among them.

In the contexts out of university, six out of the eight mainland Chinese participants reported that in the first 2 years or so when they studied in Hong Kong, they tried not to use English with a Chinese or Putonghua accent to hide the mainland identity and to avoid discrimination and being regarded as one of the tourists from mainland China who, in Hong Kong society, have a rather negative image of being wealthy but less socially appropriate. The following extract is representative:

S8 (mainland): It is hard to admit, but Chinese English has no market here. When you go shopping, if you speak Putonghua, you can easily feel the discrimination from the salespersons because they think you are one of the rich mainland tourists. If you speak English, the Chinese accent discloses your mainland background and you will be

laughed at being showing off. Before, I didn't use English or Putonghua when doing shopping. It was very inconvenient. Of course now is a different story, I am getting older and braver. (Y4)

The above extract indicates that in Hong Kong society, Chinese English and Putonghua are closely connected with a mainland identity, and the sometimes negative connation related to a mainland identity, made mainland Chinese students hesitant in language use. Therefore, both on and off campus, mainland Chinese students, during their early stage of studying in Hong Kong, tended to be marginalised and silenced because their linguistic and cultural resources were misrecognised by both others and themselves. It is noteworthy to find that S8 indicated a transformation in language use, which will be elaborated in the following section.

Seven of the participants mentioned that although Hong Kong peers tend to have larger vocabulary than mainland students, the Hong Kong students' grammatical knowledge was not desirable. For instance,

S7 (mainland): We have learnt grammar in a very systematic way. The teachers taught us grammar first and then writing. Then the teachers would let you know if there are some grammatical mistakes in the writing. I think this is good because if the teachers didn't tell the kids exactly where the mistakes are, when they grow up, they cannot write and speak in standard English. (Y4)

4.4.2 Transformation from Monolingual Ideology to Flexible Multilingualism

When talking about their current linguistic practices and views towards languages, the participants indicated that the opportunities to interact with students with diversified backgrounds in the university have shaped their views towards different languages and linguistic varieties and enabled a language ideological transformation among them. Five out of the eight mainland Chinese participants documented the process of getting more flexible in language use. For example, S6 retrospected,

S6 (mainland): In the first two years of studying here, I was not confident in speaking much English or Cantonese with the local people, both had accents. Gradually I found my communication circle was small, mostly with mainland Chinese students. Putonghua was mainly used... Things changed in the third year. I went for an immersion programme in Australia in year three and I was closer to the Hong Kong classmates in the same trip. Communication itself because the focus, rather than accents. I made friend [sic] with a lot of Hong Kong classmates in Australia and talked freely with the native English speakers. (Y4)

S6 found that the concern about accent and mainland Chinese identity had limited him within a monolingual communication space with students from the same background only. Staying in a safe place where Putonghua is the legitimate language, the mainland Chinese students lost opportunities of understanding the host society, mastering the local language, and practicing English in authentic situations other than classrooms. The experiences of S6 and some other mainland Chinese students

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indicated that exposure to linguistic and cultural diversity may help them establish a more flexible language ideology. This can be illustrated by S8's recounts:

S8 (mainland): Compared to when I had just arrived, I use languages more freely and flexibly. I speak Cantonese with local students and English with international students. I also teach Putonghua to the local and internationals students if they have an interest. I have more and more friends and feel more connected to Hong Kong. (Y4)

S8 took more proactive steps to practice and use Cantonese with local students. It appears that through the use of different languages, spaces were opened up and S8 was more socialised into the local group. We may find from the above extract that, if the students would see the social and personal benefits of languages, they may be more willing to use and practice them.

Seven out of the eight Hong Kong students commented that they were aware of the increasing importance of Putonghua in a global context and were more willing to practice Putonghua with mainland Chinese peers. The following extract is illustrative:

- S10 (Hong Kong): Honestly I didn't have strong intrinsic motivation to learn Putonghua, but it's getting popular and important in the world, and speaking Putonghua well may give me more opportunities in the future. Mainland Chinese students are ideal learning partners, but I even ignored that before. I created chances to speak Putonghua to them. My Putonghua is not good, and they will laugh but I know they have no evil intention. (Y3)
- S15 (Hong Kong): I use Putonghua with the mainland students because I want to have more to say in my CV when hunting for jobs. (Y4)
- Interviewer: How about your perception of different English varieties, like English spoken by mainland Chinese students?
- S15 (Hong Kong): I am more and more used to it. I learnt World Englishes and the thinking influenced me. Chinese English, Hong Kong English and Indian English are varieties of English.

S10 realised that she had been ignoring the linguistic resource of mainland Chinese students and started to seek opportunities to practice Putonghua with them. Putonghua, which used to be misrecognised by both Hong Kong and mainland Chinese students, gained value in peer communication. S15 also mentioned that she was getting more and more tolerant with different English varieties. In spite of the fact that these students' willingness to learn Putonghua was mainly due to practical consideration, it seems that mainland Chinese students got empowered in speaking Putonghua and English, and that the gradually changing attitudes of Hong Kong students towards Putonghua had to a certain extent influenced mainland Chinese students' language practice. For example,

- S8 (mainland): My local classmates' attitudes towards Putonghua are changing. I spoke Putonghua more often than before. Some Hong Kong students came to us to practice Putonghua. Sometimes they spoke Putonghua, I used Cantonese. It is interesting phenomenon on campus. (Y4)
- S6 (mainland): at least when communicating with local classmates, Putonghua and Chinese accent of English are not regarded as strange and awkward. I find myself active in group discussion and presentation. I focus my attention on the content rather than the accent only. (Y4)

Putonghua is no longer an irrelevant language in the educational context when the students need to consider their future employment in higher year levels. The symbolic value associated with Putonghua was recognised. The linguistic repertoire of

mainland students is therefore recognised as an important resource and as an additional capital for them in peer communication. As the mainland Chinese students developed more open and flexible attitudes towards language use, they were able to develop broader communication circles and to practice English, Putonghua and Cantonese in different situations. The students also recognised other symbolic values associated with Putonghua. The following extract is representative:

More and more young people from Hong Kong go to mainland China to work. Putonghua is very useful! When I talked with some international students, they told me that they were more willing to learn Putonghua because, even after then go back to their own country, Putonghua can still be used, because a lot of people are learning Putonghua. I should not have wasted the chance to learn Putonghua from mainland students in university. (Ben, HK, Y4)

No longer viewing Putonghua as an irrelevant language, Ben associates it with career opportunities in mainland China. The international students' positive attitudes towards Putonghua reinforce its increasing global socio-economic status. The linguistic repertoire of mainland students is therefore recognised as an important resource and as an additional capital for them in their future careers.

Hong Kong students shared the view that native accent English represented a person' family and educational background. For example,

S9 (HK): A standard native accent means this person was born into a rich family, had a lot of chances to travel overseas and got a good education.

When asked about their view towards American or British English, the participants indicated that they have a different understanding from Hong Kong peers. For example, they said,

- S4 (mainland): In Hong Kong, people think that the English accent can reflect a person's educational, social and economic background. They think one who can speak native-like English must come from a wealthy family and then he/she will be respected. (Y3)
- S5 (mainland): I like American English more, maybe because our generation has been influenced by American culture a lot and I wish I could speak American English. It is cool.

While Hong Kong students regard native accents of English as an indicator of a person's socio-economic background, mainland Chinese students identify with them, especially American English, because they represent modernity and trendiness.

4.4.3 Identity (Re)Construction

It was found that over the educational years in university, some mainland Chinese students began to move from a deficient marginal identity to a multilingual identity in the university. For instance,

S8 (mainland): I make friends with local students and international exchange students. I have learnt more about the lives of young people in different places and countries. I shared with them my experiences in mainland China and welcomed any critical ideas. I learn what they think about mainland China, which also pushed me to critically look at what's happening in there as both an insider and outsider. I know more about the world and never see foreign countries as mysterious and unreachable. (Y4)

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S5 (mainland): I practiced English and learnt Cantonese in the past years. With proficiency in different languages, I feel more freely when communicating with students speaking different languages. Putonghua is not so non-mainstream as when I was first came [sic]. It is gaining power. (Y4)

These students shared their experiences of what was happening in the cultural circles of Hong Kong, mainland China and other countries. S8's comments indicated that the multicultural communication also helped develop critical ideas towards social issues. They came to realise that the multicultural and multilingual resources could be fully utilised when participating in cross-cultural activities for social and personal gains.

Cross-cultural interactions helped both mainland Chinese students and their Hong Kong peers establish a broad, global outlook and a flexible view on language use, as the following extracts illustrate:

- S14 (Hong Kong): I mix up languages, and it is really convenient to express myself when communicating with others. (Y4)
- S7 (mainland): Sometimes an open attitude may be of a big help. The world needs to be diverse and multiple, so we need to respect different languages and the cultures they represent. (Y4)
- S8 (mainland): But it is as if languages have become part of my belongings; I love them all and they make my life easier and fun. They make me more popular. (Y4)

Realising the power of multi-literacy, the students positioned multiple languages as mutually complementary instead of as oppositional and sought opportunities to make use of their multicultural and multilingual resources. The following extract is illustrative:

S5 (mainland): I joined a club on campus that provides a platform for cultural exchange. I introduced my hometown of Shanghai to students from different countries or places. Mainly using English, I also used Putonghua, Cantonese and even Shanghai dialect. But, of course, I translated what I spoke when I used a language other than English. I sang the traditional local opera, Yue Opera, in Shanghainese for them. It was so much fun. The next day, when I was on campus, somebody I didn't know said hello to me. They had seen me at the activity. (Y4)

The above extract indicated that the student's multilingual and multicultural resources brought her both social and personal benefits. Her language proficiency had improved and she had gained more knowledge of different cultures. The multicultural knowledge gained the student recognition on campus and access to different cultural communities. The data reflects the gradual emergence of a multilingual identity. For instance,

Interviewer: What have you gained from the university life?

- S8 (mainland): The more I experience, the more I know how diversified the world is. So I become more tolerant to myself and others. My English may easily disclose my background, and sometimes there is 'prejudice' in the society, but I try not care about others' views. I can use three languages, and they may not be standard according to the native criteria, but I don't want to compare with the native speakers because I am multilingual. (Y4)
- S3 (mainland): I was a student helper last month for an international conference held in our university. I need to help at the reception desk to guide the attendees and provide neces-

sary information. They were from different countries and places. Of course they could speak English, but when I speak Cantonese to Hong Kong people, Putonghua to those from mainland China, English to the English speakers, they were very happy. I even tried German with two Germany attendees. I realized that speaking multiple languages was an advantage. Except the native language, my other languages don't sound native, but it is fine for communication. (Y3)

It seems that S8's learning experiences in university has deepened her understanding of the linguistic and cultural diversity and enabled her to move out of the majority-minority dichotomy in terms of linguistic and cultural diversity. We can find the student used her own personal agency when she tried not to be influenced by social discourses on different status of languages and accents, and argued against the native-speaker paradigm by establishing a multilingual identity. S3's comments reflect how a student who is an English learner establishes a competitive identity as a multilingual person, rather than a monolingual native speaker. S3 re-established her position from deficient (a learner with relatively poor English compared to that of native English speakers) to advantageous (a person capable of speaking different languages). Through flexible linguistic practices, the students regarded their interlocutors as the focus of their interactions:

- S6 (mainland): No matter which language we choose to speak, we just want to communicate well and show respect to each other. Knowing more languages is not a bad thing. (Y4)
- S5 (Hong Kong): Now mixing three languages is the most common mode of communication. Mixing is most convenient for us to communication. As long as we understand each other, we don't mind which language is used. (Y4)

For these students, multilingualism has become an everyday, unmarked practice (Li, 2011). Furthermore, they view multilingualism as a valuable resource for their future:

S3 (mainland): I may go overseas to study in the future. I am confident I can communicate with people who speak different languages. I will never refuse to learn any new languages or things. (Y3)

In spite of this, the students seemed to be aware of the hierarchy among different languages, in terms of their socio-economic prestige in the broader social context:

- S5 (mainland): We hear different voices. The government calls for trilingualism and biliteracy in Hong Kong. Our teachers stress that English is most important if you want to make academic achievement. Speaking Putonghua will sometimes still be received with prejudice both on and off campus. If I feel some local people don't like Putonghua, I change to other languages. (Y4)
- S7 (mainland): A lot of factors determine the status of languages history, economy, politics, etc. But to me, my knowledge of different languages is not my burden, but my fortune. I can go to different places in the world, meet different people and realize my dreams. To me, a new language can lead me to a new culture, a new world. (Y4)

The above extracts indicated that the students' linguistic practices are influenced by the government's policy of multilingualism, the prestigious status of English as a critical language for one's career development, and the diverse language ideologies held by individuals. The comments made by S3 and S7 reflected the students' understanding that the relative status of different languages is socially, economically and politically constructed. They see the languages as changeable, rather than unitary or fixed.

4.5 Discussion

The findings indicate that the cross-border students experience transformation of language ideology during their educational experiences in a multilingual university. During the first one or two years, these students tended to hold the ideologies of 'standard language'. The key elements of these ideologies are the perceived superiority of certain languages or language varieties and the marginalisation of other languages or linguistic styles (cf. Cashman, 2008; MacGregor-Mendoza, 1998). These ideologies have not only limited the students' linguistic practices, they have led to discrimination against minority languages, variants of one particular language and accents, both foreign and domestic.

For example, during the first one and/or two university years, these cross-border students tend to regard American- or British-accented English as superior to other varieties of English. Therefore, some of them lacked the confidence and courage to speak English with local students because their English had a Putonghua accent and they could not speak English as a native speaker does. The negative social connotation of Putonghua also restricted the use of Putonghua among the cross-border students.

The globalised context has provided a space in which students could transform their language ideologies. For example, the liberating experiences of S6, one mainland Chinese student who travelled overseas with local HK students, clearly illustrates language ideologies and student mobility in a globalised context are closely related. Within a globalisation context, both the mainland Chinese and HK students had gained opportunities to get access to linguistic and cultural diversity, which enabled them to move away from a monolingual or unitary linguistic mode and a mono-cultural communication circle. Their flexible multilingualism allowed the mainland Chinese students to empower their accented English and their identity as cross-border students. It also enabled the HK students to recognise the socially constructed nature of linguistic practices other than their own. This helped them to develop an agonistic perspective on various styles of language use. While antagonism entails an explicit division between 'us' and 'them', between 'our' language and 'their' language, and regards those with whom we disagree or who are different from as enemies, agonism transcends the disagreements and accepts the legitimacy of the 'other' (Mouffe, 2005).

As reflected in the findings, another example of the close relationship between language ideologies and student mobility in a globalised context is the rise of Putonghua as a new international language especially in terms of career development, commerce and trade exchanges in a globalised world. In this study, the international

students' positive attitudes towards Putonghua reinforced its increasing global socio-economic status, which therefore changed language ideologies of these cross-border students as well as of HK students in terms of their understanding of language status and identity construction. The linguistic repertoire of mainland students was therefore recognised as an important resource and as an additional capital for them in their future careers, which reconstructed the identity of mainland Chinese students from accented English speakers to multilingual speakers. The reconstruction of identity can also be found in local HK students' incorporation of Putonghua proficiency as part of their identity and their more flexible attitudes towards trilingual code-mixing.

The participants in this study were found to use linguistic resources "in complex, sophisticated ways to perform a range of subject positions" and to play a number of roles, sometimes simultaneously (Blackledge & Creese, 2008, p. 535), which subsequently gained them recognition, a wider friendship network and greater access to information and recreational resources. They also seemed to draw on their cultural and linguistic repertoires to transcend cultural, linguistic and regional boundaries and construct a multilingual identity (Gu, 2010). This was an empowering experience for the students, and these emergent identities afforded them a sense of power over their learning context and their imagined future environment (cf. Creese, Bhatt, Bhojani, & Martin, 2006; Martin, 2010). Echoing Poon's (2016, Chap. 12 in this volume) study, the present findings indicated that transcending the boundaries between different linguistic and cultural groups in HK would be an effective way to enhance the speakers' intercultural competence and turn the multilingual practices into symbolic resource.

In this dynamic space, the interrelationships among languages and their positions constantly developed and changed, as did the linguistic resources of the students, giving them access to different socio-cultural or economic opportunities.

This inquiry has provided an account of the linguistic ideologies of both mainland Chinese and Hong Kong students at a multilingual university in Hong Kong. This study explored how the extant linguistic ideologies in the university context constrained or enhanced students' multilingual practices, the identity positions they constructed and presented and the social spaces they jointly established. This study further points to the need to understand an under-researched aspect of student characteristics, i.e., language ideologies and its formation and development, and how it can be utilised for improving learning and teaching practices. It would be desirable if policy makers and practitioners gained a deepened understanding of the formation of students' language ideologies in the era of internationalisation in higher education. As indicated in this study, language ideologies pose both a threat and an opportunity to learning and interaction between local and international students. On the one hand, the monoglot ideology, which tends to legitimise one language with one standard accent and disqualifying other languages as well as accents, may not only limit the local and international students' linguistic practices, but leads to discrimination against minority languages and variants of particular languages and accents, both foreign and domestic. On the other hand, with a more flexible language ideology, both the local and international students will be able to develop broader

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communication circles and practice different languages in different situations. Furthermore, through flexible linguistic practices, the students identified their interlocutors, rather than the languages they used, as the focus of their interactions (Creese & Blackledge, 2011).

As implicated in the findings, within the multilingual settings, the students gradually transformed from deficient language learners to advantageous multilingual speakers. Therefore, it would be important to develop ways to fast-track the development of a more inclusive and international language ideological perspective that can enable both local and non-local students to realise the limitations of their own language outlook, and that can emphasise the need for a revised and improved understanding of and greater respect for language variety, which is an important citizenship attribute in a globalised world. To utilise the multilingual resources of students, Kirkpatrick (2016, Chap. 11 in this volume) suggests that multilingual students be allowed to use their first language during the process of completing an assignment, and submit the finalised version in English.

It is important to note that this cross-sectional study investigates students at higher year levels at university (year three and year four). More might be revealed through a longitudinal study tracing the development of language ideology and linguistic practices among a particular group of students over their university period. Such efforts would provide more insights into how such factors as peer interactions, cultural and linguistic backgrounds, teachers' beliefs and values, university policies and social discourses on languages might jointly and separately impact the language ideologies of students and their subsequent language behaviours.

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Chapter 5 Students' Academic, Intercultural and Personal Development in Globalised Education Mobility

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Abstract A growing number of students around the world are engaged in cross-border study mobility. Their academic, intercultural and personal development is a major concern and responsibility of not only the students themselves and their families but also the host institutions and other actors involved in the education of this cohort. This chapter addresses the pressing need to capitalise on international students' dual strengths of diverse knowledge and transformative capacity as a meaningful and valuable approach to optimising their personal, intercultural and academic development. It also argues that international students' learning should be conceptualised from a critical approach that considers how these diverse and intangible dimensions of the mobility landscape affect their learning experience rather than merely locating their learning in cultural, institutional or individual parameters.

5.1 Introduction

The internationalisation of education and growing cross-border student mobility have been recent important trends influencing the pedagogy, curriculum and operations of institutions in different parts of the world. There are more than 4.5 million students moving globally every year for their tertiary education (OECD, 2014). The flow of international students has become increasingly diverse and fluid with English speaking and European countries no longer being the sole group of host countries. In Chaps. 2 and 3 of this volume, Huang (2016) and Lassegard (2016) point out that some Asian countries including China and Japan have significantly expanded their internationalisation strategy and become major destinations of international students. The latest figure of the Australian Education International reveals that currently there are 422,324 international student enrolments in Australia (AEI, 2014). While some efforts are devoted to researching the learning experiences of

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international students as well as institutional practices in internationalisation, more urgent research is required to examine effective ways to support the intellectual, intercultural and personal development of these students.

This chapter points to a pressing need to develop pedagogies and support practices that build on international students' multiple potentials stemming from their diverse sources of knowledge, their international perspectives and their self-forming agency. These fundamental elements shaped by their 'cultural capital' and their engagement with spatial, intellectual and transnational mobility should be seen as a springboard for their personal, intercultural and academic development. Therefore, these important factors need to be taken into account in the design of the curriculum, pedagogy and assessment for this international student cohort. This chapter also argues for the importance to draw on a relational approach to conceptualising international students' academic, intercultural and personal growth. This approach focuses on the correlation between the complex dimensions of the mobility land-scape in which cross-border students are engaged and their learning and developmental experience rather than purely locating their learning in simple cultural, individual or institutional parameters.

This chapter first situates the education of international students within the nexus of globalisation and internationalisation of education. Next, it proceeds to address the Australian policy for internalisation of education and the positioning of international students. This will be followed by a discussion of international students' learning experiences and ways to facilitate their academic, intercultural and personal adjustment and development.

5.2 Globalisation and Internationalisation of Education

Globalisation and internationalisation of education have been regarded as interconnected processes in the literature over the past few decades (Altbach & Knight, 2007; Knight, 2004; Marginson, 1999; OECD, 2012; Rizvi, 2004). As Knight argues, "internationalisation is changing the world of higher education, and globalisation is changing the world of internationalisation" (p. 4). Whilst globalisation is often argued to link to the convergence of national economies and the liberalisation of trade and markets (Altbach & Knight, 2007), internationalisation of higher education refers to academic relations across borders including staff and student mobility, cross-border research and program delivery (Marginson, 2007b). The internationalisation of higher education is intimately bound to the present global context, which has led to the need for students, both domestic and international, to be trained to engage and perform in an international and multicultural environment (Khalideen, 2006). Endorsing the significance of internationalisation of higher education (HE), the OECD argues that internationalisation should be an indicator of HE quality and a responsibility of HE institutions. A commitment to internationalisation can open up the possibility for flexible responses to the changes and demands of the current globalised age and for innovations in the teaching and learning practices (OECD, 2012).

The internationalisation of education and scholar mobility has always been closely shaped by historical, economic and political factors. In a review of the different stages of internationalisation and mobility, Rizvi (2007) mentioned that in the eighteenth century, the British, French and European colonisers utilised education and student mobility to promulgate their civilisation and serve colonial imperatives. This was followed by post-colonial decades in which international education was designed to produce human resources in the form of foreign aid. This approach was then criticised as serving the political and economic aspirations of the provider countries (Rizvi, 2007) and increasing the dependence of the receiver countries on the provider countries. The past three decades have marked the shift from education as an aid to trade, which has seen the mass recruitment of international students to generate revenue for the host institutions and countries. Within the current context, international education has been regarded as a service export industry.

The underpinning principles and focus of internationalisation of education may vary between developing and developed countries. Economic, political, sociocultural and academic factors have been proposed as the four key forces driving the internationalisation of higher education (Knight & de Wit, 1997). The focus of internationalisation of education can be humanistic, developmental, cooperative or commercial. Aspirations for fostering intercultural understandings and engaging with the region and the world can be the main driver of internationalisation of education in some Asian countries (Tran et al., 2014). A growing stream of the literature has pointed out that educational institutions in English speaking countries tend to link internationalisation with the marketization and commercialisation of education (Marginson, 2007b; Matthews & Sidhu, 2005). For many developing countries in Asia, internationalisation can be developmental in nature as it is regarded as a tool for developing a more qualified workforce. For other countries, internationalisation of education is predominantly motivated by an engagement and cooperation approach, as well as a capacity building approach. This is in contrast with marketdriven principles that appear to dominate in English-speaking countries (Tran et al., 2014). Criticising the commercialisation and economic orientation of internationalisation, Ng (2012) argues that internationalisation should represent "a commitment to the development of an internationalised curriculum where the pursuit of global citizenship, human harmony and a climate of global peace is of paramount importance" (p. 439).

Research on the internationalisation of higher education has significantly expanded over the past two decades. Knight and de Wit (1997) define internationalising higher education as involving a process of incorporating "an internationalisation/intercultural dimension into the teaching, research and service functions of the institution" (p. 8). Harman (2005) offers a broader definition of this concept. According to the author, the internationalisation of higher education appears to be linked to diverse and multi-layered practices including diversifying the curriculum, promoting the global movements of the academic staff and students, advocating multilateral relationships between universities and commercialising educational services. The issue of internationalisation of higher education appears to cover aspects ranging from pedagogy, curriculum, knowledge dimensions, student experi-

ence, and educational services to staff development principles and student outcomes. The definitions of internationalisation of higher education may have different focuses but suggest diverse processes, new philosophical constructs and ideological orientations governing institutional practices within the increasingly globalised world.

The internationalisation of higher education has been generally viewed as a positive process in the rhetoric. However, researchers also critically explore the complexities of the internationalisation process and its purposes and argue that this process is related to the universalisation of 'Western' institutions, culture and practices (Doherty & Singh, 2005b; Edwards & Usher, 2000; Ryan, 2011; Vandermensbrugghe, 2004). This process has also been referred to as the "colonial characterisation" of internationalisation (Ninnes & Hellstén, 2005, p. 4) or "recolonisation of knowledge" (Ng. 2012, p. 454). Prominent scholars in the field of internationalisation and globalisation including Singh & Han (2010) and Rizvi (2009) also point out the ethnocentrism of 'Western' academic practices. This issue is reflected in the plethora of the literature which acknowledges aspects of international students' struggles in confronting the obligations to conform to 'Western' practices (Ninnes & Hellstén, 2005; Vandermensbrugghe, 2004), Also, the authentic 'Western' pedagogy embedded in the internationalisation of higher education and students' awareness of their responsibility to respond to institutional practices may contribute to furthering 'Western' educational practices, which has been referred to as the 'Westernisation' of educational practices. It is still a long way to promote reciprocal adaptation as many academics do not see the need to adjust their teaching but instead regard their roles as "simply educating students in 'our ways' or 'our values'" (Ryan, 2011, p. 637) or even as teaching them how it is done in the 'West' (Doherty & Singh, 2005a).

5.3 Internationalisation of Education in Australia

Australia has witnessed a move from internationalisation as an aid process to internationalisation as a commercialisation process. Before 1980, the primary driver of internationalisation in Australian universities was rooted in the philosophical principle of social aid (Meiras, 2004). However, this principle was replaced by a pragmatic commercialisation-driven and profit-making approach through the introduction of 'Overseas Student Policy' in 1985 (Meiras, 2004). The changing nature of internationalisation in Australia was due to the increasing dependence of Australian institutions on international students' tuition fees, which has been largely driven by the decrease in funding from the Commonwealth government (Tran, 2011). Internationalisation of Australian higher education appears to be predominantly motivated by the neo-liberal market-driven principles. At present, although Australia has made some important achievements in the internationalisation of higher education, the most remarkable accomplishment seems to be the increasing

presence of fee-paying international students (Harman, 2005; Marginson, 2007b; Matthews & Sidhu, 2005).

Marginson expresses a distinctive mind-set in relation to the international agenda of Australian universities to "build a massive fee-paying enrolment to fill the revenue gap" (2007a, p. 26). He argues:

Unfortunately, it has been difficult to synergise the academic capacities of Australian universities with their business strengths. There is limited scope to bring research insights and cultures to bear on improving standardised high volume course work programs for middle-level students... Most Australian research collaborations are in North America, United Kingdom, and Europe, whereas the fee-paying students come mostly from Asia. (p. 26)

There thus seems to be a lack of balance between the commercial approach to international education and the policies for the development of academic and research capacities in Australian higher education institutions. These policies can capitalise on student mobility and intellectual resources for the purpose of internationalising teaching and learning practices (Ryan, 2011, p. 632; Marginson, 2007a, p. 26). Thus, in the long term, such imbalance is a threat to Australia's position in the cross-border higher education market.

In a similar vein, Khalideen (2006) discusses further:

A strategy for internationalisation has to be more far reaching than the recruitment of more international students and the sale of educational products and services. At the heart of the internationalisation process lie the fundamental values of an education that addresses the issue of a diverse world population. Internationalisation cannot realise its potential without critical reflection on the various ways in which universities conceptualise the world and the ways these conceptualisations serve to define their practices. (p. 6)

This argument focuses on the internationalisation of the university from the ethical lens. Khalideen (2006) criticises the considerations for internationalisation, which are primarily based on the accelerating enrolments of full-fee international students to increase the institutional finances. His argument thus implies the relevance and significance to critically explore how curriculum content and pedagogical practices are implemented in courses and programs in the process of internationalising higher education.

The internationalisation of the curriculum is regarded as a core component of the internationalisation of higher education. A number of universities have taken initiatives to internationalise the curriculum but how these ideas are implemented in practice and to what extent they are successful appears to be inadequately addressed in the related literature (Harman, 2005). Leask (2008b) defines internationalisation of the curriculum as "the incorporation of an international and intercultural dimension into the content of the curriculum as well as the teaching and learning arrangements and support services of a program of study" (p. 209). What constitutes 'an international and intercultural dimension' and how this is enacted differently in curriculum planning and delivery in specific HE contexts is a critical question that needs further investigation. Internationalisation of the curriculum is "a framework of values and practices oriented toward increasing awareness and appreciation of differences as the basis for the development of necessary skills and literacies for a changing world"

(Rizvi & Walsh, 1998, p. 11). A commitment to internationalisation of the curriculum aims towards the development of all students for the interconnected local, national and global contexts that they are living in. The development of international knowledge, cosmopolitan attributes and intercultural capacities is increasingly important for HE graduates in order to become engaged and valuable citizens in the current global society.

In internationalising the curriculum and the student experience, inclusive pedagogy, which is related to both teaching strategies and knowledge content, is considered to be a key practice (Ryan & Carroll, 2005). Exploring how to promote inclusivity and diversity in the internationalisation of the curriculum thus appears to be a crucial issue in the process of catering for the whole student population more effectively. Hellstén and Prescott (2004, p. 349) argue for the significance of "inclusivity as a dynamic negotiation, as opposed to the domination of one over another" and of the accommodation of diversity in the process of internationalising the university curriculum. It is thus necessary to incorporate more international examples into the Australian HE curriculum (Barnett & Coate, 2005; Morris & Hudson, 1995). As Teekens (2000) argues, "teaching approaches and strategies which are traditionally driven by national perspectives and needs might no longer be wholly sufficient for the novel teaching and learning environment of the international classroom" (p. 5).

5.4 Re-conceptualizing International Students' Learning in English Speaking Countries

This section casts a critical gaze at the move of the literature from an ethnocentric perspective that focuses on the problem identification approach to viewing international students to a more ethnorelative perspective that recognises the potential cultural and intellectual contributions of international students and their self-transforming capacities. It highlights a common theme in the literature that is predominantly shaped by a stereotyped, negative and static view of the learning styles of international students and accordingly by the assumption that international students should take the sole responsibility for adapting and making changes in the host institution. Drawing on theories about cosmopolitan work (Hirst & Brown, 2008; Hellstén, 2008; Luke, 2004; Marginson & Sawir, 2011; Rizvi, 2009,), transformative learning (Cranton, 2002; Mezirow, 2000; Taylor, 1994) and self-transformation (Marginson & Sawir, 2011), the discussion in this section offers an alternative lens on international students' learning that can capitalise on their transnational experiences, cultural resources and self-transforming potential.

5.4.1 The Shift from an Ethnocentric Perspective to an Ethnorelative Perspective

Research on international students' academic and cultural experience has addressed a wide range of issues. These include the students' motivations and engagement in learning, their academic and cultural transitions, their learning characteristics and communication styles, their expectations and interactions with peers and teachers, and their identity (Cownie & Addison, 1996; Cruickshank, Chen, & Warren, 2012; Hellstén & Prescott, 2004; Holmes, 2004; Koehne, 2005; Seow, 2005; Tran, 2012; Volet & Jones, 2012; Wong, 2004; Wright & Schartner, 2013). Volet and Jones pointed out that most of the literature in the field of the teaching and learning for international students is centred around the broad perspectives of unilateral conceptualisation of adaptation, reciprocal adaptation or a perspective of transformation. A stream of related studies reflect the "unilateral conceptualisation of adaptation" which is linked to the one-way acculturation of international students and the adjustment of teachers (p. 243). Bilateral adaptation is embedded in scholarly work that examines the reciprocal adaptation of international students and teachers and their engagement in intercultural interactions. A perspective of transformation is captured in research that explores how international students' learning and deep engagement in the new environment can lead to "personal and academic development" (Volet & Jones, 2012, p. 241). Even though the mutual adaptation and transformation of international students and lecturers have been recently raised in the rhetoric of international education, in practice there is still a significant imbalance between these key players in terms of making changes and adapting their teaching and learning. The existing underlying beliefs, values and systems appear to preclude the intercultural development and reciprocal development of academics and international students.

Between the 1950s and 2000s, the literature on international students' learning tended to be largely dominated by an ethnocentric perspective which focused on identifying the academic, social and cultural skills that Asian international students were assumed to lack in the 'Western' academia (Elsey, 1990; Lacina, 2002; Samuelowicz, 1987). Challenges facing international students in Anglo-Saxon institutions are seen to be predominantly related to language problems, cultural differences and a lack of 'adequate skills' to succeed in the host environment. Thus, this approach tends to regard international students as being deficit and assume that it is the onus of international students to adjust to what is required of them (McLean & Ransom, 2005, p. 45). Ryan and Viete (2009) argue that this approach has also led to the focus on support programs that help students develop particular generic academic skills, which is underpinned by the principle that it is the student's sole responsibility to change and adapt. This approach has resulted in the growth of remedial programs that centre on the provision of language and learning support to help 'fix' international students' 'deficiencies' rather than assist them in developing their learning skills or maximising their potentials. It also implies that not only the academic support advisors but also academics who should help to 'correct' the 'problems' of international students. Seen in this regard, international students' adaptation typically equates with 'assimilation or socialisation' (Volet & Jones, 2012, p. 246). Within this deficit model, the curriculum and pedagogy in 'Western' universities tend to position international students as 'the others' who need to assimilate into 'our' system. This perspective tends to be underpinned by the "innate belief in Western superiority" (Marginson, 2010, p. 6).

The literature which sees international students' learning as acculturalisation and assimilation has been criticised by a growing number of researchers (Doherty & Singh, 2005b; Kim, 2012; Tran, 2011, 2012; Volet & Renshaw, 1996). Drawing on the notion of 'Asian liquidity', Doherty and Singh argue that the learning characteristics and needs of international Asian students should be seen as divergent, dynamic and shifting rather than fixed and unitary. The authors argue that various studies fail to acknowledge that Asian identities may be constructed in relation to "Asian modernities and Asian diaspora spaces" (Brah, 1996, as cited in Doherty & Singh, 2005b, p. 3). Kim echoes this perspective and argues that a copious amount of scholarly work tends to ignore the ways in which "the global academic system and its hierarchy affect the international students" (2012, pp 2-3). In addition, Ryan (2011) calls for the need to take into account the rapidly changing contexts and realities within countries such as China and the "enormous diversity within these systems" (p. 641). Thus, international students' exposure to different facets of the changing globalised world, their engagement with spatial, virtual, intellectual, cultural and social mobility and their capability to mediate these impacts are important factors that need to be taken into account when viewing their learning experience and transformation. International students' learning should be conceptualised from a relational approach considering how these diverse and intangible dimensions of the mobility landscape affect their learning experience rather than locating their learning in simple cultural or individual parameters.

Researchers have also challenged the body of literature that views Asian students' learning approaches as stable and fixed across educational contexts (Biggs, 1997; Ryan, 2011; Tran, 2013b, 2013c; Volet & Renshaw, 1996; Watkins & Biggs, 1996). Volet and Renshaw for example argue that the images of Southeast Asian learners have been predominantly portrayed based on a stereotyped, negative and static view of their learning styles and motivations. As a result, these above views may fail to consider how international students may possess the capability to adapt their learning in response to the requirements of the new learning context or under the impact of their engagement in mobility. Some authors assume that Asian international students' learning approaches adopted in Australian institutions seem to be contextually based rather than culturally situated (Volet & Kee, 1993; Wong, 2004). In other words, their learning styles have been tailored through the way they exercise their agency in the new environment to meet the requirements of the specific learning context rather than being shaped by "characteristics of individual or cultural groups" (Volet & Kee, 1993, p. 3). Tran's (2013a) study is congruent with this line of scholarly research which challenges the generalisations of Asian students and the essentialist view on their learning patterns. Based on discourse analysis of Vietnamese and Chinese students' assignments and in-depth interviews, this study

reveals that students' national culture and their background do not play a dominant role but instead are found to be inflected in these individual students' learning and interact with other factors. Also, in any case where culturally influenced ways of learning are reproduced, this does not typically happen in simple and uniform ways but rather ways that are personally mediated by the students (Tran, 2013a).

The scholarly work that focuses on identifying the cultural norms and differences of international students may provide some insights into some of the preferred ways of learning and values international students may bring with them into Anglo-Saxon institutions. Nevertheless, excessive dependence upon the connection between cultural factors and Asian students' learning may inhibit or mislead the understanding of complexities and variables in their learning experiences as well as their transformative capacities (Tran, 2013a). Essentialising international students into homogenous groups with similar characteristics, concerns and interest has resulted in a lack of understanding of international students' complex experiences, diverse needs, hidden concerns and potential choices and the ways the institution could best respond to those aspects.

International students' strategic agency, discursive power, individual intentions and personal motivations, which tend to represent what may lie behind their experiences to mediate their learning and their ways of development in the host institutions, seem to be rarely brought to the fore. Adopting an *emic* perspective by providing international students the opportunity to reflect on own experiences in adapting to Australian higher education, Tran's (2013a) empirical study shows that international students' adaptation journey is complex and multi-layered. The study found four main forms of adaptation international students are engaged with, including surface adaptation, committed adaptation, reverse adaptation and hybrid adaptation. Based on these forms of adaptation, this research argues that international students embrace an aspiration to transform themselves and actually undergo significant moves throughout their engagement in higher education in the host country. Yet the diverse cultural and intellectual resources and values that they bring along to the Australian academia and that are central to the way they exercise their own agency are not often recognised and validated in the daily practices of higher education teaching and learning. In other words, international students are still positioned within the problematisation discourse rather than regarded as valuable intellectual and cultural assets of the university.

Research has also highlighted that what challenges international students, may emerge from "the mismatch between the needs of the students and the responses of the university" (Harris, 1997, p. 36). In a study which examines the transition experiences of international students into an Australian higher education context, Prescott and Hellstén (2005) show the unsatisfactory aspects of international students' initial encounters with the academic environment, and social and cultural practices of the host institution. They argue that this relates to a mismatch between international students' needs in relation to cultural and academic navigation and institutional expectations despite extensive efforts on promoting cultural diversity in Australian institutions. They suggest two primary strategies for addressing such challenges: incorporating inclusive practices regarding communication and

implementing effective teaching and learning incentives. Furthermore, Lawrence (2001, p. 4, as cited in McLean & Ransom, 2005, p. 45) argues that the challenges could also be linked to the lack of the academics' understandings of the diverse educational backgrounds and complex experiences of mobile international students

5.4.2 International Students' Learning as Being Cosmopolitan and Their Self-Transforming Potential

Recent discourse of internationalisation in higher education and international students has been influenced by a 'cosmopolitan' perspective (Hellstén, 2008; Hirst & Brown, 2008; Luke, 2004; Marginson & Sawir, 2011; Rizvi, 2009). This trend in the literature advocates the view that globalisation, internationalisation and increasing transnational and local diversity have indicated the importance to re-vision all students, both local and international, and their learning as being cosmopolitan. Hellstén (2008), for example, argues "students of the new millennium are global citizens who see their future opportunities beyond the boundaries of their nation, and their professional prospects outside locally defined parameters" (p. 83). Accordingly there is a challenge facing universities in supporting international students' development as 'worldly learners', 'new internationalists', or 'global citizens'. The positioning of international students as cosmopolitan beings is intimately linked to the recognition of the nature of classrooms hosting international students as being cosmopolitan sites. Rizvi (2008) sees cosmopolitan teaching and learning as the development of "a different perspective on knowing and interacting with others, within the changing context of the cultural exchanges produced by global flows and networks" (p. 30). Sanderson (2011) and Leask (2008a) support this perspective and link it to the increasing demand to develop an internationalised curriculum that can facilitate the development of all students as cosmopolitan learners and citizens. These perspectives are also indicative of a crucial dimension of teaching as cosmopolitan work which is related to how diversity can be used in international classes as valuable cultural and intellectual resources for teaching and learning.

Drawing on theories about transformative learning and self-transformation (Cranton, 2002; Mezirow, 2000; Taylor, 1994), some studies see international students' adjustment to 'Western' universities as a dynamic interplay between challenges and transformative potential (Brown, 2009; Marginson & Sawir, 2011; Tran, 2012). Traveling overseas to undertake an international education entails the potential process of transformation and engaging in the "path of change" (Marginson & Sawir, 2011, p. 137). Cross-border mobility is linked to a journey of struggle, discovery and self-transformation. Using transformative learning as a conceptual tool and drawing on case studies with international Vietnamese and Chinese students, Tran's (2012) research reveals that the engagement in mobility and the complex nature of negotiating higher education in a foreign country provides international

students with a valuable condition to mediate shifting intellectual and cultural borders, discover their hidden strengths and experience changes in their perspectives. This research shows international students' capacity to critically reflect on their own experiences, appreciate the need for change and plot new strategies to transform themselves personally, culturally and academically (Tran, 2012). Critical selfreflection is identified as being central to the international students' process of mediating higher education. This process also provides a springboard for the development of personal agency and the emergence of the newly-constructed self and personhood. The conceptualisation of international students' learning that draws on transformative learning theories resists the discourse which is based on a deficit model that problematises international students' learning. Such conceptualisation values and reconstructs international students as having the potential to transform their learning as well as their lives (Tran, 2012). It recognises the potential values, different sets of knowledge and diverse experiences of international students as important assets for generating new ways of working and for internationalising higher education teaching and learning in a broader sense. Given the current lack of theoretical and empirical research on cross-border students' transformative power, there is a critical need for more research on the transformative characteristics of international students and how to best capitalise on their potential.

5.5 Supporting Students' Academic, Intercultural and Personal Development in Australia

In light of the above review of the literature, this section will discuss the ways to enhance international students' learning and cultural experience in Australian universities. This discussion of the implications for providing academic and intercultural support for international students will focus on the need to build a responsive and inclusive international education that is based on knowledge of the impact of international students' prior education and socio-cultural backgrounds upon their learning, their aspiration regarding what they wish to get out of their educational experiences in Australia and the manners in which their learning in the new context can enable them to reach their goals. This section will also discuss specific strategies that academics and universities can use to recognise international students as agents who are capable of mediating their academic practices and empower them to negotiate and draw creatively on different ways of knowing and working. These steps are essential towards developing generations of graduates who are capable to engage and perform effectively in local as well as transnational contexts shaped by globalisation and global knowledge mobility. In essence, this section will focus on three key points that are central to the enhancement of international students' academic, personal and intercultural development under the current changed circumstances. These include the repositioning of international students as resources for knowledge, the importance to construct them as self-transforming agents and the need for reciprocal development for both staff and international students.

Central to facilitating international students' learning and intercultural transformation is how academics enact productive pedagogies in recognising the value of making transnational connections with international students' existing and prior experience, diverse knowledge and perspectives in the classroom context (Leask, 2008b; Ryan, 2011; Singh & Han, 2010; Tran, 2010). This approach essentially moves beyond the problematisation of international students and their learning. Studies that advocate this perspective explore the approaches involved in validating the knowledge, experiences and skills that international students bring with them to the international classroom and using them as useful resources for enhancing the quality of teaching and learning.

If different intellectual and cultural traditions brought along by international students are embraced and built upon in the curriculum, pedagogy and assessment, then this assists the internationalisation of the student experience and the development of their cosmopolitan qualities (Rizvi, 2008). The integration of international students' intellectual and cultural resources into teaching and learning is significant for preparing all learners for more adaptive, flexible and engaged workforce. But in essence, how to engage lecturers in the process of re-visiting their existing assumptions about teaching and learning for international students, thereby changing their mind-sets and then taking the lead on intercultural and knowledge transformation for themselves and their students, appears to be the key issue in ensuring high quality academic practices. Therefore, a whole-institutional approach to providing staff with professional learning that enables them to recognise this need and work out specific strategies to enact it into the reality of teaching and learning is fundamental to the process of internationalising the experience for staff and students alike.

Pedagogy that focuses on capitalising on international students' intellectual resources opens up the possibility for students themselves to actively engage in the learning process and exercise their agency as a co-constructor of knowledge in the classroom (Tran, 2013b). This approach is empowering for international students because it positions them as being central to generating new knowledge and enriching the experience of those involved in the learning process. It acknowledges and builds on not only their source of knowledge but, more importantly, their selftransforming capacities. Pedagogy that takes into account international students' dual strengths – i.e. diverse knowledge and 'hidden' transformative capacity – is perhaps the most meaningful and valuable approach to optimising international students' personal, intercultural and academic development. Employing this practice, teachers can move beyond the curriculum that marginalises international students through the manners in which the content of learning is Western situated and thus privileges 'Western' ways of working (Doherty & Singh, 2005a). Thus, in addition to engaging students through productive pedagogies, this approach that sees international students as valued sources of learning for the university community embraces features of inclusive, intercultural and empowering pedagogies.

One of the key pedagogical approaches to capitalising on international students' diverse knowledge and experience is to design activities and tasks that require them to contextualise the learning concepts and theories within the setting of their home countries (Tran, 2013b). These tasks not only promote mutual recognition of the

divergent disciplinary practices in different countries but also involve students in taking control of the learning process. This approach is useful in helping students develop transcultural knowledge and outlooks because "having international search for evidence or concepts from their homelands takes all students beyond a nation-centred parochial education to engage them in producing international perspectives" (Singh & Shrestha, 2008, p. 77). Adopting this pedagogical practice, teachers move beyond viewing international students as being deficit or empty vessels to be filled with Australian practices. Rather, students are regarded as being capable to navigate disciplinary knowledge, negotiate multiple standpoints and add alternative perspectives to the teaching and learning process based on their understandings of their homeland contexts and their reflective capacity (Tran, 2013b). This process of engaging students in not only building on their source of nation-centred knowledge but also enhancing their transnational and transcultural understandings will help them move towards a more ethnorelative perspective and will improve their capacity to mediate multiple perspectives shaped by different national contexts.

A critical impediment for the enhancement of the learning and intercultural experience of international students is the lack of the reciprocal adaptation between academics and international students. As discussed above, because international students' learning is locked within a 'deficit' frame and therefore problematised, the quality of teaching is less problematised. As a result, the benefits of greater adaptability and change in pedagogical practices among the academics tend to be less emphasised than adaptation from the students. According to Ryan (2011), this practice misses out the "very real possibilities of mutual learning" for academics and all students (p. 644).

As Ryan (2011) argues, reciprocal adaptation is closely related to the question, "how can universities and academics open not just their 'doors' but also their 'minds' to the benefits of diverse academic traditions and perspectives?" (p. 635). As discussed in the first section of this chapter, at the present time the step of opening university's 'door' is predominantly driven by the commercialisation principle to generate revenues for institutions. However, it is the process of changing staff's mindset and opening their minds to diverse intellectual and cultural traditions which is essential to enriching the teaching and learning in tertiary education.

Enhancing the learning and cultural experience of international students is the collective work of the whole university community including the collaboration of both academics and learning support officers. Learning support programs in Australian higher education have been criticised for offering support services that are not closely connected with or sit outside the main disciplinary teaching (Arkoudis, 2008; Arkoudis, Baik, & Richardson, 2012; Arkoudis & Tran, 2010; Wingate, 2006). Another critical issue facing the provision of language and learning support for international students is that many of them do not access the service due to different cultural and personal reasons or their unawareness of the value of this service (O'Loughlin & Arkoudis, 2009; von Randow, 2010). The cross-disciplinary collaboration allows subject teachers and language and learning advisors to work closely together and build on their own expertise for a common goal of optimising the learning experiences and outcomes of international students. The partnership

between language and learning support and teaching staff helps to enrich the learning experience of students, the teaching experience of teachers and the support experience of language and learning advisors in a coherent manner. Yet, there needs to be a coherent whole-institution approach to developing and nurturing this form of productive collaborations between academics and learning support advisors. In essence, to enhance the learning experience of international students and indeed of all students, the following key principles of the intercultural pedagogy could be adopted by teaching staff:

- Re-examine their own teaching beliefs and values and re-think how these shape their teaching practices;
- Position students as a resource of knowledge;
- Be open and learn from international students about different transnational professional and cultural practices;
- Enhance awareness and knowledge of international students' educational backgrounds, cultural learning characteristics and cultural norms;
- Integrate international examples, case studies, materials and visual aids into teaching and learning, where relevant;
- Structure activities that require international students to contextualise professional concepts based on their home country;
- Recognise and validate prior learning and cultural knowledge;
- Structure activities to foster the interaction between international and domestic students;
- Draw on existing resources to make teaching practices more flexible and divergent to address the variety of learning styles (Tran, 2013b, p. 28).

5.6 Conclusion

This chapter highlights the interconnected relationship of globalisation and internationalisation of higher education. Global forces generally 'continue to give rise to new waves of learning reforms' (Ng, Nakano, & Fox, 2016, p. 22, Chap. 1 in this volume) and in particular, create the demand for internationalising institutional practices and the student experience. A commitment to internationalisation provides the possibility to create a transformative learning environment that enables all students to respond better to the diverse world, global interconnectivity and transnational workforce mobility. However, there seems to be a conflict between the current neo-liberal market-driven trend in international education and the ultimate goals underpinning the engagement in international education, which are related to broadening one's knowledge, developing international outlooks and transforming life trajectories. In addition there are a lot of contradictions and challenges in integrating the development of global citizenship, intercultural capabilities, social justice, ethics and sustainable development within the current trend of commercialisation and profit-making within HE (Ng, 2012, p. 454).

The education of international students is situated within the nexus of globalisation and internationalisation. Research on the teaching, learning and support for this student cohort tends to be rich, diverse and contested. The past two decades have witnessed a shift in the research field from the positioning of international students as 'problems' to be solved to a more transformative approach and finally to reconceptualising international students taking into account their transformative potential, their potential resources and their contributions to internationalising teaching and learning practices as well as the need for reciprocal development. Despite this, scholarly work in this field still appears to be disparate, under-theorised and underempirically researched (Hellstén & Reid, 2008; Ryan, 2011). Ryan calls for the need to draw on a conceptual framework to underpin research and practice in the field of teaching and learning for international students. In a similar vein, Hellstén and Reid highlight a critical need to re-contextualise "pedagogy to include systematic notions of teaching and learning in international contexts and with international students and curricula" (2008, p. 2). That is, it is valuable to conceptualise specific pedagogical practices that have been effectively implemented by individual teachers and embed them in the broader context of international education. Such conceptualisation of specific practices can be regarded as an essential step for the research field to "move beyond simple problem identification towards more innovative and sustainable models of curriculum and pedagogy that are derived from, and are suited to, diverse cultural intellectual paradigms and traditions, and that embody critical and respectful approaches and a meta-awareness of cultural issues and their complexities" (Ryan, 2011, p. 638).

This chapter addresses the critical need to develop curriculum and support practices and policies that build on international students' dual potentials, embedded in their own diverse intellectual and cultural resources, as mobile scholars and their self-forming agency. International students' engagement with spatial, intellectual and cultural mobility has helped nurture these two fundamental potentials, which are central to their personal, academic and intercultural development in the country of education. How pedagogy, curriculum and support mechanisms could build on international students' 'cultural and intellectual' resources, cross-border attributes and transformative capabilities in order to create a transformative and mutually satisfying learning environment for all students should be a central question for academics, researchers and policy-makers alike.

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Chapter 6 Sustaining Learning Engagement in Distance Education: An Achievement Goal Perspective

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Abstract Globalised processes such as massification of higher education, promotion of lifelong learning and widespread use of computing technologies have contributed to the development of distance education in the higher education sector in the Asia-Pacific region. Distance education has become one of the most important forms of educational delivery in higher education within this region and distance learners have become a major new student group in the higher education sector. While the number of distance learners has substantially increased over the past few decades, distance educators battle continuously with the problem of retention and sustained participation. What motivates distance learners to engage in sustained periods of learning and how their motivation can be supported are important questions in the design of an effective distance learning environment. This chapter discusses research in distance learner motivation and retention. Based on achievement goal theory, it proposes a conceptual framework for designing an effective distance learning environment to sustain participation for distance learners.

6.1 Introduction

Open and distance learning (ODL) has played a significant role in improving access to higher education in the Asia-Pacific region. Despite concerns about student isolation and quality assurance issues, the open university model based on ODL has flourished and developed into a major alternative form of higher education within the region and beyond. ODL is pivotal to meeting the demand for lifelong learning and its open access to higher education contributes significantly to educating knowledge workers for globalised economies. As both a response to and product of globalisation, ODL is a critical element in the massification of higher education in the Asia-Pacific region and other parts of the world.

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Nevertheless, higher education through ODL continuously battles the issue of retention. Research has confirmed repeatedly that course and program completion rates are substantially lower in ODL mode than those in face-to-face mode (Simpson, 2013). However, this does not mean that campus-based universities do not have to consider the issue of student retention. In Chap. 3 (Lassegard, 2016) and Chap. 5 (Tran, 2016) in this volume, this issue has been discussed in relation to recruiting and retaining international students in Japan and Australia. Within the context of ODL, some believe that dropout is a weeding process whereby academically unmotivated or unprepared distance learners will be removed. Others consider the issue of dropout as inevitable because ODL universities adopt an open entry policy in enrolment and therefore many learners who are less academically capable will eventually be forced to drop out of their distance learning studies.

Rejecting these views, this chapter considers that it is important for ODL universities to come up with learning and motivational supports to improve retention and sustain participation. One of the main arguments is that without sustained participation and reduced dropout rate, the impact of ODL on improving access to higher education in globalised economies will be compromised. In addition, a high dropout rate jeopardises institutional competition and may be perceived as a problem of educational quality within the current climate of public accountability and global competition in the higher education market. This chapter takes a motivational perspective and considers empirical research on achievement goals as a foundation for developing a supportive learning environment for promoting learning engagement and improving retention.

In the section below, the rise of ODL in Japan, Hong Kong and Australia is taken as an example to show the importance of ODL as an initiative responding to the need for lifelong learning and constant supply of knowledge workers in advanced knowledge economies under the influence of globalisation. Examples of increased enrolment in other parts of the Asia-Pacific region will also be cited to support the claim that distance education and globalisation are closely related. While the enrolment figures are constantly increasing in distance education, the problem of retention and dropout persists. Addressing this problem, this chapter proposes a motivational model for sustaining learning engagement and improving retention at the course level based on accumulated evidence derived from research on achievement goals.

6.2 The Rise of ODL in Asia-Pacific

In many Asian countries, access to higher education involves fierce competition due to limited university places. Many high school students have missed the opportunity to gain entry to university, particularly in countries that operate an elite educational system. In these places, ODL courses and programs offer an attractive alternative pathway to higher education and open up learning opportunities for many learners who may have failed to access higher education through traditional competitive

pathways or have been disadvantaged due to various personal, social and economic influences.

Learning through ODL is not bound by time and location. The high level of flexibility through an ODL mode meets the needs of adult learners who are unable to complete a learning program following a fixed schedule, due to complex personal, familial, or employment issues. In addition, ODL allows distance education institutions to capture a large student group without the need to cap the enrolment number. Expectedly, many open universities in the Asia-Pacific region have enrolled a significant number of distance learners.

Modelling the success of Open University in the United Kingdom (UKOU), open universities have begun to establish in different parts of the Asia-Pacific region since 1980s. Many of these open universities were formerly correspondence institutes or radio and television colleges. A major effort in widening participation in higher education through ODL is the establishment of the Asian Association of Open Universities (AAOU) in 1989. The remit of this international organisation is to promote access to higher education through ODL. In 2013, the membership of AAOU was comprised of 43 ODL universities from different parts of Asia that enrol millions of distance learners in their academic programs. Among these member institutions, some are classified as 'mega' universities that enrol more than 100,000 distance learners. For example, the Korean National Open University had an enrolment of over 150,000 in 2013 (Jung, 2000). According to its 2010 Annual Report, the Open University of China had a total enrolment of 244,200 in its undergraduate open education programs.

Much has been written about ODL's contribution to widening tertiary participation in developing countries (e.g. Morpeth & Creed, 2012). Less attention has been given to ODL's significant role in improving access to higher education in developed countries. Let us consider the case of ODL in the selected advanced economies in this book. In Japan, 274,120 Japanese students enrolled in 57 degree programs in 2007, accounting for 9.7 % of the total enrolled student population in the Japanese higher education sector (MEXT, 2007, as cited in Bray, Aoki, & Dlugosh, 2008). The Open University of Japan is one of the major ODL providers in Japan and enrolled over 83,000 learners in its undergraduate and postgraduate programs in 2012. In Australia, the Open Universities Australia (OUA) enrolled a large number of students as well. In 2012, it enrolled more than 60,000 students with an increase of 17 % over the previous year. In Hong Kong, the distance learning market is highly competitive with a huge number of foreign institutions advertising their distance learning programs in this Asian city (Murphy & Yum, 1998). Despite fierce competition, the Open University of Hong Kong (OUHK) has enrolled a large number of local students in its distance education programs since its inception in 1989. The number of enrolment increased from about 3000 in 1989 to over 24,000 in 1998, achieving a staggering increase of 800 % over a decade. While enrolment in OUHK has dropped in the past few years, probably due to increased competition and economic downturn, the Open University of Hong Kong still maintained an enrolment of over 11,000 students in its distance learning programs in 2012.

Today, with the advancement of online and internet technologies, the provision of distance education is no longer confined to distance learning institutions. Nearly every university has some provisions of distance learning using different modes of flexible delivery that blend ODL and face-to-face learning together. In addition to the spreading of ODL to conventional universities, another notable trend should be mentioned. Improved technologies have increased the use of different forms of online learning for reaching out to a large number of students with reduced cost in both campus-based and distance learning universities. In particular, massive open and online courses (MOOCs) have gained popularity and this new online initiative has the potential to reach a greater number of learners locally and internationally. In 2013, the first MOOC in Asia was offered by the Hong Kong University of Science and Technology, which attracted an enrolment of 17,000 students from around the world (Sharma, 2013). Ever since, major universities in Australia, Japan, China, Singapore and other parts of Asia have joined their European and American counterparts to offer their MOOCs. In Chap. 8 in this volume, Fox (2016) offered an updated review of the development of MOOCs in Australian and Asian universities.

6.3 Learner Retention and Motivation

While MOOCs enrol a large number of students, learner retention is a significant challenge to its development (Koutropoulos et al., 2012). Reviewing research on MOOCs, Liyanagunawardena and colleagues (Liyanagunawardena, Adams, & Williams, 2013) reported that a majority of MOOCs had a completion rate of less than 10 %. Other traditional forms of ODL courses and programs also face a significant challenge of retention and dropout. Simpson (2013) used the term 'distance education deficit' to describe the significantly higher levels of dropout among distance learners compared to those studying in conventional universities. Dropout is often measured in terms of program graduation rate or course completion rate from the perspective of offering institutions. At UKOU, the program graduate rate ranges between 0.5 % and 20 % compared unfavourably to over 80 % of graduation rate in traditional face-to-face university programs in the United Kingdom (Simpson, 2013, p. 106). At OUHK in Hong Kong, the dropout rate can range between 10 % and 70 % or over (Fan & Lee, 2007). At the Open Universities Australia, the course completion rate was recorded at 40 % in its 2012 Annual report, implying a non-completion rate of 60 %. Additional studies about dropout in other Asian distance learning institutions (e.g. Choi, Lee, Jung, & Latchem, 2013; Fozdar, Kumar, & Kannan, 2006) and those in other parts of the world (e.g. Barefoot, 2004; Gibbs, Regan, & Simpson, 2006; Rovai, 2003) consistently report a high level of dropout among distance learners. Accumulated empirical evidence from different parts of the world indicates that learner retention is a universal challenge facing ODL.

One of the most discussed reasons for distance learners' dropout is limited interaction between teachers and students in ODL learning mode. Distance learners often experience isolation and their sense of belonging to distance learning institutions is relatively low due to physical separation. In addition to this specific nature of distance learning, limited screening on student qualification as a result of open entry policy in most distance learning programs may have been a possible reason for high dropout rate as well. However, based on the UKOU experience, Simpson (2013) argued that the open entry factor has limited explanation power for the high levels of dropout rate in ODL programs. He went on and discussed additional reasons such as settling for intermediate qualifications and juggling competing demands of work, personal health, and life issues. In the study of Ashby (2004), academic concerns (such as falling behind in academic work) were the most reported reason for withdrawal following by work and familial responsibilities.

While it is difficult to ascertain the effects of these reasons on retention or dropout, negative effects derived from dropout at both personal and institutional levels are concerning. At the individual level, dropout may link to the development of negative perceptions of personal efficacy, self-concept and control. A high dropout rate may also reflect negatively about the quality of an educational program or higher education institution. To maintain a competitive edge in a globalised higher education market, tertiary institutions, regardless of their mode of delivery, need to develop innovative measures to retain students and reduce the dropout rate. In fact, student retention can be an important factor that separates successful from less successful distance learning institutions (Rovai & Downey, 2010).

The crunch question is then how learner retention in ODL can be improved. In the literature, there are several major interventional approaches to addressing the issue of retention. A major intervention effort is to provide learners with accurate enrolment information. This form of intervention substantially reduces a significant number of dropouts attributed to enrolling in an unsuitable program or course or holding inappropriate expectations of learning and learning outcomes. It is now a common practice for ODL institutions to provide pre-enrolment guidance and advice in order to make sure that learners select the right courses and programs for themselves. Course and program orientations including the provision of detailed information on course/program goals, coverage, assessment and learning outcomes are important for learners to form an appropriate plan for learning and expectations for themselves as learners. Course advice comes in a form of taster pack and student course reviews can be effective in making sure that learners are in the right course at the right time.

While important, these forms of learner support offered at the enrolment stage are reactive by nature. Limited attention, however, has been given to offering proactive support to address distance learners' academic needs and support their learning engagement (Gibbs, Regan, & Simpson, 2006). "Simple global recommendations on how and why of study seems unlikely to help", Murphy and Yum (1998, p. 79) wrote in the conclusion of a study on supporting distance learners. More direct and personalised assistance is required. In response, various forms of personalised intervention have been experimented in the past decade. These include early contact

with new learners (e.g. first year programs in New Zealand, first year student seminars), identifying at-risk learners, tracking progress through email and phone discussion with tutors (e.g. Barefoot, 2004; Grant, Olivier, Rawlings, & Ross, 2011). A major proactive approach is to provide support through peer mentoring, as affiliation is an important factor affecting dropout rate (e.g. Kember, 1995; Murphy & Yum, 1998). Interactivity and the chance of collaborating with each other are significant components of distance education. Ng and Murphy (2005) studied this topic and pointed out that limited collaboration was observed in the online learning environment. Simpson (2008) provided empirical evidence supporting the effectiveness of a peer mentoring program in sustaining distance learners in their engagement with and completion of courses at the Open University in the UK. Similar programs with reported evidence in retaining learners have been developed and implemented in the Asia-Pacific region (Boyle, Kwon, Ross, & Simpson, 2010; Grant, Olivier, Rawlings, & Ross, 2011; Yates, Brindley-Richards, & Thistoll, 2014). Another current effort is to provide support through various forms of personalised internet systems (e.g. Leung & Li, 2006).

While much attention has been given to improve social support and enhance collaboration, limited research and discussion has been expended to prevent student dropout and promote sustained engagement from an academic perspective within a specific course or subject environment, such as the design of assignment. In reviewing research for promoting retention, Barefoot (2004, p. 16) concurs that "a final frontier that is only beginning to be explored is the process of instruction whether in face-to-face or distance settings". Within the academic context, there is a need to take learners' motivation into consideration in developing support measures for promoting sustained participation and reducing dropout (Simpson, 2008). This specific consideration is significant because it speaks against the belief that dropout in ODL is inevitable as a result of the enrolment of many academically and motivationally unprepared learners. Such a view on dropout edges towards a deficit perspective that affords most of the blame to distance learners' lack of perseverance in ODL. Also, this view is not akin to developing a motivating learning environment for distance learners. An important point of departure for the main argument in this chapter is that distance learners often begin their ODL courses or programs with some forms of motivation. These motivations can be derived from both extrinsic (e.g. for career development) and intrinsic sources (e.g. for personal development). Building on these initial motivations will help distance learners persevere in their learning and subsequently develop learner satisfaction (cf. Bray et al., 2008). In addition, there is a need to recognise that many distance learners are serious about their studies; they hold keen interest in learning for various reasons (Ashby, 2004), often take a deep approach to learning and put significant effort in their ODL studies (Auyeung, 2005). With these considerations in mind, the main task for distance educators is to find ways to reinforce distance learners' motivation and sustain deep learning. In discussing the issue of student retention based on their extensive research on distance learning, Woodley and Simpson (2014, p. 4) argued for the importance of taking student motivation into consideration. They stated that retention services need to clarify and build on motivation and address motivation-reducing issues (Woodley & Simpson, 2014, p. 469). Aligning with Woodley and Simpson, this chapter maintains that creating an engaging ODL learning environment will promote distance learners' motivation to learn and improve learner retention. This is because a motivating learning environment gearing towards academic success will provide distance learners with positive learning experiences and higher academic aspirations which in turn will sustain their continuous participation and improve retention.

6.4 Achievement Goal Research

While motivation has been taken as one of the most important variables for understanding retention and sustaining participation, there is a dearth of research that explores its relationship with participation and retention in ODL learning. Expectedly, limited effort has been put into develop a motivating ODL environment for promoting retention and participation. Most of the research on learner motivation in distance education has focused exclusively on reasons for learning (Simpson, 2013). For example, a plethora of research in ODL has confirmed that distance learners often learn because of work-related considerations, personal development and an interest in a specific subject domain. However, limited efforts have been made to continue this important line of research and explore meaningful ways to utilise learners' reasons as an anchor for sustaining participation and improving retention. This lack of concerted research effort may be due to the absence of a theoretical model for informing conceptual understanding, research design and the development of meaningful intervention. Addressing this gap, Simpson proposes that there is a need to utilise dominant motivational theories to explore the effects of motivation on retention, persistence and achievement. Responding to Simpson's call, this chapter utilises achievement goal theory to develop a conceptual model for motivating distance learners to sustain their participation. Achievement goal research has placed a significant role on learners' cognitive goals for understanding, developing and reinforcing their motivation and learning. From an achievement goal perspective, it is important to address distance learners' goals and understand why they want to undertake distance learning. The advancement in psychological studies on students' goals for learning and achievement in the past several decades has provided a useful theoretical framework and empirical foundation for researching distance learners' goals and the possibility of developing a motivating learning environment in ODL settings to promote distance learners' motivation and improve retention. There are several reasons why a goal perspective is useful in this endeavour.

Achievement goal theory is an established psychological model. Three decades
of research on achievement goals has provided a strong empirical foundation
verifying the validity of this theoretical perspective for understanding the relationship between goals, learning and achievement (Hullenman, Schrager,

- Bodmann, & Harackiewicz, 2010). In particular, achievement goals are closely related to persistence, effort expenditure, learning enjoyment and achievement levels. These dependent variables are undoubtedly important for promoting retention regardless of the mode of learning;
- 2. Recent studies on achievement goals have shown that classroom goal emphasis is closely associated with students' endorsement of personal goals (e.g. Meece, Anderman, & Anderman, 2006; O'Keefe, Ben-Eliyahu, & Linnenbrink-Garcia, 2013; Schwinger & Stiensmeier-Pelster, 2011; Urdan, 2010; Wolters, 2004). In other words, manipulating classroom goal climate may hold the key for promoting adaptive learning goals and tapping into motivational resources associated with these goals. This piece of empirical evidence is supportive of the claim that developing a motivating ODL learning environment will promote participation and perseverance;
- 3. Recent studies (e.g. Ng, 2006, 2008; Remedios & Richardson, 2013) of achievement goals using samples of distance learners have confirmed the applicability of an achievement goal perspective on distance learning. This nascent literature of achievement goal research on distance learning offers support for using the achievement goal theory as a guiding framework for developing a motivating environment for distance learners.

The section below reviews the research on achievement goals with particular focus on those using distance learners as targeted research samples. Based on convergent evidence supporting the motivating effect of mastery goal orientations, this chapter re-deploys the TARGET framework (Ames, 1992a, 1992b) to develop a conceptual model for promoting mastery learning in ODL courses.

6.5 Achievement Goals and Motivation in ODL

Achievement goal theory provides a theoretical framework guiding the development of a motivating learning framework for sustaining participation in distance learning. Achievement goals are students' perceived cognitive purposes that define why and how students engage in learning or achievement behaviours. Different goals are associated with a different pattern of cognition, affect and behaviour (cf. Dweck, 1986; Kaplan & Maehr, 2007). Two important goals have captured the most research attention: mastery goals and performance goals. Mastery goals orient students to learn for the sake of improvement and comprehension; performance goals, however, orient students to focus on achievement and relative ability. Early studies consistently showed that mastery goals were always associated with adaptive learning outcomes such as higher levels of efficacy belief, persistence, effort expenditure, task value and frequent use of cognitive and regulatory strategies, and expectedly better achievement. In contrast, performance goals were less adaptive and tended to link with lower achievement levels (e.g. Ames, 1992a, 1992b; Ames

& Archer, 1988; Dweck, 1986; Meece, Blumenfeld, & Hoyle, 1988; Nolen, 1988; Pintrich & De Groot, 1990; Pintrich & Garcia, 1991).

Further research on these two contrasting types of goals has fine-tuned the goal categorisation using approaching and avoidance orientations. Achievement goal researchers like Elliot and Harackiewicz (Elliot, 1997; Harackiewicz, Barron, & Elliot, 1998) argued that the detrimental effects of performance goals should be confined to those focusing students on avoiding performance, such as avoiding revealing one's lack of ability. In contrast, performance goals with an approach orientation, such as getting a good result, should have positive effects on learning and motivation. The debate and subsequent research on the nature of performance goals have therefore led to the separation of performance goals into finer categories - performance approach and performance avoidance goals. Recent research on mastery goals has followed a similar development and separated mastery goals into approaching and avoidance forms (Elliot & McGregor, 2001). In terms of definition, mastery approach goals to a great extent follow the established conception that such goals draw students' focus on learning, development and improvement. The mastery avoidance goals describe students' concerns and worries about failure to learn, missed opportunity of learning, and inability to learn as much as is expected of them. The research evidence verifying the effects of mastery avoidance goals on learning is still developing.

Debates and discussions about important conceptual issues and empirical effects of achievement goals continue (Hullenman et al., 2010). Nevertheless, an important point of agreement is that mastery goals are motivational. Empirical evidence derived from survey, experimental and qualitative studies in the past three decades has consistently verified mastery goals' positive effects on learning and achievement. This convergent pattern of findings is also consistently located in different types of students, including distance learners (e.g. Ng, 2006, 2015). In particular, the close relationship between mastery goals and important learning variables such as effort expenditure, self-regulation, persistence, enjoyment and interest is highly relevant to the search for effective measures for promoting motivation and retention in ODL and other learning settings.

In the field of distance education, researching achievement goals is at the nascent stage. While few published studies are available, accumulating evidence thus far also consistently points to the significant role of mastery goals. In the study of Eppler and Harju (1997), it was found that non-traditional adult learners had stronger mastery goals than did their younger counterparts in traditional learning settings. Sachs (2001) found that mastery goals predicted adult learners' enjoyment in completing course assignments but not their graded performance. More direct support regarding the significant role of mastery goals for distance learners can be derived from several recent studies (Ng, 2006, 2008, 2009, 2012, 2015; Remedios & Richardson, 2013) that produced convergent empirical evidence supporting that learning for knowledge improvement, understanding and competence development has been a dominant form of motivation for this group of learners. Using various samples of Chinese distance learners in Hong Kong, Ng's studies provided empirical evidence supporting the positive effects of mastery goals for learning among distance learners. In

particular, it was found that mastery goals were associated with a positive learning pattern in two different levels of learning specificity, at the course level (e.g. Ng, 2008, 2012) and during the completion of an assignment (Ng, 2006, 2009). The mastery learning pattern is characterised by high levels of efficacy and control beliefs (Ng, 2012), the use of deep learning strategies and self-regulatory strategies (Ng, 2006, 2008, 2009), and a high level of achievement (Ng, 2006). Such a strong pattern of association has been consistently found using both variable- (e.g. regression) and person-centred (e.g. cluster analysis) analytical procedures. Ng (2006, 2012) argued that distance learners' mastery goals are an important learning orientation to adult learners who are concerned about learning, understanding and personal development in their studies. In addition, the nature of distance learning environment does not heighten a performance focus similar to those learning in conventional universities where comparison between students are frequent and assessment tasks are often evaluated using a norm-referenced basis. Longitudinal effects of mastery goals on distance learning were found in a new study that assessed distance learners' mastery and performance-approach goals at three different points of learning over an academic year (Ng, 2015). In this study, it was found that distance learners endorsing mastery approach goals in their goal profiles, including learners focusing solely on mastery goals and those endorsing simultaneously mastery and performance-approach goals in their profiles, have a more engaging pattern of learning over an academic year. This is characterised by the use of deep and regulatory strategies and high levels of self-efficacy and learning interests. Using a sample of distance learners studying in UKOU, Remedios and Richardson verified a 2×2 framework of achievement goals involving both approaching and avoidance configuration. They concluded that the achievement goal framework is applicable to distance learners. British distance learners in this study rated mastery-approach goals as the most important goal orientation, though it was mastery avoidance goals that predicted significantly learners' completion rate in a negative manner. Taken together, the emergent findings derived from this set of research studies consistently support the significant role of mastery goals for motivating distance learners to learn.

An important issue relating to the attempt to promote mastery goals for improving retention and sustaining participation in ODL is the context-dependence nature of mastery goals. Previous studies using campus-based student samples have shown that mastery goals as a personal orientation are rather stable. Ng (2015) also found that distance learners' mastery and performance-approach goals were stable over an academic year. These findings suggest that mastery goals are rather personal and beg the question of the extent to which mastery goals can be cultivated or promoted. Recent studies on classroom goal structures (e.g. O'Keefe et al., 2013; Schwinger & Stiensmeier-Pelster, 2011) have shown that these adaptive personal goals are related to classroom goal climate. In classrooms where mastery goals are emphasised as a desired orientation through structures and practices, students are more likely to adopt mastery goals for learning. While the causal direction has yet to be established, a firm conclusion is that achievement goals are not unmalleable (Urdan, 2010). Further evidence of malleability of achievement goals can be sought from experimental studies where students' goals are manipulated using carefully-designed

conditions and messages. In other words, achievement goals are both person- and context-dependent.

To sum up, there is a strong empirical foundation derived from studies spanning over three decades using samples drawn from both campus-based students and distance learners providing convergent evidence supporting the motivational effects of mastery goals on learning and achievement. The crucial question is how mastery goals can be promoted among distance learners and in what way a motivating learning environment can be developed based on mastery goals in an ODL setting. The discussion below re-deploys the TARGET model (Ames, 1992a, 1992b) as a useful heuristic framework for developing a motivating course environment supporting distance learners' mastery goals and providing them with successful learning experiences.

6.6 Developing a Motivating Environment in ODL for Sustaining Engagement and Improving Retention

A mastery-oriented environment promotes effort expenditure, deep learning, and persistence in response to challenges. Based on the work of Epstein (1989), Ames (1992a, 1992b) contends that there are important classroom structures that can be manipulated for creating a mastery-oriented environment for promoting mastery goals. Six key structures were identified: Design of learning task (T), supporting students' authority (A), recognising students' effort (R), promoting group work and collaboration (G), evaluating progress (E), and encouraging time and effort expenditure (T). Ames named this as the TARGET model. Subsequent studies (e.g. Church, Elliot & Gable, 2001; Greene, Miller, Crowson, Duke, & Akey, 2004; Tapola & Niemivirta, 2008) have indicated that students are more mastery-focused in classrooms where these structures are being promoted. In a recently published study, Lüftenegger, Van de Schoot, Schober, Finsterwald and Spiel (2014) validated the TARGET structures and provided longitudinal evidence supporting the positive effects of TARGET on students' mastery goals.

However, the TARGET framework for promoting mastery engagement has not been applied to distance learning. Given this research gap, a conceptual model is proposed to deploy a mastery-oriented TARGET system for supporting and sustaining distance learners' learning motivation, and in successfully doing so, the proposed model will have the potential to enhance retention in distance learning. An important consideration in the design of the conceptual model in this chapter is that distance learners' decision to quit a program of studies of their choice is not rooted in the lack of support in program selection and enrolment guidance, but more so, in their actual learning experiences in distance learning, engagement in the types of learning tasks they are required to complete and the levels of continuous support that learners are provided at the course level.

The conceptual model focuses specifically on creating a motivating environment supporting the completion of major assignments based on TARGET. This specific focus is chosen because there is research evidence indicating that unsuccessful completion of the first assignment is associated with distance learners' dropout decision (e.g. Simpson, 2013) and that early intervention is required for supporting distance learners (Gibbs et al., 2006). In fact, due to the lack of student-teacher interaction, assignments in ODL courses are an important channel for monitoring learning progress (Ng, 2009).

Assignments in ODL are often designed with a performance focus by which distance learners' are drawn towards scores and grades they receive for their assignments. Moreover, assignments in ODL are often completed by distance learners individually. Limited choices are available as to how and when these assignments should be completed. In addition, learners seldom receive timely feedback regarding their progress and results of their assignments. Often, an extensive time gap exists between assignment submission and return of feedback. Effort expenditure and improvement are often not acknowledged as important input or criterion of assessment. In short, the overarching purpose in ODL assignments is on performance and assessment, though criterion-referenced grading is used widely. To shift the assignment design from such a performance focus to one that promotes mastery and learning, a mastery-oriented assignment environment can be developed based on the TARGET framework. Table 6.1 summarises this mastery-oriented assignment environment.

6.6.1 Task Design

To promote mastery goals, the design of an assignment in ODL needs to focus distance learners on learning, understanding and improvement. Key considerations guiding assignment design include: Are learners provided with a variety of assignments that challenges them to put effort into interesting topics relevant to the course? Are the design of an assignment relates to learners' work, familial and other personal concerns? In other words, assignment design should be varied, interesting and meaningful in order to give a reason to focus distance learners on learning. To do this effectively, distance educators can link an assignment to important issues relevant to distance learners and their personal, familial and work contexts. In this way, distance learners will value the task and understand the relevance of their learning. In addition, it is important that the completion of an assignment should facilitate knowledge improvement and develop confidence. Setting an assignment with an appropriate level of challenge and providing sufficient support for progressing towards completion are important considerations. Additional design considerations for promoting a mastery orientation can include creative ways to encourage distance learners to study additional reference materials beyond the course requirements.

 Table 6.1
 TARGET framework applied to design of assignments in ODL courses

| TARGET | | Key design | |
|-------------|---|--|---|
| structures | Description | concepts | Key questions for effective practices |
| Task | Design of assignment | Variety, interest, learning, challenge, improvement | Are assignments designed to promote deep learning of course materials? Do the assignments appeal to distance learners' personal interest and interest in selected topics in the course? Are assignments related to learners' concerns derived from work, familial and other important personal contexts? |
| Authority | Support personal control | Choice, decision making, sense of control | Are options and choices included in the design of an assignment? Is structure or guidance provided for learners to regulate the process of completing an assignment? |
| Recognition | Use of incentives | Incentive and reward | Is learners' effort expenditure being recognised? In what ways is effort expenditure rewarded? Does the design encourage learners to spend more time and effort in the course? |
| Group | Effective use of collaboration | Grouping, interaction and collaboration | Does the assignment design involve components that learners are expected to complete individually and in collaboration with other learners? Does the assignment design encourage different forms of collaboration among learners? How can peer mentoring be used to build learners' confidence in completing an assignment? |
| Evaluation | Assess progress and promote improvement | Assessment of progress and provision of feedback | Is feedback on assignment provided in a timely fashion? Will learners be able to get feedback on draft assignments? Are learners provided with an option to improve their assignments based on feedback? |
| Time | Pace of learning | Workload, pace of learning, and time management | Can learners self-set a submission date? Is the option of extension available for learners? Has an expected time frame for key components of an assignment been specified? |

6.6.2 Authority

Supporting learner authority is important for facilitating a sense of personal control. In designing an assignment, distance educators should consider how learners can be involved in the decision making process and be supported to take responsibility for their learning. This can be achieved by providing learners with a choice in selecting assignments that interest them. To encourage effortful engagement and challenge deep learning, distance educators may consider adding a choice of completing a challenging option that attracts extra grade. Learner authority can also be developed by providing distance learners with guidance for monitoring their progress, setting achievable goals, scheduling the pace of completing major parts of an assignment, and knowing where and how to get assistance and additional resources to inform their work on an assignment.

6.6.3 Recognition

Assignments in ODL are graded on the basis of performance specified in the assessment rubrics which is usually provided to distance learners in an assignment file at the beginning of an academic year. Effort expenditure is often not part of the assessment and therefore may have been devalued. Recognising the time and effort distance learners spend on assignment will encourage deep learning and engagement on course materials. Many distance learners may believe that distance learning is easier than traditional campus based learning and therefore do not spend sufficient time on studying and completing assignments. It is important to develop an assignment design to promote effort and time expenditure.

6.6.4 Grouping

One of the main issues of learning through ODL is the lack of opportunities for collaboration and interaction. An assignment design that enables collaboration and interaction among distance learners will allay the concern of isolation. In addition, incorporating group work in an assignment will facilitate sharing of resources, knowledge construction and deep understanding. Grouping and interaction between group members can be arranged using various online technologies commonly used in most ODL courses. In addition, peer mentoring provided by successful learners in previous offerings of a course can assist distance learners in planning and managing assignment completion process, building confidence and seeking appropriate support.

6.6.5 Evaluation

The tutor's feedback on assignment is a major channel for distance learners to receive explicit evaluative comments on their work. In most ODL courses, the feedback is provided in form of a grade or mark assessing distance learners' performance in an assignment which arrives weeks or months after the submission deadline. This practice of feedback provision does not allow for improvement and deep engagement in an assignment. Formative feedback should be provided to encourage improvement and sustain motivation during the completion of an assignment. Opportunities for submitting drafts for comment should also be considered. Peer mentoring can include assistance such as reading assignment drafts and providing timely comments for improvement. Distance learners can also be encouraged to self-assess their own progress. A simple question asking distance learners about how much time and effort they have spent on an assignment will orient them to the importance of effort expenditure.

6.6.6 Time

Distance learners often need to deal with competing demands for their time from work, familial and other personal commitments. Effective management of time and support for individualised pace in completing an assignment are important consideration for promoting mastery. Distance learners may lose a sense of control if they have to meet a deadline for their assignments while attending to other time-demanding commitments and routines. To facilitate learning and to encourage improvement, distance learners should be allowed options such as self-nominating a deadline for assignment submission. In addition, the design of an assignment in ODL may include time management strategies to guide distance learners, such as providing an estimation of the expected time required for completing critical steps for an assignment. In this way, distance learners can fit the time requirements into their routines or find suitable time to complete different steps for an assignment.

Within a distance learning system, a variety of assignment designs has been used, including academic essays, short questions, multiple choice questions, online discussion, and tests and examinations. The TARGET model discussed above provides a heuristic framework for designing assignments to promote a mastery orientation to learning. However, there is a need for course coordinators to use this guiding framework flexibly and in creative ways in order to adapt it to different types of assignments and to overcome some constraints inherent to a particular form of assignment design. For example, a challenge for sustaining a mastery orientation will become more imminent when examinations and tests are used as the only form of assessment. Nevertheless, even in this extreme case, reflective questions should be raised as to how mastery goals can be promoted; for example, whether students will be able to engage in more interesting forms of examination tasks, whether they

will have options to select questions to answer in the exam, whether a test can be completed by a group, whether evaluation in an examination can involve marks for taking on challenging questions, and whether students can complete the examination at a time that fits their own schedule. These questions are challenging, but by engaging in this form of reflection, distance educators will begin an important process for the development of an engaging and motivating assessment environment.

6.7 Conclusion

Distance education facilitates access to higher education through its open entry policy in most open universities and therefore will contribute significantly to allay the concern of educational inequalities in the process of globalisation and provide a second chance for many adults to gain access to high education in the Asia-Pacific region and beyond. Nevertheless, this significant contribution and its impact on boosting educational access will be compromised if the problem of dropout persists. It is only when distance learners persist and harvest benefits from their distance learning programs that ODL as an alternative form of higher education can be claimed to have played a significant role in widening access to higher education. A high dropout rate compromises the impact of ODL on massification of higher education in the era of globalisation.

This chapter points out the need to build on distance learners' initial learning motivation and provide them with successful learning experiences to build their confidence and help them focus on learning. Doing well academically is the most effective way for preventing dropout (Wetzel, O'Toole, & Peterson, 1999). To this end, this chapter discusses a conceptual model for building a mastery-oriented assignment environment based on the TARGET framework. Obviously, some of the proposed practices have already been used quite extensively in ODL courses. For example, the option for requesting extension for an assignment is a common practice in nearly every ODL course. There is certainly a need to build on this and other established practices. Nevertheless, there are obvious areas that call for distance educators' urgent attention, one being the provision of timely feedback and another one using assignments for promoting interest and learning. The proposed model provides a unified framework based on an established theoretical perspective for distance educators to consider simultaneously six different significant structures for developing a motivating assignment environment. Using this framework, distance educators can systematically build on their effective practices and address areas that need improvement in the design of an assignment in order to motivate distance learners and provide them with successful learning experiences. The TARGET framework discussed above is comprehensive, theoretically driven and empirically grounded and should be able to provide a useful platform for testing out innovative ways for promoting learning and improving retention in distance learning. An important extension of this chapter is adapting the TARGET framework to online

offerings of distance courses and programs including MOOCs where the issue of retention is equally common (e.g. Gütl, Rizzardini, Chang, & Morales, 2014).

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Part III New Technological Practices for Change

Chapter 7

An Ecosystem Inspired Change Strategy to Rejuvenate Technical Support Service for Twenty-First Century Teacher Education

Nancy Law

Abstract Higher education has experienced a lot of changes over the past several decades, expedited by globalisation and escalating pressures on research performance. While the pressures and mechanisms of change at the institutional level, including the tenure and promotion system, are generally high on academic and top level administrative staff in universities, technical and support staff are not subjected to the same forces. Yet the latter plays an important role in supporting the process of change in higher education. This paper describes how a faculty of education applied an ecological model of change to rejuvenate its technical team progressively by building in self-organizing mechanisms to ensure that the success can be sustainable.

7.1 Introduction

It is not possible to discuss globalisation and changes in higher education in recent decades without taking account of the rapidly escalating changes in information and communication technologies (ICT) and the Internet. While the Internet was started in 1969, a major milestone was in fact the public launch of the World Wide Web in 1991 in terms of its popularization, when one could begin to access the Internet via browsers. The start of the new millennium saw the emergence of 'social' technologies that are designed to support user participation, contribution, social networking and co-construction of artefacts. These include technologies such as blogs, wikis, podcasting and social bookmarking, which have now been referred to broadly as 'Web 2.0' after the paper by Tim O'Reilly (2005). Applications like Youtube, Facebook and Twitter have major impact on all aspects of our social, economic and professional lives, and on teaching and learning. The new affordances brought about

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by Web 2.0 technologies can promote pedagogical explorations and innovations involving inquiry-based and exploratory learning, communication and collaboration, co-creation and 'productive' modes of learning (i.e. learning through the production of knowledge artefacts) (Conole & Alevizou, 2010). The 2013 NMC Horizon Report on Higher Education (Johnson et al., 2013) identifies six technologies as having the potential to enter into mainstream teaching and learning higher education within the next 5 years: massively open online courses (MOOCs) and tablet computing as having a near-term impact of 12 months; games, gamification and learning analytics in the near-term adoption horizon of 2–3 years; 3D printing and wearable technology in the far-term of 4–5 years.

Given the rapid technological changes described above, it is not surprising that there is much in the higher education literature on technological customizations/ developments that have been made to support learning and/or teaching, pedagogical designs that can leverage the potential of these new learning technologies, learning outcomes achieved by learners, as well as challenges posed to the teachers and the organisation in the process of technology integration. Clearly, changes in pedagogical practice necessitate technological and pedagogical support. Hence there are also many published studies on professional development to support pedagogical adoption of technology in higher education. However, literature on staff development for technological support to meet the needs of the changing scenarios and contexts in higher education is almost non-existent, even though this is clearly one of the areas of concern. This is probably because the management of technology support is generally not under the jurisdiction of professoriate faculty, who understandably already have a 'full plate' and should not be burdened with further administrative chores. Drawing on the author's experience of leading institutional development over 3 years as associate dean of a faculty of education in a prominent Asian University, this paper argues that staffing and professional development of the technical team needs to be an integral part of any higher education institutional advancement strategy. Unless there are appropriate structures and interactions in place to ensure that the technical support team's understanding of institutional priorities, competence profiles, work practices and organisation can be continuously aligned with the institution's strategic development through self-organising mechanisms, the ability of an institution to achieve its strategic goals would be seriously hampered.

This paper begins by describing in the next section the institutional context and the strategic institutional development that the author was tasked to lead when she took up her associate deanship. This is followed by a presentation of the tension between the profile and role of the technical team at the time and technical support tasks that the faculty needed to continue its trajectory of development as a leading faculty of education. This is followed by a description of the ecological model of sustainable change that guided the rejuvenation plan (often referred to as restructuring in the organisational change literature) for the technical team, followed by a description of the key phases of change and the respective design principles that guided each phase of the change process. The paper ends with a reflection on the change process and its achievements, and implications for leaders and leadership in higher education institutions in an increasingly connected world.

7.2 The Institutional Change Context

In Chap. 1 of this volume, Ng, Nakano, and Fox (2016) highlighted the global changes in universities in recent decades brought about by massification, marketization and inter-institutional competition in higher education as well as increased interconnectedness in all aspects of human activities. The University of Hong Kong is a microcosm that reflects through its recent institutional history the same underpinning pressures as driving forces for change. It was established in 1911 as the first university in Hong Kong. Teacher Education was among the first programs offered by the University, marked by the setting up of the department of education in the Arts Faculty in 1916. With the launch of the 9-year compulsory education in Hong Kong in 1976, the need for teacher education was greatly expanded. The Faculty of Education was formally established in 1984 to provide a fully-fledged organisational and governance structure with the capacity to lead the academic and professional developments necessitated by the demands of the community on higher quality education in the basic education sector.

Over the ensuing 30 years since its establishment, there have been tremendous changes in the profile of the faculty in terms of the academic programs offered, faculty members, student body, research productivity as well as reputation, as summarized in Table 7.1.

Similar to the description of changes in teacher education in Japanese universities (Yamazumi, 2016, Chap. 18 in this volume), the above changes took place within the broader context of the globalising Hong Kong higher education scene, and the need to improve and broaden teacher education programs to meet the demands on schools to nurture abilities needed for the twenty-first century. All of the major universities in Hong Kong are publicly funded through the University Grants Committee (UGC). Since 1990s, the UGC undertook restructuring and

| 1984 | | 2014 |
|--|---------------|--|
| Teaching | | |
| Mostly pre-service postgrad teacher training | → | Full-range of academic & professional programs, including seven undergraduate professional programs |
| Small Master in Education program | → | Greatly expanded MEd intake, four additional taught Master programs: MSc(Audiology), MSc(ITE), MSc(LIM), MA(TESOL) |
| Few research postgraduate students | → | Two doctoral programs, >200 enrolled research higher degree students |
| Research | | |
| Little research funding | | ~USD 5 M/year |
| No post-doctoral fellow | | ~18 post-doctoral fellows |
| International reputation | | |
| Relatively unknown | \rightarrow | Ranked 8th and 16th in 2013 and 2014 respectively by QS rankings |

Table 7.1 Key changes in the faculty over the 30 years since its establishment

introduced a series of quality assurance mechanisms for the monitoring of the UGC-funded institutions, following the global trends in higher education (Cheng, 2002). The mechanisms introduced in the 1990s include Research Assessment Exercise (RAE, in 1993), Teaching and Learning Quality Process Review (TLQPR, in 1996–1997), and Management Reviews (in 1998). These changes in quality assurance were accompanied by changes in the funding method, moving from a historically-based input measures method (i.e. based on student numbers, staff-student ratios, senior-junior staff ratios, etc.) to an increasingly performance-based model (UGC, 1995).

These globalising changes brought major changes to the personnel system for academic staff, gradually changing from the British model of academic ranks to the American professoriate tenure and promotion system. These changes put the academic (professoriate) staff into direct 'competition' with their international peers through international recruitment and the institution of mandatory external reviews by globally recognised experts in the relevant fields as a major input into all tenure and promotion decisions.

On the other hand, the staffing structure and appraisal/promotion system for non-academic staff have not undergone similarly drastic changes. The changes in institutional reporting, compliance and accountability mechanisms set up by the university in response to the UGC quality assurance mechanisms have also forced a much tighter link between the university central administration and faculty administrative staff. However, the technical support staff has been relatively 'protected' from these pressures over the past two decades, culminating in the tensions and challenges that form the focus of this paper.

7.3 Mismatch of Physical, Digital and Human Infrastructure with Technological and Globalising Changes

One of the major changes in Hong Kong to align with the global education trends was the change in the structure of school education, reducing secondary schooling from 7 to 6 years, and for universities to change their undergraduate academic structure from 3 years to 4 years from the September 2012 intake. Hence, even without the pressures to increase the percentage of secondary school graduates admitted to UGC-funded undergraduate places, all universities have to cater for a sudden increase of about 33 % in their undergraduate student population. This understandably creates huge pressures on all fronts, including physical accommodation and facilities. For the University of Hong Kong, similar to Waseda University (see Nakano, 2016, Chap. 10 in this volume), these pressures were perceived positively as an opportunity to improve the campus network infrastructure, services and revamping of the University-wide Learning Management System. In addition, the University also took advantage of the expansion of the physical campus to configure it into dynamic learning and teaching spaces that can be flexibly modified to support and encourage collaborative and interactive learning, and to cater for different individual styles of learning and twenty-first century learning needs (HKU, 2008).

In addition to expanding and improving the physical learning spaces, the University also launched a review of the eLearning strategy and digital learning environment as well as the establishment of the eLearning Pedagogical Support Unit² to ensure that students and teachers are appropriately supported to facilitate 24/7 learning. Even though the centrally provided campus-wide developments set up an excellent baseline across the University, pedagogical innovations and improvements in research and administration support still depend on the infrastructure and human resource developments at the faculty level in order to function 'on the ground'.

In the Faculty of Education, strategic development plans have been formulated in alignment with the University vision and mission. The physical and information infrastructure were found to be no longer fit for purpose, and the author was appointed as associate dean (development) to take on the necessary strategic renewal of these in 2010. However, to concretize and implement these strategic renewals the support of a team of support staff with the necessary capacities to undertake those tasks is imperative. In 2010, a ten-member technical team in the faculty would have been more than adequate if the Faculty had still been mainly involved with providing pre-service postgraduate teacher education. Looking at Table 7.2, the services listed on the left hand column would then suffice. The team did not have any finer organisational structure, and everyone was expected to play the same role in providing classroom service support, and appraised only by the team manager.

New technical support staffs were recruited. These new members brought specific IT skills such as network management and software development to meet the new demands, and they were 'integrated' into the same team structure to serve similar job descriptions, i.e. providing baseline general technical services, while the additional technical duties were treated as individual variations. One important constraint to change management with regard to technical services was that most of the team members had long-term superannuable contracts with the University since most had served the faculty for more than a decade, and some dating from the days before the formal establishment of the Faculty in 1984, while the new hires were on contract. So the challenge becomes: how can we rejuvenate and build team capacity without changing the people? In Chap. 18 of this volume, Yamazumi (2016) emphasizes the inadequacy of individual training or apprenticeship models of professional development for teachers, and argues for the need to shift from 'closed autonomy' to 'networked hybridity' and for learning that is inter-professional and boundary-crossing. What about the learning of technical support staff in a Faculty of Education? Does it also need a similar shift in professional development paradigm?

7.4 An Ecosystem Framework Guiding the Change Management

For more than a decade, education researchers have pointed to the complex nature of educational change and sought insight from ecological studies (Davis & Sumara, 2008; Hargreaves, 2003).

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Table 7.2 The technical team's actual & needed competence and management structure (2010)

| Actual competence & structure | Needed competence and structure |
|--|---|
| Audio-visual | Learning technology |
| Taking photos, making slides | Learning management system operations |
| | Digital courseware development |
| Conventional graphics, OHP slides | Classroom system control, HW/SW for teaching purposes |
| | Basic trouble-shooting of equipment |
| Print publications | Multimodal, multimedia publications |
| Posters | Website design, development and maintenance |
| | Webpage design and Web 2.0 enhancements |
| Page making | Multimedia production |
| | 'Camera-ready' digital proofs for printing/reproduction |
| Technical services | Technical development and services |
| Core service: School level | Core service: Faculty information system infrastructure |
| science experiments in | design, development, management and maintenance; |
| laboratories | network security |
| User support and maintenance | Design, development & maintenance of Faculty portal & |
| of AV equipment | Faculty information system |
| Basic computer operations and trouble-shooting | Information system and database design, database |
| | programming and maintenance for dynamic information update of faculty websites, etc. |
| Team management structure | Team development and accountability structure |
| | |
| Led by team manager, who is sole appraiser of every team | Accountability should be to 'clients', i.e. academic & admin staff, as appropriate for role of a service team |
| member | definitional, as appropriate for role of a service team |
| No specialization, everyone | Teams with specialization and expertise to serve diverse |
| plays 'equitable' service role | functions and complex tasks |
| | |

Ecosystems are characterised by the presence of many different feedback loops, interactions and interdependences across different parts and levels of the system such that there is no simple causal relationship. Changes in one part of the system, such as the piloting of some pedagogical innovation, would not be able to sustain and scale unless the necessary infrastructure (physical and digital) and technical support are present. On the other hand, it is the emergence of new curricula and pedagogical innovations that creates the need for new infrastructure and support. Hence an ecological model of change highlights the dynamic and interactive aspects of the process and the need for mechanisms to be put in place to ensure that self-organising changes take place so that the conditions for change and the changing states themselves form self-sustaining feedback loops.

Of the many conditions necessary for innovation and change, physical and digital infrastructures are the easiest to change as the main limiting factor there is the resources available. On the other hand, it is the people's understanding and skill levels that pose the greatest challenge. Case studies of ICT-enabled pedagogical innovations found that an important condition for scalability is the presence of supportive *architectures for learning* (i.e., structure and mechanism for communication, collaboration and mutual influence) (Law, Kampylis, & Punie, 2013;

Law, Yuen, & Fox, 2011; Penuel, Fishman, Cheng, & Sabelli, 2011). Further, learning for innovation and change needs to go beyond changes in beliefs and understanding of individuals to have impact at the institutional level. Cultural norms, routines and established practices often pose obstructions to the implementation of innovations and reforms (Stein & Coburn, 2008).

In addressing the mismatch in technical support team competence and structure, the priority is on sustainability and scalability. The inadequate capacity of the team and its members is not perceived as inadequacies of the staff concerned, but as a learning challenge for the institution. Long-term sustainable impact and deep changes in the organisational culture, mindset and work practices of individuals and teams are considered more important than short-term visible outcomes. The focal strategy was thus on building architectures for learning, that is, to facilitate the metamorphosis of the team into a self-organising learning organisation through the building up of coevolutionary structures and mechanisms in the everyday work, monitoring and appraisal practices. Another feature of the change strategy is the integration of workplace problem solving with just-in-time learning for institutional advancement to ensure that the technical support capacity co-evolves with the improvements and advances in the physical and digital infrastructure available in the faculty.

7.5 Basic Principles Guiding Change at the Operation Level

Based on this theoretical framework, a set of five basic principles was established to guide the change process and these were *communicated to the entire technical sup- port team at the start* so that everyone would understand the rationale and goals of the change as well as their expected role within it:

7.5.1 A Learning & Productivity Challenge

The challenge that the technical team faces is similar to the challenges the faculty and higher education at large is facing, i.e. learning and re-skilling to meet the productivity challenge when the services needed have changed drastically over time. Everyone is expected to make their best efforts to learn new skills and to improve.

7.5.2 Team Restructuring as Capacity Building

There needs to be a change in the non-discriminant assignment of classroom service 'chores' to everyone. The purpose of the restructuring is to build the necessary capacity for specialised service, and not a cover-up for staff redundancy or replacement. That, of course, does not preclude the normal human resource appraisal and monitoring processes.

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7.5.3 A Strong Service Mentality

The core mission of the technical team is to provide the necessary service to academic and administrative staff to achieve the overall goals and objectives of the Faculty. Hence the team should consult the respective 'clients' to decide on the kinds of services to be provided and the respective levels of expected performance.

7.5.4 Team Accountability and Monitoring as Critical Feedback Mechanisms

Academic and administrative staff members of the Faculty are the team's clients, who should be the ultimate evaluators of the team's performance, rather than the team manager.

7.5.5 Work Better, Smarter

To handle the increasingly complex demands on technical services, the team had to schedule long service hours, resulting in much overtime work, unhappiness and conflicts among the team members. One important goal of the restructuring is to conduct in-depth investigations of the services needed and how to fundamentally improve the work process so that service will improve and is accompanied by improved working conditions. Working better does not necessarily mean working harder, if one can work smarter.

7.6 The Change Implementation Process

The technical service restructuring contains several phases, which are described in this section. The change management process was launched by meeting with the whole technical team to communicate and discuss the five basic operational principles as described above. During the meeting, the results of phase 1 in the change process were communicated, and the team was invited to contribute to phase 2 of the process.

7.6.1 Phase 1—Establishing Targets and Target State in Alignment with Faculty Vision

The author started by understanding the functions of the different information systems that have already been developed by the University, such as personnel, finance, inventory, student admission, etc., how these systems have been adopted by relevant

colleagues and if there were issues that needed resolving. The investigation revealed that while the use of these systems was mandatory, the efficacy of their implementation was various. Some of the systems were developed directly to serve the functions under the Registry and the Faculty Secretary took responsibility to ensure their smooth implementation. Here, it is important to note that within our University organisational structure, Faculty Secretaries are Registry staff deployed by the Registrar to the various Faculties. Hence, the understanding and implementation of such systems was relatively well understood by the relevant administrative staff, and the strict adherence was enforced. On the other hand, implementation of systems involving functions that were considered 'technical' was left to the technical team manager. It was found that in these cases, legacy practices and outdated Faculty-based systems (developed long before the University-wide system was available) prevailed. New university-wide systems, e.g. the campus-wide online inventory system, posed additional updating demands and required changed work practices, which the technical team members resisted. They continued to use the old Faculty system and only grudgingly transferred data to the campus-wide system 'when time permitted'.

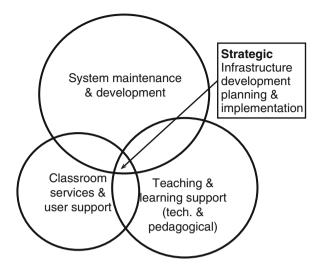
There was also no information and knowledge management strategy or plan in the Faculty. The many different requests—such as for information updates on research and knowledge exchange outputs from the University administration for accountability purposes, and those for feeding the Faculty website or personal webpages—then became increasing burdens. It was also noticed that a lot of clerical staff time was taken up by the printing/copying and distribution of various Faculty board and committee documents, resulting also in cluttered offices and heavy demands on secured disposal of confidential documents. We need to build a proper Faculty portal with appropriate levels of user access and decision process support to achieve a paperless office.

Another important area of technical services needed was eLearning support. With the diversity of academic programs offered by the Faculty, and the changing contexts in schools, the most needed technical support for teaching and learning was no longer audio-visual production or traditional kinds of education technology support. Instead, helping academic staff with different levels of competence and understanding to make use of the Learning Management System for different pedagogical functions became a priority need. The traditional classroom service of taking videos for microteaching and providing laboratory support for science experiments has become a relatively minor demand. Figure 7.1 is a diagrammatic representation of the technical service needs of the Faculty for strategic development purposes.

7.6.2 Phase 2—Gathering Data for Evidence-Based Leadership and Management

At the first team meeting and after reviewing the findings from phase 1, each team member and the team manager were asked to participate in three activities to provide a solid information base for understanding where the team was in terms of 146 N. Law

Fig. 7.1 Diagrammatic representation of the technical service needs of the Faculty



services provision and expertise: (1) Each member had to fill out a job audit over two consecutive weeks, recording on a spreadsheet the task that was being worked on in half hour intervals; (2) Each member completed a self-reporting survey on roles and responsibilities held in the team, areas of competence, and professional development desired; and (3) Each member had an individual interview with the author after the first two activities were completed. The interview asked each team member to describe their views on the performance of the team, perceived problems and how the team's services should be improved.

Analysing the data collected from these three activities, it became very clear that most of the team's work had been focused on the provision of classroom services. Each classroom was equipped with basic equipment including a desktop computer, a LCD projector, peripheries such as a document visualizer, CD player and a connector for an external laptop. Unfortunately, the teacher's console that incorporated the control system for this equipment was so counter-intuitive in its operations that most teachers were not confident to use the system by themselves. As a consequence, the manager had to assign staff to be on duty whenever classes were scheduled to ensure that the systems could be switched on and function properly. There was basically no system development work and only minimal e-Learning technical support. No one was actually engaging in strategic infrastructure development planning or implementation. Figure 7.2 provides a diagrammatic representation of the actual state of affairs in terms of technical team functions at the time.

The interview revealed rather different sentiments among the technical staff. Nearly all of them were unhappy with taking rostered turns to provide standby classroom service support during weekdays from 8:15 a.m. to 9:30 p.m. This was particularly evident among the more technically competent colleagues who were

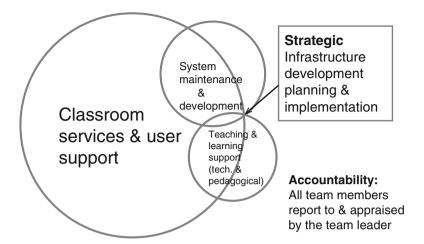


Fig. 7.2 Diagrammatic representation of the actual state of technical service provisions

assigned additional duties related to system maintenance, as well as network or database related functions. Some pointed out that the Faculty management information system was seriously out of date, and some even indicated that they had a low self-image because of the low level of service that the team was able to provide. In addition, it was evident that many of them were still very hesitant and worried about the prospect of a team review and restructuring.

7.6.3 Phase 3—Establishing Common Understanding and New Accountability Structure

Drawing on the basic principle that change is a learning process, and that we need to institute the change as a self-organising, sustainable process, we need to design an 'architecture for learning' (Law et al., 2011; Stein & Coburn, 2008). Basically, this means constructing organisational structures and interaction mechanisms that would scaffold effective feedback mechanisms and peer learning across different groups of stakeholders. Usually, the accountability and team structures are important leverage points for building architectures for learning in the educational change literature. In the present case of the technical team restructuring, the established accountability structure of everyone reporting to the team manager was clearly unconducive to organisational learning or establishing communities of practice within the team. Hence, the first structure change was the establishment of functional teams and the creation of an accountability structure for each of the teams.

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First, in alignment with the finding that there are three main tasks that are performed by the technical team, the ten members of technical staff were grouped into three teams:

- The *System Team*, responsible for all system development and maintenance—as this team serves the most technical and strategic functions, the three most technically competent members of the team were assigned to this team.
- The Services and User Support team, responsible for all maintenance and user support services in all staff offices and classrooms—while all these services require some level of IT technical skills, they generally involve routine operations and can be adequately conducted by staff members with some basic level of technical skills if properly trained and backed up by the system team.
- The Teaching and Learning Support Team—this team is mainly responsible for helping teachers to use the Learning Management System, as well as setting up science laboratories and assist with education technology. Hence the least IT literate staff members are assigned to this team, and given training on how to use the Learning Management System to set up courses and learning activities in course rooms.

Integral to setting up the above team structure, the accountability structure for each team was also established to ensure that each team would have an opportunity to understand the support needs of their most typical client and that their performance appraisal would depend on how happy this client is with their service. It was decided that each team would be guided and monitored by two 'client representatives'. For the Teaching and Learning Support Team, their client representatives were the Assistant Dean (Learning Environment) and a teacher from the language education area who had been actively integrating e-Learning activities into her courses in the form of blended learning. The two client representatives for the Services and User Support Team had very contrasting profiles; an IT expert teaching specialised information system related courses, and a humanities colleague who had some rather frustrating experiences earlier when she needed help from the technical team. For the system team, their client representatives were the Associate Dean (Development) and a senior computer officer from another section of the university who is very knowledgeable about system and network functions and development. Figure 7.3 is a diagrammatic overview of the three systems and their respective client representatives.

This new accountability structure encouraged openness and distributed leadership in the professional development and personnel decisions involving the technical support team. Further, the concept of the client representative is not the same as a manager, but similar to someone who represents the interests of particular groups of colleagues in the Faculty. This makes that everyone in the Faculty has a say in the kind of technical support needed, and provides an organisational structure and mechanism for interaction among technical team members and faculty members on different support and development services.

In addition to day-to-day operations, there needed to be a structure to take overall responsibility for strategic planning, development and monitoring of the overall

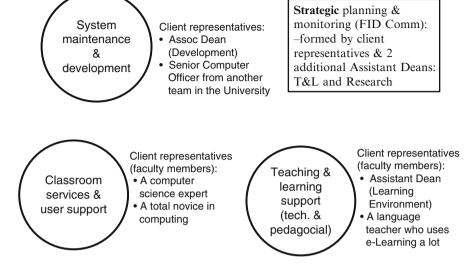


Fig. 7.3 Diagrammatic overview of the three teams and their respective client representatives

physical and digital infrastructure of the Faculty. An eight-member Faculty Infrastructure Development Committee was set up for this purpose, comprising all six client representatives, the Assistant Dean (Learning Environment) and Assistant Dean (Research), chaired by the Associate Dean (Development).

7.6.4 Phase 4—Setting Short Term, Achievable, High Impact Targets and Establishing Knowledge Management Structure

With the team and accountability structures clearly laid out, the technical support team was ready to be put to the test—they needed to be progressively tasked to revamp old services and develop new ones to be able to develop new capacities. After consultation with different stakeholder groups, the System Team put forward a set of priority system development targets for the ensuing 12 months:

- Develop clear documentation for all servers and services, access information, backup schedule etc.;
- Revamp the existing classroom control system for improved, more intuitive user interface and user-friendly operations;
- Develop equipment loan system with email reminder and reporting tasks;
- Align inventory practices with university guidelines, move all data and operations on the old legacy inventory system to central University inventory system.

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In order for the System Team to focus their energy on the system development plan, it was agreed that they should be relieved from non-system-related duties as much as possible. The team was also given contacts to external experts who would be able to advise them on the technical aspects of these development plans, which extends the architecture for learning for this team beyond the faculty.

The other two teams were also tasked to set clear targets for user support and e-Learning support in consultation with their client representatives. Each member was also encouraged to identify his own training needs, and a professional development budget was set aside to facilitate and support their learning of new skills.

Before the restructuring, besides taking roster shifts on the classroom services roster, each member of the technical team had to take care of some specific tasks such as updating of inventory, and preparing practical work in the science laboratory. For these specific tasks, there was often only one person assigned to each task, and there was no set procedure or information infrastructure in place to record critical information or work process that is shared with other team members. This lack of structures, guidelines and processes for documentation and knowledge management was completely pervasive through all domains of technical service, including the passwords and details of services hosted on specific servers, causing some serious crises at one point before the restructuring plans were even developed. Hence, when the teams were developing their implementation plans for their newly set performance targets, they were also asked to implement the following knowledge management and peer learning strategies:

- Before the restructuring, the management structure was a one to many direct
 monitoring and accountability link between the manager and each of the technical staff. This means that except for the manager, no one knows what another
 colleague is exactly doing—even the password for accessing mission critical
 servers were only known to the specific colleague concerned with the service.
 After the establishment of the three teams, each team was encouraged to
 strengthen their within team interactions and peer support to increase their capacity to learn and perform, so as to achieve the targeted performance goals;
- In each of the three teams, the most knowledgeable member was assigned team leader role to guide and self-monitor the progress of each team;
- Members within each team would take responsibility to work with the team leader to develop an appropriate means for the documentation of the special technical tasks they took responsibility for. Each member should also have full knowledge of all team tasks within their own teams, and able to substitute for each other for these tasks if necessary. At the same time there should be clear accountability for the work that each person takes responsibility for.

7.6.5 Phase 5—Acknowledging and Rewarding Success

Within a year of the team restructuring, the set targets were progressively completed. Of particular importance to the entire team were the second and third items on the task list of the system team in Phase 4 as these help to reduce unnecessary

classroom support services (which cause frustration to teaching staff), and reduce the chores and ineffective tracking of items on the inventory. Once these tasks were completed, the author met with the entire team, not only to congratulate them on their accomplishments, but also to raise with them the possibility of reducing the length of their roster hours. The system team was asked to set up a reporting system for user support requests, detailing the time, the nature of the problem, the name of the person making the request, and how and when the problem was resolved. The goal of this was to identify the systematic weakness areas that need improvement. The best support team is one that has no need for provision of ad hoc support services, as they have focused on developing the appropriate infrastructure and robust services. Further, the team was informed that if statistics show that teachers do not need classroom service support after 6:30 p.m., then the Faculty could consider reducing the on-duty roster hours for the technical team members.

After a month of data collection, it was found that there were only two instances of classroom support requests after 6:30 p.m., and both were resolved before 7:00 p.m. Faculty members were then informed by the Associate Dean (Development) that there will be a trial period of 4 weeks to end the provision of classroom service support at 7:00 p.m. instead of 9:30 p.m. This arrangement was formalized at the end of the trial period when no objection was received. This change led to a significant increase in work pleasure and team morale within the technical support team, not only because of the improvement in working hours, but, more importantly, because of the recognition of the quality of their work by the Faculty at large.

7.6.6 Phase 6—Renewing Team and Renewing Ambitious Targets

With the revamped and functioning team structure, strengthened expertise, and demonstrated enhanced capacity through successes in development projects and improved service delivery, the team rejuvenation has successfully reached a state that was necessary to take on the infrastructure development work necessary to support the realization of the Faculty's strategic vison and mission. The major developments include:

- Design, plan and re-develop the physical spaces allocated to the Faculty as part
 of the campus expansion plan of the University for teaching, learning as well as
 general accommodation for all faculty, academic, administrative and support
 staff;
- Support e-Learning development in the Faculty in alignment with the University curriculum reform goals;
- Development of a Faculty portal that incorporates state-of-the-art knowledge management principles for paperless meetings (as part of the Faculty's commitment to environmentally responsible practice), enhanced productivity/performance in administration, research and knowledge exchange.

In order to signify that the technical team's focus was no longer on low-level support and marking the transition into a new era of service, the team was also renamed the Faculty Infrastructure Development Team.

7.7 Discussion and Conclusions

What is the relevance of this "rejuvenation" story to higher education in general? After all, the situation of the technical team is specific to the particular faculty context. This story may be relevant to someone working in an established university with personnel issues of a legacy nature. Is there any relevance to a relatively young institution? What if the institution is offering primarily distance learning courses? Furthermore, administration and monitoring of technical support staff is rarely the work of academics, so is this paper only written for a small group of people in higher education administration who has to take care of this kind of "mundane" but perhaps necessary chores?

The reformation task in general and the restructuring of the technical team in particular were stimulated by my belief that monitoring and management of technical staff are not purely routine administrative tasks, but provide opportunities for changes to team structure, work practices and routines that are integral to the imperative strategic institutional advancement in teaching and research that we want to achieve. More importantly, the learning of professional support staff needs to take place within a 'networked hybridity' as argued by Yamazumi (2016, Chap. 18 in this volume) for the case of teacher learning, which requires the design of an appropriate architecture for learning for it to be accomplished. Reflecting on my 3 years as Associate Dean (Development), I have three key observations that I think are valuable to share with anyone who is concerned with strategic institutional advancement and academic leadership.

7.7.1 Technical Infrastructure and Support as an Integral Part of the Globalising Educational Ecosystem

At the start of this chapter, I described the institutional context of our Faculty and the mismatches in physical, digital and human infrastructure faced in realizing the vision, mission and strategic development plans. How did this situation come about? Was it simply a case of negligence in monitoring and management during some periods of faculty administration? I hope the description of the context and the challenges have demonstrated that the fundamental nature of the problem is in the absence of leadership awareness and strategic mechanisms that would ensure that the technical support team and services co-evolve with the changing priorities and activities of the Faculty. They could do so by addressing the technological and

globalising changes the technical support team and services face. Infrastructure, both physical and technological, cannot improve appropriately and effectively without appropriate changes and development in human resource infrastructure. While it may be possible to renew the former overnight, changing the technical support service cannot be likewise achieved. The challenge is not only that staffing challenges may involve complex terms of contract and labour legislations; what needs to be changed is not simply the skill set, but much more importantly the mindset of the staff and thereby the organisational culture. They need to be willing and confident to anticipate change and to initiate solutions in alignment with the changing nature of the institution, and in order to do so, they need to be competent lifelong learners as well.

For academics, especially those in leadership positions, an important leadership concern is the question of how to ensure that the technical support team can continually co-evolve with the changing faculty. The only exception is when there is no need for changes in academic programs, pedagogy or research activities, and therefore no need for changes in infrastructure and support. However,, in an increasingly globalising world this is difficult to imagine.. Those faculty members not holding a leadership role may be frustrated by the inadequate or inappropriate technical support for their teaching or research needs. This gap should be understood and addressed not as the problem of individual non-performing staff members, but as a concern of the institutional advancement strategic plan, as this is a systemic issue. Technical infrastructure and support service are integral parts of the institutional ecosystem, nested within the wider local and international educational ecosystem that the institution is situated. Hopefully, the ecosystem framework guiding the change management described in this chapter will prove to be useful to those in positions of academic leadership.

7.7.2 Architectures for Learning—Structures and Mechanisms to Connect Communities of Practice for Capacity Building and Strategic Alignment

The successful rejuvenation of the technical support team includes not only improvements in the technical expertise of the team members, or in the new team and accountability structure. More importantly, the team has evolved from a passive low level, frontline technical support team to an 'infrastructure development team', focusing on the identification and development of critical infrastructure and services to enable the faculty to perform effectively and efficiently in achieving its new goals. In other words, the enhanced technical team capacity has contributed significantly to enhancing the strategic performance capacity of the faculty in all areas of activity.

Why has this process been successful? The primary attribution of success should be to the model of change adopted to guide the entire process—building architectures

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| Phase | Development focus |
|-------|---|
| 1 | Establishing targets and Target State in alignment with Faculty vision |
| 2 | Gathering data for evidence-based leadership and management |
| 3 | Establishing common understanding and new accountability structures |
| 4 | Setting short term, achievable, high impact targets and knowledge management structures |
| 5 | Acknowledging and rewarding success |
| 6 | Renewing team and renewing ambitious targets |

Table 7.3 The six phases in the management of the technical team rejuvenation

for learning. The whole change process was not targeted as an issue of individual performance, but that of a learning challenge. The six phases of change summarized in Table 7.3 were constructed as a learning design to foster self-directed and self-organising collaborative learning.

There are two important features of this learning design:

- It models a problem solving process, from establishing a goal, to finding relevant information, developing a common understanding of the problem, breaking down into sub-goals and component tasks for implementation, review of outcomes and establishment of new targets;
- 2. The design builds architectures for learning that make explicit and strengthen important interdependencies and feedback between team members and relevant stakeholders of the respective services or functions. Architecture here refers to both the *organisational structure* (and in this case, it is the team structure and the monitoring and accountability structure) and the interaction mechanisms (this refers to the team meetings, reporting mechanisms, and the staff appraisal system). The appointment of *client representatives* as key members responsible for appraisal makes explicit the key dependencies between the service providers and the faculty functions they serve, as well as providing an effective channel for feedback and communication to expedite necessary improvements.

7.7.3 Change Management Is Not a One-Off Process. Sustainable Advancement Requires Sustained and Connected Learning Leadership

Now that the technical team has been successfully 'rejuvenated', can we now declare the mission accomplished? Unfortunately not, unless the world stops changing and the team's activities would remain fit for purpose in the years to come. As there is no indication that the increasing pace of globalisation and technology development is going to stop or even slow down, the leadership needs to be vigilant in strengthening and extending the architecture for learning that has been established; the technical team will risk losing its momentum and may falter in its development direction to become an out-dated and non-performing team again.

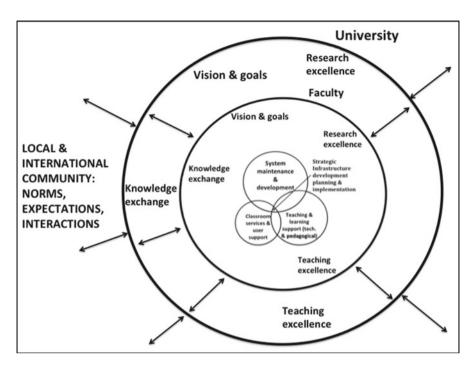


Fig. 7.4 A diagrammatic representation of the technical team situated within the institutional, local and global higher education context

Figure 7.4 is a diagrammatic representation of how the technical team is situated within the broader higher education ecosystem. The current team composition, structure, functional roles and accountability structures is a product of the management of change process, reflecting its history and the institutional demands from the Faculty to achieve teaching, research and knowledge exchange excellence. On the other hand, the Faculty's vision and goals are not cast in stone, but are strongly influenced by external factors and pressures. The most direct influence comes from the University's strategic priorities and performance expectations, which in turn are affected by the policies and strategies of the University Grants Council in Hong Kong as well as by the trends in higher education development and administration. To ensure that the Faculty remains dynamic and productive in contributing to teaching, research and knowledge exchange as a world class faculty of education, it also has to design its overall architecture for learning in these various areas of core activity.

As becomes evident from Fig. 7.4, a major challenge to academic leadership in higher education is dealing with rapid changes in an increasingly globalising world and the pressures that these challenges cause. A helpful way to conceptualise such pressures is to view them as multilevel, multifaceted learning challenges. Effective learning leadership within a dynamic ecosystem should focus on building architectures for learning that connect people and teams across functional facets and levels,

and ensuring that the changes as learning outcomes are aligned with the overall institutional vision, mission and goals. The monitoring and administration of a faculty infrastructure development team should be built into the overall strategic development and administration plan of the faculty leadership.

Notes

- 1. History of the Internet from http://www.historyofthings.com/history-of-the-internet
- 2. http://epsu.cetl.hku.hk/tag/elearning-strategy/

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Chapter 8 MOOC Impact Beyond Innovation

Robert Fox

Abstract This chapter focuses on the role MOOCs can play in creating new opportunities for new practices, processes and ways of working and in building capability and capacity within the higher education sector. The chapter examines new arrangements in developing curricula and governance in offering MOOCs and related technology solutions in sustainable ways. The chapter explores the challenges these changes can make to the way institutions see themselves and their role as higher education providers, and the roles of the stakeholders within the institutions. In this sense, MOOCs are seen as a catalyst to unbundle higher education in a new way. The MOOCs themselves are not seen as necessarily innovative but they provide the opportunity for new thinking and working and in offering courses in non-traditional ways, open to all, anywhere, with potential links to the institution's conventional award bearing programs.

8.1 Introduction

MOOCs or Massively Open Online Courses are a much discussed and hyped phenomena with debates concerning their worthiness and impact across the full gamut for and against their value. This debate about the role and merit of MOOCs has become a central point of discussion with many Asia-Pacific universities and this was exemplified in the 2014 Asian Association of Open Universities (AAOU) conference in Hong Kong (http://aaou2014.ouhk.edu.hk/). Discussion on MOOCs in this conference was initiated through keynote and parallel presentations and continued in informal debates throughout the conference. Though the debates initially focussed on MOOC roles and impact for distance and open learning programs and courses in the Asia-Pacific region, the discussions concluded that MOOC impact on conventional on-campus teaching and learning and on using MOOCs to supplement and take the place of course components was on the rise (Li, 2014, November 17).

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This point is further discussed in Chap. 10 of this volume, where Nakano outlines the development and use of new technologies, including MOOC applications to enable Waseda University in Japan to achieve strategic advancements through new educational delivery mechanisms. Discussion in the AAOU conference, 2014, in particular focussed on ways that developed MOOCs could be repurposed for a new hybrid mix of distance and on-campus teaching, increasing the resources and methods of delivery for teachers; trialling and prototyping innovative ways of fee-forservice courses, methods of assessments and for the delivery of income generating professional development courses; and exploring the MOOC resources in blended on-campus learning; and sharing good practices in developing and delivering courses using effective applications of the new technologies in Asia-Pacific universities. What was clearly demonstrated at the conference and through debates occurring elsewhere in the region and especially in Hong Kong, Malaysia, Japan and Australia, is that MOOCs are very much in the forefront of thinking in many Asia-Pacific universities and it is important to stay abreast with new technological developments in the delivery of higher education in keeping up with world rankings, reputation and practices. According to Grossman (2013, July 5), universities in Australia, China, Hong Kong, Korea, Japan and Malaysia were the first to offer MOOCs and this has been seen as a wake-up call for the MOOC offering universities in the United States to invigorate their strategic alliances and partnerships in the region or be potentially overtaken by Asian universities taking a lead in MOOCs. Other countries in the region have quickly followed suit, in offering global MOOC courses.

Many, perhaps most MOOCs are based on instructor/content-led, so-called xMOOC courses, while a growing number have focussed on autonomy, socialnetworking and the development of co-constructed learning and student knowledge creation or cMOOCs (Downes, 2012, May 19). No matter which type of MOOC course is developed, the hidden value of engagement for the institution can be significant. Governments such as Malaysia have recognised the value of MOOC engagement, by planning mainstream integration of the technology-led courses into award bearing programs over the next 5–10 years (Bernama, 2014, September 19). The question that this chapter explores does not focus on MOOCs, MOOC innovation or their equivalent technology-led initiatives, but on what these applications can do to spearhead new ideas and new ways of working in Asia-Pacific institutions. In other words, this chapter investigates how MOOC engagement offers institutions opportunities to spearhead change and diversify international student engagement and meeting the changing demographic needs of students (see Lassegard, 2016, Chap. 3 in this volume for further discussion on student diversification), with the MOOC in the role of catalyst for change.

The MOOC phenomenon is new: the term itself is only a few years old. Yet, millions of students around the world are engaged in MOOC courses. An investigation into the life of MOOCs reveals however that they are merely part of a longer history of technology-based applications, as elaborated in Chap. 10, to support learning and teaching, especially in higher education over several decades (Young, 2013, October 6). The impetus for such initiatives has been grounded in the needs for improving distance and open learning opportunities for students wishing to study, who are

unable to physically attend classes, as well as blended learning initiatives that have focussed on ways to provide components of courses in mainstream face-to-face classes that take into account the affordances of the educational technologies available. There are many spin-off applications, methods and resources that have resulted in refinements in the ways existing courses in higher education are offered, such as the present interest in flipped classrooms and open educational resources, outlined in Law (2016). These developments also provide major supplementation to courses and programs, leading to more significant rethinking of how higher education might be offered in order to improve the quality of student learning experiences and to increase efficiencies and effectiveness of these courses. The following paragraphs explore how engaging in MOOCs are creating new challenges for universities.

8.2 New Practices

8.2.1 Partnerships and New Practices

Most universities engaged with MOOCs have partnered with outside companies. The largest of these firms is Coursera (https://www.coursera.org/), a commercial company that grew out of Stanford University but is now independent. The company is funded primarily by venture capital and is therefore looking to make a profit sometime in the future to pay those who have invested in it. To date, 118 universities have signed agreements with Coursera, which has more than 22 million enrolled students from more than 190 countries. The universities involved are identified as top institutions from across the world and institutions in the Asia-Pacific region are well represented, especially from Malaysia, Hong Kong, Australia and Japan. Coursera's MOOC courses, now almost 600 in number, enable anyone to enrol and complete university-level undergraduate and postgraduate short courses from anywhere in the world free-of-charge. If students want their work within the course to be more formally assessed, they normally have to pay a fee. The resultant verified certificate of successful completion of the course can be used by students in a number of ways: for example, to evidence carried out work to show employers, as proof of continuous professional education and development in students' field of work, as a possible basis for enrolling in future studies at universities, or as a way to trial their competence in a subject area covered in the MOOC. In addition, Coursera is combining MOOC courses from various universities to create a series of courses that can lead to potentially more substantial academic certification. Overall, these MOOC courses take advantage of online learning and Blooms' mastery of learning approach that helps students learn topics, step-by-step, before moving to the next stage of study (Guskey, 2007), though more recent research into learning, exemplified in Thibault and King (2016) of this volume is identifying new pathways that educational design can take to better meet student learning needs.

Enrolments in the more popular MOOC courses are over 250,000 students per offering. The Coursera platform enables instant feedback to students on their progress through the course with additional exercises to support students' successful completion of each stage. Courses can take advantage of peer engagement, enabling the establishment of self-help groups to support each other working through individual courses. Though there is nothing inherently innovative about MOOC pedagogical practices, some innovative practices are certainly arising, such as new ways that educational institutions are working with commercial partners to offer courses, the delivery mechanisms, the range and scope of the student base beyond formal enrolment, new certification of successful completion of courses and the potential to re-purpose the MOOC to suit on-campus conventional courses via blended learning. Traditionally, it was distance provider institutions that offered predominantly open access education courses, but with MOOCs, many institutions that offered primarily on-campus delivery courses now offer MOOCs. The reasons for conventional institutions taking up MOOCs vary, but increasingly, the adoption of new technologies to supplement existing courses and the consistent growth in general of the use of learner management systems have given on-campus focussed institutions positive experiences in the use (or the potential use) of digital technologies to enrich student learning experiences and offer tutors more efficient and effective ways of teaching (Fox, 2007).

Different universities, for example, Waseda University in Japan, described in Chap. 10 (Nakano, 2016), are exploring different ways to create links between the MOOCs and conventional courses. However, many institutions view their MOOC courses as totally separate from their core on-campus accredited programs and go to some lengths to ensure there is no crossover and no recognition of prior learning between students studying their MOOCs and the use of any MOOC accreditation of study counting towards attainment in the award-bearing courses at the university. These universities are fearful that the technology-led MOOC courses cannot provide the level of quality and depth in student learning experiences that a conventional face-to-face course can offer. They are also concerned that a fully online course has limited checks on student marked submissions that could have been completed by other students or a commercial business that makes money from completing student work. It should however be pointed out that these limitations and potential cases of plagiarism and assignment cheating can also be carried out in an on campus environment, making the argument against MOOCs and distance delivered courses limited in scope. Chapters in this book's Part V entitled "Challenges to assessment and quality assurance" include broad discussions on some of these points.

Yet, an increasing number of institutions in the region are looking at potential closer links between MOOCs and their conventional courses. At the very least many institutions see the MOOCs as a taster to their degree programs and as an entry point, inviting potential students to explore the subject area and decide whether the program is suitable for them. This has potential savings for both universities and students as the percentage of students switching degrees after first year is increasing worldwide. These taster MOOCs can also be used within on-campus programs to introduce students to core dimensions of the subject, enabling them to gain an over-

all view of the degree, which can so easily become confusing for students, due to the focus on individual components and the many varied courses in degrees with not enough clear links being made between courses and the overall program. Some MOOCs are repurposed as compulsory components to on-campus courses, often in the form of blended learning and flipped classrooms (see Law 2016), enabling the teachers to identify parts of their courses that take advantage of the technology-led MOOCs and then blending other components of the course, incorporating the MOOC. This is becoming increasingly popular in the larger foundation courses in many subjects. The use of these MOOCs included into mainstream teaching is also leading to a deeper re-think of curriculum delivery. For example, the standalone MOOC, open to all from anywhere round the world can be completed free of charge or can be certified by the provider technology platform or the institution, in recognition of successful completion. As stated earlier, this certification normally carries a fee, but for internal students, this fee and indeed any charge can be waived, enabling on-campus students to evidence success in completing components of the course in their own time and at their own pace. This frees up the teacher to focus on other components of the course, ensuring that students gain the richest experience possible. Public universities in Malaysia are amongst the first in the Asia-Pacific region to be working in this way (Bernama, 2014, September 19).

Within the university, MOOCs offer an opportunity to rethink course components and how they are interlinked, as well as new ways of thinking about how best to use the technology and what the technology affords to the program and their corresponding course components. New terms such as BOOCs (Blended Open On-campus Courses) and OOCs (Open Online Courses) are increasingly being discussed and developed in the Asia-Pacific region higher education institutions. For example, the research-intensive Hong Kong University of Science and Technology (HKUST) is focussing on developing BOOCs, primarily to support its own student cohort, while the University of Hong Kong has MOOCs that provide clear introductions to culturally focussed subject matter, for example, 'Humanity and the Nature of Chinese thought'. The approach to developing these BOOCs is in identifying crucial components of on-campus courses and especially aspects where students need remedial help that can take advantage of the affordances of online technologies (Pong, 2014, October 28). Rather than produce many BOOCs, the HKUST strategy is to develop a handful of high quality student-centred courses that play a crucial role in mainstream teaching within the University. This close tie with core teaching courses on-campus ensures that the work and effort put into the development of these technology-led courses has a more sustainable life, with ongoing revisions being made that take into account the big data collected from the BOOCs for analysis. Analysis from both MOOC and BOOC integration with mainstream courses also leads to further examination of the student-centred course, the course structure and its linkage to on-campus degrees. The result is that new models are being considered and researched, for example see Thibault and King (2016), that focus on how students can best work through courses and the program to achieve and evidence the learning outcomes set. For example, all courses leading to a degree could require students to complete a series of MOOC or BOOC type modules, before

moving to the second component of each course. This component could include a more blended delivery of face-to-face teaching and tutorials, supported by online resources, online tasks and student-led activity with feedback and group and individual assignments. There are many variations possible in the delivery of such hybrid courses as well as in the way they are taught and the opportunities students are given to enrich their learning experiences. Offering a different and more flexible blend of face-to-face and online delivery of courses also impacts on the types of classes held and the times that components of courses are offered. This is discussed in a later section of this chapter.

8.2.2 Space and Time

Higher education institutions have been exploring a changed need for more varied physical learning spaces brought about by curriculum reform, change in student demographics, and the ubiquitous use of increasingly mobile and cloud-based technologies that students increasingly have continuous access to. The requirements for the standard lecture theatre, seminar tutorial rooms and library spaces that have traditionally dominated the university landscape have now changed (Boys, 2015). The need for storing physical books in central library facilities is also changing as students are now seeking access to e-books and e-journals to support their studies. This can lead to re-thinking how library spaces are used and considering housing physical books off-campus, allowing the central real-estate in the libraries to be repurposed for places students can gather for individual and group learning activities.

Today, universities in the Asia-Pacific region are exploring varied combinations of on- and off-campus teaching and offering students more flexibility and personal preference for what they study and where they have to study. In Hong Kong, for example, the rapid increase in university student numbers of more than 20 % from 2012 onwards in the large research-intensive universities has led to rapid expansion of both physical and virtual learning spaces and environments (Fox & Sidorko, 2013). In planning for this expansion, universities have been asking what new kinds of learning places are needed that will be fit-for-purpose for students today and in the future. Do we need to duplicate and expand existing student services and places, designed before the introduction of new technologies and new practices or should we fundamentally rethink our physical environments, taking into account students' changing study habits, changing curriculum requirements and emerging technological and pedagogical practices? The introduction of MOOCs on campus has intensified these debates about learning spaces and created new options for management and faculty to consider how best to use the technology-led courses to free up the use of physical learning spaces, to reconsider delivery and curriculum strategies and to invigorate cross institutional debates about strategic learning and teaching plans and standards for learning environment requirements. As MOOCs are incorporated into blended course delivery, lecture theatre and classroom timetabling is also affected.

8.2.3 Legal, Copyright and Intellectual Property

The technology-led open nature of MOOCs and the partnership with an external and commercial company has led to changed design, development and delivery requirements for courses. For example, the open nature of MOOCs enables anyone to examine the course anywhere. Any shortcomings of the course could reflect badly for the university and faculty involved. For example, representatives for the deaf and visually impaired students are filing lawsuits against major universities in the States stating that antidiscrimination laws have been violated by failure to provide appropriate "closed captioning in their online lectures, courses, podcasts and other educational materials" (Lewin, 2015, Feb 13, p. A18). Exposure of MOOCs and course quality and inclusivity therefore must be carefully considered by individual institutions. The open access and the partnership with a commercial company requires the developer to pay close attention to issues concerning copyright and intellectual property. Copyright laws differ between countries, requiring each university offering MOOCs to gain legal advice, preferably on a regular or needs basis. Obviously, the larger universities already have legal support teams within the institutions, but many smaller universities may not have this support. This topic was discussed in the 2014 Asian Association of Open Universities (AAOU) conference in Hong Kong, introduced earlier in this chapter, and the smaller universities in the region identified legal and copyright issues as a great challenge to their institutions engaging in developing MOOCs. This leads to additional costs associated with the MOOC development. The laws and legislation governing copyright for educational institutions does not transfer to educational institutions who have partnered with commercial companies. In other words, the more lenient agreements that are made between copyright holders (notably publishers) and educational institutions cannot be assumed with the platform partnerships. An increasing number of legal cases is arising between publishers and institutions, where publishers are demanding huge sums of money for individual MOOCs using copyrighted materials. Again, the larger universities have the advantage and flexibility to be able to employ specialist copyright staff to handle these more complex copyright arrangements. Laws, university policies and practices concerning intellectual property are in need of careful reexamination to ensure the university, the academic, the development team, third party contracted parties and the partner platform provider are given clear guidelines concerning their ownership rights. Again, this requires legal advice and therefore additional funding and resources to ensure intellectual property matters are dealt with appropriately.

8.2.4 Governance

There is no standard agreement made across all MOOC platform providers and educational institutions, though generally the contractual agreement is made between the institution and the platform provider with the Vice-Chancellor as a

signatory to the contract, rather than the faculty and the provider dealing with each other directly. This distinction is significant. Faculty-platform provider agreements may facilitate simpler development arrangements but as each MOOC makes reference to the institution, matters of institutional reputation, branding, marketing, copyright, intellectual property, etc. could be by-passed. Institutional-level agreements also provide opportunity for more central planning and control, regarding the number of agreements made with different platform providers, quality assurance and improvement of institutional MOOCs, types of MOOCs offered and planning for sustainable developments and sustainable re-offerings of MOOC courses. For example, many institutions call for expressions of interest from faculty for MOOC development. The process of acceptance will differ, from broad acceptance of representation from the various faculties to more targeted and strategic decisions to support MOOCs that best represent strengths or key areas the university wants to expand in. An anecdotal review of existing MOOCs at the 2014 Coursera Partners conference in London (http://www.london.ac.uk/5630.html) with delegates from 100 institutions, with representation from Hong Kong, Japan, Australia and Malaysia, indicates that most universities support faculty-led initiatives, rather than institutional strategic and directed MOOC development.

Central support and control of institutional MOOCs may include an advisory or steering committee with representation from the vice-chancellery, as well as faculties and central services such as teaching support units. The latter offers expertise in curriculum design and development via educational designers and technologists, and also works with technical and copyright specialists to support the MOOC development. Other common forms of central support are funding, access to shared educational developers, and technology experts, for example. One advantage of central coordination of the MOOCs is the collected learning from different MOOCs that can be shared across facilities, which leads to better planning, monitoring and the assurance of quality of courses as well as better more efficient use of the university funds. For example, all technology innovations designed within every MOOCs must be designed to be adapted to mainstream on-campus courses. MOOC practice itself is emergent and as such benefits from institutional level monitoring to ensure development is best suited to the institutional needs. One key potential benefit of central coordination is the ability for the institution to trial new course development and pedagogic models and practices that at a later stage can be used to evidence and support use in the institution's mainstream operation.

Designing and developing MOOCs and technology-led courses requires new arrangements and new practices within most universities and this is exemplified at the University of Hong Kong in Chap. 7 of this volume. While distance and open learning focussed universities have offered core central educational support, most universities that rely on face-to-face on-campus delivery of their courses have traditionally developed courses at the faculty and school level with little interference from the central services. Most MOOCs have required the establishment of more specialist teams of support staff that assist faculty in the development of their courses. When this practice is seen by faculty as producing better quality courses, it can lead to more central involvement in faculty course development beyond the

creation of MOOCs to conventional courses as MOOC course development requires new expertise, that includes specialist skills with the MOOC platform. This includes keeping up-to-date with changes in the platform, a broader understanding of the affordances of a technology-led course and the use of a shared course design model that can later be used for on-campus course development.

8.3 New Learning Design Models

A wide range of new learning design models have been trialled and evaluated in MOOCs, facilitated by large numbers of students and the short nature of MOOC courses. These units are often between 4 and 6 weeks in length, and with frequent offerings it enabled universities to quickly experiment with different models (Dalton, Grant, & Perez, 2014). Though there is no single model emerging from MOOCs, some common elements in MOOC design – broadly encompassing Blooms' mastery of learning – can be identified. One such element is the growth of interest in an outcomes-based curriculum in the Asia-Pacific region (see Laguador, Conrado, & Castro, 2014) that takes into account affordances of new technologies, while maintaining core principles that support quality assured learning and teaching.

A model arising from research carried out in Hong Kong exemplifies these new learning designs (Churchill, King, & Fox, 2013). This model arose from the need to offer the university a pedagogy-led framework to use with a new learner management system in a new cross-institution outcomes-based curriculum, suited to all courses but especially to blended and online courses. The model is based around four key components, namely Resources, Activities, Support and Evaluation or RASE. The RASE model proposes that no matter the discipline, courses should contain these four interrelated components to ensure students are given appropriate opportunities to successfully achieve the learning outcomes of the course.

In this model, Resources are concerned with various elements of the course content, which needs to be structured in a way that best suits the student cohort and students' needs as well as providing students with the necessary materials and tasks that will enable them to achieve the learning outcomes for the course. Resources may include lectures, lecture notes, videos, readings, demonstrations and experiments that support the course curriculum. These resources need to be provided in a way that facilitates student learning in a timely manner; they need to be structured to enable students to work through the resources as needed.

The second component and perhaps the most important one is the Activities for students. This component focuses on ways to engage students in active learning, where they use the Resources, working through mini-tasks to gain the skills and knowledge required in the course. Common types of activities include problem-based learning and investigations, which require students to work through multiple pathways and dilemmas to resolve the problem or task set as well as experiments where students need to evidence the process they have gone through right up the conclusions they make.

The third component is Support. Students taking technology-led courses will need support in a number of ways: in making the best use of the technology platform and accompanying widgets and add-ons. Support also includes establishing networks that enable students to easily contact tutors as well as other students online to discuss course matters, exercises given, complete group activities, etc. In the MOOC space, Support requirements are particularly needed as students are studying totally online and mostly in isolation and in different time zones, and need alternative and predominantly social networking ways to contact each other (Tschofen & Mackness, 2012). The final component of the RASE model is Evaluation, which focuses on ensuring that structured support is given with formative feedback to empower students to monitor their own progress through the course. The evaluation component can also be used by tutors to monitor how well individual students are progressing and to identify areas of weakness where additional support is needed to ensure students progress appropriately. This model emphasises a student-centred approach, which is not only essential for most MOOCs but also for most university courses. The RASE model, used in an outcomes-based curriculum, offers a particularly strong framework, which supports and scaffolds quality assurance and improvement, while clearly identifying core components of courses as well as their links to the program. The model in conjunction with Biggs' constructive alignment framework (2014) offers a strong cohesive structure, linking modules and courses to the overall program students are studying. RASE and similar design models, trialled in MOOCs are also being trialled in on-campus courses.

Figure 8.1 shows how the RASE model is used on-campus within an outcomebased constructively aligned curriculum.

The components of the framework, illustrated in Fig. 8.1 include:

- **Program Learning Outcomes (PLOs)** prescribe the specific knowledge, attitudes, skills and practices that students need to demonstrate in completing a degree or program of study. Generally the number of PLOs should be limited to five or six statements:
- Course Learning Outcomes (CLOs) prescribe the knowledge, attitudes, skills
 and practices that students need to demonstrate in completing a specific course
 or courses within a designated program. The key to CLOs is how they articulate
 and are mapped with PLOs. As with the PLOs, the number of identified CLOs
 should be limited to five or six statements. Any more creates levels of complexity
 that leads to confusion in constructively aligning components of the program and
 its courses and related tasks and assignments set;
- Learner Needs describe the gap between an individual's current demonstrable capabilities and those prescribed in the learning outcomes associated with their program or courses;
- The RASE focuses on Resources, Activities, Support and Evaluation feedback (formative tasks and assessments), which is required for full achievement of course learning outcomes are the core course components;

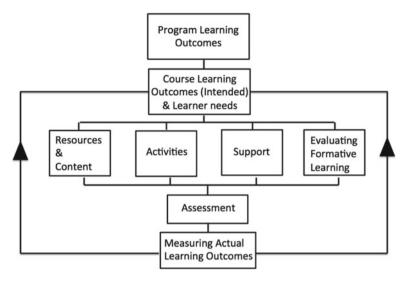


Fig. 8.1 RASE within an outcomes-based curriculum (Source: Fox 2015, p. 101)

- Assessments evidence actual learning outcomes. Assessment methods can be
 formative or summative and need to be closely aligned with the learning outcomes set. It should be made clear to students how each assessment task is linked
 to the expected knowledge, skills, attitudes, practices, etc. that the students will
 need to demonstrate, to successfully pass the course;
- Measuring Actual Learning Outcomes ensures that the student can demonstrate that they have achieved the intended learning outcomes of the course and program. This evidence can be used to assess not only student levels of success but also strengths and weaknesses in any given course. For example, if particular courses have consistently low pass rates, identifying student evidenced achievement can lead to a close examination of the course and course components, identifying areas in the course that may need further development and revision;
- Additional elements of the integrated model should include consideration of the
 institution's Strategic Intent and Graduate Capabilities. Strategic intent establishes university-wide aspirations for all programs, and broadly defines what students may expect to experience when undertaking a program at a particular
 university. Graduate capabilities are the broad knowledge, skills, practices and
 dispositions that students are required to develop during their time at university.
 Strategic intent and graduate capabilities need to be integrated and articulated
 within the PLOs (adapted from Fox, 2015).

New research conducted primarily in Hong Kong and Australia, into student learning in higher education institutions is highlighting further opportunities to improve and tailor programs and courses to meet individual student needs. Thibault and King (2016) introduces an in-depth study that exemplifies this research.

8.4 Conclusions

MOOCs in themselves are not necessarily innovative. Indeed, an examination of some MOOCs, especially earlier developed courses, are often teacher-centred and focussed around videos and computer text and graphics that summarise lectures accompanied by notes with simple tasks for students to perform. The video lectures are supplemented with online multiple-choice tests that provide a basis for students to check their understanding as they work their way through the course. The purpose behind these MOOCs is often seen as a way to brand, promote, and market the institutions, highlighting their 'star lecturers', performing in front of the camera, as well as demonstrating the skills the university staff have in using cutting edge technologies to support its courses. Through the MOOCs, this message is sent out worldwide, offering the institutions an increase in the demographic profile of potential national and international students. This in-turn can lead to more students applying to a particular university's mainstream programs. What is argued in this chapter is that this alone does not seem to be a good reason to produce MOOCs. What this chapter has focussed on, drawing on examples from the Asia-Pacific region, is the underlying values for institutions being involved in MOOCs. The benefits are more subtle and include new opportunities to develop curricula beyond the domain of the school and faculty, with central service involvement providing specialist skills in new pedagogies and in learning and teaching with and through technologies. This leads to the development of new cross-institution teams of staff that are brought in to ensure the development and delivery of the MOOCs.

When the MOOCs are used to support mainstream on-campus course development, this in turn can lead to better developed and quality assured courses. This development is exemplified in the 20 Malaysian public universities and in a growing number of universities, notably in Australia, Hong Kong and Japan. In addition, central services can ensure that matters of copyright, disability laws and intellectual property have been carefully considered and the use of educational technology, audio visuals, animation and graphics are appropriately developed to enhance the student learning experience within a proven learning design model, such as the RASE. The MOOC experience can develop and enhance the institution's capacity for change and growth in educational applications across all disciplines and, at the same time, advance staff capabilities in working in larger curriculum design teams with multiple input from different specialists. A key goal here is the prospect that the experiences of MOOC involvement will stimulate change in the mainstream teaching and learning and an increased awareness of the value as well as the limitations of technologies to support both the teaching and the student learning experience.

This chapter has described Asia-Pacific institutional examples of where MOOCs have led to some rethinking and repurposing of on-campus teaching and learning, which can be incorporated in sustainable and scalable ways. In summary, MOOC involvement and careful development can act as a catalyst for change; that what is learnt in individual institutions from involvement in one MOOC can be used to

support improvements in the development of another MOOC. The MOOC experience too throws new light on the structure of the curriculum and offers new possibilities in developing varied levels of participation in a course, from a free involvement open to all from around the world, to a certified course from professional development or evidence of continuing professional education to supplementing or becoming core to mainstream courses. Leveraging the opportunities MOOCs offer to trial and develop new practices, new models of teaching and delivery as well as new ways to thinking about courses and the relationships between courses and programs are major learning opportunities that should not be missed.

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Chapter 9 Interactivity, Values and the Microgenesis of Learning in a Tertiary Setting

A Distributed Cognition Perspective

Paul J. Thibault and Mark E. King

Abstract Student learning is a hot topic in tertiary education circles these days. However, it is not always clear what words like 'learning' and 'learner' mean. It is important for educationalists to understand learning as it actually occurs in real-time learning situations. We build on Hutchins' theory of distributed cognition and Gibson's ecological psychology to show how human learning is an interactive process. We propose Multimodal Event Analysis as a tool for analyzing a University tutorial in which students attempt to solve a problem of regression analysis. We investigate how participants' multimodal interactivity with the changing affordance arrays of the learning situation is the driver and shaper of learning. Moreover, learning is an unfolding microgenetic construction process. Theories of microgenesis (e.g., Brown, Werner) are a fertile starting point for developing new understandings of human learning as an always embodied and culturally-saturated form of values-realizing interactivity.

9.1 Introduction

Our paper occupies a new space between the learning sciences, educational research and interaction studies of *in vivo* classroom teaching and learning activities in higher education in the Asia-Pacific region. As the title of this volume suggests, higher education is currently being reshaped and directed along pathways that conform to

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the diktat of global neo-liberal capitalism and its economic and political ideology and praxis (see Smith, 2016, Chap. 16 in this volume). There is much talk in the learning sciences and in educational research about the 'learning society', 'lifelong learning', 'learning relations', and so on. Some scholars have now begun to examine these educational developments in relation to Michel Foucault's later work on governmentality (Fejes & Nicoll, 2008). Governmentality refers to the array of rationalities, practices, technologies, and values through which people engage with institutions and their practices and in the process engage in processes that are productive of particular forms of conduct, particular kinds of social relations, particular value systems, and particular forms of selfhood. The reforms of teaching and learning alluded to in the title of this volume can be understood in the context of recent neoliberal practices of governmentality in higher education. Such an understanding opens up the possibility of researching the nexus of socio-cultural, institutional, and individual factors currently working through higher education in order to constitute individuals as learning subjects. As other chapters in this volume show in various ways, the institutional practices of management, testing, assessment, and so on are embedded in a larger-scale socio-cultural matrix of cultural affordances, discourses, forms of knowledge, measurement and monitoring techniques, and learning technologies that are organized to produce the effects of a specific mode of social production—that of the learning self (Gu, 2016, Chap. 4 of this volume; Tran, 2016, Chap. 5 of this volume).

Learning is based on particular assessment regimes that seek to accredit students with competencies, knowledge and skills that students have attained (Joughin & Hughes, 2016, Chap. 15; Nakano, Ng, & Ueda, 2016, Chap. 17; Ng, 2016, Chap 6, all in this volume). In this context, it is important to develop empirical research methodology and theory that yield understandings about how students learn in addition to what they learn. Whereas much educational research, including, for example, learning analytics (Knight et al., 2014) uses macro-level theoretical constructs and analytical procedures that are not sensitive to the subtleties of real-time embodied interactivity between persons and the subtle ways in which agents attune to the learning situation, our chapter is grounded in micro-analytical techniques that can yield insights about how real persons-learners and teachers-interact with the affordances of the learning situation in real-time. Our approach does not argue for a one-size-fits-all methodology that can serve to analyse the many different learning situations that exist in higher education. We recognize that the development of the skills of scaffolding and self-scaffolding and the role of teaching in this development are very different across different domains (Fox, 2016, Chap. 8 in this volume). With reference to a detailed analysis of a single episode of learning, our more modest goal is to propose a new integration of theoretical perspectives and analytical methods and techniques that show how the real-time interactivity of learners and teachers with the affordances of the learning situation requires knowledge of how to recognize and avoid error (Bickhard, 2001). The dialect of teaching and learning involves regulation of this interactivity. This is so in two senses: (1) (self)-regulation of the interactivity between teachers and learners and the learning environment; and (2) regulation of the processes of microgenetic construction of new learning. Unlike recently predominant social constructivist approaches to classroom interaction that are founded on the socio-discursive construction of positive knowledge that is 'encoded' in conventional forms, our approach is a naturalistically grounded one that requires abandoning many of the assumptions and formalisms of these approaches so that real progress can be achieved in developing a process model of learning and teaching based on a naturalistic epistemology that addresses the open system dynamics in which learning and teaching take place.

From the moment they come out of the womb and begin the process of becoming persons (Ross, 2007), humans begin to participate in and to learn in Distributed Cognitive Systems, which are a distinctive hallmark of the extended human ecology (Steffensen, 2011; Thibault, 2011). Persons create and sustain their learning and teaching trajectories on the basis of complex, dialogically coordinated relational and affective dynamics that cannot be reduced to technical skills or to the properties and characteristics of the technologies used.

Drawing on recent theoretical developments in distributed cognition, distributed language, and multimodal interactivity, we undertake a "thick" empirical description of video-recorded data from a pilot study of students' interactivity in tutorials in conjunction with a course taught in the Faculty of Business and Economics at the University of Melbourne. Using the techniques of Multimodal Event Analysis (MMEA), we investigate how participants' multimodal interactivity with the changing affordance arrays of these learning episodes is not only a form of action, but also a form of publicly enacted thinking when persons are coupled both to each other and to external resources as they engage in problem-solving and other cognitive tasks.

MMEA will be applied to the learning activities in which students and tutors participate, with a specific focus on those affordances and predispositions to learning which enable learners to select and focus on cognitively salient aspects of the task in ways that promote effective learning. MMEA yields valuable microanalytical insights on how learners develop different trajectories of learning and different learning strategies and practices. In other words, 'local' and 'global' factors are integrated and oriented to in diverse ways by learners throughout the development of their learning trajectories.

Our main focus is on how culturally saturated interactivity and its effective utilisation in the classroom guides and shapes learning. Interactivity is not the same as "interaction", as commonly understood in discourse-analytical and social interaction approaches. Interaction tends to rely on theoretical abstract a like the exchange of "shared" meanings between persons, shared codes, and abstract systems that mediate and make possible interaction. Interactivity is more concrete: it is situated and embodied. It affords the manipulation and reshaping of the learning task through very natural, intuitive ways in which our bodies engage with material affordances, artefacts, and tools in the physical and social environments. Activities such as touching, moving, pointing, visual scanning, talking, writing, reading, and auditory prompts and cues of various kinds are coordinated in our interactive engagements with technologies of learning. In other words, learning is grounded in and extends the natural interactivity of human bodies, i.e. our natural sense of 'being there' (Clark, 1997). By the same token, interactivity and therefore learning in the here-&-

now is constrained and enabled by non-local and hence virtual cultural resources deriving from cultural-historical traditions that can be evoked in situated interactivity and which perfuse it with meaning and sense (Thibault, 2011, 2012).

We therefore place the emphasis on the culturally saturated nature of human interactivity and on the learning trajectories that participants co-construct through their dialogically coordinated interactivity. Much more is at stake here than issues of managerial efficiency or cost effectiveness. Instead, we seek to show how interactivity can enhance our theoretical understanding of human learning and teaching. In doing so, we will emphasise that learning, which is ubiquitous in human interactivity, is a values-realizing mode of behaviour (Hodges, 2007a, 2007b). This presumes a heterarchy of diverse and shifting values that shape and guide teaching and learning along their trajectories rather than pre-determined, hierarchically ordered goal states that pre-determine the learning trajectory top-down fashion.

9.2 Distributed Cognition and Learning

Learning is a context-sensitive and adaptive process in which the learner must solve problems that are often ill-defined or underspecified. The learner must therefore engage in ongoing processes of interactivity with the learning environment that provide the learner with information which it can use to modify its own future interactions. It is in this way that learners progressively hone and refine initial, poorly defined problem spaces into ones with enough structure to guide the construction of a solution. Learning involves processes that both provide heuristic action guidance and improve the learning system's capacity to guide action (Christensen & Hooker, 2000). Heuristic action guidance ('scaffolding') may, crucially, involve dialogically coordinated processes whereby one agent provides heuristic guidance to another agent's learning activity. However, learning is also a self-directed process whereby learners generate "high order anticipative structure that improve self-direction" (Christensen & Hooker, 2000, p. 7).

Our account of learning thus focuses on the interactive processes that shape learning and the heuristic guidance of learning. A core principle that informs our discussion is the ecological and situated embeddedness of learning: learners and their learning are not independent of their environment. Instead, the learner's brain is embedded in an interacting body and this body-brain system in turn is embedded in a complex, culturally saturated environment. Learning is a dynamic, time-extended and organised mode of interactivity in a complex environment. Learners are embodied agents who must learn to harness and deploy their bodily capacities and interactive processes in order to achieve the goal of overall or global system autonomy. Autonomy, as Christensen and Hooker (2000, p. 9) argue, requires that all the system's processes must be interrelated in order to focus on the autonomy of the learning system as a whole.

Learning, like many cognitive processes, encompasses processes and activities of many different kinds. However, learning processes involving problem solving,

interpretation, evaluation, decision-making, and so on, all seem to have a number of features in common. They are all dynamic and enactive processes that are not readily explainable in terms of mental states, representations, or static contents. Cognitive processes, according to classical models of cognition, are brain-bound and individual-centred processes: cognition takes place in the head of the individual. Clark's (1997, 2008, 2013) Extended Mind Hypothesis (EMH) and Hutchins (1995a, 2014) theory of Distributed Cognition (DC) have challenged this view and articulated alternatives.

Clark's extended mind thesis includes external cognitive resources so that the concept of mind is extended beyond the individual organism by its coupling to extra-somatic resources that enhance and upgrade cognitive performance, for example, by the use of digital technologies—iPads, smart phones, computers, Google Earth, and so on.

Hutchins points out that the term Distributed Cognition does not refer to a kind of cognition, but is a perspective on all cognition: the working assumption is that "all instances of cognition can be seen as emerging from distributed processes" (2014, p. 36). The important and interesting question in this perspective is not whether cognition is distributed or not distributed, or whether it is sometimes distributed or always is (Hutchins, 2014), but what on any scale of investigation of cognitive processes are the component processes of the cognitive system, the relations between them, and how cognitive processes arise through the interactions among the components. Hutchins (1995a) showed how the cognition involved in navigating a boat into port is embedded in social institutions and practices without which the cognitive processes required to bring the boat safely into port could not take place. The technologies and artefacts with which persons couple in order to accomplish these cognitive processes may be seen as "external aids" (Luria, 1973, pp. 30–31) that provide situational support to internal processes of neural circuitry building or they may be seen as more fundamentally and deeply constitutive of these cognitive processes.

As we shall see below, it is a formidable challenge to model the different facets of the distributed relations that are involved. We identify three kinds of relations that are relevant to this goal: (1) how the organisation of the learning system as a whole responds to and interrelates in a global way the various normative constraints on the system so that it attains and maintains in time its autonomy; (2) the organisation of the various component processes that form a Distributed Cognitive System; and (3) the creation and maintenance of a coherent self-directed learning/action trajectory in response to multiple constraints and across multiple timescales. Consider for example a University tutorial setting in which a student is required to solve a mathematical problem using regression analysis. In this thought experiment, the following hypothetical scenarios may be entertained:

- 1. The student alone solves the problem 'in her head';
- 2. The student solves the problem in concert with the heuristic guidance provided by other members of the tutorial group (tutor, fellow students);
- The students together solve the problem without any explicit guidance from the tutor.

Let us take Scenario 1. In this scenario, our brilliant student only apparently performs all of the needed intellectual work in her head. She would not be able to perform the cognitive task without accessing and interacting with the mathematical and linguistic tools and practices that exist in some sense 'out there' in the culture or in some functional subcomponent of the culture where these resources, the expertise for using them, and the practices in which this expertise is embedded are located, stored, maintained and revised over time in the form of the texts, technologies, institutional knowledge and practices, and expertise that together constitute a body of academic knowledge, its history and traditions.

A University tutorial setting is a specific, albeit selective, embodiment or actualization on a particular occasion of these institutionalised meanings and practices. No one—student or expert—can think up all of this on his or her own. Instead, individuals neurally and bodily couple to and interact with meanings and procedures that derive from the longer, slower time scales of the academic discipline, the culture, including its traditions of literacy and numeracy, and the norms and values associated with these. Following Hutchins on this point, we would say that the cognition emerges through the coupling of these time scales that is enacted in and through the student's problem solving activity. The student interacts with and is entrained to the dynamics of the cultural affordances of her ecosocial niche, defined as the array of affordances that constitute her world (Thibault, 2014). The ability to go solo in the solving of a complex problem is the outcome of a long apprenticeship in the development of the ability to entrain, through what we refer to as 'deliberate practice', one's own neural and bodily dynamics to the dynamics of increasingly complex scales that extend cognition into the realm of the virtual cultural entities created by language, mathematics, and other second-order cultural constructs in increasingly distal realms beyond here-and-now interactivity.

Scenario 2 shows a different kind of distribution of cognitive dynamics. The student concerts her own learning with that of her fellow students as well as the tutor, who all provide different kinds of heuristic guidance. There is dialogically coordinated interactivity between, for example, the student and the tutor. The tutor has prepared his lesson a week ago in a discussion group with his fellow tutors. The questions and answers were pre-prepared by the course lecturer and made available as text on the worksheet which the students and tutor handle and refer to during the tutorial. Moreover, the questions (and answers) on the worksheet draw upon well-defined models and have a well-defined location in the learning topologies.

There is in this scenario a very different distribution of component processes across scales. In this case, the participants in the tutorial engage in here-and-now interactivity both with each other and with relevant artefacts in the situation (the text of the worksheet, writing on the whiteboard). The participants must adjust and entrain their real-time bodily and neural dynamics to each other and to the artefacts they couple with at the same time that they also learn to orient to, to entrain to and thus to anticipate the dynamics of increasingly distal time scales as the learning objects emerge through a microgenetic process of small-scale selection and variation on established patterns (Bickhard & Campbell, 1996). In the situation, it is the tutor who is best able to locate the current learning in relation to successful prior

learning constructions and as well as to evaluate how near or far the student's current efforts are with respect to those prior constructions in the overall learning topology. These prior products of successful learning are collective entities that are now the constitutive elements of a system of institutionalised cognitive processes and products that are stored and maintained in collective social practices, texts, digital technologies, and highly specialised semantic, visual, mathematical and other patterns and relations characteristic of the domain-specific functional processes characteristic of a highly specialised socio-cognitive domain.

The two scenarios described here show very different distributions of components and processes. And yet, we saw that it is entirely feasible to view both from the perspective of distributed cognition. What is interesting to us is the different kinds of relations among the components and how the learning arises from the interactions among these. We see too that in spite of appearances to the contrary, the student in the first scenario is unlikely to be doing cognition exclusively in the head. Instead, her enhanced abilities depend on and would be impossible without her entrainment to and self-scaffolding by the cultural dynamics of the collective cognitive processes and products that constitute the institutional history of a particular body of knowledge. Individuals couple with and learn to entrain their neural and bodily dynamics to the distal dynamics of these virtual cultural constructs as they become increasingly skilled practitioners in the high-order cognitive processes of the socio-cognitive domain in question.

9.3 Distributed Cognitive Systems, Multimodal Interactivity, and the Learner-Environment Interaction System

Humans live in and have constructed a unique extended ecology that is defined by our inter-connectedness—with other persons, with artefacts, with social institutions, with technologies. By means of these resources, humans integrate their activities to shared cultural patterns and in doing so they coordinate their activities across times and places. In recent years, both the biological and cognitive sciences have demonstrated an increased sensitivity to the fact that human learning and thinking are not purely private and internal processes of individuals. They reflect inter-individual dynamics that are shaped by human culture. This realisation has also cast doubt on the traditional academic distinction between 'cognition', seen as taking place within persons, and 'communication', seen as occurring between persons.

Perceiving, acting, thinking, learning, decision making, moving, doing things with artefacts, and language are all shaped by the norms and values of what Goffman (1983) called the *interaction order*. Moreover, perceiving, acting, thinking, etc. are not outcomes of exclusively individual-centred processes. Instead, they have the capacity to affect both other persons and aspects of their environments. What is often somewhat loosely called 'communication' is in fact a socially organised way of co-ordinating thinking, feeling, perception, and action between persons. On the

traditional view, 'cognition' and 'communication' were seen as separate areas of study within very different research traditions. This view is now seen as less tenable. Cognition also routinely occurs between persons and between persons and their artefacts in culturally rich environments. Humans are born into and learn to exploit Distributed Cognitive Systems (DCSs). It is our participation in DCSs after birth that enables us to become persons. Humans are 'ecologically special' (Ross, 2007) precisely because of this fact. The human ecology depends on culturally saturated DCSs to a far greater extent than other species.

A DCS consists of a network of persons who interact with each and with relevant artefacts and technologies in order to perform cognitive and learning tasks that could not be achieved by any of the components of the DCS on their own (Clark, 1997, 2008; Hutchins, 1995a). A DCS thus has cognitive properties that are irreducible to the properties of its component parts. Cognition is distributed between brains, bodies, and aspects of the physical, technological, and cultural worlds of persons (Clark, 1997).

A growing body of evidence shows that *interactivity*, not abstract symbol manipulation, internal representations or information processing centred on the internal mental processes of the individual, is the key to human learning and intelligence. Text-based literacies mediated by abstract social and semiotic codes have privileged pedagogies that abstract away from this basic fact. Humans learn best in situations that promote rich, culturally saturated interactivity when they engage with and manipulate external artefacts to solve learning tasks and cognitive problems in often complex environments such as aircraft cockpits, interpreting fMRI brain scans by brain scientists, and medical simulations involving senior doctors and trainee doctors (Alač & Hutchins, 2004; Clark, 1997, 2008; Hutchins, 1995a, 1995b, 2010; Kirsh, 1995a; Steffensen, Thibault, & Cowley, 2010).

Multimodal interactivity and the forms of coupling of agents to their environments that it enables is not reducible to low-level perceptual-motor skills, but is central to higher-order cognitive operations in complex environments requiring expert knowledge. Moreover, a long tradition of work in experimental psychology (Koffka, 1910, 1935; Luchins, 1942; Vallée-Tourangeau, Euden, & Hearn, 2011) shows that what Koffka (1910) identified as *latente Einstellung* ('latent attitude'), or experience-based predispositions to learning, can influence learning negatively and therefore can guide learning in inefficient ways that delay (Kirsh, 1986) or frustrate desired outcomes (Kirsh, 1995a, 1995b; Vallée-Tourangeau et al., 2011). Building on Koffka's insight, the experimental work of Luchins and Vallée-Tourangeau et al. points to the potential of interactivity to diminish negative predispositions towards learning.

Unlike learning based on text-based models or mental simulation inside the individual's head, we conceptualise the Learner-Environment Interaction System (LEIS) as a rich, dynamical multimodal environment consisting of manipulable artefacts which afford a changing array of affordances and possibilities of perception and action. The affordances and possibilities of the LEIS attract and shape attention and action. In doing so, they constrain action, knowledge and cognition in ways that seem more likely to promote positive learning experiences and outcomes. Interactivity with artefacts, tools, and technologies in the physical and cultural

environment of the LEIS enables learners to segment and identify the features of that environment so that they develop more effective learning strategies. Interactivity, through visual scanning, haptic manipulation and exploration, sound, and movement, enables learners to manipulate and re-organise the physical aspects of the learning task such that active exploration and manipulation of physical artefacts gives rise to new perceptions. In turn, these can transform the learning task.

As mentioned above, activity is not directed to a single goal that determines the activity (hierarchical model), but is embedded in and is constrained by multiple values that agents orient to and seek to realize (heterarchical) (Hodges, 2007a). In the distributed view, there are multiple organising principles around activity, not just task or goal. The learning task thus becomes a changing, dynamical multimodal configuration or affordance layout that reveals new affordances during the learner's time-extended interactions with the learning task. In this sense, interactivity involves sense-saturated coordination that contributes to human action, cognition and learning (Kirsh, 1997; Steffensen, 2013; Thibault, 2011, 2014; Vallée-Tourangeau et al., 2011).

According to the classical view, interactivity consists of a sequential unfolding of static state transitions: action>reaction>action (see Kirsh, 1997 for critical discussion). The agent acts on the environment, the environment reacts and the agent acts again in response to the reaction from the environment. On this view, the agent formulates a desired goal state and acts to obtain the desired goal. A more dynamical conception of this view is also possible. According to the dynamical view, action is a continuous response to feedback from the environment. Moreover, the environment is seen as external to the agent who acts on it. Both the static and dynamic views are based on transitions between static states. However, interactivity is much richer and more complex than this. Interactivity is best characterised as follows:

- 1. Interactivity involves multiple functions, not only pragmatic ones, including (a) exploratory activity that generates information; (b) the continual re-structuring of the affordance layout through this activity; (c) probing the environment for solutions (Cowley & Nash, 2013), (d) epistemic action (Kirsh & Maglio, 1994); (e) heuristic guidance; (f) guiding and shaping attention; (g) coordinating with resources/affordances; (h) creating and responding to reminders (Kirsh, 1997); (i) maintaining the environment in an optimum condition; (j) anticipating the future development of the trajectory; (k) responding and adjusting to normative signals.
- 2. Interactivity is guided and shaped by a heterarchy of multiple and fluctuating values that continuously modulate its trajectory rather than aiming for a single final goal state as in a command hierarchy;
- 3. Interactivity is the sense-saturated coordination of agents both with each other and with the affordances and artefacts of their social and cultural worlds (Steffensen, 2011);
- 4. Interactivity couples agents and environment in a unified Agent/Learner-Environment Interaction System rather than seeing the environment as external to the agent: the environment is in part the outcome of agents' interactivity and is not therefore independent of either the agent or the interactivity that couples agent and environment in the LEIS;

- 5. The coupling of agents to their environments is spread across a diversity of time scales:
- 6. Interactivity prompts and shapes agents' learning: agents learn to exploit and be guided by the dynamics of their interactivity.

9.4 Interactivity, Microgenesis and Learning: Multimodal Event Analysis (MMEA)

In the episode to be analysed below, three students participate in a problem-solving exercise together with their tutor. The problem is a discrete probability distribution that includes Poisson and hypergeometric probability distribution components. The students are working on Questions a. and b. in the worksheet (see Appendix 1 for these two questions and Appendix 2 for the solutions).

Following the seminal work on extended mind and distributed cognition by Clark (1997, 2008, 2013) and Hutchins (1995a, 1995b, 2010), respectively, analysts have tended to stress the individual problem solver and his or her interactivity with environmental affordances such as tools, technologies, artefacts, and so on. However, problem-solving is also very often a dialogically coordinated form of interactivity involving other persons in addition to the technological and artefactual character of the external affordances that have the capacity to extend human cognitive processes beyond the individual person (Cowley & Nash, 2013; Thibault, 2011). In ways that are clearly crucial to teaching and learning, this is also true of the other persons with whom the learner interacts in the learning environment.

Three students and the tutor participate in the problem-solving exercise. Two of the students talk whilst the third remains silent except for a brief exchange with the tutor at the end. Student 1 in the transcription below is the student who is charged with responding to Question b above. Our analysis is of the transcribed episode presented in Figs. 9.1, 9.2, 9.3 and 9.4.

9.4.1 The Transcription

The transcription featured in Figs. 9.1, 9.2, 9.3 and 9.4 is of a 02.42.000 s. sample of an extended learning trajectory that was video-recorded. Timings were obtained by means of the multimodal language analysis program *Elan 4.1.2*. The transcribed episode begins 38 s. after the beginning of the video recording. The start time of each Phase according to *Elan* is shown in the left-most column of the transcription. Other time details are indicated when required. These too are from *Elan*. In the transcription, an utterance unit designates a single pulse of synchronized bodily activity that is coordinated with other persons or with other aspects of the situation. In the transcription, a line refers to a complete utterance unit and may in fact extend

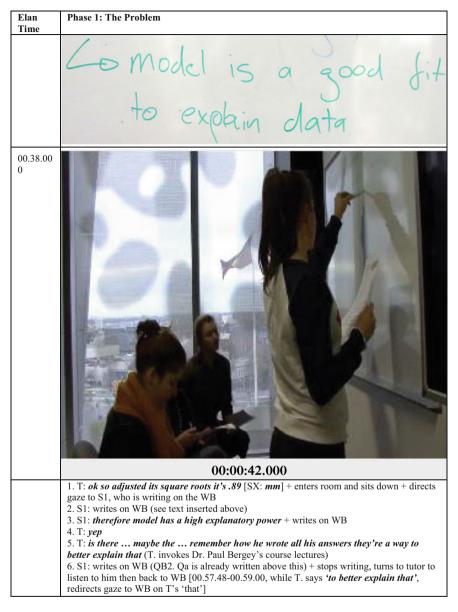


Fig. 9.1 Multimodal event analysis: phase 1: the problem

over more than one line of printed text. An utterance unit is of variable duration and includes some synchronization of variables such as body movement, deictic points, gaze, gesture, head nods, posture, and speech, taken as a single unit of whole-body sense-making. The verbal component of an utterance unit in any given line is indicated in bold italics. Other bodily events (gaze, gesture, etc.) are indicated in normal

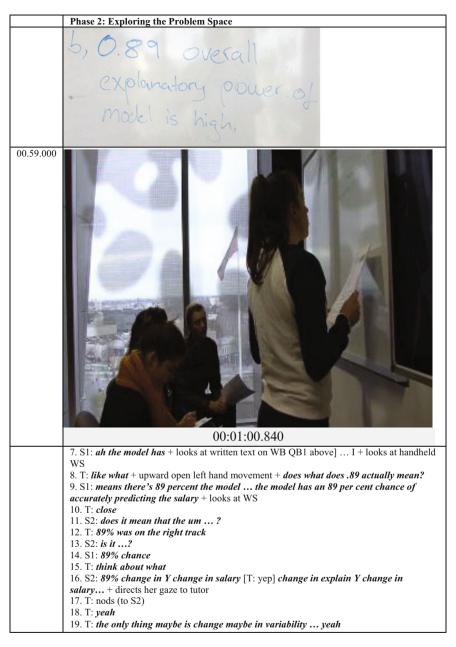


Fig. 9.2 Multimodal event analysis: phase 2: exploring the problem space

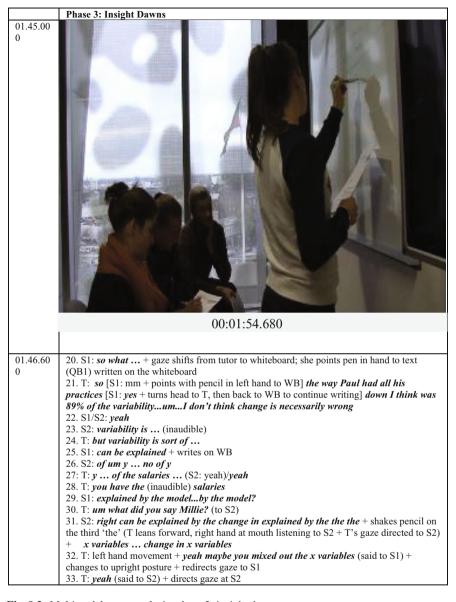


Fig. 9.3 Multimodal event analysis: phase 3: insight dawns

font. The use of the '+' sign indicates that one event is concurrent with some other in the same utterance unit. The numbered lines refer to the utterance units of the Tutor and Students 1, 2 and 3. In the transcription, the following abbreviations are used: S1=Student 1; S2=Student 2; S3=Student 3; T=Tutor; WB=white board; WS=work sheet. The use of square brackets [...] serves to indicate that the

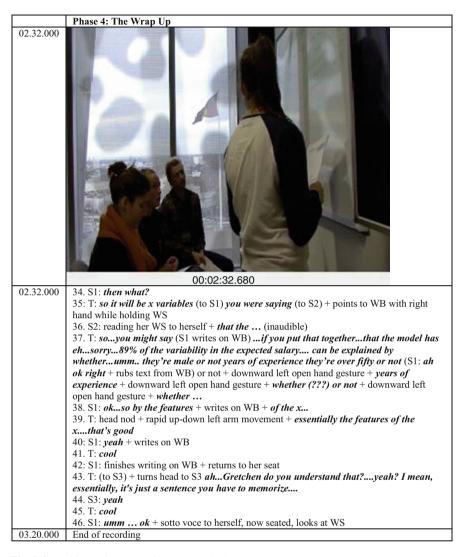


Fig. 9.4 Multimodal event analysis: phase 4: the wrap up

utterance activity of one participant is concurrent with and/or overlapping with the utterance activity of some other participant. In such cases, the concurrent utterance is placed in the same line of the transcription.

Each line of the transcription is correlated with the MMEA displayed in Figs. 9.1, 9.2, 9.3, and 9.4. Figures 9.1, 9.2, 9.3, and 9.4 are stills from the video recording annotated with reference to each student's utterance activity. In the detailed analysis in Sect. 9.5, specific events are cross-referenced with reference to both the line in which they occur in the transcription and the relevant Figure of the MMEA. For example, Line 1, Fig. 9.1 refers to Line 1 of the orthographic

transcription and Fig. 9.1 refers to the MMEA. Figures 9.1 and 9.2 additionally show screen shots of written text that is written on the whiteboard and is concurrent with the activity referred to in that Figure.

The four participants are in a semi-enclosed area that is partitioned off from another group of students with which the same tutor is working concurrently. The male Tutor and Students 2 and 3 are seated while Student 1, who is the main problem-solver in the transcribed episode, is standing before the whiteboard. Student 2 is seated to the Tutor's immediate left. Student 3 is seated further to the Tutor's left in the foreground of the screen shots.

The interactive event is embedded in and coupled to and also co-constructs a local micro-ecology consisting of ecologically salient architectural spaces, objects, surfaces, etc. and what these afford the participants (Thibault, 2008, pp. 318–320). For reasons of space, we cannot discuss this in detail (see Thibault: 318–320 for a detailed account). The physical environment of the learning situation is itself a mediator and enabler of the interactivity; it is not a neutral physical setting. The physical environment is saturated with cultural meanings and values. Surfaces such as the whiteboard, objects such as pens, the handheld worksheets, the seating arrangements and the locations of the tutor and students all play their role in affording certain kinds of interactive relations between the participants and the physical environment in which the episode takes place.

9.5 Learning as Microgenetic Constructive Process

Learning is a form of growth (Brown, 2005, p. 206) that occurs in particular spatiotemporal circumstances. Our focus on interactivity has the potential to show that learning is dependent on the microgenetic individuation of acts of cognition. Microgenesis is a micro-level constructive process on small time scales; it is constructive in the sense that it sets up conditions in the system (e.g., the learner) that did not previously exist (Bickhard & Campbell, 1996, p. 129). Microgenesis is a continuous and ubiquitous feature of the system: it happens whenever the system functions (Bickhard & Campbell, 1996, p. 129), for example, during the system's real-time interactivity with its environment. Microgenetic processes are small-scale shifts in the manner of the system's function that set up new constructions. Learning is dependent on prior microgenetic construction of the system and modifies it (Bickhard & Campbell, 1996, p. 129; Smith, 1991, p. 205).

The term 'microgenesis' was first proposed by Werner (1956, 1957). However, the concept goes back to the work of Sander in the 1920s and 1930s (Sander, 1932). The term *Aktualgenese* ('genetic actualization'), from which Werner derived the term 'microgenesis', referred to the developmental unfolding, or actualization, on very small time scales of a thought, percept, action, or utterance. This entails a process of differentiation across diverse levels or strata of organisation as the initial vague potential is dynamically unfolded as a fully actualized form. Microgenesis is a dynamical process that refers to the development on a brief time scale of a percept,

thought, gesture, vocalisation, etc. It is a developmental process in which the final outcome of an experience, the finished product, is already embodied in the early stages of its development. The final product of experience is thematised as a 'figure' that is developed and stabilised through dynamic processes of unfolding and differentiation. As Rosenthal (2004, p. 222) points out, microgenesis takes place in relation to a thematic field that is given from the outset no matter how poorly defined or undifferentiated it may be. Microgenesis is, then, a movement from potential to actual, a process of actualization across different strata of neural and bodily organisation, rather than a sequential chain of causes and effects (Brown, 2005, pp. 222–224). This transformative and distributed movement across levels of neural and bodily organisation has emergent properties: antecedent stages of the final product, beneath the surface, leave their trace in the final product and actively shape it (Brown, 1991, p. 57).

In our analysis, students and tutor together engage in a process of microgenetic schema construction (Werner & Kaplan, 1984/1963). For narrative purposes, our analysis divides the transcribed episode into four macro-phases, as follows: (1) The problem; (2) Exploring the problem space; (3) Insight dawns; and (4) The wrap up. The detailed analysis of these four macro-phases with reference to the transcription in Figs. 9.1, 9.2, 9.3 and 9.4 now follows.

9.5.1 Phase 1: The Problem

In Fig. 9.1, the Tutor invokes the course lecturer's pre-prepared written answers and on that basis invites Student 1 to derive the required explanation. The Tutor's invocation of the course lecturer's answers grounds the new problem-solving trial that the student is about to engage with in the context of a previous and already successful learning dynamics. The Tutor thus prompts Student 1 to locate the new problem-solving heuristic in relation to the old learning dynamic so that both the new trial and the prior one are located within the same overall learning topology. The student is required to attempt a new trial that is seen as topologically near to the previously successful one. Learning can be seen here as the setting up of new trial dynamics on the basis of a heuristically guided rather than blind variation-and-selection dynamic. It is therefore important that the previously tried and successful dynamic is readily retrievable from the same overall learning topology so that it can guide the microgenetic process of new learning (Bickhard & Campbell, 1996: p. 143). New learning trials are variations on old, successful ones.

In Line 5, Fig. 9.1, the Tutor's utterance is there ... maybe the ... remember how he wrote all his answers there's a way to better explain that locates the new trial dynamic that Student 1 is about to engage in close to the old and successful microgenesis of the course lecturer's answers. The mental process verb¹ remember in the

¹The lexicogrammatical terminology used in the analysis in this section is based on Halliday (2004).

Tutor's imperative utterance functions to evoke an explicit memory of the earlier process and to redintegrate it to the current learning situation. Moreover, the attributive clause there's a better way to explain that articulates a positive evaluation of the lecturer's answers and thereby functions as a selective mechanism that stabilizes the old (previous) dynamic as one which was successful and worth retaining. The Tutor's comments do not add new content. Instead, they serve to locate the new trial as being near to the old, successful learning construction; the new trial is seen as being topologically close to the old one in the overall learning space. The old trial is thus established by the Tutor as the background context in relation to which the new learning trial must be developed and differentiated. The trick then is to access the information available in the prior problem solving heuristic and to make it functionally available for the new trial.

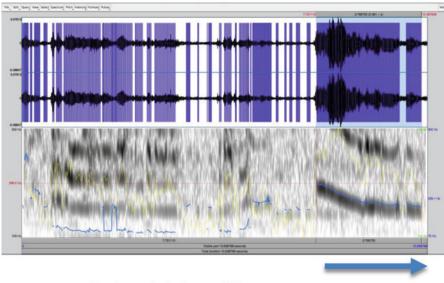
9.5.2 Phase 2: Exploring the Problem Space

Student 1's response (Line 7, Fig. 9.2) begins with a long apparent hesitation in the form of the syllable 'ah' that is characterised by a pronounced and continuous slide in pitch starting at 300.2 Hz and moving to a low of 209.5 Hz and lasting 1.300 s. She then utters the phrase 'the model has', which continues the downward pitch movement from 234.4 Hz to 195 Hz. This part of the utterance lasts 1.460 s. Figure 9.5 shows the *Praat* analysis of the vocal dynamics described here.

Overall, this utterance, lasting a total of 2.766 s, is characterised by the slowing down of the speaker's voice and the progressive fall in pitch noted above while her gaze is directed at the text she has just written on the white board (Fig. 9.1). At the end of this phase, Student 2 switches her gaze to the question sheet (Appendix 1) she is holding in her right hand. It would be easy to read the specific properties of this initial phase of Student 1's response, as described here, as some kind of hesitation phenomenon while the student gathers her thoughts, so to speak. This view is not without merit. However, we further suggest that the student registers the indeterminate nature of her current attempt to correctly locate the new learning problem in the overall microgenetic learning space. Micro-temporal dynamical properties of vocalizations, body movements, gaze, gesture, etc. can thus be seen as the initial stage of a process of individuation of a temporally extended act of learning that is progressively unfolded in microgenesis.

An analysis which focuses exclusively on the verbal aspects of the student's performance and thus ignores the micro-temporal or pico-scale² bodily dynamics of

²The term pico-scale bodily events refers to dynamical bodily events on micro-temporal time scales of the order of tens of seconds to fractions of seconds. These events are an intrinsic part of our embodied interactivity and have the capacity to bias action, perception and awareness in value-weighted ways in real-time interactivity between persons. Therefore, they are significant aspects of the cognitive dynamics of human interactivity (see Cowley, 2007; Steffensen, Thibault & Cowley, 2010; Steffensen, 2013; Thibault, 2008, 2011, in press).



T: maybe remember how he wrote all his answers there's a way to better explain that... S1: ah... the model

Fig. 9.5 Praat analysis of student 2's vocalization: 'ah the model'; temporal extent of S2's utterance indicated by the *blue arrow*

the flow of cognitive activity effectively conceals the real nature of the learning process (Brown, 2005, p. 206). As Brown (2005) points out, this process is a morphogenetic one of the derivation of a cognitive act as it unfolds in microgenesis. We argue that at this initial stage of the unfolding microgenetic trajectory, the process is characterised by microgenetic indeterminacy or destabilization: the student is uncertain as to which way to direct the current microgenetic trajectory within the overall learning space.

Bickhard and Campbell (1996, p. 145) point out that microgenesis is a dynamical space in its own right. It is characterised by its own dynamics; processes of destabilisation and restabilisation are not extraneous to the microgenetic process, but are intrinsic to it. The stabilization of microgenetic construction is essential for learning to occur (Smith, 1991, p. 206). In turn, this leads to increasing automatization through the repetition with small variation of successful microgenetic constructions. These processes of stabilization, destabilization and automatization are the means by which microgenetic constructive change necessary for new learning occurs. Microgenetic destabilizations are regions of indeterminacy whereas stabilization corresponds to well-defined organisations of microgenetic process dynamics. Student 1 is engaged in the process of learning a new mathematical skill. The trick is to avoid those regions of the larger dynamic learning space of strategies and approaches that don't work. The Tutor has already provided a vital clue (Line 5, Fig. 9.1) as to the correct region of the overall learning space that is relevant to the solving of the problem and, implicitly, of those regions to be avoided. Thus further

implies that the Tutor has already learned those regions of intrinsic microgenetic instability that have the potential to constitute "implicit vicariant guides to the avoidance of constructive, microgenetic, error" (Bickhard, 2001, p. 205).

The current learning trial is, for the student, a differentiation of microgenetic process out of more holistic and undifferentiated processes. The explanatory power of "the model" is presented as a further differentiation of the lecturer's answers that the Tutor invokes (Fig. 9.1). The Tutor's follow up question (Line 8, Fig. 9.2) like what does what does .89 actually mean? has a monitoring function. The Tutor seeks both to nudge the student towards a more stable region of the learning space at the same time that the Tutor's question is itself influenced by the student's prior activity such that the microgenetic dynamics of the Tutor's monitoring question is influenced by the student's microgenetic process. More specifically, the Tutor's question differentiates one class of dynamics of the student's monitored process from other possible classes and in ways that seek to stabilize the student's destabilized microgenetic dynamics. That is, the Tutor's question is a selection constraint that operates in favour of the stabilization of the microgenetic process and against its destabilization as the Tutor seeks to guide the student away from the possibility of error (destabilization) and hence towards the region of greater stability. The Tutor in effect catches the student before she moves into a region of greater microgenetic instability. This requires on the part of the Tutor sensitivity to the significance of the picoscale bodily dynamics referred to above. In catching the student in this initial zone of instability, the Tutor nudges her towards a region of greater stability when he asks the student to attend to the meaning of ".89".

In asking the student to consider the meaning of .89, the Tutor is providing a further piece of an emerging normative differentiation that potentially will enable the student to learn more about (1) what the problem is; and (2) how to solve the problem. Whereas (1) is a matter of construction, (2) is a matter of interaction. The Tutor's question invites Student 1 to construct an anticipatory model of the interaction process (Christensen & Hooker, 2000, p. 20). Her response, *means there's 89 percent the model ... the model has an 89 per cent chance of accurately predicting the salary* (Line 9, Fig. 9.2), constructs an anticipatory model of the interactive process of predicting the salary. The interaction process is concerned with the development of a specific prediction tool. However, Student 1's grasp of the prediction tool at this point remains defective. The Tutor provides normative feedback ('close', Line 10, Fig. 9.2; and '89 % was on the right track', Line 12, Fig. 9.2) that provide Student 1 with information that enable the student to better hone and identify the problem in her own prediction technique. This information, in turn, enables the student to form and evaluate anticipations about the prediction process.

In Line 14 ('89 % chance'), Student 1 takes a further step in the honing of the prediction technique. However, it is Student 2 who picks up on the anticipatory model construction process in Lines 13 and 16: is it ... 89 % change in Y change in salary [Tutor: yep] change in explain Y change in salary [inaudible]. Student 2's contribution further refines the anticipation model. Again, the normative feedback from the Tutor ('yep') shows that Student 2 further refines and more precisely defines the prediction technique. Student 2 has more effectively picked up on and

responded to emergent context-sensitive clues that have arisen in the course of the interaction. Specifically, she has picked up on the significance of the Tutor's question in line 4 about the meaning of .89. Accordingly, her learning at this point is more self-directed than is Student 1's. Her ability to pick up on context-sensitive information allows her to provide in line 12 a more articulated profiling of the prediction technique. In turn, this changes the anticipatory modelling, which in turn induces a change in the information that the learner becomes sensitive to.

The generation of a temporally extended learning trajectory also entails the anticipatory modelling of the future development of that trajectory. It is important to be able to anticipatively modulate the interaction flow so that the learning trajectory and its future development is coordinated with appropriate learning outcomes (Christensen & Hooker, 2000). The consciously accessible products of the microgenetic process thus constitute interactive affordances that serve to guide and modulate the further development of the learning trajectory because of their capacity to indicate possibilities of further interaction in that environment. The Tutor's head nods, his laconic 'yep' and 'yeah', his hand gestures, and his extended comment at the end provide evaluative feedback as to the success of Student 2's learning trajectory. Specifically, they provide normative evaluators that indicate success or failure and thus provide the student's learning with feedback that enables her to adjust and direct the trajectory more effectively in order that the learner can stay adaptive. Importantly, these evaluators have the potential to bring about changes in the learner that bring about changes in the way the learner will interact with the relevant environment. The learner thus learns to track a complex matrix of interaction processes and environmental organisation that is spread across diverse time and place scales and is, moreover, continuously evaluated by a heterarchy of norms and values (Hodges, 2007a; see Sect. 9.6).

The exchange between Student 2 and the Tutor is nested within Student 1's attempt to solve the problem. Table 9.1 sets out the pico-scale bodily dynamics together with timing of the exchange between Student 2 and the Tutor.

The close synchronization of the pico-scale bodily dynamics of the two speakers again shows the importance of fine-grained context-sensitive information that is not amenable to discourse-analytical techniques. The Tutor's rapid series of head nods together with 'yep' constitute a prosody that responds to and synchronous with the entire duration of Student 2's utterance in line 12.

As noted above, learning problems are not always clearly defined. Learning systems are often required to transform vague problems into more specific ones (Christensen & Hooker, 2000, p. 31). It is important, therefore, to understand how people learn things that, initially, lack clear definition. An explanation based in algorithms cannot provide a satisfactory resolution of this problem because of the explicit, encoded nature of the problem and solution states in such accounts (see above). The resolution of this problem lies in showing how microgenetic constructive processes effect and enable the transformation from initially vague, ill-defined problems spaces to more specified, better-defined ones. Microgenesis shows how

Table 9.1 Pico-scale analysis of Student 2's microgenetic construction in Phase 2

| Time in ms. | | | |
|--------------------|---|--|--|
| according to | | | |
| Elan | Student 2 | Tutor | Student 1 |
| 39.0–39.9 | Left head turn to T; eighty nine | | |
| 39.9– 40.5/41.2 | percent | | |
| 41.2-42.9 | change in | Two nods on 'in' | |
| 42.9–43.0 | Pause | | |
| 43.0-43.7 | why | Three nods | |
| 43.7–44.7 | change in salary | Two nods (44.1–44.7) | |
| 44.7–45.2 | probably | yep; one nod | |
| 45.2–46.0 | explains | Downbeat of right hand flipping sheet of paper; one nod | |
| 46.0–46.2 | why | | |
| 46.2–48.0 | there's a change in | Two nods on <i>change in</i> (47.0–47.6) | |
| 48.0–48.7 | | One nod and one flip of sheet of paper making audible sound | |
| 48.7–49.2 | salary | | |
| 49.2–49.7 | | yeah | Downbeat of hand holding sheet synchronized to Tutor's 'yeah' |
| 49.7–51.9 | | the only thing you can sort of change; up-down circular movement of open left hand, fingers spread on 'change' (50.7–51.9) | |
| 51.9–53.0 | | may be in variability; up-down hand gesture on 'variability' (51.9–52.6) | |
| 53.0–54.0 | Switches gaze from Tutor to hand held sheet | | |

Verbal text in bold italics

learning and hence cognitive capacity progressively emerge as the learning system exploits the interactivity of the learner-environment system to enhance and increase its differentiation-making powers and to enhance its capacity to adapt through its interactivity. The interactivity between learner and environment is the driver and shaper of cognitive processes.

9.5.3 Phase 3: The Dawning of Insight

Phase 3 is characterised by the key insight that a change in the x variables is a crucial part of the solution to the problem. Phase 3 begins with Student 1's utterance so what? (Line 20, Fig. 9.3) as she shifts her attention from the Tutor back to the white board and points to the text of Question B1 written there. In doing so, she constructs a link between what the Tutor said in Line 19, Fig. 9.2 and Question B1 previously written on the white board. Student 1's utterance prompts the Tutor in Line 21, Fig. 9.3 to expand on the notion of 'change in variability', which he had introduced in Line 19, Fig. 9.2. In Line 21, Fig. 9.3, the Tutor introduces two crucial elements: 89 % of the variability and I don't think change is necessarily wrong. The second of these two elements is explicitly normative. The Tutor builds a link to Student 2's attempts to formulate the role of change (Line 16, Fig. 9.2). In Line 19, Fig. 9.2, he builds on Student 2's utterance when he adds the crucial factor change in variability.

The normative element that is articulated in Line 21, Fig. 9.3 is presented as a personal opinion of the Tutor by its framing clause (*I don't think* ...) that frames the clausal proposition *change is not necessarily wrong*. The normativity of the Tutor's utterance serves to focus on the ensuing flow of the interaction. It constitutes a microgenetic anticipation of future interactive flow (Bickhard & Campbell, 1996) by normatively anticipating and hence constraining the possible future development of the students' learning trajectories. The point is that microgenetic anticipation—the setting up of the local conditions for the further development of the interaction—can be correct or incorrect, true or false, right or wrong, etc. (Bickhard & Cambbell).

Lines 22–29, Fig. 9.3 are a direct outcome of this set up. Students 1 and 2 concur with the Tutor in Line 22, Fig. 9.3 with their near simultaneous uttering of yeah. Both signal that they understand the normative implications of the Tutor's prior statement. Lines 22-29, Fig. 9.3 constitute, in our view, a process of successful microgenetic consolidation of the new thematic content introduced by the Tutor in Line 21, Fig. 9.3. As the transcription reveals, Lines 22–29, Fig. 9.3 illustrate how Student 2 and the Tutor jointly articulate small fragments of and variations on this new material, which unfolds as a choral-like interweaving of the voices of these two participants. This is shown by the convergence of their voice dynamics: tempo, rhythm, and volume register a reflective style of joint communion that contrasts with the different and vocally more prominent and contrasting voice dynamics of Student 1 in Lines 25 and 20, Fig. 9.3 (can be explained ... explained by the model ... explained by the model?). The closely synchronized voice dynamics of Student 2 and the Tutor modulate and accommodate each other to a shared trajectory that is constrained by the same or very similar higher-order parameters in the form of the verbal patterns that are evoked. In other words, the thematic content that is activated as small variations on a convergent theme sets the parameters for the attunement of the two participants to each other's vocal (and other bodily) dynamics as they engage in this act of joint thinking together.

These higher-order parameters do not hover above the participants; instead, they too are perceived aspects of the vocal and other bodily dynamics of the two speakers. They are the most explicit layer of multiple layers of differentiation of the unfolding microgenetic process. As cultural-semantic patterns, they are longer, slower processes emanating from cultural timescales that the two participants entrain to. They set the parameters for faster, smaller bodily and neural events. In setting the parameters for these faster, smaller processes, these cultural-semantic patterns are anticipative in ways that are manifested as the functional coherence of the two agents during their brief moment of mutual attunement. The self-organising dynamics of the dialogical interaction between the two agents is oriented to interactive success. The voice and other bodily dynamics of the two participants, together with the higher-order cultural-semantic parameters that are set, tend to induce a recruitment of bodily and neural dynamics of the two agents to an overall convergence that briefly stabilizes as a common learning trajectory in Lines 22–28, Fig. 9.3. The significance of the Tutor's normative anticipation of the solution in Line 21, Fig. 9.3 (see discussion above) lies in the fact that it attempts to and is successful in recruiting the future development of the learning trajectory to the normatively anticipated interaction outcome that is made explicit by Student 2 in Line 31, Fig. 9.3.

Student 1's contrasting voice dynamics, including the rising intonation of her interrogative utterance *by the model?* (Line 29, Fig. 9.3), strike a different melody, so to speak, that is not attuned to the unfolding insight that Student 2 and the Tutor develop together. She publicly addresses the whole group whereas Student 2 and the Tutor engage in a parallel act of thinking together that concludes in Line 28, Fig. 9.3. In Line 30, Fig. 9.3, the Tutor, in response to Student 1's question in Line 29, Fig. 9.3, invites Student 2 to articulate to the group the insight that remains incipient in the dialogue that occurred between Student 2 and the Tutor in parallel to Student 1's efforts to solve the problem on the white board.

In Line 31, Fig. 9.3, Student 2 illustrates a 'tip of the tongue' experience as she searches for the correct choice of term in response to the Tutor's invitation in Line 30, Fig. 9.3 that she make explicit to the group the insight they had previously developed together more implicitly. The initial part of Student 2's utterance (right can be explained by) echoes the Student 1's prior attempts in Lines 25 and 29, Fig. 9.3 to derive an explanation. However, it is also an important modification of Student 1's efforts. The 'tip of the tongue' experience mentioned above is manifested by the repetition of the definite article 'the', the syllabic lengthening of the third occurrence of 'the', which is synchronised with a rapid twirling movement of the pencil which she is holding in her raised right hand, and the ensuing pause of 700 ms. (7 deciseconds) prior to her uttering of the crucial element x variables ... change in x variables, which had been anticipated by the Tutor in Line 21, Fig. 9.3. The rapid twirling movement of the pencil she is holding has no inherent meaning. This movement is schematized (Werner & Kaplan, 1963) so that it serves to anticipate the not-yet-verbalised meaning 'x variables', which is the crucial insight here. It is not difficult to see that the rapid twirling movement of the pencil is schematized to serve this function at this point in the unfolding microgenetic process: the rapid pencil movement thus signifies the meaning 'variability' before it is verbalised 700 ms.

Table 9.2 The microgenesis of insight in Student 2's utterance in Line 31, Phase 3



later. Table 9.2 presents the pico-scale dynamics of Student 2's 'tip of the tongue' utterance in Line 31, Fig. 9.3.

In Line 31, Fig. 9.3, Student 2 searches for the semantic category that remains incipient in and yet anticipated by the prior development of the discussion from Line 21, Fig. 9.3 to this point. As the analysis of Phase 3 shows, Student 2 (unlike Student 1) has hit upon the correct category. In Line 31, Fig. 9.3, she struggles momentarily to specify it. The result is the objectification and stabilization (*x variables* ... *change in x variables*; Line 31, Fig. 9.3) of the normatively appropriate meaning construction as the multiple potentialities of the situation are articulated as a single more focal meaning in the public learning space (Draguns, 1991: 298).

The repetition of the definite article 'the', along with the other factors mentioned above (Line 31, Fig. 9.3), evidence a microgenetic transition from a physiognomic mode of understanding to an objectified one that is adapted to the public reality of the tutorial (Werner & Kaplan, 1984/1963).

Phase 3 concludes with the Tutor providing normative feedback to the contributions of both Student 1 and Student 2, respectively. In Line 32, Fig. 9.3, he enacts a general reorientation of his body posture as he shifts from the posture he adopted in Line 31, Fig. 9.3 while attending to Student 2's utterance to the new posture he adopts in Line 32, Fig. 9.3 (see transcription for the details) while directing his feedback to Student 1. (*yeah maybe you mixed out the x variables*). In doing so, he creates a retroactive thematic tie to what Student 2 had said in Line 31, Fig. 9.3. In Line 33, Fig. 9.3, he then switches his attention to Student 2 and provides further normative feedback to her (*yeah*) to indicate her successful negotiation of the interaction outcome that was normatively anticipated in Line 21, Fig. 9.3.

9.5.4 Phase 4: The Wrap Up

Phase 4 is one of consolidation. In Line 34, Fig. 9.4, Student 2 prompts the Tutor to provide further clarification. Initially, he does so by further mention of the x variables (Line 35, Fig. 9.4). The conjunction so links this mention back to the previous discussion in a semantic relationship of consequentiality. He then invites Student 2 to elaborate further on the insight she had articulated in Line 31, Fig. 9.3. At the same time, his pointing to the text on the white board creates a further link between the two (Line 35, Fig. 9.4). In Line 37, Fig. 9.4, the Tutor builds a link between the two constructs 89 % of the variability in the expected salary and the x variable whether they're male or not.

Student 1's responses in Line 37, Fig. 9.4 (ah ok right) and in Line 38 (ok so by the features of the x) elicit both confirmation and normative feedback from the Tutor in Line 39 (essentially the features of the x ... that's good). The rapid up-down arm gesture that is co-synchronous with essentially (Line 39, Fig. 9.4) schematizes in a holistic and imagistic way (McNeill & Duncan, 2000) the meaning that is verbalised by the lexeme essentially to evaluate the significance of the features of the x. The utterance, comprising the gesture-verbal complex described above, thus distils the essential and important point at this stage in the discovery of the solution to the problem posed in Phase 1. It is distilled as an objectified mathematical truth in the transition from the physiognomic mode of understanding articulated by the gesture to an objectified verbal-mathematical one. This transition is further reinforced in Line 43, Fig. 9.4 when the Tutor addresses Student 3, who has not spoken at all during the entire recorded episode.

In Line 43, Fig. 9.4, the Tutor seeks to establish that Student 3 has understood the point of the discussion. Again, he uses the modal evaluator *essentially* to locate the statement *it's just a sentence you have to memorize* in an objectified verbal-mathematical domain of scientific truths. Moreover, it is something you 'have to

memorize', i.e., it is posited by the tutor as an obligation enforced by the conventions of the discipline that one must commit to memory and about which the learner has no choice. The essential content of the tutorial is at the end distilled as a prospective memory: later recall (of the relevant construct) is thus constrained not by first-order perceptual data of the kind that constrains our memories of past experiences, but by the second-order semantic patterns articulated in the tutorial and the mathematical conventions that these give voice to. The outcome is the invocation of a prospective memory that is construed as an obligation that one passively receives from the outside rather than as a thought that one freely entertains and develops. It is a semantic construct that one must replicate in future memory and therefore inculcate as a habit that one can intentionally orient to and reproduce when required. Memory as distinct from thought stabilizes learning experiences as categories that can be reproduced when required whereas thought is exploratory and oriented to change and innovation (Brown, 2005: 542). The flux of exploratory thought that has characterised the episode as a whole is thus stabilized at the end as a learning construct on which attention can be focused in future recall. The new learning construct is a result of microgenetic constructive effort that brings about a change in the initial learning topology. It therefore takes its place in the overall topology so that future microgenetic constructive processes can take place.

Pace the strong influence of social constructivist thinking on educational theories in recent decades, we contend that an analytical focus on abstract verbal patterns, as in discourse-analytical approaches to classroom interaction, fails to account for the grounding of human cognition and learning in our embodiment. It is by means of our embodiment that we couple with both local and non-local resources in the Distributed Learning Systems in which the activities of teaching and learning occur. Learning is indeed a constructive process rather than a passive input of information obtained from the external environment. However, we argue that learning is best viewed as an unfolding microgenetic construction process that starts from a primordial matrix of ill-defined affective, imagistic, ideational and other elements that are channelled along a microgenetic trajectory until their final articulation as a fully formed end product in consciousness. The microgenetic theories of Brown, Werner and others prove to be a fertile starting point for developing new understandings of human learning as a values-realizing activity that is shaped and guided by the culturally-saturated interactivity in which it is embedded.

Learning, then, is a microgenetic constructive process that transforms the learning space. From a microgenetic perspective, there is a clear difference between already-learned knowledge and still-to-be-learned knowledge (Bickhard & Campbell, 1996, p. 144). As Bickhard and Campbell (1996, p. 144) point out, the microgenetic process can already construct the previously learned knowledge; it cannot yet construct the knowledge that still needs to be learned. Learning is not a matter of pre-constructed structures, schemas or rules that are stored in memory. Learning is a process which is both constructive and transformative. It is constructive in the sense that it modifies the microgenetic process so that it is able to prepare or set up those structures or resources when needed. As the interaction between the tutor and students illustrates, successful construction takes place in microgenesis as

a process of small additions to and variations on already available constructions (see Table 9.1). Table 9.1 shows how Student 2's microgenetic constructive effort proceeds as a series of rhythmic pulses on very small time scales (Buzsáki, 2006). Moreover, these pulses are interactionally synchronised with those of the Tutor. It is the interactivity between Student 2 and the Tutor that enables learning progressively to be actualised. Student 2 uses the mutual shaping of their interactivity to build up through the microgenetic process small additions to and variations on prior constructions. In the first instance, she builds on Student 1's immediately prior (and incomplete) attempt. She also builds on the tutor's invocation of the lecturer's own answers.

We have seen how in the learning situation analysed here, learners establish a vague, ill-defined background meaning or context. In the microgenetic process, they construct variations on this background context. According to microgenetic theory, affect and meaning "are processed much earlier than the conscious experience of the stimulus" (Kurian, 1991, p. 83; see also Brown, 1988, pp. 46–47). For example, Brown (1988, p. 47) points out that the phonological representation of a word is a conscious perception after the meaning is already understood. Discourse-analytical transcription practices focus on the final products of microgenesis that are available to conscious perception and hence to transcription. The underlying microgenesis is accordingly frozen and reified. The linguistic pattern that we have learned to detect and to use in the stimulus flux of bodily activity, including phonetic gestures, is the outcome of a temporally unfolding microgenetic process of progressive actualization through a series of stages or strata of neural and bodily organisation that precedes the conscious experience of a cognitive act. Libet's (1985) experimental work on brain processes in conscious experience and volitional acts has shown that a readiness potential precedes the conscious intent to act by about 350 ms. The brain microgenetically prepares or sets up such actions before conscious awareness kicks in (see also Wegner, 2002; Wegner & Sparrow, 2007). Consciousness is the outcome of this process, not its initial cause. Consciousness is a kind of rear vision mirror view that looks back on the outcome of a series of prior real-time neuronal processes that actualize the unfolding microgenetic process (see also Harnad, 1982).

The consciously accessible outcomes of the microgenetic process in real-time learning situations are the visible and audible, etc. bodily movements, e.g., vocalisations, heads nods, gaze, hand gestures, etc., that briefly crystallise before decaying and giving way to the next pulse of the microgenetic process. These consciously accessible percepts are perceived and assessed in relation to the established background meaning and are perceived to operate on this and to modify it. By the same token, these consciously accessible percepts afford anticipatory modelling of the future development of the unfolding learning trajectory. Usually, words and other external media are taken to be representations or expressions of either inner (mental) or outer (environmental) processes. This is in accordance with the encodingist assumptions of the perceive-plan-act view of cognition. On this view, a linguistic utterance, for instance, is a representation of some mental or world-side event for the speaker. The speaker-hearer uses that representation to infer some possible course of action.

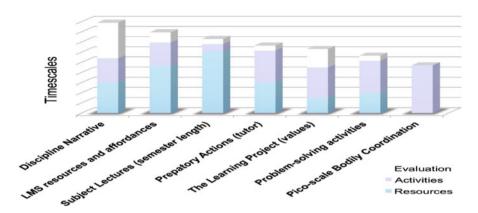


Fig. 9.6 Time scales of the tutorial session

An alternative and more plausible view that does away with the encodingist assumptions that have characterised virtually all accounts of representation has been proposed by Bickhard (e.g., 1998). Rather than constituting representations of the prior unfolding microgenetic processes, the observable percepts provide interactive indications as to what the current environment affords for the agents' (learners') further interactions with that environment. Learning is not a process of assembling the various components of a discourse to come up with the required meaning. Instead, it is a microgenetic constructive process of creating a dynamic, internal state that is coherent and constrained moment-to-moment (Schweiger, 1991, p. 99) by the modifying influence of further constructive effort in the form of small additions to and variations on the learning process. The detection of past and present actualities in the environment and attunement to their affordances sets up the microgenetic processes that afford further interactive potential in that environment (see Bickhard & Campbell, 1996, p. 113). Words don't 'represent' these actualities. Instead, they differentiate the current environment in ways that afford further interactive potential with that environment.

As the pico scale analysis in Table 9.1 shows, Student 2 is faced with the problem of generating an extended action trajectory that will produce the desired outcome. She must shape and modulate her action trajectory to solve the problem to hand. Therefore, she must manage and direct the interaction process in ways that extend and enrich the management horizon (Christensen & Hooker, 2000, p. 15; Werner, 1957) so as to encompass and integrate to her trajectory both local and global factors that span a diversity of time and place scales. These factors include the immediate situation of what is said and done by the Tutor and Student 1. They also include the course lectures which were invoked at the beginning. They include the written text on the whiteboard, the printed work sheet with the problems and the lecturer's solutions, the various artefacts and resources of the online learning management system (LMS) and the longer-term history of the discipline, its theories and methods, etc. Figure 9.6 models the time scales that are integrated in the learning situation analysed above.

Figure 9.6 displays the diverse time scales that the students must integrate to their learning trajectory. These are summarised as follows:

Beyond the Tutorial Session

- 1. The discipline, its culture and traditions;
- 2. LMS resources and affordances (enduring artefacts);
- 3. The course lectures (semester length);
- 4. Preparatory actions: tutor's planning session the week before the recorded tutorial sessions:

Within the Tutorial Session

- 5. The Learning Project: values-realizing activities framed by institutional norms and values;
- 6. problem-solving activities; what is said and done by students and tutors;
- 7. Pico-scale bodily coordination: synchronization of and attunement to values-biasing bodily dynamics.

Some of the affordances of the LMS and online resources include *Narrated PowerPoint*, *Narrated Excel and LiveScribe* Pencasts. *LiveScribe* and *Narrated PowerPoint* enable students to track and monitor the tutor's voice-over and integrate the tutor's voice with his/her reading of written text and visuals. The tight Learner-Artefact coupling integrates real-time interactivity to the lecture timescale. *NarratedPowerPoint*, *Narrated Excel* and *LiveScribe pencasts* combine information and interactivity landscapes (Kirsh, 1997). They are examples of how the learning environment can be filled with artefacts that facilitate and enhance coordination between learner and task across place and time scales. Both of these resources are examples of the importance of setting up resources that make the learning task easy to track. This means less planning and more coordination.

9.6 Conclusion: Learning, Values-Realizing Interactivity and Microgenesis

According to Gibson's ecological theory of perception, values and potential meanings in the form of environmental information are external rather than internal to the animal. They are objectively available in the environment of the animal; they can be exploited and used if the animal is disposed to engage in effortful exploratory interactivity. They do not depend on the internal needs of the animal or an act of perception of the animal (Gibson, 1986/1979, p. 139). They are not phenomena of experience that are constructed by the categories of mind in order to make sense of meaningless sensory input. The affordances of the environment are objective facts, not subjective constructions of the mind (Reed, 1996, p. 101).

The affordances of environmental objects, events, etc. are not therefore the result of the observer's subjective interpretation of these objects and events. Objects and

events afford what they afford because of what they are. The affordances of environmental objects and events are invariants that are objectively available in the environment. The observer only needs to make the necessary effort to perceive and attend to the affordance. In other words, the environment of the observer is replete with potential meaning and value that the observer can discover, exploit and refine through effortful exploratory interactivity. Meaning and value are ecological in this sense.

In the human case, the human environment is a culturally saturated one, i.e., saturated with potential meaning (information) and value that human agents learn to detect, sensitize to, and refine in the course of their learning and development. Information and value are available in the environment of the individual and the social group though they also require that the individual make the effort to enter into an interactive relationship with the meanings and values of the environment (Reed, 1996, p. 101). As Reed further points out (1996, p. 101), the nature and intensity of these efforts can vary according to the biological needs and the developmental experiences of the animal.

Linguistic utterances, other persons, and the affordances of the LEIS are all replete with both value and potential meaning in the form of information that the learner becomes sensitized to and gradually refines in the course of their interactivity with these objects and events. These learning objects and events are in fact not simple invariants, but complex combinations of invariants, or compound invariants (Gibson, 1986/1979, p. 141), that structure the information made available to learners in the learning environment. For example, linguistic utterances covary with aspects of situation, both real and virtual, such that the covarying relation between utterance and the particular aspects of the situation that is relevant to the understanding of the utterance forms a probabilistic combination of invariants that specify complex and often very subtle information structures in the environment of the learner. Learning involves the honing and refinement of one's attunement to the subtle and complex information structures of these combinations (Bolles, 1975). Another example is the compound invariant formed by combinations of visual, spatial, auditory, and linguistic invariants in multimodal artefacts such as Narrated PowerPoint, Narrated Excel and LiveScribe pencasts discussed in Sect. 9.5. Cultural artefacts and events, typically, are complex compounds of invariants, or invariants of invariants. They, nonetheless, form complex cultural units that are not reducible to combinations or associations of elementary sensations (Gibson, 1986/1979, p. 141).

Through learning, we sensitize and attune more and more to these complex variables through the development of what Runeson (1977) calls "smart" perceptual mechanisms that are responsible for more advanced information pick up. Perception of these complex variables is directly related to adaptive and flexible behaviour. Gibson argues that: "Even in the classical terminology, it could be argued that when a number of stimuli are completely covariant, when they *always* go together, they constitute a single 'stimulus'" (1986/1979, p. 141). Gibson's theory of direct perception is concerned, above all, with the perceivable physical world. According to Gibson's theory, there is a one-to-one relation between a given environmental feature and a corresponding pattern of information in the ambient optical, auditory, chemi-

cal, etc. array. The theory needs adjusting in order better to account for the complex phenomena of culturally saturated human cognition and meaning-making (Thibault, 2014). Not all perception is direct: patterns of information in the array may carry information about some environmental feature that is not necessarily present, but which is evoked by the pattern in the array as a form of virtual perception (Thibault, 2014). In such cases, the relationship is probabilistic, not one-to-one.

Learning is a motivated and effortful enterprise. Reed (1996, p. 102) distinguishes between two sets of motivations: "... every animal will thus evolve a set of motivations to use important affordances of its niche; in order to use these affordances, there will also have to be a set of motivations to hunt for information specifying these affordances. The first set of motivations I call the species' effort after values and the second, its effort after meaning." (p. 102). This applies to all animal species in different ways. The animal is motivated to seek out and use the affordances of its environment because these affordances are important for the animal in some way—for its survival, for its learning and development, and so on. In other words, the affordances of a given species have value for that species. In seeking out the affordances of its environment, the animal engages in values-seeking and valuesrealizing interactivity. By the same token, the animal is motivated to detect and make use of the information that specifies the affordances of its environment. In detecting and making use of this information, the animal engages in meaningful action that has the capacity to transform and to extend perception, action, awareness, and understanding. Meaning-making is this process of information detection and use that modifies the animal's relationship to its environment; it is not, we argue, a construction of the mind that is projected onto a flux of meaningless elementary sensations or an amorphous flux that require interpretative enrichment by means of internal representations, mental schema stored in memory or linguistic codes.

Reed's distinction between the two kinds of motivation shows that the effort after meaning is always framed, shaped and guided by the effort after values. Hodges (2007a, 2007b) builds on the earlier insights of Gibson and Reed to show that values are both enablements of and constraints on interactivity. In acting and perceiving, we realize values and in so doing we attune to and sensitize to the potentialities of the environment. Hodges (2007a) proposed the notion of *values-realizing action* in order to show that our interactivity with our environment is nested within a complex values-realizing dynamics. Interactivity is not so much guided by overarching and hierarchical goal-states towards which the agent strives and which control the action top-down fashion. Instead, values are multiple and heterarchical (Hodges, 2007a, 2007b).

Interactivity is shaped, guided and informed by a fluid and fluctuating heterarchy of diverse values such that different values may modulate and guide the activity and therefore may come to the fore at different moments throughout the time-extended development of the action trajectory of the agent. In the development of their learning trajectories, learners orient to and coordinate with both other persons and with the affordances of the learning environment. In doing so, they also orient to and are guided by a fluctuating heterarchy of values that inform and shape the learning situation. From the perspectives of the tutor and the students, respectively, some of the

values heterarchy that informed the learning episode analysed above may be summarized as follows:

The Tutor

- Planning lessons that make effective use of resources;
- Developing awareness of students' understandings and needs;
- Providing effective, context-sensitive scaffolds;
- Making students become aware of relevant patterns and how to use them.

The Students

- Developing problem-solving skills;
- Cooperative, dialogical learning;
- Helping each other to detect relevant patterns;
- Attuning to others;
- · Self- and other-scaffolding.

Learning is a constructive and values-realizing process that involves various kinds of selection pressures. Constructions only survive if they prove successful and thus are retained as valuable. Once they are retained, they serve to provide heuristic guidance to future constructive effort in the overall learning topology (Bickhard & Campbell, 1996). Construction therefore takes place in the context of previously constructed forms of organisation. As the interaction between the tutor and students illustrates, successful construction takes place in microgenesis as a process of small modifications of and variations on already available constructions.

Moreover, we have seen that the interactive success or failure of learning trials depends on (1) how they are evaluated in relation to the norms of the situation (is it appropriate, relevant, etc.?); and (2) whether the given action is supported by the environment in which it occurs. Regularities in the behaviour of persons serve as standards which persons use to evaluate others' behaviours in ways informed by their own perspectives and experience. We accordingly give that behaviour value and meaning. Persons-in-interaction align to and are constrained by norms that shape the interaction itself and its regularities. As Goffman (1983) showed, many of these constraints give interacting bodies and cultural artefacts value and meaning for the selves in interaction.

Gibson (1986/1979, p. 141) pointed out that both affordances and the information to specify affordances face two ways—to the environment and the observer. Rather than the opposition of the phenomenal world of meaning (mind) and meaningless matter, as in the psychophysical dualism characteristic of mainstream theories of perception and cognition, this means that "the information to specify the utilities of the environment is accompanied by information to specify the observer himself, his body, legs, hands, and mouth. This is only to reemphasize that exteroception is accompanied by proprioception—that to perceive the world is to coperceive oneself. This is wholly inconsistent with dualism in any form, either

mind-matter dualism or mind-body dualism. The awareness of the world and of one's complementary relations to the world are not separable" (Gibson, 1986/1979, p. 141).

The feeling of the realness of the world that one encounters is promoted as a mode of sensory experience through one's exploratory and always embodied contact with the objects and events of the world. The complementarity of one's relations to the world also means that one is part of a community of similar organisms who experience the world in like ways through the complementarity of exteroception and proprioception. The complementarity of exteroception and proprioception constitutes the core of a unitary action-perception cycle. Exteroception and proprioception are the two poles of awareness of this cycle. The learner actualizes perception through its exploratory interactivity with its environment. The values-realizing quest for affordances is a quest for objects of interest in which the perceptual world is articulated by feelings in objects of interest (Brown, 2005, p. 140).

As Brown points out, it is the objective existence of objects in the world and their temporal extensibility that define their value, not a subjective human feeling that is projected onto objective external objects (2005, p. 134). The value of things is "planted deeply in the nature of things and their evolutionary histories—in other words, that culture enhances or elaborates what is nascent in basic entities" (Brown, 2005, pp. 129–130). Gibson's theory of affordances demonstrates, as Brown puts it, that "value brings the objectivity of the external world into relation with human emotion and conceptuality" (Brown, 2005, p. 128). The process of the actualization of the perceptual world is one of microgenesis. The microgenetic process that gives rise to a pattern of actualization of a brain state or a perception consists of "a succession of (probably) rhythmic phases ordered from earlier to later, unfolding in a fraction of a second" (Brown, 2005, p. 142). Brown (1988, p. 312) makes the following pertinent observation:

According to the microgenetic concept, objects are not "out there" in the world waiting for acts to engage them but have to be constructed in parallel with developing actions. Although there are differences between action and perception, there are deep inner similarities. Early stages in object formation provide the contextual background from which objects develop and persist abstractly as levels of conceptual or symbolic content within the object itself. Similarly, early stages in action elaborate the instinctual and affective bases that drive the action forward to its goal. Act and object also undergo a similar development. The "zeroing in" on target movements in the specification of an action has its correlate in the featural modelling of object form. Both act and object are analysed into finer units. The exteriorization of a target movement and its effectuation on extrapersonal objects correspond with the realization of an external object field. Act and object exteriorize together. A world of real objects and the effects of actions in that world are part of the same microgenetic end point. The deception that a movement is voluntary or willed by the self as an agent corresponds to the deception that we are independent of our own objects. The increasing passivity and then final detachment of an object representation mirror the activity of an action and the realization of an intentional attitude to movements directed toward those object representations.

Brown (1988) draws attention to action as a form of microgenetic constructive effort. Objects, including virtual objects, are actualized together with the actions

that are directed towards them. Brown writes of "object representations" whereas we would rather say that action progressively differentiates the object. The microgenetic constructive process is a developmental process that progressively hones and differentiates the object towards which it is directed. This includes both real objects that are directly perceived and virtual ones indirectly perceived in memory, imagination etc. Gibson's theory shows that action-perception cycles are a form of exploratory activity whereby agents learn progressively to differentiate and hence to fine-tune their attunement to their environment.

Affordances constitute the ecological niche of an animal. The cultural affordances of the human world constitute the niche of the extended human ecology (Steffensen, 2013) that spans diverse time and space scales and is populated by an increasingly large number of virtual cultural entities and processes. Human beings begin their lives outside the womb by perceiving the affordances of other persons and what they tell us about how others relate to the world. In this way, we learn of the diversity of points of view from which the affordances of the environment can be perceived. As the analysis above shows, the learning environment may consist of affordances that are available for all perceivers albeit from different points of observation, both actual and virtual, in the environment. In learning to perceive the common affordance of, for example, .89, the students learn to perceive the values of things not only from their own perspective but also from the perspective of others (see Gibson, 1986/1979, p. 141). In this way, values-realizing interactivity enables them to enact the microgenetic constructive effort whereby they are guided to detect and to make appropriate use of the information that specifies the affordances of .89 in the learning task such that perception and awareness of the learning task are modified. It is only when learners perceive the values of things for others as well as for themselves that learning takes place.

Our contribution to the discussion around the global reform of teaching and learning in higher education is to propose new theoretical constructs and analytical methods for understanding real-time teaching and learning in higher education. The domain-specific competencies, knowledges, and skills required for the scaffolding and self-scaffolding of learning and for the identification of error will look very different across different learning domains. However, (self)-scaffolding is a general principle (Bickhard, 2001) that can be empirically investigated in different domains and the differences and similarities across domains can thus be established. Teaching-learning is a dialogical encounter between teacher and learner that entails an ontological commitment to the joint processes of attending to and observing that take place when teachers lead novices out into the world rather than simply cramming their heads with 'knowledge' (Ingold, 2014: 388). A first step towards understanding these processes is the development of theoretically well-guided models of teaching and learning that can provide guidance to the recursive microgenetic construction processes that takes place whenever teaching and learning occur.

Appendices

Appendix 1

| Obs | Employee | Salary | Male | Exper | OvrS0 | MBA |
|-----|----------|--------|------|-------|-------|-----|
| 1 | Mary | 28.6 | 0 | 0 | 0 | 1 |
| 2 | Frieda | 53.3 | 0 | 4 | 0 | 1 |
| 3 | Alicia | 73.8 | 0 | 12 | 0 | 0 |
| 4 | Tom | 26.0 | 1 | 0 | 0 | 0 |
| 5 | Nicole | 77.5 | 0 | 19 | 0 | 0 |
| 6 | Whong | 95.1 | 1 | 17 | 0 | 0 |
| 7 | Ellen | 34.3 | 0 | 1 | 0 | 1 |
| 8 | Bob | 63.5 | 1 | 9 | 0 | 0 |
| 9 | Vivian | 96.4 | 0 | 19 | 0 | 0 |
| 10 | Ceol | 122.9 | 1 | 31 | 0 | 0 |
| 11 | Barry | 63.8 | 1 | 12 | 0 | 0 |
| 12 | Jaime | 111.1 | 1 | 29 | 1 | 0 |
| 13 | Wanda | 82.5 | 0 | 12 | 0 | 1 |
| 14 | Sam | 80.4 | 1 | 12 | 1 | 0 |
| 15 | Saundra | 69.3 | 0 | 10 | 0 | 0 |
| 16 | Pete | 52.8 | 1 | 8 | 0 | 0 |
| 17 | Steve | 54.0 | 1 | 2 | 0 | 1 |
| 18 | Juan | 58.7 | 1 | 11 | 0 | 0 |
| 13 | Dick | 72.3 | 1 | 14 | 0 | 0 |
| 20 | Lee | 88.6 | 1 | 21 | 0 | 0 |
| 21 | Judd | 60.2 | 1 | 10 | 0 | 0 |
| 22 | Suni | 61.0 | 1 | 7 | 0 | 0 |
| 23 | Marcia | 75.8 | 0 | 18 | 0 | 0 |
| 24 | Vivian | 79.8 | 0 | 12 | 0 | 0 |
| 25 | Igor | 70.2 | 1 | 12 | 0 | 0 |

Variable Names: Salary = employee's annual salary (thousands), Male = 1-if employee is male, 0 otherwise, Exper = number of years employment at the company, 0×r50 = 1 if employee is over 50 years old, 0 otherwise, MBA = 1 if employee has an MBA degree, 0 otherwise ™

| SUMMARY OUTPUT | | | | | | | | |
|-------------------|--------------|------------|----------|-------------|----------------|-----------|------------|------------|
| Regression Sta | tistics | | | | | | | |
| Multiple R | 0.955629 | | | | | | | |
| R Square | 0.913227 | | | | | | | |
| Adjusted R Square | 0.895873 | | | | | | | |
| Standard Error | 7.443884 | | | | | | | |
| Observations | 25 | | | | | | | |
| ANOVA | | | | | | | | |
| | df | SS | MS | F | Significance F | | | |
| Regression | 4 | 11663.38 | 2915.844 | 52.62173636 | 2.45213E-10 | | | |
| Residual | 20 | 1108.228 | 55.41141 | | | | | |
| Total | 24 | 12771.61 | | | | | | |
| | Coefficients | andard Eri | t Stat | P-value | Lower 95% | Upper 95% | ower 90.09 | pper 90.0% |
| Intercept | 28.87806 | 4.924619 | 5.864019 | 9.77367E-06 | 18.60548229 | 39.15063 | 20.38448 | 37.37164 |
| Male | 3.012695 | 3.495811 | 0.861802 | 0.399012029 | -4.279438155 | 10.30483 | -3.01659 | 9.041984 |
| Exper | 3.019047 | 0.2499 | 12.08102 | 1.20703E-10 | 2.497764308 | 3.540329 | 2.58804 | 3.450054 |
| Ovr50 | -8.59787 | 6.323776 | -1.35961 | 0.189085641 | -21.78903983 | 4.593293 | -19.5046 | 2.308859 |
| MBA | 9.587027 | 5.003378 | 1.916111 | 0.069755498 | -0.849837656 | 20.02389 | 0.957609 | 18.21644 |

- a.→Please characterize the multiple regression model provided in the regression outure of the excel regression tool-(i.e. write down the full equation here). ¶
- b.→How would you describe the overall amount of <u>explanatory power</u> of the model provided?¶
- c.-> What is the estimated salary on an additional year in experience? How reliable do you believed this estimate is?Defend your statement of reliability using your best statistical argument. ¶
- d. +What is the expected salary for an employee who is a 35-year-old male with a Bachelor degree and with 10-year-experience? What can be the difference between the salary received from an employee with same characteristic other than a MBA degree? How reliable do you believe this difference? ¶



Appendix 2

```
Solutions: ¶

1. ¶

y=28.8781+3.0127x1+3.0190x2-8.5979x3+9.5870x4 ¶

Where x1=1 when the employee is a male and x1=0 when she is a female ¶

x3=1 when the employee is over 50 and x3=0 when he/she is under 50 ¶

x4=1 when the employee has a MBA degree and x4=0 otherwise ¶

¶

2. Adjusted R^2=0.89 which is high and the model overall is a good fit to explain to data ¶

3. 3019.047 dollars for one more year experience. Very reliable because p value is very small. ¶

4. YBACKLIOS=28.8781+3.0127+30.190-0+0-62.0808 ¶

YMAG=28.8781+3.0127+30.190-0+9.5870=71.6678 ¶

Difference=9.5870 ¶

Reliable because p value is close to 0.05 and the 90% confidence interval shows that the null hypothesis should be-
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Chapter 10 Capitalising on Internet and Computing Technologies for Improving Learning and Teaching: The Experience of Waseda University

Michiko Nakano

Abstract This chapter explains how Waseda University, a forward looking university in Japan, has capitalized on internet and computing technologies to improve learning and prepare students to engage in globalised economies. Initiatives such as open education, sharing of resources at a global level, and real-time exchange with students in other Asian countries will be discussed. The chapter concludes by examining the university's future development plan and creative ways of using technologies to promote learning in an increasingly globalised world.

10.1 Background

Waseda University was founded in 1882. In 2015, it consisted of 13 faculties, 19 graduate schools, seven specialised graduate schools, and two affiliated high schools (Senior High School and Honjo Senior High School). It was the second largest university in Japan with around 45,000 undergraduates (including 4400 foreign students) and over 9000 graduate students. These students, as well as 1862 faculty staff members and 4500 part-time instructors, all used ICT (information and computing techologies) facilities. Technology has become a pervasive element of educational experience for all the Waseda students, whether studying on or off-campus.

This chapter looks into technological changes at the institution level using a case study of this leading Japanese university. Extant literature on technological reforms in higher education, including Fox (2016) in this volume, mostly focuses on technological change in learning and teaching at a rather micro-level involving university courses or specific groups of students or teachers. For example, Fox in Chap. 8 discussed the use of technologies in developing MOOCs to reach a large group of

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students worldwide. Drawing on theories of distributed cognition and ecological psychology, Thibault and King (2016) in Chap. 9 provided a detailed account of an innovative interactive learning design integrating new technologies. These are significant research efforts advancing learning and teaching using new technologies. However, the literature is rather silent in relation to technological reforms in higher education from an institutional perspective. Relevant policy frameworks at different organisational levels are required to create a supportive context for technological innovation to occur in university classrooms and online platforms. This chapter presents a case study of how Waseda university has proactively planned for technological change. This chapter also provides a technological context for Ng's study (2016) of an innovative pedagogical model for teaching English in Chap. 13.

10.1.1 Digital Developments at Waseda University

Digitalization at Waseda started in 1995. When the university was seeking cyber partners at this early stage of its digitalisation effort, few Asian partner universities in developing countries had computers dedicated solely for student use. In order to start cyber sessions with international students, the university continuously donated computers to partner universities in Korea, Malaysia, the Philippines and China until 2005. In 1997, the university initiated the Digital Campus Consortium (DCC) to connect academics with industrial partners. Through established partnerships with major technology companies in Japan, ICT education within the university improved greatly. The DCC goal of 'realizing a new university model based on an information network for the 21st century', and thereby promoting sustainable e-learning, has led to significant developments in reforming Japan's highereducation system. To date, 22 companies have participated in the consortium, including Sony, Panasonic, Towa Engineering, NEC and IBM. These corporations supplied computing equipment and facilities to the university, which were renewed every 3 years. Major outcomes of the DCC initiative are summarized in Sect. 10.1.1.

Waseda's investment in ICT for education purposes corresponds with Kozma's proposal (2008). Kozma stated four goals for investing in ICT for education purposes:

- To support economic growth by developing human capital and increasing the productivity of the workforce;
- To promote social development by sharing knowledge, fostering cultural creativity, increasing democratic participation, improving access to government services and enhancing social cohesion;
- To advance education reform, through major curriculum revisions, and changes in pedagogy and assessment; and
- To support educational management and accountability, with an emphasis on computer-based testing and the use of digital data and management systems.

These four objectives were proposed and realized at Waseda University through two plans designed to enable the university to become an internationally competitive global university in the twenty-first century: *Grand Design for 21st Century Education and Research* and *Waseda Next 125*.

In practice, this meant that the productivity of the workforce was improved, with IT training and workshops held regularly for administrators and faculty staff members. The administrators had to take an IT test (CISCO levels 1 and 2) to monitor the development of their new skills. Faculty members were encouraged to attend international conferences where they could study different classroom applications and innovative teaching methods using ICTs. Major curriculum revisions were made through the establishment of the 'Open Education Center', which promoted e-learning and open access to courses. In order to promote e-learning and innovative capstone education, Waseda introduced core education in English, mathematics and Japanese, and made contemporary issues as well as interdisciplinary subjects available to students. The influence of modern technologies could further be seen in the use of computer-based testing in English language education and the use of the Learning Management System (LMS) containing automatic scalable systems. To increase accountability, all campus information was made available online. In addition, to avoid the digital divide faculty staff members were given full access to PCs that were renewed every 5 years, and similarly, the number of PCs in the PC rooms and learning commons for students were increased.

In 2013, the university proposed the *Waseda Vision 150* plan, with a focus on internalization and globalisation. For the sake of sustainability, the university continued to restructure and develop ICT work and learning communities, in order to create a support system for promoting technological change. This led to the adoption of a multi-channel approach, which is discussed in Sect. 10.2. Overall, ICT has been a core driver of Waseda policies, reflecting the activities and intended outcomes of the Digital Campus Consortium.

10.1.2 Main Outcomes of DCC Activities

The DCC activities were implemented in five phases, as detailed below. The DCC activities were considered successful based on two observations. First, the DCC-initiated courses yielded positive evidence of student engagements over the years. Second, the use of ICT at Waseda University increased, thanks to a newly implemented infrastructure where DCC-initiated experimental courses were run independently from faculty decision-making procedures and were financed outside of university formal structures. Following evaluation, the piloted experimental courses were deemed successful. The university then introduced the Open Education Center which was independent from faculty scrutiny. The role of president of the DCC was either fulfilled by the President of Waseda University or the Executive Director of the IT promotion office. The leadership and insights by these leaders have led to many of the successes documented below.

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10.1.2.1 Phase 1 (1999–2001)

The first DCC phase was aimed at creating an 'open campus' and produced significant results by combining the academic resources of universities with ICT technologies of business enterprises. Major projects

- Cross-Cultural Distance Learning seminars (CCDL) with overseas partner universities. Joint seminars were held with 30 universities in 16 countries in a foreign language;
- Development of a tutorial based English learning program, attended by 2800 students in 2001; this was effective in improving Standard Speaking Test (SST) scores;
- Introduction of five on-demand courses in 2011;
- · Access to online publication of academic databases;
- Distribution of 'open' distance learning programs;
- Establishment of joint ventures by corporation partners and Waseda University.

10.1.2.2 Phase 2 (2002–2004)

Keeping the standard of achievements in DCC Phase 1, the second phase worked on the following projects in order to realize a twenty-first-century university model:

- Preparation for the establishment of a Cyber University Consortium (CUC), by
 implementing joint distance learning courses with overseas universities using
 on-demand lectures and video conferences. The above mentioned CCDL program was further developed, using video chat and videoconferencing systems to
 interact with international universities. By the close of 2004, 44 universities in 21
 countries had participated;
- Establishment of the Accreditation Council for Practical Abilities (ACPA) (Non-profit organisation); and
- Establishment of the Forum for On-Demand Lecture Circulation (FOLC).

10.1.2.3 Phase 3 (2005–2007)

DCC Phase 3 continued the projects from the previous phases and worked on the following projects to prepare for the establishment of an 'Asia Cyber College', planned for Phase 5:

- Enhancement of partnerships with overseas universities;
- Joint experimental seminar projects, including: "Coexistence in Asia" (2003–2006), "Toward the Establishment of the East Asian Community" (2006–2007), "FTAs in the East Asia" (2007–2010), and "World Englishes and Miscommunications" (2004–ongoing);
- CCDL program development, with 79 universities/institutes in 21 countries participated by 2007;

- Development and distribution of free 'Japanese-learning for beginners' software in Thailand; and
- Provision of support for the General Institute of Advanced e-Learning System, the Research Institute of Distance Learning and Computer Based Testing, the CCDL Research Center, the Research Institute of Open Source Software, and the Institute for Asia's IT Strategy.

10.1.2.4 Phase 4 (2008–2010)

In Phase 4, the DCC worked further towards the realization of the Asia Cyber College, with the aim of contributing to society through developing 'bridging human resources' by producing graduates who are equipped with global literacy and practical skills and have the ability to act as next-generation leaders in the Asian Community. This was done through:

- The establishment of an ICT-based method for cyber seminars with foreign universities. The CCDL program involved 91 universities/institutes in 24 countries;
- The development of new cross-cultural programs and distance learning methods including a short-term intensive training camp for learning English in Japan, an online presentation contest in the CCDL program, new cross-cultural programs with international students, and the development of the CCDL Partner Search Site:
- The development and promotion of Japanese learning contents in Asia, including the distribution of on-demand contents to Peking University, Tsinghua University, and Renmin University (China), Hankuk University (South Korea) and Thammasat University (Thailand). A needs survey for learning Japanese was also conducted

10.1.2.5 Phase 5 (2011–2013) and Future Plans

The goal of the DCC Phase 5 was to establish the Asia Cyber College to develop and produce graduates who can play leadership roles in globalisation, and to promote networks of personal contacts in local communities. Major project plans include:

Expansion of cross-cultural interactions and cyber-seminars through the implementation of programs for improving the educational quality of existing cyber-seminars and Cross-Cultural Distance Learning (CCDL), application of educational methods developed through past implementation of CCDL to face-to-face classroom learning, and through the development of systems aimed at expanding exchange opportunities and increasing the effectiveness of education;

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Projects related to Japanese language and culture, including new programs that
can assist international students to find employment in Japanese companies by
providing them with effective ICT-based support for learning Japanese based on
the needs assessment survey results. This also includes programs and contents
designed to help people from other countries to develop a broad knowledge of
the culture of Japan;

- Develop content that supports core education such as English, Japanese, statistics, and information science, and also improve the IT systems which act as a platform for core education. Develop a foundation system which multiple universities can share and conduct studies for establishing an inter-college information centre:
- Develop a next-generation e-learning system, by examining the contents and platform on the basis of demonstration experiments of mobile learning using smartphones, tablet PCs, and/or electronic book readers, and promote the study of simplified recording and archiving contents, a classroom lecture automatic recording system, and next generation tutorial rooms;
- Continuation of Waseda University-Korea University Global Presentation Competition;
- Development of a new computer-adaptive testing system that can measure the proficiency level of students enrolled in Tutorial English that about 10,000 students registered each year. Their level was assessed according to the Common European Framework of Reference (CEFR) standards and a CEFR level placement/achievement test; a system was developed to link the unit tests in the textbook with Can Do Descriptors using Latent Rank Theory (LRT), automatically providing test-takers with appropriate feedback. A future target was to incorporate a speaking testing mechanism based on automatic speech recognition technology;
- Mobile Learning Project in Discussion Tutorial English; students learn English
 through their mobile devices. The aim was to provide an environment that
 enables students to learn effectively in small timeslots and evaluate their
 effectiveness.

10.2 Infrastructure Without Digital Divide: Equal Access Among Students and Faculty

10.2.1 Waseda Network Processes

Due to the fact that Waseda University had 13 faculties and over 20 additional schools, students, faculty members and instructors were based in separate campuses. In order to ensure a strong connection between these campuses, a wide-area network (WAN) was secured between the main campus and the other 11 remote campuses.

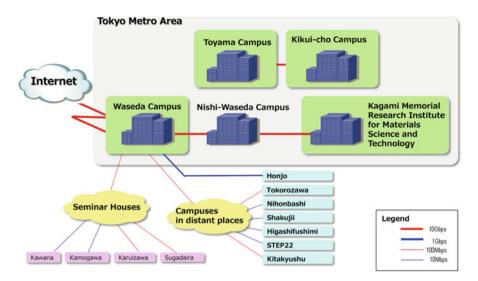


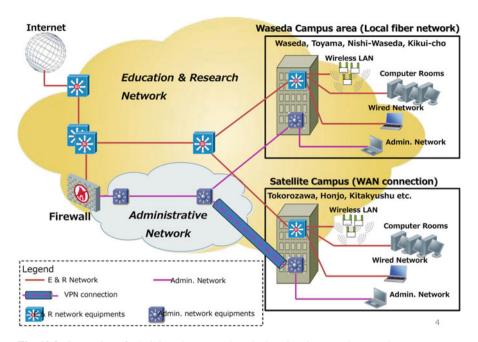
Fig. 10.1 Waseda Internet network among campuses

Figure 10.1 represents the Internet network connecting these campuses and seminar houses.

812 full-time staff members and almost 400 part-time staff members used the administrative network to handle matters related to registration, accounting, course registration, score reports, and so forth. Wireless Access Points were available within each campus, enabling students to use mobile phones and tablets and PCs. Figure 10.2 represents the Education & Research network and Administrative network.

At the time of writing, the university had overseas offices in New York and San Francisco in U.S.A., as well as offices in Bonn (Germany), Beijing and Shanghai (China), Taipei (Taiwan) and Singapore. In addition, Waseda University operated an affiliated high school in Singapore, a Japanese Education Centre in Bangkok (Thailand), and a Bio-Science Research Centre in Singapore. The university provided identical ICT services to these overseas offices and research centres, leading to a growth in the number of end-user devices, as shown in Table 10.1.

Due to the rapidly increasing number of ICT users since 2006 and the rising number of servers, Waseda decided to change the policy to integrate the existing servers via Cloud Technology. In addition, the university made other changes in administrative processes. The university was mainly subsidized through a system of tax-funded grants, the amount of financial support was based on internal as well as the external assessment of educational, research and administrative performances. Financing the technological reform remained a challenge, as tuition fees were not increased. Nevertheless, digitalization proved useful: digital administration speeded up work flow, registration, the process of payment of admission fees and managed to reduce the number of employees and thus expenses. The digitalization of the campus increased the workforce efficiency.



 $\textbf{Fig. 10.2} \ \ \textbf{Separation of administrative network and education \& research network}$

Table 10.1 Growing number of wireless access points

| | Year | | | | | | | | | | |
|-----------------|------|-----|-----|-----|-----|------------|-----|-----|------------|------|------|
| Campus | '03 | '04 | '05 | '06 | '07 | '08 | '09 | '10 | '11 | '12 | '13 |
| Waseda | 60 | 163 | 227 | 243 | 265 | 439 | 452 | 460 | 485 | 486 | 500 |
| Toyama | 6 | 6 | 6 | 6 | 10 | 13 | 13 | 17 | 51 | 53 | 98 |
| Nishi-Waseda | 0 | 29 | 29 | 29 | 145 | 156 | 167 | 168 | 188 | 206 | 247 |
| Zairyo-ken | - | - | - | - | - | _ | - | - | - | _ | 3 |
| Kikui-cho | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 27 | 27 | 27 | 27 |
| Tokoro-zawa | 34 | 43 | 43 | 50 | 50 | 50 | 88 | 103 | 117 | 117 | 140 |
| Nihom-bashi | 9 | 9 | 12 | 12 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| Higashi-Fushimi | 13 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| Honjo | 8 | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 22 | 22 | 22 |
| Shakujii | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 11 | 11 | 34 |
| Nakano | - | - | - | - | - | - | - | - | - | - | 81 |
| Karuizawa | 0 | 0 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 5 | 5 |
| Matsudai | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 |
| Kita-kyushu | 38 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 81 |
| Total | 168 | 321 | 389 | 413 | 558 | 750 | 821 | 875 | 951 | 1006 | 1236 |

Source: http://www.waseda.jp/wits/data/suuji/2013/index.html. Reprinted with permissions from IT Strategies Section, Waseda University

10.2.2 Reformed Teaching Styles via Learning Management Systems (LMS)

In 2004, Waseda first attempted to implement on-demand courses, through the socalled On-demand Internet Course (OIC). In on-demand courses, the Powerpoint files and lecture videos were synchronized and included memo functions, in which students could take notes while viewing the on-demand lectures anytime and anywhere. The OIC functions were, however, restricted to viewing on-demand lectures, attendance checking, a simple study log, automatic scoring of quizzes, discussion on a Bulletin Board System (BBS), and the option to attach supplementary materials.

In 2005, Waseda trialled a new in-house Learning Management System called 'Course N@vi', which was comparable to Blackboard. It was released for all users at Waseda in 2007. This feature-packed Learning Management System performs many functions: through this system teachers can input their syllabus, course descriptions, distribute teaching materials, conduct web-based tests and questionnaires, deliver on-demand lectures, evaluate their students' learning results and send announcements to the individual students. A noticeable feature is that everybody, even people outside Waseda, can view course descriptions and on-line syllabi. This development was a result of the 'Open Policy in Education' which started in 2001. In addition to these functions, students can use the BBS for discussions, oral chatting, voting, creating a personal profile, creating a portfolio, conducting surveys, submitting their reports and sharing their materials for their virtual discussion. These types of content are downloadable, as opposed to on-demand lectures, which are protected by digital rights management. Waseda can set the time and duration for students' viewing on-demand lectures. Figure 10.3 shows that the number of courses and the number of students enrolled in on-demand lectures were mostly increasing.

On-Demand Lectures (Asynchronous Distance Learning)

On-demand lectures for commuter students – no.of courses

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|-------------------|------|------|------|------|------|------|------|------|
| Full on-demand | 93 | 100 | 119 | 128 | 122 | 120 | 130 | 131 |
| Blended on-demand | 302 | 341 | 337 | 389 | 362 | 326 | 312 | 308 |

On-demand lectures for commuter students – no.of enrolled students (total)

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Full on-demand | 8,804 | 9,120 | 12,432 | 12,005 | 16,525 | 20,834 | 22,736 | 26,463 |
| Blended on- demand | 10,961 | 10,007 | 10,619 | 13,806 | 14,026 | 12,318 | 15,377 | 15,879 |

Fig. 10.3 Number of on-demand lectures in 2005–2012 (http://www.waseda.jp/wits/data/suuji/2013/index.html. Reprinted with permissions from IT Strategies Section, Waseda University)

LMS reduced teaching loads, since the lectures were broadcasted along with associated resource materials. The teaching style has changed from teacher-centred lecturing to student-oriented practices including the use of flipped interactive classrooms. The use of e-clickers also has made classrooms more interactive and engaging, allowing students to enter an answer to a multiple choice question on a hand-held clicking device. Since the introduction of LMS, the final year students' tasks have been turned into project-based problem solving activities. One of the outcomes of the development of the DCC was the Waseda Course Channel in which 1500 ondemand courses were made open to the public. Learning analytics with computer-based learning techniques were used to investigate learning processes in programming lessons, reading and writing activities, in order to give effective feedback to learners. Students can study on-demand courses anywhere from the Waseda Course Channel, and this multi-channel approach enabled students to access resources from a variety of end-user devices.

10.2.3 Diversity Management and Hybrid Leadership Education: Collaborative Cross-Cultural Distance Learning (CCDL) Courses and Cyber Sessions with Overseas Partner Universities

Collaborative CCDL courses began in 1999, as briefly described in Sect. 10.1.2. Based on the 'Open Policy in Education' at Waseda, the 'Open Education Center' was established in 2001. To leverage education resources within Waseda and to offer inter-disciplinary subjects to cope with global challenges, the barriers between faculties were removed in order that Waseda students could choose courses from all the subjects open to all students. At the same time, resource sharing was extended to partner universities in other parts of the world. The explosion of a global communication tool such as the Internet has created an unprecedented reformative opportunity for teachers in Japan, especially for those working in the field of educational ICT. The teaching of tertiary English education at Waseda University has experienced this dynamic change, since university English was a major focus of reform at the centre of this new generation of international internet-driven communication. Figure 10.4 summarizes the statistics of resource sharing and cyber exchanges in 2005-2012 and shows that the number of enrolled Waseda students in joint classes with overseas universities has increased, and so did the number of participating countries and universities.

Based on analyses of students' written and chat records in the 1999–2004 period, it became clear that the BBS platform was relevant to undergraduate English language education. First, they provide authentic interactive opportunities for undergraduates, in which they can introduce Japanese society and cultures, while they receive information about Korean and Taiwanese cultures and society. Second, they promote intercultural or cross-cultural awareness. By examining the textual

| Joint Cla | sses | with | Oversea | s Univer | sities (Syn | chronous | Dista | nce | Learnin | g) |
|--|-------|-------|-------------|-----------|--------------|----------------------|----------|---------------|-------------|-------|
| Joint classes | with | ove | rseas uni | versities | — statist | ics | | | | |
| | 1 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | | 2011 | 2012 |
| Joint class courses | | 34 | 45 | 67 | 83 | 102 | 85 | | 72 | 79 |
| No. of enrolled Waseda students | 2,235 | | 3,211 | 3,379 | 3,477 | 3,543 | 3,574 | | 3,306 | 3,525 |
| No. of overseas participants | 1 | ,181 | 2,094 | 3,058 | 3,882 | 4,422 | 4,254 | | 3,894 | 3,974 |
| Participating countries and universities | | | | | | | | | | |
| | 20 | 005 | 2006 | 2007 | 2008 | 2009 | 20: | 10 | 2011 | 2012 |
| Participating countries/regions | 2 | 21 | 21 | 21 | 24 | 24 | 24 | 1 | 24 | 25 |
| Participating universities/institutes | 5 | 52 | 55 | 78 | 86 | 89 | 9: | ı | 92 | 94 |
| Participating | insti | tutes | by coun | try/regi | on (92 parti | cipating univ | ersitie: | /inst | itutes in 2 | 012) |
| Australia | 6 | Indi | a | 2 | Russia | Russia | | United States | | 15 |
| Brunei | 1 | Italy | , | 1 | Singapore | Singapore | | Uzbe | ekistan | 2 |
| Canada | 3 | Sou | th Korea | | Taiwan | Taiwan | | Vietnam | | 2 |
| China | 10 | Mal | aysia | 2 | Thailand | Thailand | | Samoa | | 1 |
| France | 5 | New | New Zealand | | United Kir | United Kingdom | | Fiji | | 1 |
| Germany | 4 | Phili | Philippines | | United Ar | United Arab Emirates | | Indonesia | | 2 |
| Sweden | 1 | | | | | | | | | |

Fig. 10.4 Number of joint classes in 2005–2012 (Source: http://www.waseda.jp/wits/data/suuji/2013/index.html. Reprinted with permissions from IT Strategies Section, Waseda University)

exchange data and the transcriptions of oral chats, eight significant points of findings related to the teaching of English using technologies emerged: (1) discussion styles (how to reach agreement); (2) emotional intelligence and social intelligence; (3) intercultural translation skills; (4) research skills; (5) principles of spoken interactions and politeness; (6) indirect/high context culture versus direct/low context culture; (7) indirect mode of speech versus direct mode of speech; and (8) facilitation skills and describe, interpret and evaluate (DIE) without being judgmental. These eight elements were incorporated into theme-based CCDL programs.

10.2.4 Multi-channel Approach: Out-Reach Efforts via Mobile Technology

The use of mobile applications commenced in 2005. iPods were used to offer openly accessible on-demand lecture content in order to attract potential students to Waseda University. At the time of writing, 145 short introductions to departments and faculties, 425 demo lectures, 610 campus life presentations were available via 'iTunes U'. In 2008 the application 'Waseda Mobile' was established, using Blackboard



Fig. 10.5 Overview of Waseda Mobile

Mobile Central, as can be seen in Fig. 10.5. The mobile service was integrated into the LMS. Since LMS can record various logs, frequency of viewing the textbook and supplementary materials, the duration of study time, test scores, feedback received, and to whom students responded, instructors can give timely and effective feedback to individual students. A software program called Flipper was used to convert PDF files into digital textbooks.

10.2.5 Waseda-Net Commons

The students in the CCDL program were required to make presentations on what they have learned through the joint sessions and the review-and-follow-up sessions at the end of the course. These sessions were conducted online in the form of a presentation contest. The CCDL presentations used the web-platform 'Xinics Commons', allowing students to review these presentations online. The image of the platform is shown in Fig. 10.6.

The participants of the CCDL presentation contest were undergraduates, who were required to do a group presentation in English and upload their contents to the Waseda Commons. Figure 10.7 shows an image of the presentation by students. Students can make improvements and recompose their presentations as well as evaluating each other using the Waseda Common system.



Fig. 10.6 The image of Waseda Commons (Source: http://commons.waseda.jp/. Reprinted with permissions from IT Strategies Section, Waseda University)



Fig. 10.7 An image of the presentation by students (Source: http://commons.waseda.jp/. Reprinted with permissions from IT Strategies Section, Waseda University)

10.3 Open Policy at Waseda and Institutional Global Collaborations

The university has promoted resource sharing and collaborative courses with overseas partner universities around the world. This is exemplified in the Forum for On-demand Lecture Circulation (FOLC) which was developed in phase 2 of the DCC (2002–2004) for sharing courses between universities in Japan. Table 10.2 lists the FOLC courses.

The nature of FOLC course sharing was identical to the OpenCourseWare (OCW) initiative developed by the Massachusetts Institute of Technology (MIT) in 2003. While MIT's OCW has since expanded globally, the FOLC initiative ended in December 2013. FOLC content, however, was subsequently used in Japan Massive Open Online Courses (JMOOC).

The contrasting outcomes between MIT's OCW and FOLC was likely due to the weakness in branding power and the economic decline in Japan. In general, education should be evaluated according to its merits and significance rather than brand names. Nevertheless, market leading universities such as MIT, Harvard and Stanford have the ability to capture a world-wide market, since student customers are often attracted to prestigious courses offered by elite universities and well-known professors.

Waseda's ultimate aim was to transform itself into a global university. Distance Learning Center staff were assigned to a taskforce in Asia-Pacific Rim Universities (APRU-net) to investigate new and open forms of teaching and learning by looking at several open education developments, such as the Open Course Ware Consortium (OCWC), Massive Online Open Course (MOOC), JMOOC, Asia Regional OpenCourseWare and Open Education Conference (AROOC), Universitas 21, the Open Education (OE) movement in the UK and Open Educational Resources in UNESCO. The university's contribution to OCW was offering 76 on-demand courses, implementing an ontological search engine for the World Englishes course (which has 300 h of lecture content) and implementing a Cross-Cultural Distance Learning search site. In the 21st Century, universities are no longer the only authoritative organisations of knowledge to create and to maintain a knowledge-based

Table 10.2 FOLC courses

| Course genres | Number of courses |
|-------------------|-------------------|
| Certified courses | 189 |
| IT | 263 |
| dccBusiness | 567 |
| Languages | 25 |
| Remedial courses | 8 |
| Liberal Arts | 5 |
| Entrance exams | 12 |
| Total | 1061 |

society. Virtual organisations such as MOOCs have already overcome the barrier of time and space. Barber (2012) states that "an avalanche is coming" when discussing the technological reform in the new century. A global educational avalanche has indeed come.

10.4 Conclusion and Future Perspective

Globalisation is progressing rapidly in social, economic and cultural ways. As the recent financial crisis shows, a problem in one country can immediately become global. Globalisation has certainly occurred in education. With the progress of social, economic and cultural globalisation, people can now easily move among countries, and so education can no longer be considered as a domestic issue limited to one country alone.

The rapid globalisation of higher education is reflected in the international attention to ranking data such as the World University Ranking of The Times Higher Education, which lists higher educational organisations around the world by using a series of indexes. Many universities have set up bases overseas and built relationships with overseas universities. Leading universities in the world are participating in international consortiums such as the Association of Pacific Rim Universities (APRU) and are developing joint operations across national boundaries. It is also a fact that universities have to compete fiercely with each other to attract top students and researchers. Universities around the world have made various efforts to strengthen their international competitiveness. The United States has set a goal of sending one million students abroad and emphasizes international collaboration through international joint research by young researchers. In Europe, the Bologna Declaration was adopted in 1999, allowing students to move freely between European countries for study purposes.

Student mobility in the Asia-Pacific region has increased, which has prompted efforts to raise the quality of higher education. In Asia, China started its scholar-ship system in 2007 to encourage 50,000 students to enter doctoral programs at leading universities overseas. Singapore is attracting the world's top universities based on its Global Schoolhouse scheme, and aims to accept 100,000 privately-funded exchange students and 100,000 corporate management trainees. Meanwhile, South Korea is switching to an English curriculum and working to attract top students from abroad. Japan has set a goal of accepting 300,000 international students and is making strategic nationwide efforts to attract top international students. In this context, there is already global competition to attract top students and researchers.

In terms of the global competition to attract talent, Euro-American universities are ahead of Asian universities. Universities in the US and Europe not only attract international students to their countries but also have set up overseas campuses that provide on-site education and academic degrees. Examples include the University of Nottingham Ningbo in China and the Johns Hopkins University campus in

Nanjing in China. Facing such intense global competition to attract talent, Waseda University designed the 'Waseda Next 125' plan to enable the university to become an internationally competitive global university in the twenty-first century. 'Waseda Next 125' included such tasks as strengthening fundamental education including language learning and mathematics and achieving educational reform by using e-learning. The plan also aimed to increase the number of international students from 2830 students in 2008 to 8000 students within 5 years; however, by May 2014 Waseda University counted 4766 international students. The plan also included the establishment of a Global Campus through internationalisation of educational research by using the overseas offices.

Revising its future plan, Waseda University announced 'Waseda Vision 150' in 2013 and released a set of mission statements with some numerical claims, as shown in Table 10.3. The table compares facts in 2012 to putative but futuristic claims in 2032.

While the number of undergraduates is reduced, the number of graduate students will increase in 2032. In addition to the growth of the research fund in 2032, the projected increase in the number of graduates in 2032 clearly suggests that Waseda University is aiming to be a research-oriented university. Along with the increasing number of international students and non-Japanese staff, all Waseda students will study abroad in 2032. This will realize the vision of Global Campus. Since the number of undergraduates is planned to decrease yet today's number of staff is expected to maintain, undergraduates will receive more individual attention from faculty members. The university's mission expects increased use of portfolios to document student study experiences and enable instructors to monitor their progress. The mission statement also states that all courses need to be made open to the public and on demand (as in MIT). Study patterns are expected to change to enable more flexible, blended approaches, including the use of flipped classrooms and downloadable lectures accessed from anywhere at any time. The mission also proposes a didactic approach to learning, as shown in Fig. 10.8.

The didactic cycle is applied to the learning processes. In this approach, ICT will play a major role. In fact, the Global Honors' College (a joint program involving Columbia University, Harvard University, MIT, Yale University, University of Washington, Korea University, National University of Singapore, Peking University and Waseda University) and the Global Leadership Program (a joint program involving Dartmouth College, Johns Hopkins University, Columbia University, Georgetown University, University of California (Berkeley), University of Washington, University of Pennsylvania and Waseda University) both utilised blended learning, on-demand lectures, on-line discussion opportunities, and frequent short-term visits with face-to-face interactions. The heterogeneous group of students in these courses facilitates the examination of multiple perspectives, including socio-cultural understanding of the concepts in the West and East, historical perspectives in each of the countries involved, speculation about causes, consequences, and hypothetical futuristic situations. In order to take an active part in cyber discussions, students need to evaluate alternative proposals, develop and respond to hypotheses. At the same time, they need to initiate idealistic, human-

Table 10.3 Numerical goals of Waseda University by 2032

| | 2012 | 2032 |
|--------------------------|-----------------|----------------|
| Undergraduates | 43,974 | 35,000 |
| Graduates | 9357 | 15,000 |
| International students | 4362 | 10,000 |
| Students studying abroad | 2399 | All |
| Non-Japanese faculty | 147 | 400 |
| Total faculty | 1679 | 2000 |
| Open Courses | 0.30 % | All |
| Research fund | 8.9 billion yen | 20 billion yen |
| | | |

Source: http://www.waseda.jp/keiei/vision150/pdf/vision150_en.pdf. Reprinted with permissions from Waseda University

Waseda Vision 150

[Diagram: How We Cultivate Global Leaders]



Fig. 10.8 Didactic cycle approach of education (Source: http://www.waseda.jp/keiei/vision150/pdf/vision150_en.pdf. Reprinted with permissions from Waseda University)

istic and futuristic discussions, and give feedback to other participants. Furthermore, students are expected to relate their own contributions to a process of consensus-building among users of English. Educators play an important role to stimulate students' understanding of the weak and the poor, encourage them to go into the academic wilderness and explore conceptual frontier in order to discover new

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solutions for the real problems in the world, question the authority. Waseda University's technological reform represents a sustained effort at the university level to promote these important educational endeavours.

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Part IV English as an International Language for Communication

Chapter 11

The Learning and Teaching of English as an International Language in Asia-Pacific Universities: Issues and Challenges

Andy Kirkpatrick

Abstract This chapter first provides a brief general review of the teaching and learning of English in Australian and Asian universities and shows that English is still primarily regarded as a native speaker product and that English, officially at any rate, is taught monolingually in English and English medium of instruction (EMI) classes and courses. The chapter then argues that the use of English as a lingua franca and the many Asian varieties of English need to be factored into university language policies and that multilingual students and staff be allowed to use their multilingual resources in English—medium education.

11.1 Introduction

The number of universities across the Asia-Pacific region which have introduced English as a medium of instruction (EMI) and/or increased the number of programmes they offer through EMI has risen significantly in recent years (see other chapters in this volume by Poon (2016), Gu (2016), and Ng (2016)). This increase in EMI courses in the Asia-Pacific region mirrors similar increases in EMI courses in other parts of the world, including continental Europe (e.g. Wachter & Maiworm, 2008; Doiz, Lasagabaster, & Sierra, 2012).

Reasons for this increase in the provision of EMI courses will be discussed below, but the decision at the 2012 Asia-Pacific Economic Cooperation (APEC) summit in Vladivostok that member countries would explore ways of facilitating staff and student mobility between universities in APEC member countries echoes the Bologna Process established in 1999, which set up the European Higher Education Area (EHEA). This trend towards the internationalisation of the universities has crucial effects upon languages of education and the languages of scholarship. In particular, internationalisation tends to privilege English at the expense of other

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languages. As Robert Phillipson has argued: "What emerges unambiguously is that in the Bologna process internationalisation means English-medium higher education" (2009, p. 37).

The implications of the emergence of English as the international language of education upon other languages is, however, seldom considered at the university level; neither are the significant changes to English itself. That there are, literally, dozens of new varieties of English, many of which are spoken in the Asia-Pacific region, is ignored. At the same time the role of English as an international lingua franca is also overlooked. Despite the fact that the great majority of users of English today are multilinguals for whom English is a learned or additional language, and despite the fact that the greatest use of English in today's world is as a lingua franca between such multilinguals, universities still treat English as a single variety, whose norms are based on a native speaker model, most commonly standard British or American. Calls by scholars for university language policies to reflect the multilingual realities of the university (e.g. Xu, 2014) and for academic English policies "to be brought in line with and better reflect the sociolinguistic realities of the international university" (Jenkins, 2014, p. 2) remain in the minority and are only recently being voiced.

In this chapter, I shall first consider the teaching and learning of English in universities in Australia and argue that, despite the development of English as an international language and the multilingual and multicultural nature of Australian universities, the multilingual reality is not reflected in universities' policies towards English, where a native speaker model, including standard Australian, remains entrenched as the sole legitimate variety. I shall then consider the teaching and learning of English in selected universities in Asia, with a focus on Hong Kong (see also Gu, 2016, in Chap. 4 in this volume). I shall argue that, generally speaking, universities in Asia also promote a native speaker variety of English at the expense of other varieties and at the expense of other languages. The chapter will conclude with practical proposals for accommodating other varieties of English and other languages within EMI programmes.

11.2 English in Australian Universities

It goes without saying that Australian universities use English as a medium of instruction. Students whose first language is not English need to provide evidence that they have adequate proficiency in English in order to successfully undertake university study through English. The best known method for demonstrating this proficiency is through international tests, such as TOEFL and IELTS, with IELTS being by far the most common test score used by Australian universities (Humphreys et al., 2012). Required scores may vary depending on level and the type of course, but, at undergraduate level, universities typically require an IELTS score of at least 6.0. What is less known, however, is that only a small percentage of international students actually enter the university using an IELTS score or a score from another

internationally recognised test. The majority enters through so-called pathway programmes. These cater for students who do not meet the university's entry requirements and provide subject and language courses that provide a direct pathway into the university, as long as the students fulfil the requirement of the pathway programmes. It is important to stress, however, that the students who enter via these pathway programmes do not need to provide an official exam score such as an IELTS. Instead, successful completion of the pathway courses is deemed sufficient evidence that the student has the requisite English proficiency to study at the university. Whether this is indeed the case, has been the subject of much debate in Australian universities over some years (Dunworth, 2009). Students may also enter if they have previously studied in EMI programmes at secondary or tertiary level for a specified number of years, usually a minimum of two. What this all adds up to is that students whose first language is a language other than English enter Australian universities via a variety of means, but with only a minority actually presenting an official score for an internationally recognised test system as evidence of their English language proficiency. Many universities therefore offer support classes in English of a variety of types, including pre-course units, generic programmes, both generic and subject-specific credit-bearing programmes, and a range of mentoring schemes. 1 None, however, systematically include or integrate English language criteria as part of assessment criteria for all subject areas. English language proficiency is viewed as something a student either has or has not; and if a student does not have it, remedial support courses are available.

The notion that language proficiency is developmental and all of us, including those for whom English is a first language, need to consciously learn how to develop academic English and literacy skills has not yet been accepted in Australian universities. Far from integrating language development into content subject curricula, therefore, English is treated as a skill that one either has or has not. In addition, 'English' is short-hand for a native variety of academic English. "There is a fixation on English and a monoglot ideology" and "the linguistic repertoires of bi- and multilingual students (are) problematized rather than being treated as multilingual capital" (Preece, 2011, p. 122). I shall return to how universities might make more use of this 'multilingual capital' later in the chapter, but stress here that the teaching and learning of English in Australian universities is treated as the teaching and learning of some definable finite product, which is the English used by native speakers in academic contexts. At the same time, the majority view is that students should have already acquired this before arriving at the university. If they have not, then they need some form of remedial English programme. This remediation needs to be undertaken by specialist English language teachers. It is not the task or responsibility of discipline academics to develop the English of their students so that it conforms to the discipline requirements. The integration of English language development into content teaching is likely to become a major issue and challenge for the Australian university-sector in the coming years (Arkoudis, 2011, October 12).

There is some irony that the view of English as an identifiable native speaker product that others have to learn, runs alongside a new government-inspired push for Australians to become more Asia-literate. In October 2012, the then government

released *Australia in the Asia Century*. This document promised that every Australian student would have significant exposure to studies of Asia across the curriculum and that "all schools will engage with at least one school in Asia to support the teaching of a priority Asian language" (i.e. Hindi, Indonesian, Japanese and Mandarin Chinese) (Commonwealth of Australia, 2012, p. 15). With regard to the university sector, the document states that the government will work with universities to "substantially boost the number of Australian students studying in Asia" and that it will "support universities to increase the number of students who undertake Asian studies and Asian languages as part of their university education" and that it will "encourage every Australian university to have a presence in Asia…" (2012, pp. 16–17).

Despite these noble high-sounding statements, the fact remains that very few Australian students study an Asian language at university. It is not a requirement for them to do so, unless they are taking a degree in Asian studies. While the numbers of students taking an Asian language unit in the first year of study may appear impressive, it needs to be stressed that the majority of these students only take one or two units of the language and then drop it; many of them are also 'background' speakers of the language rather than Anglo-Australians. The multilingual resources provided on campus by the many international students who speak Asian languages are not valued or used in any systematic way.

So, on the one hand, the Australian university plays host to thousands of international students, the majority of whom come from Asia. All speak English as a lingua franca and many speak established Asian varieties of English such as Malaysian, Singaporean or Filipino. Many also speak the very Asian languages identified as priority languages in the *Australian in the Asia Century* document referred to above. In addition, the university hosts thousands of multilingual Australian students who come from migrant families who may speak a variety of different Englishes. Yet the university gives no recognition to these varieties of English, and insists on using a native speaker norm as the sole arbiter of correctness. As Jenkins asks "Why, in an *international* institution, should it be acceptable to require non-native English speakers (NNESs) to replicate the *national* academic English norms preferred by native English speaker staff and students?" (2014, p. 11) (italics in original).

On the other hand, the current political rhetoric emphasises the importance of more Australians becoming Asia-literate and learning Asian languages. Yet, as indicated above, the university sector makes no systematic use of the multilingual and multicultural resources brought to the university by these international and migrant students. Some universities may try and set up some form of 'language buddy' system, but these tend to be ad hoc and voluntary.

The problem lies in the mismatch between the universities' claims that they are international spaces and the reality of their continued classification of English as a native speaker language best spoken by monolinguals. Were the universities to actually exploit their actual multicultural and multilingual identities, then both the teaching and learning of English and the teaching and learning of Asian languages

would be greatly enhanced. I described specific ways in which this might be done in the final section of this chapter. I now turn to a brief review of the rise of EMI programmes in universities in Asia.

11.3 English in Asian Universities

As noted above, and as discussed in chapters by Poon (2016), Gu (2016), and Ng (2016) in this volume, there has been a significant increase in the provision of EMI courses in universities across Asia and the reasons for this vary. Knight (2008) lists four possible motivations for universities to internationalise: political, economic, cultural and academic. While all these motivations may play a part, especially in the earlier years of internationalisation (Wilkinson, 2013), financial considerations have become increasingly important. Until recently, the internationalisation of higher education in Asia has been "characterised by Asian students travelling to 'western' countries to obtain degrees" (Kirkpatrick, 2011, p. 108). The Anglophone countries of the US, Britain and Australia are major receivers of these students (see also Poon this volume), although European countries such as France and Germany also receive substantial numbers (Howe, 2009). A consequence of this has been both intellectual and financial loss on the part of the Asian countries, and intellectual and financial gain on behalf of the receiving countries: intellectual loss/gain as many Asian students choose to remain in the country after obtaining their degrees, and financial loss/gain as these students pay international student fees (and also have to meet other living expenses). Not surprisingly, therefore, a number of Asian countries have decided to set themselves up as 'education hubs' in a bid to deter their own students from travelling overseas for further study, while, at the same time, attracting international students from overseas to study in their hub. And, in order to establish an education hub, it is considered essential to offer EMI courses. Again not unexpectedly, it is those Asian countries which have an institutional use of English inherited from their colonial history that have, to date, been the most successful, namely Singapore, Malaysia, and the Philippines. Hong Kong has also set itself up as an education hub, with education being promoted as one of the Hong Kong government's six pillar industries (Li, 2013a, p. 67).

It is not just about establishing education hubs. Many individual universities across Asia have also increased the number of EMI courses they offer (see Kirkpatrick, 2013). The China Universities and Colleges Admissions System (CUCAS) provides a website where prospective students can search for which degrees are offered in English and at which universities (http://www.cucas.edu.cn/).

As well as the increase in Chinese universities offering degrees in EMI (see Hayhoe, Li, Lin, & Zha, 2011), there are also a number of foreign universities which have set up campuses in China, of which the British universities of Nottingham and Liverpool are two examples. Melbourne's Monash University has also recently

established a campus in Suzhou. These universities teach in English, with the English being understood as a native English model, something that is explicitly stated on the Nottingham Ningbo campus website: "All degree programmes are taught in English and at the same high standards at Nottingham University in the UK" (http://www.nottingham.edu.cn/en/admissions/studywithus.aspx).

A financial motivation may be a key reason for Japanese universities' move towards internationalisation, as the current Japanese demographic shows an ageing population with fewer people and fewer people of the university age group. The 'Global 30 Project' aims to attract 300,000 international students to study at one of 30 universities in Japan, all of which now offer at least some programmes through EMI. The Global 30 Project website allows prospective students to download a booklet entitled *Study in English at Japanese Universities* (http://www.uni.international.mext.go.jp/global30). The Global 30 Project does not seem to be a success, with only 22,000 international students enrolled in 2011.

Korea has also seen a move towards EMI courses in higher education. In 2007, the prestigious Korean Advanced Institute of Science and Technology (KAIST) adopted a strict English-only policy. This, however, is now being reconsidered. As Kim (2013) has noted, the role of Korean as opposed to English or as well as English in delivering content knowledge is being re-evaluated.. Below, I shall move to consider the notion of allowing students and staff to use their linguistic resources and use more than one language in the classroom. I will do so when discussing the new language policy at the Hong Kong Institute of Education and by considering proposals for how English might best be taught in Asian HE.

This move towards the provision of EMI courses can thus be seen throughout Asia. Here, however, I want to focus on the situation in Hong Kong, where six of the eight government funded universities teach through EMI, with the exception of Chinese-related courses, including Chinese itself. I focus on Hong Kong as it offers, I believe, some lessons (mainly negative) for the use of EMI in higher education. A brief introduction to the Hong Kong context is first provided in order to show how the language education policy and practices across levels, such as primary, secondary and tertiary, inevitably impinge on each other and cannot sensibly be treated separately.

The Hong Kong government wishes its citizens to be trilingual (in Cantonese, Putonghua [Mandarin] and English) and biliterate (in Chinese and English). With this aim in mind, it advocates the use of Cantonese – the mother tongue of over 95 % of the population – as the medium of instruction (MoI) in government primary schools. Some primary schools are also trialling the use of Putonghua as a MoI, especially for the study of Chinese itself. The use of the child's home language as the MoI in primary schools is supported by almost all research into multilingual education and by the several reports into language education which the various governments of Hong Kong commissioned over the years (Bolton, 2012). The situation at secondary school is more complex. During the colonial period, the government adopted a laissez faire policy which allowed schools to decide for themselves which MoI they would use. The great majority chose English, primarily because the universities taught in English. Even the Chinese University of Hong Kong, which was

established in 1963 to provide a Chinese medium of instruction (CMI) education, insisted that students first had to pass an English exam in order to gain entry. So, even for entry to a CMI university, students had to have high proficiency in English.

With Hong Kong's handover back to China in 1997, the new government insisted that only those secondary schools which met certain conditions would be allowed to continue to offer EMI education; the remaining secondary schools, which accounted for some 75 % of the total, were required to use Cantonese as the MoI. This new policy for secondary schools occasioned much opposition and debate among parents (Bolton, 2012) with the result that the government finally agreed to 'fine-tune' the secondary policy and allow CMI schools to teach certain classes and certain subjects through English, as long as they fulfilled certain language-related criteria. The inevitable result of the fine-tuning was a decrease in the number of subjects taught in Cantonese and a corresponding increase in the number of subjects taught in English (Kan, Lai, Kirkpatrick, & Law, 2011). As students had been performing well in studying subjects like maths and science in Cantonese, it is hard to see why there was this dramatic shift to EMI, other than to recognise the influence of the universities' use of EMI as the primary driver.

As mentioned above, the Chinese University is the only university in Hong Kong that offers the full range of degrees in Chinese. The appointment, however, of a new Vice-Chancellor in 2004 who had ambitions to raise CUHK's status led to the implementation of a range of EMI courses in order to attract international students and staff. The motivation here, therefore, for EMI was to improve the international standing of CUHK. Despite being taken to court by a student who accused CUHK of breaching its charter (and who finally lost his case in the Court of Final Appeal), CUHK has successfully introduced a range of EMI courses (Li, 2013a).

This shows how the EMI policies of the universities of Hong Kong have managed to make the successful implementation of the government's objective of making the citizens of Hong Kong trilingual and biliterate extremely difficult. It also shows how important it is for any language education policy to be integrated across all levels and considered holistically. In the case of Hong Kong, the universities' desire for high international rankings has ensured that they will retain their EMI policies. This causes a washback effect down into secondary schools and, eventually, will also be felt in primary schools.

This also shows that a city of seven million with an overwhelmingly Chinese population has only one university which offers a CMI education, although even here EMI programmes are now available. While the promotion of Asian languages as languages of education and scholarship is not the subject of this chapter, (see Kirkpatrick, 2011, 2013), I feel that universities which have adopted EMI programmes underestimate how valuable and attractive most international students would find courses in the local languages. It seems odd, for example, given the rapidly increasing international importance of Putonghua (see Gu, 2016), that Hong Kong's universities do not routinely provide bilingual education which would see international students graduate proficient in Chinese. Of the eight government-funded universities, only the Hong Kong Institute of Education (HKIEd) operates a trilingual education policy, and I next briefly review its MoI policies.

The HKIEd is instructive as it is the sole tertiary-level institution which has a language policy that mirrors the government's aim of producing trilingual and biliterate citizens. The aim of the HKIEd language policy is to produce graduates who are functionally trilingual (see Xu, 2014). Students, in consultation with staff, identify the levels of proficiency that they will achieve in each of the three languages when they graduate. These will vary depending on the first language of the student. Although the majority of HKIEd students have Cantonese as an L1, there are several from Mainland China whose L1 is Putonghua. There are also a few local students whose L1 is English. Given the multilingual nature of the student and staff body, the HKIEd policy also draws an important distinction between the official medium of instruction of a particular course and actual classroom use. This is explained below.

The MOI, to be adhered to strictly in all undergraduate and postgraduate programmes, bears on the following: (a) the course outline, including synopsis, aims and objectives, main assigned readings, teaching and learning activities, and the course's intended learning outcomes; (b) formative assessment in writing, including major assignments and quizzes; and (c) summative assessment such as the final exam. Accordingly, all assessed activities of an EMI course should be in English, while those of a CMI course should be in Chinese.

'Classroom language' (CL) refers to the language of interaction between teacher and students and among students in the classroom (lectures, tutorials, labs and so on). While the CL of an EMI courses is English by default, a CMI course may be conducted in Cantonese or Putonghua, subject to the teacher's reference after consulting all relevant factors, such as the students' language backgrounds and abilities. Subject to moment-by-moment classroom learning and teaching needs, the teacher of a CMI or EMI course may find it necessary to switch to some other language(s). It should be noted that classroom code-switching, which is typically justified by students' enhanced learning outcomes, do not constitute a breach of the Institute's new LLT policy. (Xu, 2014, p. 218) (see also Kirkpatrick, 2013, p. 14)

The HKIEd language policy is unusual in explicitly allowing the use of class-room code-switching. As I shall argue below, this is a brave and innovative policy, which is to be applauded. As Barnard and McLellan have recently reported in their collection of studies of classroom code-switching across Asia (2013), the official policy typically prescribes the use of one language only in the classroom. Code-mixing is expressly forbidden. As they also show, however, in practice all teachers, for a variety of reasons, engage in classroom code-switching. Not surprisingly, given that this transgresses official policy, they feel uncomfortable and guilty about it. This is why Macaro notes that "classroom code-switching research is desperately in need of some theorizing" (2013, p. 10). The teacher's dilemma is to decide when and why to use the L1 and/or the L2 (Li, 2013b).

The 'one language at a time' principle is also adopted in the teaching and learning of English and content subjects in Australian universities. The multilingual resources which might be available to students and staff are typically ignored. The official position is that the courses are all EMI and therefore only English should be used. The distinction between official policy and actual classroom behaviour which the HKIEd policy so importantly and innovatively makes has yet to be considered in Australian universities.

In the previous two sections of the chapter I have briefly reviewed how the teaching and learning of English is viewed and undertaken in Australian and Asian universities. I have also considered some of the possible reasons for the trend found in many Asian universities to adopt EMI in higher education. As a general rule, despite the universities in both Australia and Asia being multilingual sites populated by many multilingual staff and students, these multilingual resources are not harnessed in a systematic way. EMI is, officially in any event, taken to mean that only English can be used. At the same time, despite the presence of many varieties of English on campus and the use of English as a lingua franca across universities, English is largely considered to be a native speaker product to which all others should aspire. The idea that native speakers might need to accommodate to other varieties and uses of English remains foreign to the native speakers themselves. In the final section of this chapter, I review a number of initiatives which have been implemented in Europe and also present a number of proposals which I feel may enhance the teaching and learning of English across universities in Australia and Asia.

11.4 Teaching English and Content Multilingually

The fundamental premise presented here stems from common sense: if the university wishes to be genuinely international then it needs to respect and adopt the multilingual and multicultural resources of its staff and students. It also needs to develop and then promote an understanding of the use of English as a lingua franca. It then needs to explore ways in which the use of multilingual resources and the use of English as a lingua franca can enhance the EMI experience.

To first consider the multilingual resources of universities, we need to distinguish between different types of multilingualism and multilingual contexts. As Lønsmann and Haberland (2013, p. xiv) point out it is very important to distinguish between countries where English today plays a large role as a lingua franca and where proficiency in English is quite high (such as Denmark and Sweden) and countries where English is used to a lesser extent and where English proficiency is limited (e.g. mainland China and Spain). Given this, it is not surprising that EMI programmes are far more prevalent in northern Europe than in southern Europe (Wachter & Maiworm, 2008). Indeed, the prevalence of EMI courses in the five Nordic countries was one of the motivations for the 2006 Declaration on a Nordic Language Policy which seeks to implement bilingual language policies in higher education (see http://www.norden.org/en/publications/publikationer/2007-746).

This concept of bilingual education has had a number of iterations. For example, scholars in Sweden promoted the idea of 'parallel language use' where both Swedish and English "are used in practice and seen as natural in the domain in question" (Lønsmann & Haberland, 2013, p. xvi). It is not clear how this actually works in practice, but would appear to indicate that the languages are used separately. An alternative model of bilingual education, 'complementary languages', has been proposed by Preisler: "The two languages will be functionally distributed within the

individual programme according to the nature of its components, i.e. the national or international scope of their language content and orientation of the students" (2009, p. 26). In the Danish context, this means, in practice, "that English is used when not all interlocutors know Danish but Danish is used where all interlocutors are proficient in that language" (Lønsmann & Haberland, 2013, p. xvii).

This may work well in bilingual settings, but even here it should be noted that privileging two languages in this way may result in other languages becoming marginalised. Doiz et al. (2012) report on attitudes to EMI courses in a trilingual setting, namely the University of the Basque Country, where English shares linguistic space with Basque and Spanish. Here again it appears that the languages are treated separately. The respondents, comprising local students, and academic and administrative staff, all valued the EMI courses but, recalling Lønsmann and Haberland's point above, had concerns about their low levels of English proficiency.

These are interesting studies but do not really come to grips with the complex multilingual reality of today's 'international' university where, literally, hundreds of different languages might be represented across a single campus or in enrolments in a single large online course. Below I want to consider how different languages and ELF might be used in EMI courses.

We use language to solve problems and understand concepts. The most powerful cognitive tool we have for this is our first language, the language which we feel is our strongest. Scholars have long shown how important it is for children to be able to use their first language as the medium of instruction in the early years of primary school, supporting UNESCO's official position favouring multilingual education which uses the first language of the child for as long as possible (e.g., Benson, 2008; Garcia, 2009; Kosonen & Young, 2009). Cummins (2000) has also drawn an important distinction between two types of linguistic proficiency. The first he calls Basic Interpersonal Communication Skills and Communication (BICS) and the second Cognitive Academic Language Proficiency (CALP). It takes a child about 3 years to develop BICS, after which the child is ready to start developing CALP. If, however, a second language is introduced, the child has to start to develop BICS in that language, interfering with the development of CALP in the first language (Chumbow, 2013). Furthermore, a person needs at least 5 years learning the second language before he/she is able to develop CALP in the L2.

In contrast, if a person is working in a second language but is allowed to use his or her L1 in the understanding of concepts and while working on a cognitive demanding task, research shows that they will perform better in the final task than if they were required to work on the problem using only the L2 (e.g. Behan, Turnbill, & Spek, 1997; Cummins, 2007; Swain, Kinnear, & Steinman, 2011). This stands to reason. Imagine, for example, you are a native speaker of Japanese who has been learning English for 4 years. You are asked to write an essay in English about your views on the advantages and disadvantages of education. Do you think your final essay would be better if you were allowed to make notes in and write drafts in the essay in Japanese while researching the problem, with the requirement that the final product had to be in English? Or do you think your essay be better if you were

entirely restricted to using English while researching and writing initial drafts of the essay? I suspect that most readers would feel that being allowed to use Japanese while working on the essay would result in a better essay. After all, this allows you to use the first language while working on a cognitively demanding problem. And this is indeed what the research shows. For this reason, I suggest that students should be allowed, where practical, to use their first language in the *process* of solving problems or working on tasks, but that the final *product* should be presented – whether in oral or written form – in the L2.

In the context of an EMI university, this means allowing students to use their first language in the preparation of tasks, but insisting that the final product is in English. This form of bilingual education is therefore not comparable to the parallel or complementary language models mentioned earlier, but rather one that allows the use of the multilingual resources of students. This technique of allowing people to use the multilingual resources available to them has been called languaging, co-languaging or translanguaging (see Garcia, 2009; Swain et al., 2011).

Staff can also be allowed to use their multilingual resources. As noted above, the series of studies collected by Barnard and McLellan (2013) showed that while official policy did not allow the use of other languages in the EMI classroom, all the teachers studied reported that they actually did use other languages. There is a serious disconnection therefore between official policy and actual practice and I believe that this disconnection exists across most of the university sector in both Australia and Asia with regard to EMI policy and practice. The use of languages other than English in the EMI classroom needs to be validated, as has been done in the HKIEd language policy. It is important that the other languages are used in systematic ways which are aimed at helping the student learn English and complete the relevant tasks. Some guidelines for using other languages in the EMI class include providing translations for difficult vocabulary and concepts and using cross-linguistic comparisons (see Swain, Kirkpatrick, & Cummins, 2011).

As a personal example of using cross-linguistic comparisons, when teaching a university course to international students in writing academic essays in English, I asked them to select essays written in their own languages that had received high marks. I put students in 'same language' groups (Japanese in one group, Koreans in another group, for example) and then asked them to translate the L1 essays into English. Students were allowed to seek advice from speakers of English if needed. Once the L1 essays had been translated into English, the students were then asked to rework them rhetorically so that they would meet the expectations of the Australian university. Part of their task was to explicitly note the changes they had to make and then discuss the rhetorical differences between the good LI Japanese or Korean essay and the good English essay. Incidentally it was common for Japanese students to say that they found the three-part English structure represented by the popular aphorism, 'tell them what you are going to tell them, tell them, tell them what you have told them' to be embarrassingly simple and the sort of structure they would be likely to find in a Japanese primary school composition. It should go without saying, therefore, that the major aim of this use of contrastive rhetoric and

cross-linguistic comparisons is to draw students' conscious attention to difference and not to claim the 'English' structure is 'better' than any other.

At the same time as allowing, if not encouraging, the use of the available multilingual resources to be used, the university needs to understand the nature of English as a lingua franca. In the Asian context, the primary use of English is as a lingua franca between Asian multilinguals for which English is a learned language (Kirkpatrick, 2010). It is, apart from anything else, the sole official working language of the Association of Southeast Asian Nations (ASEAN). Thus, English is typically the language of choice between a group of educated Chinese, Indonesians, Thai and Vietnamese, for example. It is important that this is understood by the Australian university. English is now an 'Asian' language through which Asian cultural values and pragmatic norms can be expressed. We also need to take on board that there are several established varieties of Asian English (Bruneian, Filipino, Hong Kong, Malaysian and Singaporean) and that these are, in many ways, equivalent to Australian English in that they are norm developing varieties of postcolonial English. They are not inferior varieties which have no place in the academy. Monolingual speakers of Australian English should take courses in English as a lingua franca to help them acquire the intercultural communication skills required for dealing in English with multilingual Asians and across Asia. The Australian university, if it is to be genuinely international, must adopt a multilingual ethos in which ways of using the multilingual resources of its staff and students can be adopted. At the same time, it must come to understand the changing roles of English; above all the role of English as an international lingua franca and the implications of intercultural communication that this entails. Australian universities therefore need language policies that accurately reflect and make use of the linguistic complexities of the campus. These need to be informed by actual practice. By the same token, Asian universities which are promoting EMI courses also need to take on board the role of English as an international lingua franca. They also need to recognise the immense 'added value' they can offer to international students by encouraging them, if not insisting, to take courses in the local language as an integral part of the programmes.

In conclusion, the main issues and challenges facing the learning and teaching of English in universities in the Asia-Pacific are twofold (see also Huang, 2016, Chap. 2 in this volume). First, it is important that the new varieties and roles of English are recognised and the universities move away from an insistence on a native speaker model and accept the notion of English as an Asian and multilingual language. Second, the universities need to explore ways in which they can value and adopt the multilingual resources they have at their disposal. These ways include allowing the use of other languages in EMI classrooms, and for Australian universities to explore means through which they can systematically make use of the expertise in Asian languages possessed by so many of their international and migrant students.

Notes

- A useful website which summarises the language policies and entry requirements of Australian universities is the recently developed 'Degrees of Proficiency' website (http://www.degreesofproficiency.aall.org.au).
- 2. It is interesting to note, however, how English as a lingua franca is now being used, albeit unofficially, in the teaching of Chinese as an international language (Wang, 2013).

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Chapter 12

A Global Challenge: Overseas Immersion as an Effective Means to Enhancing English Proficiency?

Anita Y.K. Poon

Abstract Promoting the use of English as a lingua franca is doubtlessly a key process in globalisation. Hong Kong, being an international financial centre, took up the global challenge to enhance the linguistic competence of its human capital through education reform, and has invested billions of dollars in language enhancement in both school and university sectors since 2000. The present paper reports on an overseas English immersion programme offered by a university in Hong Kong, and explores whether immersion is an effective means to enhancing English proficiency. The paper first provides a backdrop for the Hong Kong government's policy on overseas English immersion implemented in 2001–2002. Then the design, content, operation and assessment of the overseas English immersion programme in a teacher education programme are described. Finally, the effectiveness of overseas immersion is discussed in light of globalisation and English language teaching and learning.

12.1 Introduction

Due to globalisation, education reforms swept across the globe towards the end of the 1990s. In addition to the major reform areas such as academic system, curriculum and assessment, English enhancement is a main focus of reform especially in countries that do not use English as a first language. Among different methods of raising English standards, overseas immersion is considered an effective way. The present paper gives a detailed and in-depth report of an overseas English immersion programme offered by a university in Hong Kong, and explores whether the claim is established. The paper first provides a backdrop for the Hong Kong government's policy on overseas English immersion implemented in 2001–2002. Then the design, content, operation and assessment of the overseas English immersion programme in

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a teacher education programme are described. Finally, the effectiveness of overseas immersion is discussed in light of globalisation and English language teaching and learning.

12.2 Backdrop for Initiating Overseas Immersion

An education reform of "unprecedented depth and magnitude covering the entire education system" (Poon & Wong, 2008, p. 35) was proposed in Hong Kong in 1999 in response to globalisation. Hong Kong, being an international financial centre hailed by Time Magazine as part of the financial network 'Ny.Lon.Kong' (i.e. New York, London and Hong Kong) (Elliott, 2008, January 28), saw the imminent need to reform its education in order to enhance the capacity of its human capital. Linguistic competence, among other competences, has been in the limelight of the reform because among all learning outcomes under the reformed education system, the ability to perform academic tasks, to learn critically, creatively, independently and collaboratively as well as to communicate effectively requires a high level of language standards, i.e. both Chinese and English in general, and English specifically. English as an international language is in great demand in globalised economies (Kirkpatrick, 2016, see Chap. 11 of this volume; Gu, 2016, see Chap. 4), and the workforce of Hong Kong must maintain a high level of English standards if Hong Kong wants to remain competitive in the global arena. Thus, the Hong Kong government has invested billions of dollars in language enhancement in both the school sector and the university sector since 2000 (Education Bureau, 2000, 2004, 2012), for example, by launching English Enhancement Schemes/Programmes in schools and universities, encouraging universities to set up an English exit test for their students, offering scholarships to students enrolled in full-time English teacher education programmes, sending full-time student-teachers majoring in English language teaching to Englishspeaking countries for immersion during the summer vacation, requiring English teachers at school to take an English benchmark test, and funding non-English major in-service teachers to enrol in programmes on English subject knowledge. 1

The Hong Kong government's initiatives to reform the education system and raise English standards are also due to community pressure. Although the government until 2008 kept denying that the English standards were declining (Education Commission, 1990, 1996; SCOLAR, 2003), various sectors in the community have persistently voiced their opinions pertaining to the dipping English standards, among which teachers and principals, employers, prominent public figures in business, politics and the judiciary. A typical example is the strong criticism given by Stephen Bradley, the former British consul general, prior to his departing Hong Kong in March 2008: "It [the English language] has significantly declined as a language in general use" (Wong, 2008, p. EDT 4). Bradley's comment was echoed by the hard data reflected in the English Proficiency Index² released by Education First: Hong Kong's ranking dropped from 12th (EPI: 54.44) in 2011 to 25th (EPI: 53.65) in 2012 (Education First EPI Report, 2011, 2012).

In response to the government's education reform, the Federation of Hong Kong Industry and 10 Chambers of Commerce formed a 'Coalition on Education in the Business Sector' in 1999 with a view to examining Hong Kong's education system and proposing ways to improve it from the perspective of the business world. One of their areas of concern was the English standards of those joining the business sector. It was the first time in history that the business sector worked hand in hand with the government to raise the English proficiency of employees in order to meet the increasing demands of Hong Kong as an international centre of commerce, finance and tourism. The Hong Kong government officially launched an 'English in the Workplace Campaign' on 28 February 2000 after incorporating the initiatives of the Coalition, which covered the English training subsidy scheme, English benchmarking, and the business and schools partnership programme ("120 firms sign for English scheme", 2000).

Likewise, parents have never ceased to press the government and the schools to help improve their children's English in order that they are able to enter university. Internationalisation of higher education is a main force that drives universities to tighten their English requirement for admission, thus indirectly adding pressure on the school sector to produce more proficient English users.

As English use is confined to the domains of education, administration, the judiciary, business and the media, and seldom in daily social interaction among the Chinese in Hong Kong (Luke & Richards, 1982; Poon, 2010), the majority of children learn English through the proper channel of schooling. Hence, the proficiency of English teachers is a crucial factor that contributes to students' standards of English. The question facing the Hong Kong government when it launched the education reform in 2001 was 'Is the quality of English teachers in Hong Kong good enough to teach English effectively?'. According to the survey conducted by the then Education Department of Hong Kong in 2001, only 9 % of primary English teachers and 36 % of secondary English teachers held relevant first degree plus relevant teacher training certificates (SCOLAR, 2003, Annex VIII).3 In addition, according to Poon's review of 25 studies on English teachers in Hong Kong, "in terms of their English language proficiency not many teachers think they have a good command of English. Research also indicates their language awareness is not high" (Poon, 2009, p. 26). Hence, training up the in-service English teachers as well as the pre-service English teachers was the main task for the Hong Kong government. Sending full-time student-teachers of English to overseas English-speaking countries for immersion was one of the initiatives of the government to enhance the linguistic competence of pre-service teachers.

12.3 A Case in Point: Overseas Immersion for a Teacher Education Programme

In order to improve the quality of English teacher training programmes, an overseas immersion programme was offered to all full-time Postgraduate Diploma in Education (PGDE) (English major) students in the 2001–2002 academic year to

sharpen their language skills in an authentic language environment. This scheme was later extended to all full-time Bachelor of Education and Double Degree (English major) students as a graduation requirement. The number of student-teachers participating in the overseas immersion programme increased from about 230 in 2001–2002 to 266 and 397 in 2012–2013 and 2013–2014 respectively. The universities that offer teacher education programmes design their own overseas immersion programmes, which usually last for 6–8 weeks. One of these immersion programmes for a double degree programme in English language teaching offered by a university in Hong Kong is reported subsequently.

12.3.1 Design of the Programme

The immersion programme provides students with immersion in an English-speaking country – Australia – through participation in various activities. The objectives of the programme are fourfold. On completion of the programme, students are expected: (1) to become more confident and active users of English; (2) to be able to use English with enhanced social appropriateness; (3) to expand their professional reference points in terms of language teaching and learning; and (4) to enhance their cultural sensitivity and awareness.

To achieve the above objectives, special attention is paid to the design of the immersion programme. As mentioned previously, students in Hong Kong learn English formally in the classroom rather than acquire it in daily social interaction. The English learnt at school tends to be formal and at times socially inappropriate to the native ears. By virtue of the immersion programme, students are provided with ample opportunities to be immersed in an English environment. However, merely immersing in an English environment does not necessarily guarantee students an enhancement in language awareness and expansion in capacity for professional use of the language, which involve meta-language and meta-knowledge. Therefore, this programme incorporates both formal learning of English in the classroom as well as informal acquisition of the language in different domains and through various activities. Details of the content of the programme are elaborated subsequently.

12.3.2 Contents of the Programme

The immersion programme is a 7-week intensive programme. Its curriculum includes five formal and informal components such as courses, school experience, lesson observations, homestay, cultural visits, outdoor activities, and exploration trips.

12.3.2.1 Courses

Three types of courses are offered: English proficiency course, English language teaching methodology course, and lectures and workshops on selected topics. The English proficiency course, which consists of 27 h, covers the areas of listening, speaking, reading, writing, grammar, vocabulary, and error correction. The English language teaching methodology course, which lasts for 38 h, covers integrated teaching (e.g. activity-based learning, content-based approach, skill-based approach); experiential learning (e.g. humanistic teaching approach, use of music and songs for language acquisition); techniques for teaching pronunciation and intonation; techniques for teaching grammar; the process approach vs product approach with a focus on genre-based teaching of writing; and peer-teaching and micro-teaching. There are also 8 h of lectures and workshops on selected topics, such as the education system in Australia, teaching of drama, and teaching of literature.

12.3.2.2 School Experience and Lesson Observations

The school experience component includes whole-day visits to five different schools of various school types, for example, state schools, private schools, primary schools, secondary schools, international schools, girls' schools, boys' schools, coeducational schools, and special schools. Student-teachers have the opportunity to share ideas with Australian students at school through making presentations and chatting with them after class. They can also observe lessons and assist the class teachers in conducting activities. However, they are bound by the regulation of the Department of Education Queensland and are therefore not allowed to conduct teaching on their own. In addition to school experience, some lesson observations on English language classes scheduled for adult international students taught by university instructors are organised for the student-teachers to widen their scope for English language teaching. Prior to lesson observations, the instructors introduce some lesson observation techniques to the student-teachers.

12.3.2.3 Homestay

Homestay is an important informal component of the immersion programme. Between student hostels and homestay, the latter is chosen because homestay is more than a place of students' accommodation. It also serves as a channel for acculturation and language acquisition. The participants of the immersion programme are each assigned a different homestay family in order that they are fully immersed in an English environment. While adjusting themselves to life in a new country, the students learn how to acculturate to the Australian living style in their homestay

families. Homestay also provides a precious opportunity for them to acquire authentic English generally, and Australian English – a variety of English that students seldom have access to in Hong Kong – in particular. Some homestay parents even play the role of 'teachers' and explain to the students the meaning and usage of some expressions and Australian slang.

12.3.2.4 Cultural Visits and Outdoor Activities

Visits to cultural sites in Brisbane and a long weekend (Friday to Sunday) to an outlying island in Queensland are scheduled as co-curricular activities. Hong Kong students are accompanied by the instructors during the cultural visits and the long weekend trip. There is a walking tour in Brisbane guided by Australian students. Such activities provide students with further opportunities to interact with their English-speaking instructors and peers in a relaxing environment.

12.3.2.5 Exploration Trips

In addition to the trips scheduled in the programme, students are encouraged to organise their own trips to explore Australia. To facilitate their experiential learning, the timetable of the programme is designed in such a way that there is a long weekend (Friday to Sunday), meaning there are no classes in the afternoon of Friday to allow students more time to travel outside Brisbane. Every year the majority of participants choose to stay behind for 7–14 days after the programme finishes, so that they can travel around Australia.

12.3.3 Operation of the Programme

It takes approximately a year for the immersion programme to complete one cycle, including preparation for the programme, implementation of the programme and evaluation of the programme.

12.3.3.1 Before the Programme

An invitation is sent in late November every year to the prospective immersion programme provider, followed by some email exchanges concerning certain details of the next programme, such as the number of participants, duration and the content of the programme. The prospective provider is requested to submit a pro forma including the following information: experience and expertise in running immersion programmes, profile of the institution, strengths of staff in designing and teaching immersion programmes, homestay arrangements, environs of the institution,

facilities provided by the institution, assessment and evaluation strategies, and costing. The programme provider is confirmed in the following January. The agreement is then drafted and revised, and the final agreement is signed by representatives from the two parties in Hong Kong and Australia in March.

Preparation work for students starts in January. Students are invited to attend an orientation session for immersion as soon as the second semester starts in mid-January every year. Students are given an overview of the programme – i.e. objectives of the immersion programme, programme provider, contents of the programme, homestay, and assessment and evaluation. The students need to attend a seminar, in which they sit face to face with a representative from the Australian programme provider in March. They are given more details concerning the programme, the programme provider, homestay, Australian lifestyle and Brisbane. A couple of weeks prior to their departure from Hong Kong, they are given a pre-departure briefing, in which two student representatives from the previous cohort are invited to share their immersion experience with their fellow students.

Meanwhile, the administrative staff at the university in Hong Kong need to attend to the logistics of the programme, for example, booking air tickets, collecting photocopies of students' passports and applying for visas, collecting students' payment slips and asking students to fill in the 'Homestay' forms and 'Learner Profile' forms sent by the programme provider. Likewise, the administrative staff on the other end in Australia have to do grouping, time-tabling, matching students with homestay families based on the information collected in the 'Homestay' forms, assigning instructors and lecturers, liaising with schools for school visits, organising cocurricular activities, making arrangements for the monitoring visit, and so forth.

12.3.3.2 During the Programme

The immersion programme takes place from late June to mid-August every year. Upon arrival in Brisbane the students are received by the personnel of the programme provider and immediately taken 'home' by their respective homestay families. The programme starts on the next day with a welcoming session, followed by a pretest on the four English skills before the proficiency classes start in the first week. A post-test is scheduled in the last week of the programme, aiming at finding out whether the participants' English has improved.

A monitoring visit is paid by academic staff on the English team of the university in Hong Kong, usually in the second week of the programme. During the visit the monitoring staff member observes lessons, talks to students in both formal and informal meetings, has discussions with the instructors, holds meetings with the administrative staff of the programme provider, and may participate in school visits and co-curricular activities depending on the arrangements. The monitoring visit lasts for about 5 days.

The participants are required to fill out two evaluation forms in the last week, one designed by the programme provider and the other by the university in Hong Kong. A graduation ceremony is held on the last day of the programme.

12.3.3.3 After the Programme

Every year only a few students return to Hong Kong immediately after the immersion programme, while the majority of participants stay behind and make use of the remaining days of their summer holiday to explore Australia.

A debriefing session is held soon after the academic year starts in September. The students are invited to give feedback on the overseas immersion programme as well as suggestions on how to improve the programme.

12.3.4 Assessment of the Programme

The English Double Degree teacher education programme was first offered at this university in 2005–2006. The first cohort of students took their English immersion programme in the summer of 2007 when they finished their second year of study. An assessment of the effectiveness of the overseas immersion programme based on the data collected from the first five cohorts of students participating in the immersion programme during 2007–2011 was conducted in 2012. This section reports on the results of the assessment of the immersion programme. The data covered both quantitative and qualitative data gathered from the following: (1) students' self-evaluation of English learning; (2) English proficiency test results; (3) student survey on programme evaluation conducted by the university; (4) programme report submitted by the immersion programme provider; (5) final report written by the university. The data from different stake-holders were analysed and triangulated.

12.3.4.1 Students' Self-Evaluation of English Learning

The number of students participating in the programme in each year was: 25 (2007), 21 (2008), 18 (2009), 19 (2010) and 18 (2011). The students were asked to evaluate whether they had made any progress in English language learning in terms of their motivation and the four English skills after completing the programme. Scores were assigned on a five-point scale (1=very weak/unsatisfactory, 2=weak/unsatisfactory, 3=satisfactory, 4=good, 5=very good).

The mean scores of different cohorts on various scales were similar except the 2009 cohort, which was bright both in terms of their English proficiency and academic standards. The scores of the 2009 cohort were lower compared with those of the other cohorts – that means they were less satisfied with their language enhancement, possibly because the English proficiency of this cohort was high and it would not be easy to see a great progress within a short period. In addition, this cohort might have had a higher expectation of themselves.

Of all the areas, listening was perceived by all cohorts as the skill which saw the greatest improvement (see Table 12.1). The students attributed their gain in listening skill to homestay, which provided them with an opportunity to differentiate

| | Mean score of 2007 | Mean score of 2008 | Mean score of 2009 | Mean score of 2010 | Mean score of 2011 |
|-----------------------|--------------------|-----------------------|--------------------|--------------------|-----------------------|
| Motivation | 3.84 | 3.41 | 3.19 | 4.00 | 3.86 |
| Speaking (accuracy) | 3.44 | 3.06 | 3.17 | 3.65 | 3.65 |
| Speaking (fluency) | 3.84 | 3.35 | 3.28 | 3.76 | 3.72 |
| Speaking (confidence) | 3.84 | 3.59 | 3.28 | 3.71 | 3.89 |
| Listening | 3.88 | 3.44 | 3.78 | 3.97 | 3.81 |
| Writing (accuracy) | 2.84 | 2.53 | 2.50 | 3.44 | 3.50 |
| Writing (fluency) | 2.84 | 2.47 | 2.56 | 3.44 | 3.47 |
| Reading | 2.84 | 2.88 | 2.94 | 3.44 | 3.53 |

 Table 12.1
 Self-evaluation of language enhancement

Australian English in general and Australian accent specifically from the American and British varieties of English that they were familiar with. Some homestay parents offered help when the students had difficulty in watching TV programmes. Confidence in speaking English and motivation for learning English was the second area with which students were satisfied. In contrast to the productive skills of listening and speaking, the progress in receptive skills of writing and reading was not satisfactory. According to the students, they were not required to do a lot of writing and reading in the proficiency courses that they took. Some students added that they expected that their speaking rather than writing would improve after taking the programme. Their expectation was in line with the nature of the overseas immersion programme, which usually focuses on speaking.

12.3.4.2 English Proficiency Test Results

The students were required to take a pretest in listening, reading, speaking and writing in the first week of the programme before attending the proficiency classes, and a post-test upon completing all proficiency classes in the last week. The listening test included filling in the blanks, matching and multiple choice questions; the speaking assessment took the format of group discussion; the reading test included comprehension passages followed by some questions; and the writing assessment was composed of error correction, error analysis and essay writing. The full mark for each test was 100 marks. The overall mean gain was positive across all cohorts, ranging from +0.18 to +14.83 (see Table 12.2). The test results show that the English proficiency of all five cohorts was enhanced after the immersion programme. However, the small increase in the overall mean gain (+0.18) and the high negative reading score (-10.97) of the 2011 cohort are alarming. Some qualitative comments provided by the participants of this cohort are revealing: "I am very fluent already"; "I'm really fluent, near-native"; "I'm always confident in speaking"; "I am very confident already"; "I have very few slips in my speech"; "I don't have any problem with listening"; "I am very good already". Confidence is a driving force for language learning but over-confidence can be a stumbling block. This offers a possible reason for the small gain in this cohort.

| | 2007 | 2008 | 2009 | 2010 | 2011 |
|-----------|--------|--------|--------|--------|--------|
| Listening | +11.20 | +17.29 | +12.90 | -0.13 | +5.50 |
| Reading | +6.92 | +10.29 | -2.20 | +1.49 | -10.97 |
| Speaking | +9.70 | +16.95 | +6.00 | +16.58 | +5.00 |
| Writing | +10.62 | +23.38 | +19.00 | +4.70 | +5.50 |
| Overall | +9.33 | +14.83 | +8.90 | +4.92 | +0.18 |

Table 12.2 Mean gains in posttests

Writing, among all four skills, received the most significant mean gain across five cohorts. This finding is apparently contradictory to the students' self-perceived improvement indicated in Table 12.1, which shows that the students assessed their improvement in writing as the least desirable. Digging deeper into the data, however, reveals that the writing paper included a section on error correction, in which the students received a lot of training as it was their weakest area. It was no surprise that the students had the greatest mean gain in this skill area after intensive training. In fact, listening and speaking, presumably the major foci of the English immersion programme, saw the most significant improvement in nearly all groups. This is corroborated by the feedback of the instructors and the comments in the programme provider's evaluation reports.

12.3.4.3 Student Survey on Programme Evaluation by the University

The participants were invited to fill in a questionnaire on programme evaluation conducted by the university in the last week of the immersion programme. The evaluation covered the following areas: (1) support from the university; (2) support from the programme provider; (3) homestay; (4) general living; (5) teaching and learning (overall); (6) language proficiency course; (7) methodology course; (8) lectures and workshops; (9) school experience; (10) overall programme evaluation. Scores were assigned on a five-point scale (1 = very weak/unsatisfactory, 2 = weak/unsatisfactory, 3 = satisfactory, 4 = good, 5 = very good).

Table 12.3 shows the mean scores of five cohorts. Each of the above areas is elaborated subsequently.

Support from the University The students were asked to give feedback on four aspects under 'Support from the University': briefings, usefulness of the monitoring visit, efficiency and overall support. The participants were satisfied with the support provided by the university, except the 2007 cohort (2.88). The sub-scores of this area reveal that the mean score for 'Overall Support' was 3.20, which means the 2007 cohort were satisfied with the support provided. However, they were not satisfied with the 'Briefings' (2.44), which they referred to as the sharing with their seniors during the pre-departure briefing. As 2007 was the first year in which English Double Degree students participated in the overseas immersion programme, the department could only invite some graduates from the full-time Postgraduate Diploma in Education (PGDE) (English major) to do the sharing with the cohort of

| | Mean | Mean | Mean | Mean | |
|---------------------------------|---------------|---------------|------------------|---------------|--------------------|
| | score of 2007 | score of 2008 | score of 2009 | score of 2010 | Mean score of 2011 |
| Support from university | 2.88 | 3.20 | 4.00 | 3.30 | 3.30 |
| Support from programme provider | 3.51 | 3.40 | 3.40 | 4.00 | 4.00 |
| Homestay | 3.98 | 3.50 | 4.00 | 4.40 | 4.40 |
| General living | 3.23 | 2.90 | 3.30 | 3.60 | 3.60 |
| Teaching and learning (overall) | 4.23 | 3.90 | 3.50 | 4.20 | 4.20 |
| Language proficiency course | 3.67 | 3.50 | 3.50 | 3.70 | 3.70 |
| Methodology course | 4.21 | 3.90 | 3.50 | 4.20 | 4.20 |
| Lectures | Nil | 3.70 | 3.60 | 3.70 | 3.70 |
| School experience | 3.46 | 3.30 | 3.10 | 3.90 | 3.90 |
| Long-weekend activities | Nil | 3.50 | 4.30 | 4.40 | 4.40 |
| Culture | 3.85 | 3.40 | 3.10 | 3.90 | 3.90 |
| Overall programme | 3.90 | 3.60 | 3.60 | 4.10 | 4.10 |

Table 12.3 Results of programme evaluation survey conducted by the university

English Double Degree Programme. There might have been some mismatches because the PGDE students went to Australia in November-December whereas the Double Degree students went there in June-August. Some information provided might not have been relevant, for example regarding the weather, activities and clothing. This problem was addressed in the following years, resulting in the scores concerning briefings going up.

Support from the Programme Provider' Support from the Programme Provider' included general facilities, IT facilities, library, handling student needs and staff-student rapport. All the cohorts were very satisfied with the support from the programme provider. In the first few years there were complaints about IT facilities because of limited access to the Internet, but this aspect had improved when the institution had moved to a new building and new IT facilities were ready for use. The students were extremely appreciative of the rapport between staff and students as well as the way their needs were handled.

Homestay 'Homestay' was one of the most well received areas and a score up to 4.4 was awarded. The feedback was very positive, for example: "I had a very nice host family"; "the host is a super good cook"; "they're willing to take me to their family gathering"; "created a strong bond with homestay"; and "We always chatted. They were always ready to make me feel at home". Students also agreed that homestay contributed to improvement in English proficiency because some host parents pointed out the errors or slips that they had made. However, some problems arose occasionally, so a few students had requested changing their homestay for different reasons, such as far-away location, insufficient supply of food, inadequate attention of the homestay because of their own busy schedule, etc. The success in homestay

was mainly due to careful planning in advance. The students were matched with potential homestay families based on the information and the requests they had put in the 'Homestay Form'. The programme provider paid due care to some students who had special needs (e.g. health problems, emotional needs or mental problems) and assigned homestay families capable of providing additional support to such students.

General Living 'General Living' refers to transportation, meals, own activities and interaction with local people. Students found overall general living satisfactory. They enjoyed different varieties of food in Australia, but "food is generally expensive, especially because of the crazy currency", so they had to bring their own lunch. Students welcomed the time provided for their own activities. They planned their own trips with the help of Activities Officers on campus to Gold Coast, Dream World, Movie World, Byron Bay, Moreton Island, etc. They found "life here is generally relaxing" and "it is a good place for you to get close to nature". Students also found "Australians are helpful and friendly"; "most drivers are nice"; and "sales staff and random people are friendly". None of the students found interaction with local people a problem, but the problem was that they did not have a lot of opportunities to interact with local people. The only thing that they did not like was the transportation in Australia, which was described as "very inconvenient" and "too expensive".

Teaching and Learning (Overall) 'Teaching and Learning' was another area that received a very high rating. Students were on the whole extremely satisfied with the courses. The teaching materials were useful, interesting and authentic although some materials could be pitched at a higher level. They were particularly impressed by the teaching quality of the instructors. Positive comments were made: "The teaching staff are inspiring and supportive"; "Our instructors are very professional, communicative and interactive"; and "They are wonderful and supportive teachers".

Language Proficiency Course The students were generally positive about the 'Language Proficiency Course'. The overall teaching quality of the instructors was good. They had positive comments on various aspects of the Language Proficiency Course: "vocabulary building is good"; "grammar is good"; and "drama is good". They particularly found the error correction component useful although it was sometimes boring. As for the assessments, the pre- and post-tests were found to be appropriate although a few students complained about insufficient time allocated to the writing tests.

Methodology Course The 'Methodology Course' was rated excellent by most of the cohorts. In particular, students were impressed by the overall teaching quality of the teaching staff. Some positive comments were given by the students: "I've learnt a lot about how to apply the methodology"; "the methodology course enriches my knowledge"; and "the demonstration is very effective". They also found the teaching materials "very useful" and some students said, "I will bring them back to Hong Kong for future reference". Peer teaching was said to be useful although some students commented that "There is too much peer teaching practice and it makes us stressful during the programme".

Lectures and Workshops Lectures and workshops were generally well received by students. The students particularly liked the workshops on drama and literature as demonstrated in their positive feedback – "I love the drama class so much"; and "Many of us have to teach literature in future. More literature methodology lectures, please!". Some students commented that "the lectures enabled us to understand more about the Australian education system".

School Experience and Lesson Observations 'School Experience' was found to be satisfactory. On the whole, students found it very useful because "it allows students to learn from experienced teachers" and "it is very inspiring to see all the different teaching styles and classroom settings". Some students commented that "the school visits give me a chance to observe how Australian teachers teach the students" and "we can compare the differences with HK classrooms". They had a lot of opportunities to observe lessons or assist the teachers to conduct activities or cope with students' problems at school. In addition, the students also appreciated the opportunities to observe TESOL (Teaching English to Speakers of Other Languages) lessons in the language institute on university campus because those students were adult international students from different countries and "it broadens my eyes".

Long-Weekend Activities 'Long-Weekend Activities' was another area that received a very high rating. Students enjoyed the long-weekend trip to an outlying island tremendously: "the trip to Tangalooma was amazing"; "the activities are fantastic – dolphin feeding, sand boarding, etc."; and "everything is good, beautiful scenery, well organised and interesting".

Culture Students had little problem adapting to the local culture although a few admitted that it took them some time to do so. They appreciated the cultural visits organised by the programme provider, especially those accompanied by Australian students. Some complained that there were not sufficient cultural visits. On the whole they had tried to immerse themselves into Australian culture and agreed that they had gained more confidence in intercultural communication – "Staying with the homestay family enables us to interact with people from another culture, especially with the other homestay students from other parts of the world".

Overall Programme Evaluation The mean rating for the 'Overall Programme Evaluation' ranged from 3.6 to 4.1 across all cohorts. The high rating suggests that students were on the whole pleased with the programme. Students were satisfied with the timetabling, balance in programme coverage as well as workload. Students appreciated the appropriate level of workload so that they had more time to immerse freely in Australia. Their overall comments were that "it was a very worthwhile programme" and that they had had "a fruitful experience".

12.3.4.4 Programme Reports by the Programme Provider

A programme report drawing on the data pertaining to English proficiency tests, language instructors' feedback and students' surveys on programme evaluation was compiled by the immersion programme provider and submitted to the university in

Hong Kong about 2 months after the programme was completed. The main points of the five reports are summarised in the sections that follow.

Overall Evaluation The programme proved to be both successful and smoothrunning for the students and the staff of the provider involved. The programme had been modified and improved over five years with the input of the immersion programme teams from Hong Kong and Australia, and particularly with the feedback from the students. One major development concerning student evaluation was to add one mid-programme survey during the second week of the programme in addition to the final formal evaluation. The mid-programme survey aimed at soliciting students' initial response to the programme in order to see whether any adjustment to the programme for the remaining weeks was necessary. For example, the main feedback stemming from the mid-programme survey of 2011 was requests for some lessons with other international students. Accordingly, the students were integrated with some international students during one of the 'English Language Skills: Speaking for Fluency' classes. The final survey served to inform the design and content of future programmes. For example, the topic on oral presentation skills was deleted from the content of the programme based on the feedback of the participants in 2007, who commented that they had already done a lot of presentations in Hong Kong; a workshop on teaching literature in Australian schools was added in 2010 because of the overriding popularity of the workshop on teaching through drama techniques from the participants of 2007–2009.

According to the instructors, the participants were generally highly motivated and conscientious with a high level of proficiency in English. The instructors also appreciated students' active participation in the learning activities. Likewise, the students were highly appreciative of the passion, commitment, knowledge and teaching skills of the instructors. English Language Skills segments were well received with different learners singling out different sessions for praise. For example, those targeting spoken fluency proved to be very popular; the session on reading aloud ('audacity') and those on error correction were highly rated, probably owing to their relevance to the Language Proficiency Assessment for Teachers. Teaching Methodology segments formed a major part of the overall programme and were also positively evaluated by the students in general, with a range of topics, such as peer teaching, elicitation and using MCQs (multiple choice questions), being singled out as popular. As for lectures and workshops, using 'Drama Techniques' in English Language Teaching proved to be very well received by the students of all cohorts.

Visiting schools in the Brisbane area was a useful way for students to gain interesting insights into the way lessons were conducted in Australia as well as providing a stimulus for discussion in the follow-up sessions in their own classes on campus. All school visits received positive feedback across the five cohorts although participants did differ in evaluations of the schools they had visited. The experience in different types of schools enabled participants to reflect on similarities and differences between Australian and Hong Kong schools, students and curriculum. In addition, lesson observations of the TESOL classes on campus were welcomed by students.

In addition to the cultural visits and long-weekend activities, which students greatly enjoyed, the participants experienced Australian culture and lifestyle by staying with homestay families for the duration of the programme. Homestay played an important role in the programme by providing a caring environment in which participants can practise their English and learn about Australian culture and lifestyle. The homestay families were drawn from a wide pool within the local community and each homestay family and family home were different. This means that participants might have had experiences in the homestay involving varying levels of interaction depending on the family, the English level of programme participants and their willingness to engage with family members. Overall, all five cohorts enjoyed their homestay experiences. The participants were to be commended on the efforts they made to fit into their host families and faced the challenge of living and studying in a different culture.

On the whole, the students across all five cohorts were almost unanimous in that they would recommend the immersion programme to their peers as being a valuable life experience and very useful for their future career as teachers of English.

Recommendations In order to ensure that programme participants gain the greatest possible benefit from the programme, the following recommendations were made for future programmes:

- Continue to brief the students thoroughly on what to expect from the overseas immersion programme in Australia and the homestay experience;
- Maintain the balance between training in English language skills and ELT methodology but consider covering some key language skills areas in greater depth, such as speaking for fluency, pronunciation, error correction and writing development;
- Consider placing an even greater emphasis on the practical application of methodology in the four skills areas, as the students find this particularly useful;
- Continue to provide the current number of peer teaching opportunities. These
 peer teaching opportunities have allowed participants to put into practice the
 practical methodology which they have evaluated highly on the programmes;
- Continue to provide students with feedback on the phonological features of their own spoken language;
- Continue to encourage students to bring their own school textbooks to Australia so that practical tips for using and exploiting these resources in the classroom can be discussed and incorporated into teaching sessions.

12.3.4.5 Final Reports on the Immersion Programme by the University

A final report drawing on different sets of data – i.e. students' English proficiency tests, the monitoring staff's report, students' survey on programme evaluation, the provider's report and the immersion programme coordinator's email and face-to-face communication with the provider – was compiled about 5 months after the

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programme was completed. The main points of the five reports are summarised in the sections that follow.

Overall Evaluation The overseas immersion programme was implemented smoothly and was well received by the students. This was evidenced by a triangulation of different sets of data mentioned above. Of all the components of the programme, the most well-received were long-weekend activities, homestay, teaching and learning (overall) and methodology. Long-weekend activities enabled students to explore Brisbane and Queensland and to be immersed in the Australian culture. The students treasured such valuable experience as reflected in their comments: "It's really a memorable experience for learning and exploring a new culture"; and "I've broadened my horizon and been amazed by the stunning landscape and friendliness of local people". As homestay is a critical element in an English immersion programme, a good arrangement of homestay is likely to contribute to the success of the programme. Apart from a few cases that required attention and change of homestay, the students of all five cohorts found homestay valuable, beneficial and enjoyable in terms of cultural awareness, personal development and language enhancement. In regard to teaching and learning, the participants of the five cohorts almost unanimously admitted that they had benefited from the courses and instructors in general, and from the methodology course in particular. They had learnt to become more open-minded to different methods of teaching. More importantly, some students had gained some deep insight about what a professional teacher should be: "Believe in yourself and be faithful of what you are believing"; "It helps me to achieve further goals and probably become a better teacher"; and "Sometimes we think it is impossible, but there is actually no impossibility".

An assessment of students' English proficiency was included in the programme despite its short running term, as language enhancement was the primary goal of the English immersion programme. The pre- and post-tests served as the only objective instrument for collecting quantitative data on students' English proficiency level. The test results show that the English level of all five cohorts was raised after the immersion programme, with writing as the most improved skill. This finding appears to be contradictory to the common perception that listening and speaking should be the foci of an immersion programme of this nature. A triangulation with other quantitative and qualitative data (i.e. the students' survey, the language instructors' feedback and the programme provider's report) reveals that listening and speaking were the actual skill areas in which the students saw the greatest improvement. As for writing, a component of error correction, which could be quickly improved after drilling, was included in the writing paper of the pre- and post-tests.

Overall the collated evaluations from different stake-holders of the five cohorts affirm that the four objectives of the overseas English immersion programme were achieved. That means upon completion of the programme, the students: (1) had become more confident and active users of English; (2) were able to use English with enhanced social appropriateness; (3) had expanded their professional reference points in terms of language teaching and learning; and (4) had enhanced their cultural sensitivity and awareness. With the collaboration and concerted efforts of the

two immersion programme teams from Hong Kong and Australia, the English immersion programme proved to be very successful.

 $\ensuremath{\textit{Recommendations}}$ The following recommendations were made for future programmes:

- In selecting future programme providers, the university should emphasise the adequate provision of pastoral care, a supportive programme co-ordinator who has the experience in organising similar English immersion programmes for Hong Kong students;
- The timing of immersion programme has important ramifications, especially for the arrangement of school visits. Ideally, students should be provided with adequate opportunities to observe English lessons and to engage in co-teaching or team-teaching with local teachers there;
- The following elements should be considered in designing an immersion programme when workload is concerned: (1) overall workload; (2) availability of free study time for students to work on assignments; and (3) a balance between learning, relaxing and cultural experience;
- It is recommended the programme provider should continue with the following good practices pertaining to homestay: (1) begin the matching exercise as early as possible; (2) take into consideration the special needs of some participants; (3) avoid two students sharing homestay accommodation; (4) place students in homestays in close proximity to the university campus;
- The ELT methodology component proved to be very well received by the students as it is highly relevant to teacher trainees. It is recommended that ELT methodology be a salient part of future programmes;
- Since language proficiency is one of the most important components of an immersion programme, it is recommended that more co-ordination between the two teams regarding the specific contents of this course be needed. The programme provider should take appropriate measures to make sure that the teaching materials are pitched at the right level for the participants. This could be achieved by: (1) an initial analysis of the pretest results so as to gauge the overall proficiency level of students; (2) seeking informal feedback from students regarding the suitability of the teaching materials, especially at the beginning of the programme; and (3) ongoing evaluation of students' language proficiency and needs through observations.

12.4 Effectiveness of Overseas Immersion on English Enhancement

In order to assess the effectiveness of overseas immersion on English enhancement, the term 'English proficiency' adopted in this paper is first defined. Then, the contribution of the immersion programme to English enhancement is discussed.

12.4.1 English Proficiency

'English proficiency' is a complicated construct that can be interpreted differently by different people. It is necessary to define this term prior to assessing whether students' English proficiency is enhanced. 'Language proficiency' refers to "the degree of skill with which a person can use a language, such as how well a person can read, write, speak, or understand language" (Richards, Platt & Weber, 1985, p. 159). Being able to use the four skills (i.e. listening, speaking, reading and writing) well in English does not warrant that the person has a high level of English proficiency because English skills are applied not in a vacuum, but in a specific context. According to the communicative competence framework developed by Canale and Swain (1980) and refined by Canale (1983), language proficiency entails more than grammatical competence as traditionally conceptualised, but also encompasses discourse, sociolinguistic and strategic competencies. Language is acquired or learnt holistically and language proficiency is fully displayed only when the three components of language (i.e. form, meaning and use) are properly addressed in relevant contexts. In addition, "language proficiency is developmental" (Kirkpatrick, see Chap. 11, p. 229), so a learner is likely to improve his/her language proficiency if s/he is immersed in the target language environment.

While contextualization is the current paradigm of viewing language proficiency, which focuses on the ability to use language adequately in face-to-face interactions, Cummins (1981, 1985[1980]) distinguishes two types of language proficiency: Basic Interpersonal Communication Skills (BICS) and Cognitive/Academic Language Proficiency (CALP). The former refers to "the manifestation of language proficiency in everyday communicative contexts" whereas the latter is conceptualized in terms of "the manipulation of language in decontextualized academic situations" (Cummins, 1985[1980], p. 137). A student who is highly proficient in BICS is not necessarily proficient in CALP as evident in many minority students in the bilingual programmes of the U.S.A. (Harley, Cummins, Swain & Allen, 1990). Therefore, the language proficiency required in context-embedded communication (BICS) is different from that in context-reduced (CALP) situations.

Digging deeper into the concept of contextualization, we can delineate more factors that determine further dimensions of English proficiency. Domains, a term proposed by Fishman (1971), are institutional contexts comprising the factors of location, topic and participants. What type of English proficiency is preferred depends on the domain in which communication takes place. For example, formal English is required in the judiciary domain whereas informal English is used in the home domain.

'Linguistic varieties' is another factor that contributes to language proficiency. 'Linguistic varieties' refers to different varieties of one language due to regional and cultural differences, e.g. British English, American English and Australian English. English was originally confined to the British Isles until the nineteenth century. Migration of English speakers from the British Isles caused the spread of English to North America and Australasia, thus forming the 'Inner Circle' of Kachru's (1985) 'Three Circles of English' use. Colonialism in the nineteenth century together with neo-colonialism in the twentieth century was a driving force for the spreading of English to the former colonies of Britain in Asia and Africa, thus forming the 'Outer Circle'. As a result of globalisation that has swept across the globe since the 1990s, English has further spread to countries where English was seldom used, such as Japan and Korea, continental European countries, and Latin American countries, thereby forming the 'Expanding Circle'. English has now become a dominant lingua franca of peoples in the global village (Kirkpatrick, 2016, see Chap. 11). Hence, new varieties of English known as 'World Englishes' and 'Asian Englishes' (Kachru, 1997, 2005) have emerged in addition to the traditional varieties of English. A person who is proficient in one variety of English may have difficulty in understanding another variety of English because of differences in pronunciation, vocabulary and sentence structure.

'Cultural differences' is a subtle and increasingly important factor that affects language proficiency. As intercultural communication is getting more frequent in the globalising world, it is common to have contact with people from different cultural backgrounds during studies (e.g. chatting with international students on university campus, going on exchange in a foreign country, etc.), at work (especially in the business sector) and when travelling (travelling overseas is a popular leisure activity for Hong Kong people). English as an 'International Language' is inevitably the common lingua franca adopted in intercultural communication (Gu, 2016, see Chap. 4; Kirkpatrick, 2016, see Chap. 11). Having knowledge of different varieties of English and maximizing the opportunities of interacting with people from diverse cultural backgrounds definitely helps to unlock the nuances in intercultural communication and thus enhances one's intercultural competency, which is defined as an "adaptive capacity based on an inclusive and integrative world view which allows participants to effectively accommodate the demands of living in a host culture" (Taylor, 1994, p. 154).

Therefore, a broader view of English proficiency incorporating the concepts of English skills, contextualization, BICS/CALP, domains, linguistic varieties, language awareness, cultural awareness and intercultural competency is adopted in the present paper.

12.4.2 How the Overseas English Immersion Programme Contributes to English Enhancement

A typical English language curriculum offered at school in Hong Kong adopts a skill-based approach. Of the four skills, reading and writing receive comparatively much more attention than listening and speaking as students need to be drilled to take public examinations, which give more emphasis on reading and writing. Although Communicative Language Teaching was introduced to the English curriculum in Hong Kong in the early 1980s, the grammar approach and audiolingualism still dominated the English language teaching scene until recently (Poon, 2008,

2011). Over the past decades the assessment of students' English proficiency has been form-focused. Those who received a high score in public examinations were not necessarily able to use English in appropriate contexts. In addition, the focus of English language teaching and learning both at school and at university has been on CALP rather than on BICS. English use is also confined to five conventional domains of education, government administration, the judiciary, business and the media although there is an emerging trend of using English in the home domain because of returnees from English-speaking countries and Filipino domestic helpers at home (Poon, 2010). The English used in the five conventional domains tends to be formal, and for the majority of students, who learn English at school only, CALP is the type of language proficiency that they are more used to. Hence Hong Kong students' English is criticized as bookish and inappropriate in social contexts, not to mention their English use in intercultural communication, which requires another dimension of English proficiency and knowledge of varieties of English.

In sum, over-emphasis on reading and writing skills, lack of opportunities to practise BICS and little experience in intercultural communication are problematizing factors within English language teaching and learning in Hong Kong. The design of the present overseas English immersion programme is meant to fill the gap. As reported previously, a main focus of the immersion programme is to train students' BICS in addition to professional knowledge and skills pertaining to English teaching methodology; therefore, students have more opportunities to practise listening and speaking rather than reading and writing in class. The other components of the programme such as homestay, long-weekend activities accompanied by the instructors and cultural visits accompanied by Australian students provide students with the opportunity to do intercultural communication. Meeting other international students on campus and occasionally having classes with students from different countries broaden students' horizons and deepen their understanding of other cultures, thus enhancing their cultural awareness, which is vital as globalisation renders intercultural communication more frequent (Evans, Alano & Wong, 2001). Moreover, the fact that the immersion programme is held in Australia offers students a chance to be exposed to a variety of English that is entirely new to them. This new experience is likely to trigger students' interest in comparing and contrasting Australian English with British English and American English that they are familiar with. Their language awareness will possibly be enhanced. This concurs with Littlewood's argument that "intercultural communication can indeed be helped when language awareness is accompanied by cultural awareness at the general and specific levels" (Littlewood, 2002, p. 35).

Finally, is overseas English immersion an effective means to enhancing English proficiency? As reported previously, the results of self-evaluation of language enhancement and the pre- and post-tests indicate that the participants' English proficiency was enhanced in general, particularly regarding listening and speaking. According to the university's programme-evaluation survey, the four most popular components of the programme are long-weekend activities, homestay, teaching and learning (overall) and methodology, in descending order. Students particularly value long-weekend activities and homestay because such components are unique and

cannot be found in the English classes or English language programmes in Hong Kong. According to the students, the greatest gains in the overseas English immersion programme are: enhanced confidence, better motivation, higher language awareness and cultural awareness, which are essential factors for language enhancement especially for advanced learners. Hence, it is affirmed that overseas immersion is an effective means to enhancing English proficiency in its broad sense regardless of the length of immersion programme.

12.5 Conclusion and Recommendations

In response to globalisation and escalating demands for proficient speakers of English in the global market, the Hong Kong government has made strenuous efforts to enhance the linguistic competence of its citizens in order to upkeep the status of Hong Kong as an international financial centre. Training high quality English language teachers is a means to achieving this end, and making overseas immersion a mandatory component of pre-service English teacher education programme is presumably an effective way to raise English standards. This paper has provided a detailed report on the objectives, design, contents, operation and assessment of an English overseas immersion programme offered by a university in Hong Kong for its English Double Degree Programme between 2007 and 2011. Triangulation of different sets of quantitative and qualitative data reveals that overseas immersion is an effective means to enhancing English proficiency in its broad sense, which encompasses the concepts of English skills, contextualization, BICS/CALP, domains, linguistic varieties, language awareness, cultural awareness and intercultural competency.

Since the overseas English immersion policy has been in place in Hong Kong for 12 years, other immersion programmes with similar objectives and content components have been reported in the field. They were organised by different universities in Hong Kong and held in various English-speaking countries (e.g. Australia, New Zealand, the U.K., and Canada) (Barkhuizen & Feryok, 2006; Bodycott & Crew, 2000, 2001; Lee, 2009; Tang & Choi, 2004). The data collected were mostly qualitative data through pre- and post-questionnaires, self-reports and reflective papers. Although no hard data pertaining to students' improvement in English proficiency were reported in these studies, a noticeable change among the participants was increased confidence in using English, "willing to take risks linguistically and socially" (Lee, 2009, p. 1098). In addition to professional knowledge and skills, listening and speaking were self-reported as the most improved English skills (Lee, 2009). Being able to be immersed in authentic English environment enabled students to develop their language awareness in terms of pronunciation, linguistic choices in formal and informal contexts and different varieties of English. Through interactions with the locals in the host countries, cultural awareness and intercultural competency were also developed. These results corroborate with those reported in the present study.

The collated results of the present study and other similar studies doubtlessly suggest that overseas immersion is indeed an effective way to enhance the English proficiency of language teachers, but why is this policy not adopted by other countries in Asia? Cost is the main concern; the overseas English immersion programme is heavily subsidized by the Hong Kong government, and the participants contribute only 18 % of the total cost. The government's expenditure on immersion in the academic year 2012–2013 was approximately HK\$ 20 million (equivalent to US\$ 2.63 million) for several hundred teachers. For a city of Hong Kong's scale, the budget may not be an issue, but for an entire country the amount spent on an annual basis might not be affordable. Thus mandatory overseas immersion for English language teachers may not be a feasible option for the consideration of governments in the region if they want to raise English standards. Are there alternative ways to enhance English proficiency at the level of the government?

A more fundamental question to address from a policy perspective is how to raise the English standards of the citizens in general rather than those of the English teachers alone. Linguistic input, especially 'comprehensible input', which refers to the language input that learners can understand (Krashen, 1982), is essential to second language acquisition. Enhancing the English environment in the major domains is the first step to take. For example, in the education domain, the teaching and learning of L1 (first language) and L2 (second language) can be planned holistically using the framework of bilingual education so that some content-based subjects, if not all, will eventually be taught through the medium of English; in the workplace domain, employees should be provided with opportunities to learn some functional English as in Hong Kong's 'English in the Workplace Campaign'; in the community domain, more functions, events or festivals can be organised with a view to bringing together different groups of language speakers. The next important step is to encourage people to use English as a medium of communication because language is acquired "as a result of an interaction between the learner's mental abilities and the linguistic environment" according to the interactionist view of language acquisition (Ellis, 1985, p. 129). In the case of Hong Kong, it is often criticized that people lack the chance to use English in social interaction. As a matter of fact, 5 % of Hong Kong residents are non-Chinese speakers (Census and Statistics Department, 2011), and they comprise native speakers of English from different countries, ethnic minorities who speak English as a second language, Filipinas serving as domestic helpers who speak English as a second language as well as speakers of other languages who use English as a foreign language. Unlike in other multilingual societies, Chinese speakers in Hong Kong seldom mix with non-Chinese speakers except at work, and other language groups also live separate lives (Luke & Richards, 1982; Poon, 2010). Such boundaries should be broken down if Hong Kong claims to be a global city in its true sense. By doing so, the vital skills that global citizens should master – i.e. English competence and intercultural competence – will automatically be enhanced.

In contrast, Japan, from origin marginally receptive to foreign languages, has recently changed its language policy to reflect the importance of English in globalisation. A 'Promoting Two-Way Student Exchange' programme was initiated in

2010, aiming at sending 300,000 Japanese students and workers abroad as well as accepting 300,000 talented students from overseas into Japan for studying and training (Ministry of Education, Culture, Sports, Science and Technology of Japan, 2013). The budgets for 2010 and 2011 were 35.5 billion yen (=0.362 billion US dollars) and 34.2 billion yen (=0.349 billion US dollars) respectively. The new move of Japan is revealing indeed.

Notes

- 1. The official response to the query of English standards had remained the same for more than two decades i.e. "the working Group concluded that English standards appeared to have been generally maintained but the fast increasing demand for competent users had led to a misperception that standards were falling". However, the Secretary for Education, Michael Suen, acknowledged at a symposium that "English-language proficiency in Hong Kong had declined substantially, and something needed to be done to reverse the trend" (*South China Morning Post*, 2008, March 31).
- 2. EF is an international education company founded in 1965 in Sweden and head-quartered in Lucerne, Switzerland. The EPI was created in 2011 "as a standardised measurement of adult English proficiency comparable between countries and over time ... The index uses a unique set of test data from over two million adults who took free online English tests over a period of three years" (Education First EPI Report, 2011, p. 3).
- 3. 2012–2013 saw an increase in student numbers, because this was the year in which the universities in Hong Kong changed their academic system from 3 years to 4 years and two cohorts of students were admitted at the same time through the former Hong Kong Advanced Level Examination (HKALE) and the new Hong Kong Diploma of Secondary Education (HKDSE). It is estimated that the number of students participating in the overseas immersion programme will go down to around 300 after 2013–2014.
- 4. The Hong Kong government has taken a series of measures since 2001 to improve the quality of English teachers, e.g., the Language Proficiency Attainment Test, English subject knowledge requirement, formal teacher training requirement, and relevant first degree requirement. Hence the percentage of relevantly trained primary and secondary English teachers has significantly increased to 54.0 % and 70.4 % respectively (Statistics of 2008 provided by the Education Bureau). There are no latest statistics on the percentage of relevantly trained primary and secondary English teachers. There is only the percentage of trained primary and secondary teachers, which is 96 % and 94.8 % respectively (Statistics of 2012–2013 provided by the Education Bureau).
- 5. With the implementation of the New Senior Secondary English curriculum in 2009 and the new HKDSE Examination in 2012, there is more emphasis on language use and application of language skills in contexts.

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Chapter 13 Crafting an Intrinsically Motivating Course Environment for Language Learning: A Japanese Pedagogical Innovation

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Abstract Students' abilities to use English as an international language (EIL) have become one of the most important graduate knowledge and skills in globalised economies in the Asia-Pacific region and beyond. However, many Japanese students lack motivation to learn this important language and disengage readily from the learning process. This chapter discusses the findings derived from an ethnographic study on an innovative course design for promoting the learning and use of English in a leading private university in Japan. Based on a variety of qualitative data, this study identified four important factors, including a high level of personal relevance, opportunities for inter-cultural communication, genuine language situations, and the silent teacher phenomenon. These factors crafted a motivating course environment for promoting Japanese students' intrinsic motivation in learning and using English as an international communication with their Korean counterparts using internet and computing technologies. The significance of these factors was discussed from a self-determination perspective.

13.1 Introduction

The ability to communicate in English is a significant skill in globalised economies. Many Asian countries such as Japan (Bulter & Iino, 2005; Park & Nakano, 2007) and Hong Kong (Lin & Man, 2009; Poon, 2010 and Chap. 12) have developed educational policy and reform initiatives to develop students' English language abilities. A high level of competence in English is currently both an entry and exit requirement for many degree programs in prestigious Asia-Pacific universities (see also in this volume Arkoudis & Doughney, 2016; Kirkpatrick, 2016; Poon, 2016).

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Nevertheless, not all English language learners in the Asia-Pacific region are equally motivated and engaged. Recent studies (e.g. Falout, Elwood, & Hood, 2009; Poon, 2009) showed that many Asian students lack academic motivation to learn English. Students who are unmotivated may fall behind and risk losing an important language resource enabling them to participate and compete in the globalised world (Lin & Luke, 2006). This negative consequence is not confined to individual learners. In researching demotivated English language learners in Japan, Falout and colleagues argued that demotivated learners will inevitably threaten teachers' motivation to teach and the overall quality of education.

The current research on English as an international language (EIL) (e.g. Kirkpatrick & Sussex, 2012) has focused mainly on clarifying the concept, developing curriculum and pedagogical arrangements. Limited research has looked into why some students are reluctant to learn EIL in Asia-Pacific universities and how students can be supported in their learning of EIL. Also, there is a general overlook of the role of English as an international lingua franca (Kirkpatrick, 2016, Chap. 11 in this volume) and how student engagement in learning this important twenty-first century language tool can be promoted. Addressing this significant gap, this chapter describes an innovative course design in a leading private university in Japan. This course has been running since 2001. Student evaluation of this course indicates that it is engaging and its design promotes the use of English that can seldom be observed in skill-based English courses in Japanese universities. This chapter describes the design of this course and reports the results from an ethnographic study investigating the effectiveness of the course in promoting learning engagement for EIL using a self-determination perspective.

13.2 The Context: Learning English in Japan

Learning and teaching of English in Japan has a long history, dating back to the pre-Meiji revolution era. According to Karchu's World Englishes model (1992), Japan is situated in the expanding circle where English is not used as an official language or a lingua franca or developed from a colonial past. Prior to 2000, most Japanese students started to learn English in the first year of junior high school. Responding to globalisation and internationalisation, recent policy change in Japan has placed great emphasis on the learning of English (Le Ha, 2013) and has taken the learning of English as a major vehicle for internationalisation (Gottlieb, 2005). In a government policy, entitled Action Plan to Cultivate Japanese with English Abilities (MEXT, 2003), the Education Ministry acknowledged the critical role of the English language to the future of Japan:

For children living in the 21st century, it is essential for them to acquire communication abilities in English as a common international language. In addition, English abilities are important in terms of linking our country with the rest of the world, obtaining the world's understanding and trust, enhancing our international presence and further developing our nation (ibid., introduction).

Following this policy direction, the Japanese government has developed additional initiatives to improve English language education in Japan. These include, for example, the setting up of a Super English High School, the development of EIGNET for distributing teaching resources, recruitment of expatriate teachers and sending Japanese students overseas under the Global 30 plan. The common goal of these initiatives is to enable secondary graduates to use English to communicate and to ensure that university graduates have the abilities to use English in work. In the Ministry's second Basic Plan for the Promotion of Education 2013–2017 released in July 2013, English language education was still a major focus. Primary school teachers are expected to spend more time on teaching English using an activity-based approach, and high school English lessons should include focal activities such as presentation, debating and conversational English.

There is a general emphasis on learning English within the Japanese society for both educational and work purposes. In addition to the time spent on English language learning in school, many Japanese students attend *Juku* (cram school) to improve their English language skills. Substantial cost is involved in sending children to cram schools and this turns private tutoring into a lucrative business in Japan (Dawson, 2010). English language education is pivotal to career development, especially for Japanese who aspire job opportunities and career pathways in large Japanese companies. Many university students take the Test of English for International Communication (TOEIC) examination in order to meet the language requirements for securing an interview for jobs offered by large Japanese companies. TOEIC is an English language test for assessing university students' English level for work purposes. This test is widely used in the Japanese corporate sector. Once these graduates are employed, Japanese companies will provide them with relevant training programs which include improving employees' English language knowledge and skills.

All in all, Japanese students' interest in learning English seem to be driven mostly by extrinsic considerations, such as gaining entry to university, meeting parental expectation and seeking employment. These considerations are external to the process of learning and their motivational effects are not comparable to those derived from intrinsic motivation such as having personal interest in learning English.

When it comes to using English for various communicative purposes, many Japanese students find it difficult and often display a high level of reluctance to participate in a conversation or in other forms of verbal exchange. Some research indicates that this is related to Japanese students' lack of confidence in using English (e.g. Matsuoka, 2005). Nevertheless, this simplistic view fails to take into account a host of sociocultural factors that intricately link with Japanese students' language learning experiences, including English education in school, the role of English in the Japanese society, and Japanese culture of interaction. It has been discussed extensively that Japanese students learn English mainly through a grammar-translation approach which requires students to spend most of their time working on grammar exercises and translating English into Japanese (e.g. Le Ha, 2013; Matsuoka, 2005; Torikai, 2005). Despite repeated calls to end this particular

approach, this practice of learning and teaching still prevails as a result of Japan's examination-oriented education system. An important consideration is that English speaking has not been part of the examination curriculum. Expectedly, Japanese students do not normally practice spoken English in school, except for those studying in international schools. In addition, a teacher-dominated style in Japan has left little room for students to initiate talk and discussion in the class. Listening to the teacher is the most observable learning behaviour in a Japanese classroom; it is acceptable for Japanese students to remain silent or to be slow to respond to questions, which has sometimes been mistaken as a lack of confidence to outsiders. Beyond school, the chance for students to use English in Japan is extremely limited. The fact is simply that English is not part of the Japanese daily routine and most Japanese can get by without reading or speaking English in Japan. Japanese students have limited exposure to English beyond classroom.

Taken together, it is not surprising that Japanese students are reluctant to use English beyond the classroom setting or examination requirements. In terms of learning orientation, it can be expected that most Japanese students learn with an external orientation in order to meet the requirements of an examination-driven education system. Such an external orientation has played a significant role in the learning process of school students in Japan and its motivational effects have driven a majority of Japanese students to spend extra time on learning in cram schools or Juku. Nevertheless, the effect of this external learning orientation is rather limited at the university level where examination pressure can scarcely provide sufficient motivation for learning. This motivational issue is further aggravated by a 'leisure land culture' shared among Japanese university students, shifting focus from academic studies to expanding life experiences. In effect, this means that Japanese university students will spend less time and effort on academic studies. Within this learning climate, Japanese academics face a great challenge which demands an effective language course design addressing the motivational needs of Japanese students who are no longer driven by examination scores. Many Japanese universities have made it compulsory for students to study English. More recently, some efforts have been devoted to offering degree programs using English, rather than Japanese, as the medium of instruction. These initiatives, of course, promote the use and learning of English, albeit that most English language courses are skill-based focusing on training of discrete language elements without providing a genuine language situation to support its use. The grammar-translation approach to learning and teaching English continues being practiced by both university teachers and students. Japanese university students remain silent in their class without feeling that they have missed an opportunity to learn. Against this context, this chapter argues for the need to rebuild a learning/teaching culture that encourages communication and prevents Japanese from sitting through the class in a quiet manner. An innovative course design that has addressed this need for reformative pedagogical practices is described below. This chapter also reports research evidence supporting the effectiveness of this course design in promoting Japanese students' intrinsic motivation to learn English.

13.3 Research on Language Learning Motivation

The research on second language acquisition and motivation has provided an empirical foundation for developing the current study. Gardner's socio-educational theory (1985) on integrative motivation represents a focused research effort to understand significant personal factors such as identification with native language communities in learning a second language. Two forms of orientations have been discussed from this integrative perspective. The first orientation is labelled as integrative orientation by which learners learn a second language in order to have contact, communicate and even identify with members and communities where the target language is being used. In contrast, a second orientation, labelled as instrumental orientation, depicts learners' practical goals and considerations for learning a second language. These practical goals may include meeting job requirements and gaining course credit. Early studies (e.g. Gardner & Lambert, 1972) had established the importance of an integrative orientation while subsequent studies conducted with student samples drawn from different cultural backgrounds (e.g. Clément, Dörnyei, & Noels, 1994; Dörnyei, 1990; Littlewood, Liu, & Yu, 1996), including Japanese (e.g. Irie, 2003; Yashima, 2000), found empirical evidence supporting the motivational effects of an instrumental orientation. The development of an integrative orientation depends on frequent contact with members of the target language group, which may not be possible for most language learners. In the context of the current study, these opportunities are limited in Japan where the use of English is largely confined to members of academia and those working in the international business sector.

Building on this foundation, recent formulations of language learning motivation have begun to explore different important variables borrowing heavily from research models and theories from related fields. For example, Dörnyei (2005) based his research on the 'possible selves' model and researched the concept of ideal and ought-to selves in motivating Hungarian students to learn English. Other researchers such Lamb (2004) also attended to the significance of learners' identities as a source of language motivation. Another notable area of research in language learning motivation is the distinction between intrinsic and extrinsic motivation rooted in the self-determination theory. From this perspective, students' motivation to learn a language will be derived from external and internal sources depending on students' perspective and the extent to which students' autonomy, competence and sense of belonging are being supported.

Extrinsic motivation refers to the pressure or reward from the social environment to learn a language. Extrinsically motivated learners aim to obtain better career opportunities, teachers' praise or recognition or even aim to prove that one is a good learner. However, a characteristic of external motivation is that it implies some kind of external pressure which, once removed, may result in the language learner quitting the second language learning (Noels, Clément, & Pelletier, 1999). Intrinsic motivation, on the other hand, is more self-determined and refers to internal factors such as enjoyment and satisfaction for oneself. Intrinsically motivated learners perform an

activity for the positive feelings associated with exploring new ideas and developing knowledge, the sensations related to attempting to master the task or achieve a goal. According to Ryan and Deci (2000), intrinsic motivation is built on students' sense of competence, autonomy, and relatedness. This also means that a learning environment supportive of students' development of competence, autonomy and relatedness will be conducive to the development of intrinsic motivation (Vallerand, 1997).

Second language researchers have considered intrinsic motivation critical for language learning (e.g. Brown, 1994; Dickinson, 1995). Intrinsic motivation predicts students' perceived competence, perceived autonomy, persistence, lower anxiety, and positive attitudes towards language learning (see Clément et al., 1994; Noels et al., 1999; Noels, Pelletier, Clément, & Vallerand, 2000; Noels, 2001b; Tachibana, Matsukawa, & Zhong, 1996). Intrinsically motivated learners are likely to display higher levels of involvement in learning and use a wider range of problem solving strategies. Various Asian studies have verified the validity of intrinsic and extrinsic motivation constructs (Honda & Sakyu, 2006; Otoshi & Heffernan, 2011). For example, Carreira (2011) adopted the self-determination perspective and verified the validity of intrinsic and extrinsic motivation for researching Japanese students' learning motivation. Pae (2008), in his study of Korean EFL learners, concluded that "intrinsic motivation is the most powerful orientation variable that is related to L2 achievement in the Korean EFL context" (p. 20). In a comparative study of Japanese and Chinese students learning English, Tachibana et al. found that intrinsic motivation was highly related to students' achievement levels. To promote the development of intrinsic motivation, Noels et al., (1999) argued that students' intrinsic motivation can be enhanced when they receive constructive feedback from the teacher and are instructed in ways that develop learner autonomy. Subsequent studies by Noels and her colleagues (Noels et al., 2000; Noels, 2001a, 2001b) support her earlier findings, thereby suggesting the significant role contextual variables – including the teacher – play in altering the learners' motivational orientation, and underscore the need to develop a classroom-based concept of motivation.

Within the context of English language education in Japan, an important consideration is how students' intrinsic motivation can be promoted and developed. Prior to university studies, extrinsic factors such as examination pressure, meeting parental expectations, and striving for competitive performance may provide sufficient extrinsic motivation to support many Japanese students in high school. This form of extrinsic motivation, whether it is introjected or integrated, is so strong that most Japanese students willingly spend extra time attending private tutoring (juku) in order to achieve a good academic result. Moving to the university, these motivating factors no longer exert strong pressure for them to engage in learning English. Many students have experienced a drop in motivation or become amotivated. This lack of motivation for studying English is aggravated by other demotivating factors such as taking up of part-time jobs and time spending on social life and cultural clubs.

In the next section, an innovative course design is described and the results of a study investigating its effectiveness in promoting students' intrinsic motivation are discussed. The aim here is not to test a predetermined set of principles for motivating Japanese students to learn English. The findings reported here are derived from

a naturally evolved case in which Japanese students' motivation to learn is supported through various creative ways consistent with a self-determination perspective.

13.4 The Global Literacy Course

The Global Literacy course was first offered in 2001 by the Open Education Center of Waseda University in collaboration initially with the National University of Singapore, and subsequently with the Korea University in South Korea. The aim of this course is to provide Japanese students with a chance to use English as an international language for communication over the internet with other English language learners in the Asian region. This is a theme-based course and students are expected to focus their discussion and presentation on selected topics related to culture, economy, politics, environment and major national challenges in Japan and South Korea. The course intends to promote intercultural understanding and to provide a genuine situation for using English as a medium of communication between Japanese and Korean students. Over the past decade, the design of this course has been fine-tuned to its current form whereby computing and internet technologies are utilised to create an engaging course environment for promoting the learning and use of English as an international language for university students in these two countries.

The enrolment was open to undergraduate students who have achieved an intermediate level of English proficiency or completed the Tutorial English course (for Japanese students only), a basic English language course offered to undergraduate students in Waseda University. This pre-requisite ensures that students have achieved a required level of English proficiency allowing them to participate in conversational English. During the investigation, Waseda University and Korea University collaborated in the offering the Global Literacy course. Eighteen Japanese students and 20 Korean counterparts enrolled in this 15 week long course. These undergraduate students who were in their second or third year of studies of their degree programs were drawn from different faculties in both universities. Female students dominated this cohort of enrolment, accounting for over 70 % of the enrolment.

The Global Literacy course was designed as a semester course that runs for 15 weeks. A special effort was made to schedule the class at identical time to enable internet interaction between Japanese and Korean students. Over the 15 weeks, students were required to attend:

- An introduction class operated separately by Waseda University and Korea University;
- Five online discussion sessions using online computing software called LiveOn;
- Two videoconferencing sessions for group presentation;
- Three tutor-guided discussion sessions facilitated by graduate international students called program assistants;
- Two trial presentation sessions preparing students for the videoconferencing;

- Three group presentations;
- After the joint online discussion and class-to-class presentation sessions were over, the students of both universities were required to write a personal reflection and conduct further discussion using the university's computing system.

Special features in this Global Literacy course include:

- 1. Online chat. Japanese students and their Korean counterparts talk with each other in an assigned chat room using LiveOn, a web conference system (see http://www.liveon.ne.jp). In each chatroom, an equal number of Japanese and Korean students were assigned. A facilitator from both sides will take turn to lead and facilitate the conversation. Each LiveOn session will run for about 45 min. While the chat topic is set following the course study booklet, students from both universities are free to focus their exchange on any aspects related to the chat topic.
- 2. Videoconferencing. Japanese and Korean students are required to conduct a group presentation on a topic relevant to the course through videoconferencing. Students are given sufficient time to work in self-formed groups on selected topics of presentation. During the presentation, each member of the group is expected to take turn to share while efforts are made to maintain a high level of cohesion between individual presenters. Prior to delivering the presentation through videoconferencing, students are expected to rehearse their presentation and develop ways to make the presentation interesting and engaging. To facilitate discussion, the presenting group is also required to lead a discussion session immediately after their presentation. The presentation slides and topics are usually sent across to students in the audience side at least 1 week prior to the presentation;
- 3. Additional online interaction through reflection. Students are expected to write a reflection of about 100 words based on their online chat and videoconferencing sessions and post them to their online chat or videoconferencing groups through the university internet system. Students are expected to focus their reflection on similarities and differences noted between Japanese and Korean perspectives and practices in relation to a selected topic. To facilitate responses and feedback, students are expected to include discussion questions at the end of their reflection and reply to others' postings;
- 4. Support. To facilitate students' participation in online chat, students are provided with a study booklet containing resources and materials on selected topics covered in the course. Students are expected to study these materials before attending a corresponding online chat and to complete learning activities in each unit. In addition, a group discussion is held prior to the online chat session in order to stimulate thoughts and ideas for online exchange. As for videoconferencing and group presentation, two sessions are assigned for students to rehearse their group presentation; the review sessions led by graduate international students provide further assistance to prepare students for their online and videoconferencing presentations; group presentation slides are distributed to both Korean and Japanese students in order that each side will have sufficient time to review the information;

- 5. Facilitator. The lecturer and tutors takes a facilitator role in the course. There is no scheduled lecture. The lecturer and tutors lead and facilitate group discussion prior to an online chat session. The lecturer frequently reminds students to write their reflection and work on their group presentation;
- 6. Assessment. The assessment structure promotes student participation and collaboration. The group presentation attracts 40 % while continual participation on online chat, videoconferencing, attendance and completion of weekly reflection attract a total of 60 % of the marks.

13.5 An Ethnographic Study

In this study, an ethnographic approach was taken to explore the motivational nature of the Global Literacy course. An ethnography produces data in relation to what people say, do and create (LeCompte & Schensul, 1999). To generate these various forms of data, this study involved in-depth semi-structured interviews, informal interviews, observation of lessons and online chat sessions, examination of course documents and student evaluation reports. This data collection was conducted over two visits to Waseda University in 2012 and 2013.

I began this study with a simple question asking why Japanese students were interested in the Global Literacy course and how it was different from other English language courses offered by the university. This question was raised during my first visit to Graduate School of Education, Waseda University in 2012. During this visit, I had the opportunity to speak to different faculty members and the course designing team about the Global Literacy course and other similar courses offered by the University. As a result, I developed a working understanding of the Global Literacy course, its background, design and what the course intended to achieve. An examination of students' end-of-course evaluation indicates that the Global Literacy course was motivating and students engaged willingly in English conversation opportunities in this course. An informal exchange with the lecturer who had run this course since 2007 corroborated students' shared view about the motivational nature of this course.

In response to these views and information collected, I narrowed the research focus in my subsequent visit to Waseda University in 2013 and examined the reasons why Japanese students actively participated in the Global Literacy course and in what ways the course itself is motivating. Multiple data sources, including interviews, observations and document analyses, were solicited to inform the search for motivating factors supporting Japanese students' engagement in the Global Literacy course. Below, these data collection procedures were described.

13.5.1 Interviews

Six students who enrolled in this course in its 2013 semester 2 offering were interviewed. Four of these students were female and two were male. All the students were in their second year of studies in their degree programs offered by different

faculties. These students had already taken the Basic English course compulsory for undergraduates. Another common characteristic about these students was that they all had part-time jobs that required them to work in the evenings or during weekends. The selection of these interviewees was based on students' English abilities. As students' perceptions and experiences in taking the course may be influenced by their English abilities, both high achieving and low achieving students were selected to join the interview. The interviews were conducted in English. The interview focused on students' learning history, their reasons for taking the course, perceptions of the course, what they like about the course and their opinions about how the course can be improved. Each student interview took about 60-80 min in a tutorial room. The main reason for the lengthy interview was due to students' pace of response in English. However, this should not be taken as an indication of their reluctance to respond. To the contrary, these interviewees were keen to engage in the conversation and responded to each interview question thoughtfully and honestly. Informal interviews were conducted with the lecturer and two tutors. The informal interview with the lecturer was conducted immediately after an online chat session. This interview focused on the lecturer's role in the course, perceived strengths and weaknesses of the course, the challenge of learning English in Japan, and effective ways for supporting Japanese students to learn English. Two tutors were also interviewed at the end of two separate classes. They were asked to reflect on their teaching experiences in the course and their perceptions of students' involvement.

13.5.2 Class Observation

Three observations were conducted in December 2013. Two of these observations focused on internet-based presentations conducted by the Japanese students. Each classroom observation lasted for about 90 min. Observation notes were taken and reflective comments added shortly after the completion of these lessons. The third observation focused on the online chat session. In this observation, the author was given access to one of the online chat rooms comprised of three Korean and three Japanese students. The observation was unobtrusive. The participants were able to see each other online and chat in real time using the LiveOn system. My presence in the chat room was shown as a dot in the screen. At the beginning of the online chat, one of the students queried about the presence of a silent member without a visual. However, all members continued their talks without any concern of my presence as a silent member. Observation notes were taken.

13.5.3 Document Collection and Analyses

A set of documents was collected from Japanese students who enrolled in previous four consecutive offerings of the course in the university term in 2011 Fall, 2012 Spring, 2012 Fall and 2013 Fall. In total, this set of documents include topics and

PowerPoint files of group presentations (N=32), students' reflective summaries of online chat sessions (N=61) and students' written reflection about the course (N=61).

13.6 Crafting an Intrinsically Motivating Course Environment

The analytical procedure was continuous. Constant comparison was made during interviews, observations, and formal and informal contact with course team members and other faculty members who had intimate knowledge about this course. An additional step was taken to verify and validate the findings by using students' reflective summaries and evaluations collected from different offerings of the course in 2012 and 2013. A coding scheme was developed to identify important aspects of the course that have contributed to the development of an engaging learning environment. Subsequently, four main factors were identified as main contributors to crafting an intrinsically motivating environment for Japanese students in the course. To seek participants' verification, the findings were shared with the lecturer and other faculty members in a formal presentation and various informal exchanges. These enabling factors are discussed below.

13.6.1 High Level of Personal Relevance

During the interview, the selected students recalled their journey of learning English since high school. All six interviewees shared a common experience in learning English; the pressure derived from university entry examination was taken as the sole source of motivation for learning English and other school subjects in high school. While acknowledging the importance of English, they considered that many Japanese students, including themselves, do not have a strong reason for learning English. Their motivation to learn English at the university was still driven mostly by an extrinsic consideration, i.e. getting a good TOEIC score for job hunting, except for one student whose career plan was to take up a home business.

These interviewees expressed their frustration of learning English through skills based courses. Other English language courses they enrolled in prior to taking the Global Literacy course repeated what they had learnt in high school and focused on discrete skills. While conversation opportunities were provided, the language setting itself was considered not genuine. They found it strange and discouraging to speak to each other in English using 'fabricated' conversation or on topics everyone already had good knowledge. As one interviewee commented:

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| 2011 Fall | 2012 Spring | 2012 Fall | 2013 Fall |
|------------------------|-------------------|----------------------------|---------------------------|
| High school life | Cosmetics | Rivalry games | Holidays |
| Military service | Food | New energy | Hunting |
| Rivalry | Drama | Government systems | Psychological tests |
| Social network service | Historical sites | Aging societies | Industry and commerce |
| Dating | Part-time jobs | English education | Food and drinking culture |
| English education | Education systems | College life & future jobs | Education |
| Drinking culture | Dating | Weddings and funerals | Dating |
| Job hunting | Major industries | Dating | Politics |

Table 13.1 Group presentation topics

There is no point to talk about things we all know in another language. You know what other would say. You tend not to listen or help other to finish their sentence if they have difficulties explain(ing) it in English. (Interviewee 2, interviewed 29 November 2013)

In contrast, the Global Literacy course requires students to complete group presentations and online chats on topics related to their personal interest in a changing globalised world. The most important consideration is that students were given freedom to select their topics. Table 13.1 shows a summary of these group presentation topics from previous four consecutive cohorts of students.

As can be seen, these presentation topics are directly related to these young adults' personal interest (e.g. games and cosmetics), social life (e.g. dating and drinking culture), employment (e.g. part-time job and job hunting), civic participation (e.g. government systems and military service), and their understanding of society (e.g. aging societies). These topics are highly relevant to their personal concerns and continuing participation in the society as an informed citizen and a productive worker. In the excerpts below, two interviewees described their positive views about the presentation topics. Both Interviewee 4 and 6 expressed their dislike of grammar-translation approach to English learning that focuses on discrete language rules and elements. They shared their interest in the Global Literacy course and highlighted motivating elements such as autonomy in topic selection, topics that appeal to personal interest and enjoyment, and the opportunity to interact with Korean students at the end of a presentation. In particular, it should be noted that these students were willing to spend their time and effort on preparing their presentations. The other four student interviewees shared these positive views about the Global Literacy course and unanimously expressed their interest in the presentation topics.

In this course, I like (the) presentation most. We chose our topics. In other English course, we (are) asked to talk about something from the textbook, about the English grammar and rules, like we did in high school. It's okay but I don't like it. Most students don't like it. In this course, we are free to choose our presentation topics. We spend a lot of time on this. I learnt a lot and every topic (in the presentation) is interesting. (Interviewee 4, interviewed 5 December 2013)

I found this course very interesting. It does not like other courses. Other courses are about English skills and grammar. In this course, we talk about interesting topics. I spent a lot of time to prepare for my group presentation. I don't mind the work. We presented (it) to the class and Korean students last week. I'm happy that they enjoy(ed) our presentation. We had a lot of questions about our drinking culture in Japan. I also learnt something about the Korean culture. (Interviewee 6. interviewed 6 December 2013)

Students' interest in the course was shared among the whole group. There was a high level of interest in the course and students were willing to participate.

13.6.2 Opportunity for Intercultural Understanding

In the literature of second language acquisition, learning about other cultures has constantly been considered as one of the main reasons for motivating second language learners to spend effort and time on a new language. Japanese students across four cohorts consistently indicated in their written reflection that the opportunity for them to connect with and learn about other cultures was a major strength of the course. One of the students in the 2011 cohort summed up her motivation for taking the course and succinctly stated that it was "simply that I like the class and want to have a multicultural communication" (in Student evaluation, Global Literacy course, 2012, p.84). This was the most important motivation shared among students in their end-of-course evaluation across four cohorts between 2011 and 2013.

The six interviewees also talked extensively about the importance of intercultural understanding as a motivating element in the course. Interviewee 5, a second year student in an Engineering degree, described how he was fascinated by the Korean culture and intended to make a visit to see his Korean friends in his online chat group during the New Year break.

I learnt so much about the Korean culture. It is fascinating. I also learnt more about our own culture. I did not notice how little I know about Japan and our culture. My discussion with Korean students reminds me how little I know. I have made some friends. One of them came last month. I plan to visit them in the new year. (Interviewee 5, interviewed 6 December 2013)

Another interesting point that the interviewees repeatedly talked about was their limited knowledge about Japan and its own culture. In the excerpt above, Interviewee 5 talked about his unawareness of his limited knowledge about Japan. In the excepts below, Interviewees 2 and 4 shared the same sentiment; on the one hand, they admired their Korean counterparts' deep knowledge of Korean culture and on the other hand, they realised that they needed to learn more about their own culture in order for them to share it with other foreigners. In the words of Interviewee 4, an effort in learning about their own culture was essential for "being a Japanese".

The Koreans know their culture very well. They can explain it to us in the presentation and the online chat. I felt embarrassed because I was unable to explain the Japanese culture to them. I could not answer some of their questions. I also found it hard to talk about the culture in English (Interview 2, interviewed 29 November 2013)

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I have learnt about the Koreans. It was very interesting. However, being a Japanese, I think I need to study my culture more. I know little about Japan. (Interview 4, interviewed 5 December 2013)

The opportunity for inter-cultural understanding is also an important motivational aspect the teaching team shared. During the informal interview with the lecturer, she explained that the opportunity to communicate with Korean students is a major strength of the course. Her Korean counterpart shared this view. In their written reflection on their teaching experiences of the course, the tutors across different cohorts unanimously focused on the significance of having the chance to learn about the Korean culture. The excerpts below show this unison view.

I came to know lots of new opinions about Korean culture and Japanese culture. I was really happy that they spared their time and made an effort to make good presentation or have an interactive discussion. (Tutor 1 2012)

I had deepened my awareness of Korean culture and also thought deeply about what is cross-cultural understanding. (Tutor 2, 2012)

Through their discussion and presentation, I came to know lots of new opinions about Korean and Japanese cultures. (Tutor 3, 2013)

The class observation record below illustrates the motivational nature of intercultural communication in two important aspects, one being an opportunity to learn about other cultures and the other making sense of cultural differences. The class I observed presented a topic about the use of social networking sites. In this presentation, the Japanese students presented convincing evidence supporting their conclusion that young people in Japan do not use Facebook as often as other Asians do. Rather, Twitter was the most popular social networking program in Japan. As expected, this had become a discussion point at the end of the presentation. In the discussion with Korean students, one of the main foci was about the reasons for this particular observation. Below is a record taken from the observation notes (lesson observation conducted 28 November 2013).

Korean 1: I was fascinated by the presentation. My question is why. In Korea, most people use Facebook. My friends use Facebook to chat. I want to know why Japanese do not like Facebook.

Japanese 1: We use Facebook too. But I think we don't like Facebook because it is too open. Japanese 2: Yes, when you travel on train, you don't want everyone to see your Facebook and the photos (in it). We spend a lot of time on train every day and it is very crowded. Twitter is more personal.

Korean 2: Interesting. You are telling us that it has something to do with the Japanese culture.

Japanese 1: Yes. Japanese like to keep some secrets. We don't want to be so open.

13.6.3 Real Language Situation

It is important that students are provided with authentic tasks for them to learn. The student interviewees described the Basic English course they had completed did not provide them with a genuine language situation. While conversations were

encouraged, they found it hard to use English to share information that everyone knows in Japan. Interviewee 2 in the excerpt below explains his reluctance to engage in such a form of fabricated conversation.

It is strange. We are asked to talk to each other in the other English course. But I feel, I don't want to speak in English. We are all Japanese. We know what we want to say. It is strange to speak to each other in English. (Interviewee 2, interviewed 29 November 2013).

The interview excerpt points to the importance of a genuine communicative situation where English is required as a lingua franca. The Global Literacy course provides these real learning opportunities by creating interaction between Korean and Japanese students in the online chat rooms, group internet presentations, and writing about reflection.

All the interviewees shared the view that the online chat session was the most enjoyable part of the course. When asked to explain why they liked the online chat room, the following reasons were mentioned: interacting with foreign students, learning about their culture, using English, and little preparation. Below interviewees 1, 4 and 5 explain the importance of English in interacting with Korean students.

I like LiveOn. It is so good to talk with Korean students. I learnt more about them. I found out our English is not so good. The Koreans are better. (Interviewee 1, interviewed 29 November 2013)

The online chat room is the most interesting (part) of this course. I look forward to see(ing) my Korean friends every week. I can talk with them using English. I can't do this in my other courses. (Interviewee 4, interviewed 5 December 2013)

Talking to Korean students is important. I need to use English. I cannot use Japanese. It is good that we have other Japanese friends in the chatroom. Because they will help when I don't know how to say something in English. (Interviewee 5, interviewed 6 December 2013)

While these students enjoyed the group presentations, they had some concerns about the amount of time that needs for the preparation. Despite their busy social life and the requirement to work part-time, they were still willing to put extra time into the group presentation. Writing reflection in English was a challenge to most students, although students still considered it important. The challenge of writing aside, an important reason that explains why Japanese did not like the writing task as much as the presentation and online chat sessions was the delay in response. Interviewee 5 pointed out that a lack of immediate response has rendered this component of the course less attractive: "I posted my reflection. But no one says anything. I checked several weeks later, there was still no question for me". (Interviewee 5, interviewed 6 December 2013)

13.6.4 The Silent Teacher

The interviews with the six students indicate that they considered other English courses teacher-driven. While conversation was possible, it was often controlled by the teacher. Students therefore tended to be silent or waited for others to speak up.

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In the Global Literacy course, the lecturer and tutors took a facilitator role, allowing students to initiate their conversation. During the observation of two lessons that lasted for 90 min, the instructor spoke for about five minutes only in the beginning to provide instruction regarding the arrangement of group presentation and to remind students to actively participate in the discussion. Another time that the instructor spoke was at the end of the group presentation wrapping up for the class and reminding the class to work for the next presentation and online chat. During the presentation and discussion with Korean students over the internet, the instructor took on the role of a silent supporter. She allowed students to take the initiative to speak and interact with each other and provided her support by nodding her head and indicating students to continue. The excerpt below is taken from the observation record, specifically focusing on the instructor.

The Korean presentation finished. Everyone clapped and cheered to show their support to the presenters. One of the Korean presenters asked if the Japanese students had any question about their presentation on social media in Korea. There was some hesitation. The instructor leaned forward and eye-signalled students to participate in the discussion. She did not hurry them but waited for the Japanese students to respond. (Lesson Observation, conducted on 21 November 2013)

The instructor was an experienced English teacher working in both high school and university settings for years. In respond to the question of why Japanese students are reluctant to speak in English, she explained that one of the reasons was the lack of training as a result of the grammar-translation approach precluding active participation and interaction in the class. She considered that Japanese students need support for their use of English. Her teaching philosophy was to allow students to take the lead.

The interviewees corroborated the importance of a silent teacher for their learning of English. The following interview excerpt indicates a cultural conception of learning and teaching in Japan.

Interviewee 1: "It is okay to be silent. We do not want to speak up in front of others. That's the reason why many say Japanese students are shy. But I think we learn to be quiet."

Interviewer: "Okay. Can the teacher be silent in the class?"

Interviewee 1: "No, the teacher will talk most of the time"

Interviewer: "But your instructor in the Global Literacy course does not talk often. I sat in two classes; she spoke for less than 10 minutes in each"

Interviewee 1: "Yes, she allows us to talk. I like it. She says it's okay to make mistakes. She wants us to talk."

(Interviewee 1, interviewed 29 November 2013)

13.7 Discussion

The original aim of the Global Literacy course was to design a course that engages Japanese students to use English to communicate with foreign students. Despite this humble beginning, the course evolved to the present form and its key components and established practices contribute to reinforcing students' intrinsic motivation to

learn and use English. The qualitative study reported in this chapter provided evidence across different data sources supporting this claim. In particular, four main factors were identified as instrumental to crafting an intrinsically motivating learning environment in this course: a high level of personal relevance, genuine language situations, opportunity for intercultural understanding and the silent teacher. These main factors are in line with a self-determination perspective on language learning and consistent with previous studies on promoting intrinsic motivation in language learning (e.g. Carreira, 2011; Noels et al., 2000; Noels, 2001a, 2001b; Pae, 2008).

The effectiveness of these factors in promoting an intrinsically motivating environment can be understood using Vallerand's taxonomy for intrinsic motivation (e.g. Vallerand, 1997). According to Vallerand three aspects are significant - knowledge, accomplishment and stimulation for promoting intrinsic motivation. Intrinsic motivation is developed as a result of students' interest to learn new ideas and knowledge, students' sensation of competence in attempting new tasks or achieving a new goal, and students' pleasure and other positive sensations by attempting the task, including the development of a sense of belonging and relationship. The Global Literacy course provides a motivating environment supporting these three forms of support for the development of intrinsic motivation. Relating to students' knowledge, the course itself provides students stimulating topics for discussion and opportunities for learning about foreign cultures and their own. The use of group presentations and online chat sessions has provided students with the opportunity to develop a strong sense of accomplishment individually and collaboratively in a gradual manner. The pleasure of attempting these tasks has been the key reflective point in students' written evaluation across four cohorts of presentation. Additional support includes positive relationship derived from the lecturer, tutors and program assistants. Taken together, the evidence across different data sources concertedly pointed to an intrinsically motivating learning environment where the learning of English has inherently involved the development of significant knowledge, competence and enjoyment.

While motivation research in second language learning is on the rise, the impact on classroom practice is still limited (Wu, 2003). One reason may be related to the difficulty and challenge in translating theoretical models into a classroom model of practice. By examining the Global Literacy course, this chapter provides an exemplary model from which constructive insights for developing effective practices can be developed. An interesting point here is that the development of the Global Literacy course is not driven by the self-determination theory. The motivation driving this innovative pedagogical design was a keen interest in advancing the learning and teaching of English as an international language for Japanese students, which led the course designing team to chart this endeavour and successfully created a self-determination driven course environment where the traditional teacher centredness commonly found in Japanese education classrooms is replaced by a studentcentred orientation focusing on autonomy, competence and relatedness support. Table 13.2 recasts the course practices from a self-determination perspective. As can be seen, the course has incorporated practices that provide students with a strong sense of control and responsibility support for the development of their com-

Table 13.2 Effective practices

| Key theoretical component | Key concept | Practices in Global Literacy Course | Relating to main factors |
|---------------------------------|--|--|--|
| Autonomy | Need for control and a sense of responsibility | Selecting topics; forming collaboration group; selecting online discussion topic; self-paced timing for evaluation and reports; freedom on responding to questions and feedback; autonomy in engaging in conversation during LiveOn sessions; | High level of personal relevance |
| Competence | Need for a sense of competence and confidence | New knowledge about Korean and Japanese cultures; support through textbook activities, preparation and program assistants; use of English; self-assessment of progress based on weekly reflective summaries from online chat sessions; comparison with Korean students and other classmates; low stakes continuous assessment and group-based assessment | High level of personal relevance; opportunity for intercultural understanding; real language situations |
| Relatedness | Need for connectedness | Compelling discussion on topics relating to personal interest, future concerns and global issues; Supportive teachers and tutors; small group learning; connecting with overseas students; | The silent teacher; opportunity for intercultural understanding; real language situations |

petences and offers various ways to develop their sense of belonging and connectedness, which in turn reinforces support for the development of autonomy, competence and relationship stipulated in the self-determination theory. In many ways these practices align with the four factors identified in this study.

Based on the findings of this study, it can be argued that training university students with essential skills and knowledge related to conversational English in a traditional way (using grammar-translation approach) is limited in its effectiveness in engaging university students and motivating them to put effort into learning and using English. Our interviewees shared their frustration in learning through this approach and the lecturer discussed its limitation in motivating students to learn English. In the absence of sustained engagement fuelled by genuine interest in language learning and using, this skill training approach will not carry Japanese education to achieve its vision of educating a new generation of graduates capable of using English for communication in work and other life areas.

What is required is a fundamental shift of Japanese students' orientation to English language learning from one that is driven by extrinsic concerns to another that focuses on intrinsic reasons. The Global Literacy course showcases how this can be achieved by creating genuine language situations that focus students on using the language for communication on topics that link them to their own culture while learning about others through ICT-enabled interaction. To do this, substantive knowledge about one's culture and that of the other is required. It is at this juncture of cultures that the Global Literacy course is motivating. Equally important at this juncture is the need for Japanese teachers to re-think their traditional teacher-centred approach to teaching and the extent to which a need for change is required in order to facilitate students' continuous participation in the use and learning of English. The Global Literacy course will compromise its motivational effects if the lecturer and tutors hold on to a traditional way of teaching and insist on playing a dominant role leading English discussion and exchange in the class. In this case, students' talk of 'a silent teacher', one that allows them to engage freely in the conversation and one that supports their experiment of their language abilities, and one who tells them that it is acceptable and natural to stutter, to feel nervous and to make grammatical mistakes and errors in the use of English, is a critical part contributing to the motivating course environment.

13.8 Conclusion

The Global Literacy course is an exemplary model capable of developing Japanese students' motivation to learn English and to use it as a lingua franca to communicate with Korean students. Japanese students' motivation to engage in conversational English in this course can be attributed to a carefully constructed course environment where genuine human exchange occurs between two groups of Asian students using English as an international language to talk, explain and discuss interesting topics related to personal, social, economic and political dimensions in Japan and South Korea. This type of motivation is seldom observable in language courses delivering through a grammar-translation approach in Japanese universities, and is certainly not derived from students' sense of confidence in their language abilities.

Many students in this course still doubted their abilities in using English. But they persisted and actively engaged in the course and used English to communicate with other Asian students using internet technologies. The success of this course can succinctly be described in terms of its creation of a genuine need for communication using English as the medium within a globalised context (see Chap. 12 for another example). Japanese students who enrolled in this course understood clearly that their learning and use of English is situated in this globalised context where Asian students communicate with each other using English as an international language. Their sustained engagement in various conversation and exchange indicates that language learning motivation is situated in pedagogical practice that brings students' focus on interaction (but not their abilities), how English works as

a lingua franca, and an appreciation of its diversity. Globalised processes have created opportunities for human exchange by connecting people through internet and computing technologies. Capitalising on these opportunities, the Global Literacy course has crafted a motivating course environment assisting students to develop intrinsic motivation to learn and use English as an international language.

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Chapter 14 Improving English Language Learning Outcomes for International Students in Australian Universities: Some Critical Issues

Sophie Arkoudis and Lachlan Doughney

Abstract As a major force in the international student market, Australian universities have put in place substantial efforts to ensure that international students who have English as an additional language (EAL) graduate with the necessary skills for employment or further study. However, recent research and media reports raise doubts over the effectiveness of these efforts by bringing into question the English language abilities of Australian university graduates, in particular EAL international students. In light of this, this chapter examines the significant questions critical for the delivery of effective language support for EAL international students in Australia. In doing so it demonstrates that some existing approaches aimed at improving the English language skills of EAL university students are not achieving desired outcomes, and that integrating English language requirements within university assessment can more effectively address global concerns about the quality of English language teaching and learning practices. However, this brings challenges at the local institutional level regarding the responsibilities of academic staff in including English language within disciplinary teaching and learning practices.

14.1 Globalisation and English Language Education

Higher education institutions are being transformed by globalisation. One of the main aspects of this transformation is the rise of English as an international language for communication (Holliday, 2005; McKay & Bokhorst-Heng, 2008), and the increased use of English in higher education as a medium of instruction (Coleman,

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2006; Phillipson, 2006; Tsui, 2008). Worldwide, over half of the three million students that seek to study in a foreign country travel from Asia to study in English speaking universities in Australia, the United Kingdom, and the United States of America (OECD, 2013). One of the main factors influencing selection of study destination by international students is English language, reflecting the rising status of English as a global language within higher education. This has been noted in the recent Organisation of Economic Co-operation and Development (OECD) report:

The prevalence of predominantly English-speaking destinations, such as Australia, Canada, New Zealand, the United Kingdom and the United States, reflects the progressive adoption of English as a global language. It may also reflect the fact that students intending to study abroad are likely to have learned English in their home country or wish to improve their English-language skills through immersion in a native English-speaking context. Hence, around 40 % of the overall increase in enrolments of foreign students in tertiary education around the world between 2000 and 2011 can be explained by increases of such enrolments in Australia, Canada, Ireland, the United Kingdom and the United States (OECD, 2013, p. 308).

In terms of English language education, globalisation influences Australian higher education institutions in two ways. First, the dominance of English as a driver for student choice in the international market, and the development of international hubs for higher education in countries such as Singapore and Hong Kong, have placed increasing pressure on Australian universities to maintain their share of the competitive international student market. Second, there has been an increased global focus on the responsibility of institutions to demonstrate their students' learning outcomes, including their English language proficiency (ELP). This focus has, in part, emerged as a result of the development of initiatives such as the OECD Assessment of Higher Education Learning Outcomes (AHELO) that seeks to assess whether students have achieved the skills and knowledge required in their professional fields, and the Tuning Process that measures and compares curricula, institutional practices and student learning. It is not enough to simply get a degree from an English-medium university, as the university needs to demonstrate the value-add regarding the knowledge and skills that students have developed during their study. Together these two factors underlie some of the tensions that exist within Australian universities as they attempt to transform their teaching and learning practices in relation to English language learning.

These issues are not unique to Australia, and are significant wherever teaching is conducted in English (see Chaps. 11, 12 and 13 in this volume: Kirkpatrick, 2016; Poon, 2016; Ng, 2016). The Australian experience highlights the challenges many Asia-Pacific universities face when transforming learning and teaching practices that integrate English language as core business within disciplinary learning.

This chapter will outline how Australian universities can integrate English language learning outcomes within disciplinary curricula, in order to remain a competitive force within the international student market. It will be argued that practices to date have had no real influence on transforming practices within disciplinary learning and assessment. As will be explained later in this chapter, part of the challenge is that Australian universities are wedded to the models of English language

support that were used by elite higher education systems in the past, which reinforce a deficit view of English language learning. The main point of tension that these models create within Australian universities occurs between the need to improve international students' English language learning and the question of who is best placed to do this. This is the case, as these models place English language learning largely outside of disciplinary curricula, and in the hands of English language support staff. This results in approaches that are often disjointed and creates conflicts of responsibility between academic staff and English language support people, with international students caught in the middle. Instead of trying to work within structures that are not effective in ensuring positive English language learning outcomes for international students, we argue for a re-conceptualisation of English language teaching and learning that can result in systematic approaches within a mass and universal education system. These approaches will be argued to provide the framework that can allow Australian institutions to maintain their competitive edge, and provide the kind of English language outcomes that are now expected in the international student market.

14.2 The Australian Higher Education Context

Australia has been a major force within the international student market. According to government statistics (Marginson & Sawir, 2011, p. 7), between 1990 and 2007 the number of international students in Australian universities ballooned from 25,000 to 254,414. Even with the projected downturn from the 2008 global financial crisis, Australia continues to attract large numbers of international students. Data from the OECD (2008) identified that in 2006, 19.7 % of onshore students enrolled in degree-level studies in Australia were international students, compared to 15.2 % in the United Kingdom and 15.1 % in New Zealand. In 2011, OECD (2013) data showed that the numbers had remained the same, with international students comprising 19.8 % of onshore students enrolled in degree-level studies in Australia. Numbers were also the same for other English speaking countries such as the United Kingdom and New Zealand. Since 2011, the numbers of international enrolments in Australia have increased slightly (Australian Education International, 2014a). China was the highest nationality group, with 40 % of higher education enrolments (Australian Education International, 2014b).

The growth in the number of international students has coincided with the massification of higher education, one outcome of which is the entry to university of people wishing to study for degrees regardless of their prior educational experiences (James, Krause, & Jennings, 2010; Trow, 2006). This is not only because of the increase in international student numbers, but also due to government policy promoting widening participation and advocating increases in the number of low socioeconomic background students, many of whom are local EAL students. University students are more diverse in backgrounds and preparedness than ever before (Baldwin & James, 2010). At the same time, employers, universities and governments

have become concerned about the employability of graduates and whether graduates have the high level oral and written communication skills sought after by employers (Australian Education International, 2010; Graduate Careers Australia, 2012).

The growth of international student numbers in Australia also occurred during a period of decreasing funding from the Federal government (Bradley, Noonan, Nugent, & Scales, 2008). International education has been a major source of revenue from the late 1990s onwards. In 2011, international education provided 17 % of higher education funding (Marginson, 2013, p. 64). Universities have relied on the international student dollar to finance university operations and, with increasing funding cuts, they are being asked to do more with less money. In terms of teaching and learning, the decreases in funding have occurred at a time of widening participation, increased casualisation of the academic workforce, and transformation of teaching and learning, where greater emphasis is placed on ensuring the students graduate with the necessary knowledge and skills for employment. While Australia still attracts a high number of international students, the forces of globalisation and rising competition within the Asia-Pacific region for international students (see Chap. 11), has necessitated Australian universities transform their teaching and learning practices, particularly concerning the ELP of international students in higher education.

14.3 Questioning the Quality of English Language Teaching and Learning

In Australia, the ELP of both entrants and graduates has been a matter of much discussion over the last 10 years, with some researchers raising concerns about whether Australian universities are graduating students who have adequate levels of English language for further study or for employment. Birrell's study (2006) was one of the first to place the spotlight firmly on English language standards. He found that 3 years of study in an English speaking university does not necessarily improve the ELP of international students who have English as an additional language. Birrell further concluded that students were graduating with less than adequate English language levels of attainment.

In 2011 the Victorian Ombudsman's report into how universities deal with international students further supported allegations of the 'soft-marking' of international students with poor English language skills (Victorian Ombudsman, 2011). The Ombudsman focused on four universities in the state of Victoria and conducted interviews with staff, as well as experts in the field of English language teaching and assessment. He found that universities were not doing enough to assure that international students have the necessary English language skills to study successfully. He argued for more rigorous assessment practices and suggested that concerns of soft-marking extend beyond international students to wider concerns over falling standards.

Research by Foster (2012) placed the spotlight on allegations of soft-marking in Australian universities. Foster used data from the Business faculties of two Australian universities to analyse demographic, course and tutorial selection, as well as the assessment grades of 12,846 students. She found that international students and others from EAL backgrounds performed significantly worse than domestic students. She also found that the higher the concentrations of international students, the more their marks were buoyed. Foster interpreted this as evidence of a type of 'grading to the curve' that effectively camouflages the underperformance of international students. She argued that academics were soft-marking international students' work. Part of the problem was attributed to the poor English language levels of international students. She concluded that it is plausible that there is "adjustment by the teacher to accommodate a larger fraction of lower-performing students" (p. 23). Her study questions the quality of learning outcomes for EAL international students, and the extent to which standards can be maintained when international students have weak English language skills for university study. This argument underlies the tensions that can exist when education is a commodity that is being sold on the international market for high prices and international students might struggle to meet the standards for successfully completing their courses.

There have been consistent messages through research and the media that call into question the quality of English language teaching and learning. The challenge for universities is to be able to prove that their international students graduate with the necessary English language learning outcomes for employability and that their teaching, learning and assessment practices work towards developing international students' English language proficiency. Without the demonstration of these things, Australian universities will not be able to challenge rising concerns about the quality of the English language outcomes that they provide for international students, and may struggle to compete within the international market. As Kirkpatrick (2016, Chap. 11 in this volume) points out, these are significant issues for Asian-Pacific universities, and indeed any institution where teaching is conducted in English.

Partly in response to critiques about the questioned effectiveness of English language teaching and learning for international students in universities, the Australian Federal Government released the Good Practice Principles (Department of Education, Employment and Workplace Relations 2009). These principles were developed to guide university practices. They can be seen in Table 14.1.

These principles outline general statements for universities to address within their context. They were developed in consultation with Australian universities in 2009 on what they thought good practice concerning the effective development of ELP for EAL international students would involve. They were also based on research leading up to 2009 that identified the problem areas that needed to be addressed in order to achieve greater ELP outcomes for EAL international students. In sum, the principles reflect the holistic institutional approach for ensuring effective English language practices. They were used by the Australian Universities Quality Agency (AUQA) as part of their university quality audits.

A detailed reading of the AUQA audits indicates that the principles concerning English language entry, and diagnostic testing have been addressed by Australian

Table 14.1 Good Practice Principles

- 1. Universities are responsible for ensuring that their students are sufficiently competent in the English language to participate effectively in their university studies
- 2. Resourcing for English language development is adequate to meet students' needs throughout their studies
- 3. Students have responsibilities for further developing their English language proficiency during their study at university and are advised of these responsibilities prior to enrolment
- 4. Universities ensure that the English language entry pathways they approve for the admission of students enable these students to participate effectively in their studies
- 5. English language proficiency and communication skills are important graduate attributes for all students
- 6. Development of English language proficiency is integrated with curriculum design, assessment practices and course delivery through a variety of methods
- 7. Students' English Language Development needs are diagnosed early in their studies and addressed, with ongoing opportunities for self-assessment
- 8. International students are supported from the outset to adapt to their academic, socio-cultural and linguistic environments
- 9. International students are encouraged and supported to enhance their English language development through effective social interaction on and off campus
- 10. Universities use evidence from a variety of sources to monitor and improve their English language development activities

Department of Education, Employment and Workplace Relations (2009, p. 3)

universities (TEQSA, 2013), while the principles attached to integrating ELP and disciplinary teaching and learning have been rather more difficult to implement. This situation in part points to a need to re-organise current approaches of English language teaching and learning in universities. The main reason for this is that the current model relies on a deficit view of the students and a quick-fix approach to English language learning. Neither of these perspectives have a place within a massified higher education system, where student diversity of linguistic and educational background demand a developmental rather than deficit approach to English language teaching and learning.

14.4 Limitations of Existing Approaches to English Language Support

14.4.1 Over-Reliance on English Language Entry Standards

There are various types of English language evidence that EAL students use to gain entry to higher education courses in Australia. They have evolved in order to provide overseas students with a range of options to enter higher education. However, with this diversity the extent to which the ELP standards are equivalent in various pathways is unclear across the various forms of evidence (Coley, 1999). Some

pathways are focused mainly on the direct measurement of ELP. Others are focused on successful completion of English courses or only indirectly focus on ELP.

By including particular entry requirements and identifying minimum ELP standards for entry to courses, universities are implicitly endorsing each pathway as providing an appropriate preparation for future academic success. However, there is limited empirical information available regarding the extent to which these different forms of evidence prepare students for their university studies (Murray & Arkoudis, 2013). English language tests that students use to enter their university studies indicate students' readiness to commence their studies, and in some cases, the English language test results would indicate that students required support to develop their skills during their study. For example, the International English Language Testing System (IELTS), the main test used by international students in Australia up until 2011, recommended that students who received an IELTS overall score of 6.5 require extra English language support if they were undertaking linguistically demanding courses. Interestingly, most Australian universities have IELTS 6.5 as the minimum entry score for study. At the very most, the use of English language tests is a blunt tool for admitting international students. It cannot predict success at university and is only the starting step on the developmental continuum. What has become clear through the research is that international students, regardless of the means by which they gained entry to their university course, need to develop their ELP through the course of their study (Kirkpatrick, Chap. 11, p. 226). Strong evidence shows that the successful completion of any standardised English language test is not, in itself, a guarantee of success in higher education studies. The same is true for high performance on alternative English preparation courses. Therefore, students need to further develop their ELP while they are studying at university, if Australian universities are to achieve strong English language outcomes for international students, and remain an attractive destination of study. This necessitates the creation of new approaches to English language learning in higher education. This is where many of the conflicts and challenges can be found.

14.4.2 The Service Model of English Language Development

In Australia, the responsibility for English language learning in universities traditionally falls with Academic Language and Learning (ALL) advisors. Each Australian university has at least one ALL unit or centre. Central units or centres offer academic language and learning support to all students and work with disciplinary staff across the university. Table 14.2 presents a summary of the main ALL activities, a general definition used to categorise the activities and the number of universities where particular activities operated in 2007, 2011 and 2013.

University provision for each type of ALL activity listed in Table 14.2 has increased from 2007 to 2013. The most popular activities, provided by 38 out of 39 universities, are generic non-credit and one-to-one consultations with students. These are traditional program types and have existed in universities for a long time.

| Table 14.2 | ALL activities | in Australian | universities |
|-------------------|----------------|---------------|--------------|
| | | | |

| | Definition | | Number of universities | | |
|--|---|----|------------------------|------|--|
| ALL activity | | | 2011 | 2013 | |
| Integrated credit | Discipline specific credit bearing subject(s)/units embedded within courses, sometimes compulsory, usually owned by faculties and frequently co-developed/co-taught by ALL and faculty staff | 13 | 19 | 21 | |
| Integrated non-credit | Discipline specific non-credit subject(s)/units or workshops embedded within courses, normally non-compulsory, usually developed/taught by ALL staff | 26 | 34 | 36 | |
| Generic credit | Non-discipline specific credit bearing subject(s) (e.g. Essay Writing 101, EAP), sometimes compulsory, usually available to all students, often as electives, owned by faculties or ALL units and usually developed/taught by ALL staff | 13 | 14 | 14 | |
| Generic non-credit | Non-discipline specific non-credit bearing courses/workshops, usually available to all students, usually owned by ALL units and usually developed/taught by ALL staff | 28 | 37 | 38 | |
| Support for research students | ALL courses/workshops available specifically to postgraduate research students | 30 | 34 | 35 | |
| One-to-one consultations with students | Individual appointments and/or drop-in services/facilities | 38 | 38 | 38 | |
| Educational development | ALL educators involved in curriculum and/or staff development activities with faculty staff | 26 | 32 | 32 | |
| English as a Second Language (ESL) tuition | Provision of ESL support to enrolled students (mainly international) with limited (below required IELTS) English proficiency | 16 | 23 | 23 | |
| Diagnostic assessment | Post-enrolment language assessment (PELA) of student cohorts | 18 | 25 | 27 | |

Adapted from Barthel (2013, p. 1)

They are predicated on the idea that ELP can be addressed through short-term programs. There is very little research evidence to support this idea. Also, many of the activities listed on Table 14.2 are not necessarily linked to disciplinary teaching and learning. Of the nine activities listed, only two are linked to working with disciplinary academics. These are the integrated credit units and educational development. All of the other activities are more or less separate from disciplinary teaching learning and assessment practices. In other words, responsibility for improving international students' English language learning resides mainly with the ALL advisers. And it is apparent that this has not changed since 2007.

Over the years, ALL programs have attempted to focus more on working closely with the different disciplines in universities (Arkoudis & Starfield, 2007). However,

while ALL work can be positioned and constructed in different ways in Australian universities, one of the important issues in terms of accountability is that "for the most part [ALL work] sits outside [universities'] mainstream teaching evaluation processes" (Stevenson & Kokkinn, 2007, p. A36). In sum, ALL providers currently deliver a service model of English language support that provides assistance to students outside of their disciplinary learning on a needs basis. As will now be explained, this approach needs to change if universities seek to improve international student English language learning within globalised higher education.

While the landscape is slowly changing, it is clear that current ALL practices mainly operate under a service model that is based on the assumption that if students require extra support during their courses, then they can access the academic language and learning support units to develop their English language skills. This kind of model has a number of problems in delivering English language support to students. Evidence shows students do not regularly attend English language programs for a number of reasons. To begin, some students do not consider the programs relevant to their disciplinary learning and assessment (Arkoudis & Starfield, 2007; Wingate, 2006). Some international students struggle to meet the demands of their disciplinary subjects and do not have the time to attend the programs (O'Loughlin & Arkoudis, 2009). Research also shows that international students view their lecturers as important in terms of their learning, and seek advice from them (Watkins, 2007).

Pedagogically, the service model is not an effective tool for supporting students' English language development. Most of the research suggests that English language and disciplinary teaching and learning are linked and should not be separated in teaching and learning practices (Hyland, 2009; Morita, 2009; Song, 2006). Moreover, there is much research that demonstrates that the service model for language support has done little to assist international students to develop discipline specific language learning outcomes. It is based on a deficit view of English language support, where students who lack the necessary English language skills attend programs to be fixed. It views language learning as a problem that can be easily addressed through short-term programs. Providing EAL students the discipline specific English language skills they require both in their courses and in order to enter the workplace is not something that can be addressed by short-term English language skills programs. Discipline specific ELP comprises skills that are progressively attained through years of engagement with coursework, and it is often difficult even for students who have English as their primary language to acquire them. Moreover, given the depth and breadth of disciplines that universities offer courses in, and the specific English language skills that each of these involve, it is unlikely that English language service providers, no matter how talented, are capable of being aware of and being able to teach all of the discipline specific English language skills that different EAL students require.

For the above reasons, it is best to depart from the dated service model of English language training. It is a model that (i) is detached from disciplinary teaching, learning and assessment practices, and (ii) views the English language skills of many EAL students as a deficit, which can be quickly and effectively addressed by

short-term programs. In order to remain competitive in the international market, ALL practices that are integrated with disciplinary learning are required, as the service model used by Australian universities is not conducive to producing the kind of English language outcomes that Australian universities want to achieve. In what follows, it will be argued that a good way to effectively achieve quality English language learning outcomes is to include English language requirements within assessment, and that ALL advisors can play a role in this strategy.

14.5 Integrating English Language Learning Within Disciplinary Curricula: Focus on Assessment

Australian universities are attempting to develop clear strategies for improving the English language learning outcomes of students. The main strategies involve identifying the best models of practice for the effective delivery of English language teaching and learning. Universities are also adopting a developmental approach in many of their statements about the focus of their English language programs. However, the reality is that many programs still operate as support programs rather than integrated within disciplinary practices. This is because English language is still largely invisible in disciplinary assessment practices. In what follows, an approach that makes English language requirements in assessment visible will be justified and then outlined. Many may argue that this is a very reductionist approach to teaching and learning, but we know from research into assessment in higher education that what is formally assessed by academics is a powerful influence on student learning (Boud, 1999).

14.5.1 Challenges in Developing Effective English Language Teaching and Learning Practices

In 2012, there was a major shift in higher education with increased accountability through the introduction of Tertiary Education Quality and Standards Agency (TEQSA), and a move to a standards and outcomes-based assessment model. Universities have relied mainly on English language entry requirements to protect standards for ELP, and most of the attention has been on international students (Arkoudis, 2014). The challenge for universities is to develop an outcomes-based model that can assure the English language learning outcomes of all students.

These changes to assuring standards upon graduation have precipitated much activity within many Australian universities in relation to English language teaching and learning. Most of the activity has involved universities developing English language policy statements that offer coordinated approaches to English language development. While the English language strategies provide a road map for how

universities plan to enhance the English language learning outcomes of their students, interviews conducted with those charged within universities for developing these strategies have highlighted some key challenges regarding the implementation of such policies within teaching and learning practices. The main challenge that was identified was the invisibility of ELP within teaching and learning assessment practices (Arkoudis, 2014; Arkoudis & Doughney, 2014). Although the research recommends that English language learning should be embedded within disciplinary teaching, this has been difficult to achieve in Australian universities. The most critical issue involves integrating English language learning within disciplinary assessment practice. And this is the area where little progress is being made.

Academics often state that they are not English language specialists and therefore should not be assessing English language skills. However, the accurate use of language is important to the adequate demonstration of content and knowledge. In other words, the way ideas are expressed demonstrates students' understanding and application of knowledge. Part of the solution lies in assessment practices. English language is part of the hidden curriculum in higher education. It is not explicitly assessed. While the majority of academics believe English language skills are important in their disciplines and in the professions, there is no consistent approach within universities for the assessment of English language in disciplinary teaching. There is little evidence that Australian universities are developing a consistent approach to assessing the English language learning outcomes of students. Research clearly indicates that assessment influences student learning in higher education (see for example, Crandock & Mathias, 2009; Joughin, 2008). Therefore, English language learning outcomes need to be visible in disciplinary assessment.

This raises the bigger issue of the role of English language learning within disciplinary curricula. The absence of English language assessment seems to indicate that English language development is positioned as implicit rather than explicit, and is therefore not part of the assessment practices within the disciplines. Hattie (2009, p. 5) has argued that learning intentions and success criteria need to be explicit. In the case of improving the language learning of international students this means that English language learning outcomes and success criteria need to be made explicit. In other words, if effective communication skills are an intended learning outcome, then we have to identify the areas in which students are to demonstrate these skills, and have to articulate what a successful demonstration of these skills looks like to the students. Hattie makes the point that when students know "what success looks like, then learning is greatly improved" (p. 4). He also argues for more focus within universities on assessment for learning, where more emphasis is placed on the processes of feedback, where processes of feedback and assessment increase students' understanding of what is expected of them. In order to make progress on this, the role of English language learning within disciplinary curricula needs to be addressed. As Biggs and Tang put it: "assessment practices must send the right signals to students about what they should be learning and how they should be learning it" (2007, p. 16). The missing link is to make English language expectations more explicit within assessment. This is challenging for universities as they have never been required to do this in the past, but it is important to do so in order to reinforce the

quality of English language learning of international students who graduate from Australian universities.

The rest of this paper will outline new practices that could more closely integrate English language and disciplinary teaching, to better address the English language learning needs of not only international but all students. It will be suggested that these practices can allow for Australian universities to be more competitive within the international student market, while improving the English language learning outcomes of students. However, these approaches also challenge current teaching and learning practices for Australian universities, as they require academics to make English language learning outcomes explicit within their assessment practices.

14.5.2 Defining English Language Learning Outcomes for Degree Programs

The first important aspect is to define what English language learning outcomes students should be able to demonstrate by the end of their degree program, both in terms of oral and written communication. It is important for academics to have a common understanding of what students' English language learning outcomes are. Without this, it would be difficult to develop a curriculum across the degree program that would result in students developing the desired learning outcomes.

One of the challenges in this area is to develop definitions that cut through the theoretical arguments about English language definitions, and that make sense to academics involved in teaching. There is much debate in Australia concerning the nomenclature for English language that hinders work on integrating English language and disciplinary outcomes. The main tensions lie with the use of the terms 'ELP', 'academic literacies' and 'effective communication skills' (see for example Murray, 2010; Harper, Prentice, & Wilson, 2011). These varied terms demonstrate the lack of consistency in terminology across the sector. 'ELP' is the term used by the Federal Government and TEQSA when referring to English language in higher education. Nearly all universities state that graduates will have 'effective communication skills'. However, the term 'effective communication skills' is used across universities, and what this means for different degree programs seems to vary (Arkoudis, 2014). Also, the ALL advisors use additional definitions, defining their work as 'academic literacies', viewing ELP as a foundational skill to developing 'academic literacies' in higher education. Kirkpatrick (Chap. 11, p. 226) proposes that Australian universities should move away from defining ELP according to native English speaker norms. These differences in terminology and foci will not be resolved quickly and in many ways it is not necessary to do this. Instead, a set of definitions that are immediately understandable by academics is needed, in order to best help them improve their disciplinary teaching as it relates to English language. Ultimately, behind the semantic debate there is the need to resolve a substantive issue, which is the requirement to integrate English language teaching in curricula so as to ensure the best English language outcomes of all graduates. Practical definitions that are best placed to ensure that this occurs effectively should be drawn upon, and separated from the semantic debate over the ideal terms to use when discussing English language teaching and learning.

The second critical issue is to actually define the kind of English language learning outcomes that are expected within the degree program. This requires a shift in thinking about teaching and learning practices and about assessing graduate attributes. For many universities, graduate attributes have been seen largely as aspirational. In other works, these attributes have been viewed as those that students are hoped to achieve, but not as attributes that will be in any way assured through the completion of a degree. With the global focus on outcomes-based learning, and the emphasis on English language as a graduate attribute, these attributes need to be assured if Australia is to remain a global player in the international student market. This has never been done before in Australian higher education and involves a rethinking of teaching and learning practices in terms of assessing and therefore teaching English language within the discipline.

14.5.3 English Language Learning Outcomes in Disciplines and Course Mapping

Having defined English language learning outcomes, the next stage is to identify subjects across the degree that will have responsibility for teaching particular English language learning outcomes. These learning outcomes should be mapped across the degree to ensure that all aspects of effective communication identified for the degree have been assessed. Figure 14.1 offers a general framework for academics to consider on matching assessment to subject-level and course-level learning outcomes. It has been adapted from Harris (2005).

In the figure below, the English language learning outcomes are made visible within teaching and learning practices. This necessitates some alignment between English language teaching and learning and the assessment tasks. Higher education institutions need to do much more to map ELP development across the degree to ensure that English language teaching and learning is integral rather than peripheral to disciplinary studies, and are taken seriously both by academics and students.

Given that integrating ELP into every subject in the degree would be too resource intensive, it is suggested that course coordinators and relevant academics identify subjects within the degree that are most appropriate for particular English language learning outcomes. There are a number of ways that this can be achieved and Fig. 14.2, developed further from Arkoudis, Baik and Richardson (2012), indicates possible approaches that academics can incorporate into their own teaching, including assistance from ALL advisors.

The important elements in this work are that both disciplinary and English language learning outcomes are made explicit to students, and allow for opportunities

Questions

In what ways is it ensured that assessment is matched to subject and course learning outcomes, including generic skills?

For example:

- Are the relationships between subject learning outcomes, teaching and learning activities, and assessment tasks made explicit?
- Taken together, does the suite of assessment tasks that a student experiences over the course of their studies align with the learning outcomes specified for that course?

Critical analysis & oral communication

Subject-level learning outcomes include: "Students will be able to critically analyse scientific research papers"; and "Students will be able to communicate effectively and succinctly through oral presentation"

Learning: Student groups are **assigned a scientific paper** to review and describe as an **oral presentation** (several weeks later). One lecture is devoted to *modeling the process* of analysing a scientific paper. Students are encouraged to *practise* their talks and provide feedback within their group (peer review).

Assessment: Students are assessed, individually, on the part of the paper that they each analysed and presented. 70% of the mark is for demonstrated understanding and explanation, 30% for the technical quality of the presentation.

The connections between the learning outcomes, teaching and learning process and assessment of the group assignment are made explicit to students early in semester, both in class and via the subject website.

Course mapping of subject-level to course-level learning outcomes

Each subject:

- 1. Subject-level learning outcomes are mapped onto the course-level outcomes
- This information is used to produce a 'course map', showing the learning outcome combinations across the subject-levels of the course;
- 3. Learning and assessment tasks for these subjects are plotted onto the course map. Course mapping is used to identify gaps or redundancies in the development and assessment of the course-level learning outcomes, and to check that the tasks (both learning and assessment) increase in complexity across the year levels.

Fig. 14.1 General framework to match assessment to learning outcomes (Adapted from Harris, 2005)

to use assessment for learning within the teaching context. This requires modelling examples with annotations that demonstrate the quality of the work, discussing with students the concept of high quality work by giving them opportunities to peer review draft assignments for comments and feedback, and working with ALL advisors who can offer detailed comments on English language and suggestions on improving written or oral assessment.

To conclude, if the three steps that are outlined within this section are followed, then English language learning may be effectively integrated within disciplinary curricula. This may in turn lead to English language learning outcomes that are capable of maintaining Australian universities' market share of international stu-

Sxamples

| Practices | Examples | Minimal intervention (indirect support) |
|--|---|--|
| Giving overall general feedback on student work | Giving general feedback pointing out that students need to work on their language and/or writing skills. | ı |
| Advising students to seek help with writing and/or language development | Giving feedback to advise students to seek help from the language and academic support units; Suggesting that students seek proofreading assistance from native-speaking peers for future assessment tasks. | |
| Organising a workshop on writing for students | Arranging a workshop with an ALL advisor to review aspects of academic writing for the next assignment. | |
| Modelling examples of high quality work | Discussing in the tutorial what constitutes high quality work, and how it can be identified; | . |
| | Asking students to provide feedback on peers work, commenting on what makes it a quality piece of work; | |
| | Requesting ALL advisors develop activities that are available online to provide examples of successful work, and a commentary on why it is successful. | |
| Making some corrections and pointing out specific problems or areas that need improvement | Correcting some of the errors (usually on the first few pages only), and then commenting on areas that need improvement; Making a list of types of errors or problems with writing and language use and asking students to resubmit corrected assignment. | |
| Correcting most or all errors as feedback and suggesting alternative expression | Making corrections to most of all linguistic errors throughout the students text and highlighting awkward phrases and/or sentences and suggesting alternative expressions. | |
| Reading drafts of work and providing detailed feedback | Providing extensive writing and/or language support through careful proofreading and editing of several drafts of work before submission of final assignment | |
| Providing intensive individual support to students in all stages of the writing process | Providing individual consultations with students to assist them at various stages of assignment writing, from reading and formulating ideas to structuring information, to proofreading and | . |
| | editing. Examples of this only occurred in relatively small classes with fewer than 30 students. | High intervention (direct support) |

Fig. 14.2 Practices to enhance ELP through teaching

dents. Despite the fact that a reductionist approach is offered in this paper, the heavy focus on integrating English language assessment may make this strategy a rather effective one.

14.6 Conclusion

Australian universities are moving slowly towards integrating English language and disciplinary learning. The main reason for this slowness is that transforming practices in these ways requires a cultural shift in academic staff. Within an elite higher education system, academics have been largely responsible for teaching their disciplinary knowledge. This has not included English language learning, which has been largely viewed in Australian universities as a foundational skill to learning at university. In other words, students who enter university should do so with the necessary English language ability to study. Within the widening participation of higher education, and the increased emphasis on international students' fees to support the funding of universities, the student population is much more diverse than ever before in terms of preparedness for study. Therefore in a massified and universal system, English language learning should occur within the course of study and academic staff are therefore responsible for this in their curriculum planning. These issues are also important to Asian-Pacific universities that offer EMI courses (see, for example, Chaps. 12 and 13), and not exclusive to Australian universities.

Global processes with regards to the increasing competitiveness of the international student market and the overreliance of this market by Australian universities for funding, means that Australia needs to progress with the times. Higher education curricula are being transformed and this provides the opportunity to improve English language teaching and learning. This should be a whole of institution responsibility, and can begin with the three steps outlined in this paper:

- 1. The English language learning outcomes that will be achieved through the completion of the degree program are defined;
- 2. English language learning outcomes are mapped across the degree program to ensure that all aspects of effective communication identified for the degree have been assessed:
- 3. English language is assessed within the most appropriate subjects identified within the degree program.

Although this is a complex area, some movement into addressing concerns regarding the quality of teaching and improving English language learning for international students in Australia must occur. If not, Australian universities run the risk of their share of the international student market withering on the vine. This change will not be easy, as existing practices are strongly entrenched within university culture. They are a part of what Christensen and Eyring (2011) have referred to as the 'DNA' of universities, something that is conservative, and has built up over a long period of time. Nevertheless, as this chapter suggests, it is a necessary change for Australian universities to make if they wish to remain a major global player within the international student market.

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Part V Challenges to Assessment and Quality Assurance

Chapter 15 Reforming Assessment to Promote Learning: Critical Issues from a Global Perspective

Gordon Joughin and Clair Hughes

Abstract The past decade has seen important progress in specifying how assessment of learning can be designed and implemented to support the process of learning, with individual scholars and colloquia producing comprehensive, well-grounded guidelines for reforming assessment in higher education systems. At the same time, numerous national initiatives have addressed demands to assure the quality of graduates by focusing on the specification of program-level learning outcome standards that apply to all graduates in a discipline, regardless of their place of study. The OECD's Assessment of Higher Education Learning Outcomes (AHELO) project is a logical international extension of these initiatives. However, assuring the quality of graduate learning outcomes through appropriate assessment regimes presents a major challenge to most higher education systems. Much work remains to be done in developing appropriate approaches to assessment and implementing these approaches in complex educational systems where effecting changes to established practices is extremely challenging.

15.1 Introduction

Since assessment has a powerful influence on what and how students study, reforming teaching and learning can only occur if assessment is reformed at the same time. What types of assessment are effective for engaging students to learn at university level? What principles and practices of assessment should be brought to bear to ensure that assessment not only provides a trustworthy record of students' achievements but also engages students in the process of learning? This chapter links assessment of learning to the process of learning and uses some of the most recent

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systemic thinking about assessment and learning to promote reform in higher education. Such reform of assessment is particularly important for advancing university education in the context of globalisation where students are drawn from a larger variety of social and educational backgrounds, where students and teachers alike are increasingly crossing national borders, and where the internationalisation of curricula, including assessment, is becoming progressively more important.

Not surprisingly, this is also a time when governments are taking an increasing interest in assessment of learning. This is principally in the form of efforts (a) to ascertain the returns on governments' significant investments in higher education by specifying the required outcomes of a university or college education and (b) to develop convincing methods for 'measuring' those outcomes, preferably in ways that allow comparisons of like degrees across institutions and across national boundaries. The resulting global 'learning outcomes' agenda has the potential to have a major impact on assessment. On the one hand, positive impacts could include a focus on integrative, performance-based assessments that would encourage deep approaches to learning, innovative assessment that engages students in educationally critical learning processes, and rich environments where learning and teaching alike are based on a strong sense of standards. On the other hand, negative impacts could include standardised testing of a narrow range of the more superficial, less complex, but more readily and reliably measured outcomes.

In this chapter, the ambiguous nature of the term 'global' has influenced what we will be dealing with. On the one hand, 'global' refers to issues that are pervasive wherever assessment for learning is being considered – we are not dealing with national or international initiatives but simply with issues that arise in any, or at least most, contexts where assessment is being made to serve the interests of learning. On the other hand, 'global' has geographical connotations, referring to a range of countries and education systems across the world. In this chapter we will consider global issues in both senses, though the limitation of space means that we cannot possibly deal with more than a small sample of national and international contexts. In the first part of the chapter we will consider assessment to promote learning from an educational perspective, initially noting the several ways in which assessment functions to support learning and then considering critical principles of assessment for learning that have been distilled in two 'manifestos' for assessment for learning. In the second part of the chapter we will deal with the critical issues associated with assessing what students on the point of graduation know and are able to do in the context of parallel national developments in three countries. This will include a consideration of '21st Century' learning outcomes, graduate attributes, program/degree-level learning outcomes, and the complex issues that are associated with the assessment of outcomes of this kind and at this level. These issues are also important to Asian-Pacific universities that offer EMI courses (see for example Poon, 2016 and Ng, 2016 in this volume), and not exclusive to Australian universities.

15.2 Assessment Promoting Learning: Conceptual Foundations

15.2.1 How Assessment Supports Learning

Since this chapter deals with 'assessment to promote learning', a short overview of the conceptual underpinnings of this construct is in order. Our starting point is the acknowledgement that the assessment we are considering in this chapter usually needs to perform *each* of the core functions of assessment:

- judging students' achievement in relation to course or program requirements essentially meeting internally determined standards of an institution, program or course:
- maintaining professional or disciplinary standards set beyond the institution (a crucial point in light of the second part of this chapter), but more or less aligned with the internally set standards; while also
- promoting learning a multi-dimensional function in itself.

Several aspects of assessment can promote learning; these extend well beyond the provision of feedback, which many have seen as the essence of both 'assessment for learning' and 'formative assessment' where the latter has been separated from summative functions. For our purposes in this chapter, assessment is seen to promote learning in three central ways. These are all to be found in the now extensive literature on assessment and learning in higher education and provided, for example, the conceptual foundation of the Learning Oriented Assessment Project conducted across all of Hong Kong's higher education institutions from 2003 to 2008 (Carless, Joughin, Liu, & Associates, 2006; Carless, Joughin, & Mok, 2006; Joughin, 2009).

Though each of the three core functions of assessment has been the focus of concentrated individual attention over the past decade, they are closely related, with the promotion of learning now needing to be directly aligned with standards. Acknowledging this alignment, three central ways in which assessment has come to be seen to promote learning are the following:

• through the design of assessment tasks as learning tasks, so that the completion of assessment tasks requires students to engage in productive learning processes. Of course, such assessment task designs need to be based on an understanding of the processes of learning, whether perceived of generically or specific to a discipline. Thus assessment tasks can be designed to engage students in a number of elements of Laurillard's 'conversational framework' of learning (Laurillard, 2012) or a final field placement in social work can engage students in developing as well as demonstrating many if not all of the requirements of the relevant professional standards. Gibbs and Simpson's 'conditions under which assessment supports learning' (Gibbs & Simpson, 2004–2005) provide additional guidance regarding the timing, spread and focus of assessment tasks.

- through the use of feedback as 'feedforward' with students actively using feedback to inform their learning and their future work. The meta-analyses of Black and Wiliam (1998) and Hattie (2007) remain pivotal in our understanding of assessment for learning, though it would be a mistake to equate feedback, however well done, as the sole or dominant element in using assessment to promote learning. Gibbs and Simpson (2004–2005) again provide useful guidelines, along with Nicol and Macfarlane-Dick (2006), with the 'Assessment 2020' propositions for assessment reform discussed later in this chapter according a more active role to students in seeking and using feedback (Boud & Associates, 2010). The need to improve the provision of feedback to students on their performance is a perennial issue in higher education, being often highlighted by standardised student surveys such as the International Student Barometer as well as by numerous reports on improving assessment, including, for example, the recent 'Improving Assessment in Higher Education' (Henry, Marshall, & Ramburuth, 2013).
- through the use of assessment to develop students' capacity to judge, and thereby improve, the quality of their own work an ability that is essential to learning during the degree and especially so beyond it. Some see this as the most important purpose of assessment since it requires students to develop a strong sense of standards and the capacity to apply those standards to their own work as students and subsequently to their future work as practitioners in their chosen field (see, for example, Boud, 2009; Boud & Falchikov, 2006; Sadler, 1989, 2010).

15.2.2 Assessment Manifestos as Vehicles for Reform

While the above framework has provided important insights for both understanding and improving assessment practice at the level of the single course or module as well as across programs, the complexity of the challenges facing the reform of assessment to promote learning has led to two influential attempts to draw together the most productive responses to these challenges by gathering assessment experts and academic leaders to identify the broader challenges of assessment to promote learning and to propose productive responses to these. The outcomes have been what might be termed two 'manifestos for reform': (a) the *Assessment Standards: a Manifesto for Change* statement from the 'Weston Manor Group' of 37 international and UK assessment experts who met at Weston Manor in England in 2007 (Assessment Standards Knowledge Exchange, 2009; Price, O'Donovan, Rust, & Carroll, 2008) and (b) *Assessment 2020: Seven Propositions for Assessment Reform in Higher Education* (Boud & Associates, 2010) based on contributions from a group of 50 international experts and leaders of assessment reform across Australian higher education institutions.

15.2.3 'Assessment Standards: A Manifesto for Change'

The 'Weston Manor Manifesto' is to some extent a reaction against the growing focus on overly prescriptive approaches to defining learning outcomes and associated marking criteria by drawing attention to the broader concerns and practices of the academic and professional communities in whom academic standards are seen to reside. The six 'tenets' of the Manifesto are summarised as follows:

- 1. Responding to concerns that current assessment practices are too strongly focused on marking, leading to a common failure to promote conceptual understanding and to set standards that would be appropriate for the complex learning expected of higher education graduates, a re-focusing of assessment's role in promoting learning is called for: "The debate on standards needs to focus on how high standards of learning can be achieved through assessment. This requires a greater emphasis on assessment *for* learning rather than assessment *of* learning."
- 2. Noting a number of erroneous beliefs about the precision and reliability of traditional marking systems which have (a) skewed assessment towards less complex learning outcomes, (b) focused students' attention on marks rather than on learning, and (c) allowed students to succeed in assessment by adopting surface approaches to learning, the Manifesto states the "need to move beyond systems focused on marks and grades towards the valid assessment of the achievement of intended program outcomes". We will see in the next section of this chapter that this tenet mirrors the intentions of Australian and US developments, where the valid assessment of appropriate program learning outcomes requires complex applied performance.
- 3. There are limits to the extent to which standards can be made explicit and communicated to students, while there remains an important role for the use of holistic judgement. Sadler's early (1989) work supports this conclusion, while his more recent work (Sadler, 2010) provides even stronger support for this tenet of the Manifesto that "limits to the extent that standards can be articulated explicitly must be recognised since ever more detailed specificity and striving for reliability, all too frequently, diminish the learning experience and threaten its validity ...".
- 4. Students' active involvement in assessment processes, including dialogue with academic staff and other students, is essential if students are to develop an understanding of standards required for complex learning: "Assessment standards are socially constructed so there must be a greater emphasis on assessment and feedback processes that actively engage both staff and students in dialogue about standards ...".
- 5. Tenet 5 states that "Active engagement with assessment standards needs to be an integral and seamless part of course design and the learning process in order to allow students to develop their own, internalised, conceptions of standards and monitor and supervise their own learning." This development requires progressive development over time, with a focus on holistic program-level outcomes rather than simply sets of fragmented course/module outcomes.

6. Tenet 6 states that "[a]ssessment is largely dependent upon professional judgement and confidence in such judgement requires the establishment of appropriate forums for the development and sharing of standards within and between disciplinary and professional communities." The UK system of external examiners is not considered sufficient for this function, while recent experiments in Australia indicate that considerable work is still needed to establish efficient and effective processes for the kind of sharing being called for.

15.2.4 Assessment 2020: Seven Propositions for Assessment Reform in Higher Education

'Assessment 2020: Seven Propositions for Assessment Reform in Higher Education' follows the Weston Manor Manifesto in that it represents the collective wisdom of a large group of international and national assessment experts and academic leaders, in this case located in the Australian context under the leadership of David Boud but with a strong awareness of the rapidly evolving global context of higher education, especially in relation to standards and the need to reconsider and renew accepted assessment understandings and practices (Boud & Associates, 2010). The seven propositions, with our brief commentary, are as follows. The propositions begin with the stem, "Assessment has most effect when ..."

- 1. "... assessment is used to engage students in learning that is productive." This proposition recognises the danger of students focusing on marks and grades rather than on what needs to be learned, along with the need for assessment tasks that engage students in appropriate learning processes.
- 2. "... feedback is used to actively improve student learning." This proposition includes the need for students to develop the capacity to provide feedback to their peers as well as taking responsibility for seeking and using feedback on their own work students need to be much more than passive recipients of their teachers' comments.
- 3. "... students and teachers become responsible partners in learning and assessment." This proposition calls for students to develop their capacity for self-critique, a sense of standards, and the ability to make confident judgements about the quality of their own work in relation to those standards.
- 4. "... students are inducted into the assessment practices and cultures of higher education." With a growing emphasis on assessment as central to learning, this proposition points to the need for students to learn about assessment through being explicitly and progressively inducted into what is required of them in a higher education context.
- 5. "... assessment for learning is placed at the centre of subject and program design." This proposition calls for a radical change in the planning of courses and programs. Not only does it require the well-accepted alignment of assessment tasks with other aspects of the curriculum, it also calls for a holistic

approach to assessment across courses and for integrated assessment at least in the later years of a degree program.

- 6. "... assessment for learning is a focus for staff and institutional development". This proposition recognises the need for a highly professional approach to assessment developed through mentoring, dialogue with peers, formal courses and moderation experiences, and with formal processes for recognising and rewarding high levels of leadership in assessment matters. It also calls for engagement with employer expectations and with national and international standards within disciplinary and professional communities.
- 7. "... assessment provides inclusive and trustworthy representation of student achievement." With assessment needing to perform at least the three functions of certifying achievement, maintaining standards and promoting learning noted earlier, there is a danger that, in promoting a stronger focus on assessment's role in supporting learning, we may lose sight of assessment's equally crucial role in certifying students' achievement. With the growing demand for assessment that certifies the competence of students at the point of graduation, there is a particular need for assessment to provide credible evidence of integrated learning against recognised standards, and that this evidence is provided in a form that conveys the richness of students' accomplishments.

15.2.5 Learning Outcomes: Twenty-first Century Skills, Graduate Attributes and Learning Outcomes at the Point of Graduation

The Assessment 2020 propositions were drafted in the context of what its authors saw as "a rapidly changing global context" (Boud & Associates, 2010, p. 1) in which positive responses to newly emerging agendas around academic standards would call for a substantial renewal of assessment practices. Learning outcomes are at the centre of these agendas.

In one sense the roots of current thinking about assessment and learning lie in the 'objectives' movement of the 1950s when Bloom developed his schema for categorising, describing and generating learning objectives in terms of how students should be able to demonstrate their knowledge at the conclusion of a learning episode (Bloom, 1956), thereby moving the focus of instruction from teaching to learning and providing educators with a technology for describing learning outcomes in terms of students' observable behaviour. Bloom's taxonomy, very usefully revised by Anderson, Krathwohl and colleagues (2000) remains one of the most widely used tools in education today and, along with the associated 'constructive alignment' of learning outcomes, teaching and learning activities and assessment tasks (Biggs & Tang, 2007), is at the core of a wide range of 'outcomes-based learning' initiatives around the world, including, for example, the Hong Kong Government's higher education initiatives of the late 2000s (see Hong Kong Polytechnic University, 2012).

The past decade has seen an intensification of focus on the outcomes of undergraduate education – what graduating students should know and be able to do, and sometimes what dispositions we would like to see them possess. These have been presented under various guises, for example, as '21st century skills', graduate attributes/qualities/abilities which are typically depicted as generic qualities of the higher education graduate regardless of their degree and in ways that are more discipline- or profession-specific, or as 'threshold learning outcomes' or 'day 1 skills'.

Whereas the frameworks and manifestos described in this section have been largely initiated by higher education practitioners, we are now seeing a powerful move towards externally driven efforts to assessing learning outcomes which have the potential to strongly influence the role assessment plays in promoting, or indeed inhibiting, the kind of learning that is going to prepare students for successful futures. It is to these that we now turn.

15.3 National Developments

At the beginning of this chapter we noted that governments are taking an increasing interest in the quality of learning outcomes achieved by graduates at a time when participation in higher education has increased dramatically. The moves over recent years to specify the required learning outcomes of higher education programs are now associated with the need to develop convincing methods for assessing students' achievements of those outcomes, preferably in ways that allow comparisons of like degrees across institutions and across countries. In this section we will describe three sets of national initiatives:

- 1. the Australian Qualifications Framework, the development of disciplinary 'threshold learning outcomes', and recent projects on assessing those outcomes;
- 2. the UK Quality Assurance Agency's 'Framework for Higher Education Qualifications' and 'subject benchmark statements' which include assessment guidelines; and
- the US Lumina Foundation's 'Degree Qualifications Profile' and its implications for assessment.

While the motivation for these initiatives may appear to be strongly influenced by the desire to specify what students should know and be able to do at the end of their study, and for some this may lead to exploration of standardised testing in a way that emphasises the reliability of multiple choice or other 'pencil and paper' testing, these initiatives are particularly relevant to the theme of this chapter – assessment to promote learning. This is because depictions of what students should know and be able to do on completion of a program/degree invariably include the application of integrated knowledge, the assessment of which requires a significant element of complex, practice-related tasks. Such tasks promote learning in two ways: (a) they can function as learning tasks in their own right, requiring students to engage in a range of appropriate learning processes in order to complete them, as

occurs, for example, when final assessment includes a capstone project or performance in a field placement, and/or (b) the preparation for them usually calls for a deep approach to learning, for example, when a final viva probes students' application of learning across a range of courses. The careful construction of complex final assessments quickly leads to the recognition that students need to progress towards final assessments through similar or complementary approaches to assessment earlier in their program.

15.3.1 The Australian Qualifications Framework, the Higher Education Standards Panel and Mandated Learning Outcomes

The current Australian Qualifications Framework (AQF) was introduced in 2011, a second edition appearing in 2013 (Australian Qualifications Framework Council, 2013), and with mandatory compliance required by 2015. The AQF specifies standards for formal qualifications in Australian education, ranging from the Senior Secondary Certificate of Education (Level 1) through Bachelor degrees (Level 7) to PhDs (Level 10). Accrediting bodies, including universities, are required to apply the AQF to their programs. The AQF utilises a taxonomy of learning outcomes based on knowledge, skills, application of knowledge and generic learning outcomes. For our purposes, the most relevant descriptor is that for bachelor degrees, as shown in Table 15.1.

The Australian Qualifications Framework operates in tandem with the requirements of the Higher Education Standards Panel, a statutory body that provides advice to the Australian Government on standards relating to a number of aspects of higher education, including teaching and learning. Its proposed *Draft Standards for Learning Outcomes* addresses learning outcomes at the course, i.e. at the degree program level, and specifies that:

The learning outcomes for each course of study are informed by:

- (a) the mastery of specific disciplinary and/or interdisciplinary knowledge and skills that characterise the field of study
- (b) the generic skills and attributes required of graduates
- (c) the application of generic skills and attributes in the context of the field of study including the communication skills required, and
- (d) the requirements of employment related to the field of study.

An informed understanding of assessment would suggest that such learning outcomes require a relatively sophisticated approach to their assessment. While neither the AQF nor the Higher Education Standards Panel deals with assessment in any detail, the Panel does require that "[m]ethods of assessment are consistent with the types of learning outcomes being assessed and are capable of validly and reliably confirming that specified learning outcomes are achieved" (Higher Education Standards Panel, 2013, p. 1).

Table 15.1 AQF bachelor degree descriptor

| Bachelor degree | qualification type descriptor |
|---|---|
| Purpose | The Bachelor Degree qualifies individuals who apply a broad and coherent body of knowledge in a range of contexts to undertake professional work and as a pathway for further learning |
| Knowledge | Graduates of a Bachelor Degree will have a broad and coherent body of knowledge, with depth in the underlying principles and concepts in one or more disciplines as a basis for independent lifelong learning |
| Skills | Graduates of a Bachelor Degree will have: |
| | cognitive skills to review critically, analyse, consolidate and synthesise knowledge |
| | cognitive and technical skills to demonstrate a broad understanding of knowledge with depth in some areas |
| | cognitive and creative skills to exercise critical thinking and judgement in identifying and solving problems with intellectual independence |
| | communication skills to present a clear, coherent and independent exposition of knowledge and ideas |
| Application of knowledge and skills | Graduates of a Bachelor Degree will demonstrate the application of knowledge and skills: |
| | with initiative and judgement in planning, problem solving and decision making in professional practice and/or scholarship |
| | to adapt knowledge and skills in diverse contexts |
| | with responsibility and accountability for own learning and professional practice and in collaboration with others within broad parameters |
| Volume of learning | The volume of learning of a Bachelor Degree is typically 3–4 years |

Source: Australian Qualifications Framework Council (2013, p. 48)

The proposed standards are designed to operate in conjunction with not only the above AQF descriptor but also with the requirements of professional bodies and disciplinary learning outcome statements developed through the Office for Learning and Teaching. This office (and its predecessor, the Australian Learning and Teaching Council) has sponsored a number of projects to generate compact statements of graduate learning outcomes for a wide range of disciplines and professions. The Accounting Learning Outcomes at the bachelor degree level, developed by a Learning Outcomes Working Party led by Mark Freeman in conjunction with an Accounting Expert Advisory Group and involving extensive national consultations with higher education and professional bodies, exemplify such learning outcomes statements (Table 15.2).

With processes for defining degree level learning outcomes well progressed, the national Assessing and Assuring Graduate Learning Outcomes project (Institute for Teaching and Learning, 2012a) conducted across Australia in 2011–2013 has sought to identify the assessment tasks, in a range of disciplines, that generate convincing evidence of achievement of graduate learning outcomes and follows earlier work of Hughes and Barrie (2010) on assessing graduate attributes. The project proposed a number of characteristics of effective tasks as identified through

| Judgement | Exercise judgement under supervision to solve routine accounting problems in straightforward contexts using social, ethical, economic, regulatory and global perspectives | |
|-------------------------------|--|--|
| Knowledge | Integrate theoretical and technical accounting knowledge which includes a selection of auditing and assurance, finance, economics, quantitative methods, information systems, commercial law, corporation law and taxation law | |
| Application Skills | Critically apply theoretical and technical accounting knowledge and skills to solve routine accounting problems | |
| Communication and Teamwork | Justify and communicate accounting advice and ideas in diverse collaborative contexts involving both accountants and non-accountants | |
| Self-Management | Reflect on performance feedback to identify and action learning opportunities and self-improvements | |

Table 15.2 Learning and teaching academic standards for accounting

Source: Australian Learning and Teaching Council (2010, p. 10)

interviews with 48 leaders of teaching, learning and assessment in Australian universities, including the following:

- The assessment tasks involved substantial learning through, for example, collaborative projects requiring planning and decision making.
- Tasks simulated 'real-world' professional practice, often with multiple components and oral presentations.
- Tasks placed students in authentic roles such as consultant, performer or researcher, with work being presented to a genuine audience such as practising engineers or to students taking the part of critical practitioners.
- Group tasks were carefully designed and managed.
- A focus on reflection helped students become more aware of their learning (Institute for Teaching and Learning, 2012b).

The project also identified a number of challenges to whole-of-program assessment:

- developing graduate learning outcomes and operationalising these through course level curricula and assessment plans;
- mapping learning outcomes across a program in non-perfunctory ways, using rigorous procedures and identifying key points in the program for collecting critical evidence of student progress;
- making assessment 'fit for purpose' going beyond established methods to ensure complex outcomes are appropriately assessed, recognising that some important outcomes may defy assessment;
- providing for progression integrating earlier learning into later level assessment, demonstrating progression though efficient documentation of student progress through, for example, portfolios;
- · matching assessment and learning activities; and
- identifying constraints on assessment, including institutional policies, staff and student workloads, and unintended consequences of well-intentioned policy (Institute for Teaching and Learning, 2012c).

15.3.2 The UK 'Framework for Higher Education Qualifications' and 'Subject Benchmark Statements'

The UK Quality Assurance Agency (QAA) has developed a 'Framework for Higher Education Qualifications' which parallels the Australian AQF. The nature of the Framework is readily illustrated by the Framework's descriptor of a 'foundation degree':

Foundation Degrees are awarded to students who have demonstrated:

- knowledge and critical understanding of the well established principles of their area(s) of study, and of the way in which those principles have developed
- ability to apply underlying concepts and principles outside the context in which they
 were first studied, including, where appropriate, the application of those principles
 in an employment context
- knowledge of the main methods of enquiry in the subject(s) relevant to the named award, and ability to evaluate critically the appropriateness of different approaches to solving problems in the field of study
- an understanding of the limits of their knowledge, and how this influences analyses and interpretations based on that knowledge.

Typically, holders of the qualification will be able to:

- use a range of established techniques to initiate and undertake critical analysis of information, and to propose solutions to problems arising from that analysis
- effectively communicate information, arguments and analysis in a variety of forms to specialist and non-specialist audiences, and deploy key techniques of the discipline effectively
- undertake further training, develop existing skills and acquire new competences that will enable them to assume significant responsibility within organisations.

And holders will have:

the qualities and transferable skills necessary for employment requiring the exercise
of personal responsibility and decision-making.

(The Quality Assurance Agency for Higher Education, 2014, p. 12)

The similarities with the AQF Bachelor Degree descriptor will be apparent. The QAA has also overseen the development of 'subject benchmark statements' which "set out expectations about standards of degrees in a range of subject areas. They describe what gives a discipline its coherence and identity, and define what can be expected of a graduate in terms of the abilities and skills needed to develop understanding or competence in the subject" (The Quality Assurance Agency for Higher Education, n.d.). The benchmark statements provide detailed outlines of subject knowledge, understanding and skills and a range of other skills, including a set of problem-solving skills, skills in working with others, communication skills, and skills in personal and professional development. The knowledge, understanding and skills from the Social Work benchmark statement, for example, are elaborated over 13 pages, then consolidated as a smaller set of 'benchmark standards' that represent the level of achievement of a typical honours graduate: seven elements of knowledge and understanding and five subject-specific and other skills. These

standards are similar in scope and format to the Australian 'learning and teaching academic standards'. An important point of difference is that the UK benchmark statements directly address assessment issues, including the ways in which assessment can promote learning that were noted at the beginning of this chapter, as the following extract from the Social Work statement illustrates:

- 6.7 Assessment strategies should show alignment between, and relevance to, social work practice, theory and assessment tasks. They should also be matched with learning outcomes and learning and teaching methods. The purpose of assessment is to:
- provide a means whereby students receive feedback regularly on their achievement and development needs
- provide tasks that promote learning, and develop and test cognitive skills, drawing on a range of sources including the contexts of practice
- promote self-evaluation, and appraisal of their progress and learning strategies
- enable judgements to be made in relation to progress and to ensure fitness for practice, and the award, in line with professional standards.
 - 6.8 Assessment strategies should be chosen to enhance students' abilities to conceptualise, compare and analyse issues, in order to be able to apply this in making professional judgements.

(The Quality Assurance Agency for Higher Education, 2008, pp. 15–16)

The social work statement proceeds to suggest complex, integrative, practice-oriented assessment formats:

6.9 Assessment methods normally include case-based assessments, presentations and analyses, practice-focused assignments, essays, project reports, role plays/simulations, e-assessment and examinations ... Where practice competences have to be assessed, as identified through national occupational standards or equivalent, opportunities should be provided for demonstration of these, together with systematic means of development, support and assessment. Assessment methods may include those listed above, in addition to observed practice, reflective logs and interview records.

(The Quality Assurance Agency for Higher Education, 2008, 16).

Since assessment tends to define program requirements and determine what and how students study, the importance of the benchmark statements for promoting learning cannot be overstated.

UK developments have occurred in parallel with the Tuning Process (see Tuning Educational Structures in Europe, n.d.) which has developed agreed learning outcomes statements in relation to a number of subject areas to facilitate a somewhat common approach to program description and development across Europe. The process has focused on generic competencies without detailed consideration of assessment matters or how the assessment of competencies interacts with learning. However, the process serves to highlight the global trend towards program/degree-level learning outcomes and the expression of these outcomes in terms of integrated application or competence.

15.3.3 The US Degree Qualifications Profile

The Lumina Foundation's 'Degree Qualifications Profile' (DQP) (Lumina Foundation, 2011) is a major attempt to represent what US graduates should know and be able to do at the completion of a degree at associate, bachelor's and master's levels, with an emphasis on the integration of learning and its application. The format of the profile is such that the implications for the assessment of students' learning are indicated, while the emphasis on application has equally clearly expressed implications for the kinds of educational experiences students should have:

The emphasis on application acknowledges the importance of an educational experience rich in field-related projects, performances, investigative essays, demonstrations and other learning-intensive activities. And it points to the many ways in which students now demonstrate their growth in knowledge and competence. While conventional testing may still be useful, students often provide more persuasive evidence of their learning through assigned tasks and major projects both within and beyond the classroom. Any useful Degree Profile must be sensitive to these experiences and able to accommodate an increasing diversity of evidence from a variety of valid assessments. (Lumina Foundation, 2011, p. 3)

Space permits only the briefest summary of the 'DQP'. Most simply put, the profile is based on five interrelated learning areas, each of which is aligned with particular kinds of student performance. The areas, with illustrative examples of bachelor's level performance from the DQP are listed below:

- Broad, integrative knowledge. This concerns the integration and application of specialised knowledge and is therefore closely intertwined with specialised knowledge. Student performance includes independent or collaborative investigative, collaborative or practical work drawing on theories and methods from different fields.
- Specialised knowledge. This refers to discipline-specific knowledge, typically involving 'majors'. Performance involves a summative project, paper, or practice-based performance.
- Intellectual skills, based on analytical inquiry and including oral and written
 communication and quantitative skills. Performance includes differentiating and
 evaluating "theories and approaches to complex standard and non-standard problems" (Lumina Foundation, 2011, p. 12); using a variety of information sources
 presented using different media; and, to illustrate the challenge of the DPQ,
 constructing alternative visions of the natural or human world and expressing
 this through a project, exhibit, laboratory report, performance or community
 service.
- Applied learning, since "what (students) can do with what they know is the ultimate benchmark of learning" (Lumina Foundation, 2011, p. 8). This includes 'real world' problem solving and innovation in work settings and everyday communications. Illustrative performances include projects, research, or a substantial field project, all of which demonstrate substantial integration of learning across the degree from inside and beyond the classroom.

• *Civic learning*, including an appreciation of different perspectives and preparation for 'democratic and global citizenship'. The student can collaborate with others to develop, implement and evaluate an approach to a community issue.

While the DQP is essentially a description of intended program-level learning outcomes enhanced by illustrative examples of student performance associated with these outcomes, the immense challenge of assessing student achievement in relation to these outcomes remains. Peter Ewell, one of the authors of the DQP, has outlined the principal challenges in a subsequent document, 'The Lumina Degree Qualification Profile (DQP): Implications for Assessment' (Ewell, 2013), including the following:

- Assessment regimes need to provide opportunities for progressively more challenging demonstrations of competence final integrative tasks such as capstone experiences are no longer sufficient to ensure that all students meet the standards of the DQP.
- Moving beyond perfunctory mapping of individual course assessments against
 the DPQ, to develop new assessments that can convincingly demonstrate students' mastery by ensuring that the actions depicted in the requisite learning
 outcomes are closely aligned with assessment tasks.
- The embedding of the appropriate assessment throughout the curriculum, not as an 'add-on' at the end or at given points of a program.
- Appropriate sequencing of courses and their assessments so that students move progressively towards mastery.
- The structuring of degree programs around competence rather than around individual courses.
- Using the DQP as a benchmark for national and international comparisons of degree-level student learning outcomes across diverse institutions.

Ewell (2013) proceeds to note a number of steps institutions would need to take if these challenges are to be met. Each step is necessary, yet each is problematic. These steps, with our commentary, include the following:

- Few higher education institutions have a culminating assessment of competency at the end of their programs. For some professional programs such as social work or physiotherapy, a culminating field placement may serve this purpose. However for most programs, their modular nature works against a final comprehensive integrative assessment. A well-constructed capstone course can partly meet this requirement, but such courses need to be preceded by integrative experiences at earlier points in the program.
- Faculty judgement remains at the heart of assessing student mastery, and faculty
 expertise is required to design appropriate assessment tasks, placing a premium
 on faculty's assessment expertise and commitment to change. The former can
 only partly be addressed by faculty development programs, while the latter
 requires a significant change in recognition and reward mechanisms to give
 assessment a priority that it has rarely enjoyed in most higher education
 institutions.

- Curricular mapping, including the mapping of assessment tasks across curricula, is seen as an essential first step. In our experience, such mapping can all too easily become a perfunctory exercise aimed at limiting changes.
- A reliance on rubrics as central to the enterprise is particularly worrying. While Ewell (2013) notes that effective rubrics are difficult to construct, rubrics can interfere with the production of good work, with students concentrating on meeting the rubric specifications rather than on learning and the production of high quality work.
- Ewell (2013) notes the need for an electronic portfolio environment for storing
 and accessing student work. While some universities and colleges have successfully implemented portfolio systems, for many others the student portfolio
 remains a long recognised but as yet unmet agenda item.

Ewell concludes that "engaging assessment in the context of the DQP requires faculty to be much more systematic and intentional than is currently the case at most colleges and universities" (2013, p. 21). In commenting on Ewell's proposals, Schneider notes that "the level of intentionality and collaboration implied in the DQP assessment principles contrasts so much ... with deeply rooted campus norms" (Schneider, as quoted in Ewell, 2013, pp. 23–24). We would note that the contrast is not simply with norms, but with structures, professional and disciplinary identities, resourcing, recognition and rewards structures, student and faculty experiences, and academic leadership.

15.4 International Developments

While the Australian, UK and US developments noted in the previous section have much in common and have been informed by each other's processes and frameworks, the principal international development regarding assessment to promote learning is the recent OECD AHELO Feasibility Study on 'Assessment of Higher Education Learning Outcomes' with its aim "to provide a tool for Higher Education Institutions (HEIs) to assess what their students know and can do upon graduation, on an international scale" (OECD, 2013, Feasibility Study Report Volume 1, p. 1). It is beyond the scope of this chapter to report on this initiative in any detail. The feasibility study conceptualised as a research exercise has generated three volumes of an extensive report (OECD, 2013) on what has been an extraordinarily complex international undertaking. Since AHELO ostensibly has explored the development of assessment instruments to facilitate international comparisons of learning outcomes in higher education, it has strongly reflected the focus on learning outcomes, student-centred learning, generic skills and the assessment of competencies noted in previous sections of this chapter.

AHELO has concentrated on assessment of generic skills and of learning outcomes in economics and engineering, with varying degrees of success as documented in the above report. Significant concerns emerged regarding the use of the Collegiate Learning Assessment (CLA) instrument as a measure of generic skills, and while the reliability of multiple choice tests in the study has been high, concerns about their validity and their tendency to assess lower level abilities have been raised. The constructed response tasks (CRTs) on the other hand were seen to be testing higher order skills, were more interesting to students and more comprehensive. (OECD, 2013, Feasibility Study Report Volume 3, Annex F).

While future steps are unclear at the time of writing this chapter, AHELO and its documentation are likely to be important stimuli for discussion of the use of assessment not only to make judgements about, but also to promote, student learning outcomes for some time.

15.5 Assessment Reform: The Challenge of Change in the Midst of Complexity

Given the well-developed conceptualisation of learning outcomes and the assessment practices needed to support their development, the critical need now is to understand how to bring about change. In short, we need an understanding of change that is as sophisticated as our understanding of learning outcomes and their assessment. It is to this that we now turn to complete this chapter.

If this chapter has done nothing else, it has highlighted the complexity of assessment, the complexity of the relationships between assessment and learning, and the complexity of the challenges facing assessment reform, not to mention the complex nature of the integrative and applied learning we seek to assess. In their evocatively titled article If I was going there I wouldn't start from here: a critical commentary on current assessment practice (Price, Carroll, O'Donovan, & Rust, 2011), the authors posit assessment complexity as one of the ten premises of good practice, noting that "acknowledgement of complexity of the issues is the first step in developing workable and coherent institutional policy" (p. 480) and that "it is a matter of urgency that assessment is addressed in a way that acknowledges the multiplicity of inter-related issues and concerns" (p. 479). In a similar vein, Hughes and Barrie (2010) draw attention to "a range of diverse but interrelated factors" that can limit the assessment of the kind of graduate attributes that have been the focus of this chapter (p. 325). While the issues raised by these two sets of authors are largely paralleled in the manifestos for change noted earlier, Hughes and Barrie highlight some particularly intractable issues, including competing conceptualisations of graduate attributes, differential influences of stakeholders, and approaches that disguise the effort needed for genuine change. Their conclusion that "[e]ffective assessment is intrinsically intertwined with other elements of institutional systems which may present obstacles that daunt and discourage the efforts of all but those with a strong commitment to change" (2010, p. 332) leads us to consider the nature of systems in higher education and the approaches to change that are particularly pertinent in higher education institutions.

Not only is there a 'multiplicity of concerns', these concerns do not necessarily lend themselves to systematic, carefully managed solutions. Earlier in this chapter we noted Peter Ewell's (2013) eminently sensible proposals for applying assessment to the Degree Qualifications Profile. Here we note Carol Schneider's repost that these proposals "may be a bit too logical, systematic, and reasoned for this fraught and overburdened moment in higher education history" (Schneider, as quoted in Ewell, 2013, p. 23). It is one thing to note, as many writers in this area have done, the multi-faceted nature of higher education institutions and the many aspects of those institutions that bear upon assessment reform. Macdonald and Joughin (2009), in a simplified model of institutional impacts on assessment, identified four different levels of institutional operations and 16 elements, ranging from institutional policies to course design, leadership and quality assurance. An increasingly important fifth level of the external context, including government policy, funding, employer and professional bodies, increases the complexity considerably. Attempts to reform assessment by dealing 'logically' and 'systematically' with each level and each element are based on an understanding of higher education institutions as 'closed' or 'loosely-coupled' systems in which the connections and relationships between different parts of the system can be clearly defined and the impact of one part of the system on another predicted with some degree of certainty.

This view is misguided. Assessment reform needs to proceed not only with an understanding of the multiple elements needing to be addressed, but with a corresponding understanding of what have been termed 'complex adaptive systems' comprised of "a large number of agents, each of which behaves according to some set of rules. These rules require the agents to adjust their behaviours to that of other agents. In other words, agents interact with, and adapt to, each other" (Stacey, as quoted in Macdonald & Joughin, 2009, p. 201). This gives lie to the notion of the university as a coherent collection of individuals and groups working in harmony towards mutually agreed, rationally determined ends. The system is not chaotic, but it is not easily controlled, so that what emerges is always somewhat unpredictable as a multiplicity of agents adapt and re-adapt to their changing environment according to their own values and mores. Change occurs through the hard leadership work of creating a shared purpose, cultivating inquiry and divergent thinking, enhancing communication and feedback, developing shared values and setting a limited number of essential boundaries (Dooley, 1997). Thus the work of reforming assessment to promote learning promises to be one of the greatest challenges for global higher education over the next decade and beyond.

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Chapter 16 The Emergence and Development of Work-Integrated Learning (WIL): Implications for Assessment, Quality and Quality Assurance in Higher Education

Calvin D. Smith

Abstract Over the past decade there has been considerable growth in the interest shown by policy makers, researchers, practitioners and other stakeholders in work-integrated learning (WIL). This chapter will describe the development over the past decade of the discourse on work-integrated learning, and explore the implications for assessment and quality assurance, and for the future of university education. The first part of the paper (Sections 1 through 5) deals with the current context for the interest in work-integrated learning (WIL), examines the defining characteristics of this curriculum strategy and explores implications for assessment and quality assurance practices. The second part is a discussion and critique that identifies the limits of current thinking drawing on the notion of the 'ideological university' and posits a remediation for consideration.

16.1 Introduction – From 'Higher' to 'Hire' Education

16.1.1 Globalisation and the Role of Education: The Emergence of the Discourse on Accountable Outcomes

For a long time there has been ongoing debate about the legitimate purposes that higher education should take as the core drivers of its endeavours. Even the Greek philosophers had opinions on education. Aristotle, uncertain of the ultimate purposes of education (possibilities included 'the good life', intellectual or moral virtue, usefulness to living, or higher knowledge) was certain of one thing: education was a

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state matter, and moulding the citizen to the reproduction of the 'character' of the state was chief among its goals. This view was justified as being in the interests of preserving something that all citizens shared equally – an interest in the wellbeing of the state (Aristotle (translated by Benjamin Jowett), 1999, Book VIII, Parts 1 and 2).

This may seem anachronistic in a chapter on higher education in the Asia-Pacific region in 2015, yet it is not a long bow to draw to see parallels in the recurrent discourses on globalisation of economic relations that underpin more contemporary reviews of the purposes and methods of higher education. In this chapter I make the argument that the emergent and always-evolving discourse on employability fits squarely in that Aristotelian camp, deriving its moral and political power from the view that the education system, and its outputs, are really the 'possessions' of the state, and whose purposes are the economic well-being of the state. Equally, the motivation for expanding work-integrated learning (WIL) opportunities for students is underpinned by this view. Recognition of the politics of higher education helps us to see how employability and WIL fit into the national debates about the goals of education. Clarity in our appreciation of the learning goals of any curriculum is necessary for the assessment and assurance of those learning goals.

16.1.2 The 'Idea' of the University and Its Role in National Wealth Creation

Although it has been acceptable to speak of 'the idea of the university' for over 150 years, according to Ron Barnett in his introduction to a recent book on the subject, the question 'what is a university?' is not one to which we can expect there to be one single unifying answer (Barnett, 2011). The reasons may be familiar: massification has changed the profile of incoming cohorts of students, and they bring with them new aspirations and expectations; many new types of institution are now entitled to call themselves universities; within one university, different, even incongruent, ideas about the ideal meaning of 'university' can be playing out simultaneously side by side; and, of course, no amount of talking about it will result in agreement about a unifying notion, let alone action that instantiates such an ideal type anywhere.

Federal governments in Australia, and elsewhere, have been taking more of an interest in the role universities play in the creation of national wealth. This is understandable, since universities are increasingly seen as engines that produce people, ideas, and goods that can enhance economic growth. There are a variety of ways in which universities are seen as part of economic growth. One is through innovation; new knowledge that can be exploited through the creation of intellectual property means the creation of new 'products' that can be traded and sold which in turn creates wealth. Another way universities create national wealth is through the provision of skilled labour to support the productive efforts that result in the creation of tradable commodities. A third way, related to innovation, is the creation of new,

usually more efficient, and sometimes alternative, ways to produce wealth-creating, tradable commodities. Universities also contribute to national wealth indirectly through the accrual to individuals of non-financial private benefits, such as interesting work, status, better health and overall life satisfaction, that may be associated with better health outcomes (Norton, 2012, p. 10). In addition, a healthy population not only costs less in health care dollars, but healthy individuals continue to contribute to wealth creation for a longer time than can sick individuals. Public benefits include a range of non-financial or indirect effects such as lower crime rates and greater civic engagement (Lomax-Smith, Watson, & Webster, 2011, p. 102). Finally, there is the monetary value of education itself. It is estimated that the direct value to the Australian economy reaches \$24 billion annually (Norton, 2012, p. 8).

Thus, there are ample claims that can be used to bolster arguments for the importance of universities to national economic wellbeing. But to understand the links between this notion and employability, and ultimately the link to work-integrated learning, we need a historical tour of the graduate attributes agenda.

16.1.3 A Brief History of Graduate Attributes in Australia and the Journey to Employability

As early as 1992 the Higher Education Council (HEC) in the report *Achieving Quality* said of graduate attributes:

These are the skills, personal attributes and values which should be acquired by all graduates regardless of their discipline or field of study. In other words, they should represent the central achievements of higher education as a process. (Higher Education Council, 1992, p. 20)

In 1998 in Australia the Government's commissioned report into higher education *Learning for life* was released (West, 1998) and noted:

The community's expectations of higher education institutions will increase. Students, their parents, and their employers will expect better outcomes from universities and, in line with developments in other service industries, they will increasingly look for products tailored to their particular interests and needs. The growing importance of knowledge-based industries, and the increasing role of research in solving social and economic problems, will increase the importance that the community attaches to higher education. (West, 1998, p. 17)

Among their recommendations were the forebears of lifelong learning, embedded in a context of a global 'knowledge economy' focused on wealth generation:

- instilling a culture of lifelong learning which emphasises the ability to acquire new skills and master new technologies and bodies of knowledge;
- equipping our graduates to play a productive role in an outwardly oriented, knowledgebased economy;
- developing a wealth generating, world-class higher education industry as part of a broader postsecondary education industry. (West, 1998, p. 48)

The Report went on to address a concern expressed by some in response to their earlier-released discussion paper that students might choose easier courses or "courses which lead more directly to employment outcomes" (p. 114):

Nor is there any threat to universities from those students who think in a more focused way about employment outcomes. Many employers do not look for discipline related knowledge when selecting graduates, and in fact value the generic attributes that are part and parcel of generalist courses like the arts and sciences. (West, 1998, p. 114)

Around this time, and partly as a consequence of this report and the previous review, the graduate attributes agenda was gaining leverage.

The Course Experience Questionnaire CEQ (Ramsden, 1991), a set of measures of classroom and curriculum practices, which was being used as part of the quality and funding regime in Australia, had been extended by the addition of a scale to measure a set of generic skills outcomes (Wilson, Lizzio, & Ramsden, 1997). This Generic Skills Scale (GSS) along with the other CEQ scales were used for over a decade as part of the quality assurance regime in Australian higher education. Engineering was one of the first professional disciplines to embrace the idea of graduate 'soft skills' that would be a supplement to disciplinary knowledge and in 1998 Engineers Australia (the professional accreditation association for engineers in Australia) introduced the notion that all curricula should explicitly espouse the production of such 'soft' outcomes for engineering graduates (Accreditation Board Engineers Australia, 2010).

In 2000, researchers at the Centre for the Study of Higher Education in Melbourne, Australia, were commissioned to extend the CEQ instrument, (Griffin, Coates, McInnes, & James, 2003; McInnis, Griffin, James, & Coates, 2001) the result of which was, among other things, the addition of a further scale to measure outcomes at a 'higher' level than in the GSS, labelled the Graduate Qualities Scale (GQS). This project was the result of considerable disquiet in the sector at the time, regarding the CEQ and its uses by government, including the allegedly low level of skills the GSS measures. This additional scale reflected some of the counter-discourse emerging at the time, in which universities expressed their discontent with a focus on lower level skills as an ultimate measure of the outcomes of higher education. The GQS was seen as capturing a higher set of qualities of graduates than the generic skills scale did. The two scales are compared in Table 16.1.

The argument for higher-level outcomes did not last long, however. Overseas as well as in Australia, there was further debate about the role and appropriate outcomes of the university sector. In the UK, for instance, the higher education funding council (HEFCE) had required all institutions to make plans for "enhancing the employability of graduates" by the end of 2002 (HEFCE, 2003, p. 24).

In the same year, the Australian Chamber of Commerce and Industry and the Business Council of Australia prepared a report for the government called *Employability Skills for the Future* which listed the following:

- communication skills that contribute to productive and harmonious relations between employees and customers;
- team work skills that contribute to productive working relationships and outcomes;
- problem-solving skills that contribute to productive outcomes;

| Generic Skills Scale (GSS) (Wilson, Lizzio, & Ramsden, 1996) | Graduate Qualities Scale (GQS) (McInnis et al., 2001) |
|--|---|
| 1. The course helped me develop my ability to work as a team member | 1. University stimulated my enthusiasm for further learning |
| 2. The course sharpened my analytic skills | 2. The course provided me with a broad overview of my field of knowledge |
| 3. The course developed my problem-solving skills | 3. My university experience encouraged me to value perspectives other than my own |
| 4. The course improved my skills in written communication | 4. I learned to apply principles from this course to new situations |
| 5. As a result of my course, I feel confident about tackling unfamiliar problems | 5. The course developed my confidence to investigate new ideas |
| 6. My course helped me to develop the ability to plan my own work | 6. I consider what I learned valuable for my future |

Table 16.1 Comparison of GSS and GQS

- initiative and enterprise skills that contribute to innovative outcomes;
- planning and organising skills that contribute to long-term and short-term strategic planning;
- self-management skills that contribute to employee satisfaction and growth;
- learning skills that contribute to ongoing improvement and expansion in employee and company operations and outcomes; and
- technology skills that contribute to effective execution of tasks. (DEST, ACCI, & BCA, 2002, p. 7 emphasis added)

It is plain to see the direction these employability items take compared with those of the GSS and the GQS. Whereas the GSS/GQS items focus on abilities that are more individually oriented (developing the attributes of an individual regardless of how these attributes are deployed), the employability domain is strongly focused on the application of skills in work contexts, to achieve 'enterprise gains'.

Similarly, by 2006, the Scottish Quality Assurance Agency was quite explicit in exploring the meaning of employability, specifying a collection of employability domains and developing benchmarks for their attainment and measurement. The domains were:

- The ability to adapt and transfer the critical methods of the discipline to a variety of working environments.
- The ability to acquire substantial quantities of complex information of diverse kinds in a structured and systematic way, involving the use of the distinctive interpretative skills of the subject.
- · Competence in planning and executing essays, reports and project work.
- The capacity for independent thought and judgement, and skills in critical reasoning.
- The ability to comprehend and develop intricate concepts in an open-ended way which involves an understanding of aims and consequences.
- The ability to work with and in relation to others through the presentation of ideas and information and the collective negotiation of solutions.
- The ability to understand, interrogate and apply a variety of theoretical positions and weigh the importance of alternative perspectives.
- The ability to handle information and argument in a critical and self-reflective manner. (The Scottish QAA, 2006, p. 10)

Around this time in Australia Barrie (2006) was trying to help make sense of the cacophony developing around graduate attributes and described how generic graduate abilities are typically taught, namely by various ways of embedding their development in course work (Barrie, 2007).

In 2007 a report commissioned by the Business and Higher Education Collaboration Council (BIHECC) summarised the graduate attributes and employability skills lists and attempts at embedding and assessing student development in these areas, from various universities and other sources (Precision Consultancy & Commonwealth of Australia, 2007). The interest in graduate attributes in universities became focused on fixing the 'problem' of an apparent lack of the systematic embedding of developmental opportunities for students in teaching and learning activities and assessments, so that the dream of graduate attributes could be finally realised. The Australian Learning and Teaching Council (ALTC) then funded a project to support an inquiry into this problem (Barrie, Hughes, & Smith, 2009), which has been followed by other projects focused on similar themes (Barrie, Hughes, & Crisp, 2012; Oliver, 2011). More recent developments include the increased prominence of the Australian Qualifications Framework (AQF) through a legislative requirement that higher education providers ensure that all qualifications awarded are commensurate with AQF qualification levels (Australian Government, n.d., Chapter 4, Section 1). The qualifications framework contains general specifications for learning outcomes for all qualification levels from secondary school through to university, across four criteria (the university qualifications ranging from Diploma through to Doctoral degree). One of the four criteria is 'application of knowledge and skills'. At Level 7 of the Framework (Bachelor Degree level) the specification is as follows:

Graduates of a Bachelor Degree will demonstrate the application of knowledge and skills:

- with initiative and judgement in planning, problem solving and decision making in professional practice and/or scholarship
- to adapt knowledge and skills in diverse contexts
- with responsibility and accountability for own learning and professional practice and in collaboration with others within broad parameters. (AQF Council, 2013, p. 16)

There is a clear, though implicit, relevance here for work-integrated learning in curricula, to help ensure students graduate with these abilities. The emphasis on the application of knowledge to professional and work contexts has emerged as a central theme in both higher education policy and funding considerations (discussed further below). In the review of funding, work-integrated learning was acknowledged as one of the stressors in the funding environment for universities as they try and expand their WIL commitments (Lomax-Smith et al., 2011, p. vii).

In the Asia-Pacific the trend towards explicit generic graduate attributes and/or employability plays out in different ways, depending on the local perceptions of need. In Vietnam, after a long slow start, the modernisation policy 'Doi Moi', has created a series of reforming shifts in the higher education sector, focused mainly on the economic impact of education, but occasionally visiting favour upon the value of intellectuals in society (St. George, 2010); in DaNang University there is pres-

ently a push to achieve standing among the wider international university community, which is driving universities to focus on research productivity, for instance, along with graduates whose abilities contribute to economic growth (DaNang University, 2014).

Similarly, in response to reforms in the lower school sector, and a new national policy on curriculum reform, Hong Kong University has been working on a new 4 year curriculum, the generic goals of which are more traditional-sounding, individual and focused on the 'higher' abilities. Examples of these goals are the pursuit of academic/professional excellence, critical intellectual enquiry and life-long learning; tackling novel situations and ill-defined problems; critical self-reflection, greater understanding of others, and upholding personal and professional ethics; intercultural understanding and global citizenship; communication and collaboration; and leadership and advocacy for the improvement of the human condition (Teaching and Learning Centre HKU, 2013). This list of attributes contains many goals that are seen in the evolving western literature on employability.

Patton (2009) described an emerging trend in China of employers critiquing higher education graduates' lack of basic skills for work, which has the same motivational underpinnings as those seen in Australia and the U.K., including graduate unemployment and dissatisfaction among national and international employers with the lack of particular skills for the workplace with which graduates exit the system.

In spite of this call for developing the employment-readiness of Chinese graduates, the representation of generic graduate attributes in the web sites and official documentation of leading Chinese universities is sometimes subtle, sometimes implied, and sometimes non-existent. Where they are not obviously present, there seems instead to be an emphasis on either educative processes that integrate theory and practice, or on outcomes of a wholly different kind. The educative processes are many and varied, but typically include work placements or other processes that encourage the integration of theory and practice, whilst innovation and commercialisation tend to be focal outcomes.

For instance, the Shanghai Jiao Tong University main website does not emphasise employability or generic graduate skills or attributes, but these ideas are implied at the School level, in the form of application of theory to practice, and there is an emphasis on innovation through the discovery of solutions to problems. As an example the School of Mechanical Engineering sub-site states that

...the School has established a new research-oriented teaching platform and redesigned the curricular offerings to ensure both breadth and depth of content as well as practical relevance. In the newly established Lab Center, students have both space and facilities to apply the knowledge learned, to develop and test the designs and prototypes and to explore new frontiers (Shanghai Jiao Tong University 2015a)

Similarly, but even more explicitly, the School of Microelectronics espouses "the idea of '[i]mparting knowledge, capacity building, personality develop' [sic] and [is] committed to cultivate leadership, work ability, innovation and a broad vision of top research talent" (Shanghai Jiao Tong University 2015b). Again, Tsinghua

University's Department of Ceramic Design website states "the Department attaches much importance to linking theory with practice and combining Chinese traditional culture and present social demands" (Tsinghua University 2015). Notwithstanding the apparent commitment to the development of skills for work, and for applying theory to practice, the concept of *employability* itself is not one that seems to have currency.

Graduate attributes are more explicitly avowed, though again not named as such, at the highest level at National University of Kaohsiung (2015) where four overarching domains give definition to future development: erudition, responsibility, innovation and virtue. Again it is worth noting the presence of 'innovation' in this list.

Thus it is easier to find references to various forms of work-integrated learning *activities*, designed to develop the kinds of graduates universities may be aiming to produce, than it is to find references to employability or generic skills. Activities range from research-based learning, through placements and international exchanges, to entrepreneurial / start-up laboratories, and are explicitly marketed as advantageous and rewarding experiences for students.

In Japan for instance, there is a clear example, described by Yamazumi (2016, Chap. 18 of this volume), of one discipline area (teacher training) embracing and theorising the development of innovative ways of understanding and implementing the integration of theory and practice, through collaboration between university teachers and practicum supervisors, that works at the "boundary" between the normal zones of operation of these two stakeholders, and that enhances learning and practice in both zones and the development of students. An example that brings together both process and outcomes, is the National University of Singapore (2015) which emphases innovation and commercialisation as key outcomes through experiential entrepreneurial education, industry partnerships and support for start-ups.

Thus, these examples show that, though any reference to generic skills or employability as outcomes may be implicit or even absent, there is a clear and explicit commitment to forms of curriculum that integrate theory and practice, that give students "real-world" experiences and that focus on innovation or commercialisation as outcomes. In both the West and in Asia universities are seen as part of broader social and economic systems, as entities that contribute to economic and social development. However, that relationship can be interpreted differently, and in ways that differentially shape strategic direction setting within the respective higher education sectors.

The generic graduate attributes agenda and the employability skills agenda have intersected each other in Australia and in the UK, where the politicisation of the outcomes and purposes of higher education results in the insinuation of the employability agenda into the outcomes agenda. The employability agenda then tends to subsume the generic graduate attributes, since most if not all the higher-level outcomes of higher education are easy enough to endorse as abilities useful in work. Employability, however, brings certain lower-level or enterprise-relevant abilities into the mix; the consequence is that the employability agenda grows in volume as it develops.

In 2010, Denise Jackson conducted a large-scale review of the employability literature (Jackson, 2010, 2013), the alarming, yet not so startling result of which was to show just how complex, a-theoretical, and constantly evolving the idea of employability skills had become over the years. She identified over 40 constructs that had cumulatively been deployed in defining this evolving domain. In Australia, and commensurate with Jackson's historical-evolutionary account, the early work on employability (DEST, ACCI, & BCA, 2002) had been developing into the 'Core Skills for Work' framework (DIICCSRET & DEEWR, 2013), a highly elaborated framework of employability dimensions.

Whereas the early-adopted generic graduate attributes were underpinned more often by the discourse on the 'higher' outcomes of higher education, the employability skills agenda is underpinned by the more pragmatic discourse of economic benefits and a utilitarian perspective on graduates; the focus shifted from developing people with certain qualities to developing people with certain utility. The employability skills agenda arose and evolves in the confluences of two discourses – one is focused on the personal value to graduates and the societal value of the development of persons with certain *dispositions*, the other is focused on economic outcomes, for individuals and for the state, of developing people with certain *abilities*.

The balance of power between those two discourses, however, is a political outcome and depends on the state of the political positioning of higher education within a broader social context. In Australia, we have seen a tendency towards the Aristotelian view that the proper role of higher education is to contribute, through the graduates it produces and through research, to innovation, trade and the broader economic well-being of the *nation*.

16.1.4 The Place of Work-Integrated Learning in the Discourses on Employability

Running parallel to the evolution of employability as a concept, certainly in more recent years, has been the emerging ascendency of work-integrated learning (WIL) as the curriculum strategy of preference for producing graduates who are 'employment-ready' (Smith & Worsfold, 2013b; Smith, 2012). WIL has been recognised in this connexion in the BIHECC report (Precision Consultancy & Commonwealth of Australia, 2007), in the remonstrations of Universities Australia (Universities Australia, 2008), in a recent joint statement on collaboration to grow WIL in Australia (UA, ACCI, BCA, & ACEN, 2014) and in the strategic plans of many universities. As already mentioned, the application of knowledge in work contexts is a mandated outcome of university degrees through the Australian Qualifications Framework (AQF). WIL is seen as offering a way forward for securing the kinds of enhanced levels of innovation and competitiveness of the economy, through employability (the ability of graduates to use their skills to best effect in workplaces), enhanced utilisation of those graduates' skills by employers, the fostering of innovation and better collaboration (between businesses and universities) (UA et al., 2014).

16.2 High-Authenticity Learning Environments

16.2.1 A Closer Look at the Dimensions of Work-Integrated-Learning

It should be noted that WIL itself is not new – many disciplines have relied on some form of WIL (often using simulated environments) for most of their recent histories. Examples include the moot court in law schools, the mock hospital ward for nurse education, standardised clinical patients, junior doctors' schemes for medical education, and of course flight simulators for pilot training. What is new is the vigorous interest in this curriculum innovation in the past half-dozen years. With that interest has come considerable research activity and the attendant need for closer specification of the meaning of the term 'work-integrated learning'.

Work-integrated Learning (WIL) involves the creation of high-authenticity learning environments either by placing students in workplaces (placements, internships, volunteering) or by simulating workplaces (e.g. student dental clinics, mock court rooms, flight simulators, simulated patients and hospital wards). It can also include having students do authentic and meaningful tasks, within the bounds of the university, for employers or other legitimate and real stakeholders (e.g. consultancy or project work).

There is no clear and agreed-upon definition of WIL. In their 2008 scoping study conducted to assess the spread and use of WIL throughout the Australian higher education system, Patrick et al. (2009) used the term 'work-integrated learning' as an 'umbrella term' for a wide variety of strategies that attempt to incorporate aspects of real-world work experience into the curriculum. In the years since then though, considerable research activity has begun to clarify and specify the elements that constitute this curriculum strategy, and it is to these elements we now turn.

16.2.1.1 Integration

Many curriculum forms come under this loose definition of WIL including those that focus only on work-based learning or work-experience. There is one attribute that separates such curriculum strategies from WIL, however: the deliberate or intentional design feature that requires, promotes and provides an opportunity to apply disciplinary knowledge in the workplace context. What is intended here is the notion of a nexus between canonical knowledge of the discipline and the activities constitutive of professional/workplace practice – a theory-practice nexus (Smith & Worsfold 2013a, 2013b).

The reason for focusing on the theory-practice nexus is that even where it may be assumed that (a) students go into placements with the appropriate canonical knowledge, and (b) their placement experiences presented them with problems to which the knowledge is relevant, there is no established way of assuring, measuring, or even triggering that the students applied that knowledge to the problem and applied it correctly. It is possible for students to have copied practice routines they have

observed or been taught, and then 'got lucky' because the circumstances were such that the practice was *accidentally* appropriate. This presents the educator with the problem of not knowing whether the practice was thought through and deliberately chosen. Worse still, this general kind of issue can foster the reproduction in work contexts of corrupt or theoretically incorrect procedures, because if no justifications for actions are sought, no reasoning behind actions can be investigated and appraised. As articulated elsewhere:

It is the presence, and integration, of disciplinary theory (not just practice theory) that makes WIL an integrating curriculum strategy – not merely work experience, not on-the-job training; and potentially much more than an opportunity to develop practice competency. The distinction here mirrors the difference between work in which trained and routinized practice is the norm, versus work in which theoretical underpinnings play a part. (Smith, 2014, p. 215).

In some fields, effective practice alone may be sufficient for professional or workplace success. It is difficult to imagine this being true of disciplines taught in higher education, but there is a branch of theory that works from this standpoint. Writers, particularly in the field of work-based learning, seem to hold the view that practice is the curriculum (Billett, 2001, 2004). Clearly this can only be the case in a limited number of circumstances, and never where integration of knowledge and practice is the goal. Where it is true, canonical studies of practice would constitute the curriculum – and training in the development of practice would be its goal.

At the opposite end of this focus on practice is the development of curricula that are biased towards or even solely theoretical, or knowledge-based. Again, being an extreme standpoint, such curricula would be rare if the discipline being taught is one that involves practice of any kind; and most do. Notwithstanding this however, one of the key motivations for WIL is the supplementation of theoretically heavy curricula with practice, as a corrective for the perceived imbalance.

Because both are discourses, neither a practice-based curriculum nor a knowledge-based curriculum is sufficient to produce an effective professional practitioner in any discipline. It is in the integration of these two that we find the point of interest in WIL – the theory-practice based curriculum.

What distinguishes WIL from work experience and work-based learning, then, is the intention that integration of knowledge and practice should be a goal (Smith, 2012). This is not to denigrate curricula whose goals are focused in practice and experience, but to sharpen our focus on the distinguishing character of WIL. Sometimes curricula are designed that implement work-based learning or work experience, instead of work-integrated learning. Yet, all these curricula are on occasion grouped together under one rubric. This is a problem of greater consequence than mere definitional fogginess; specifically, clarity around this notion helps to make the implications for assessment and quality assurance practices much clearer, for the way we assess and what we assure depend totally on what we intend students to have learned. What these curriculum strategies do share is the incorporation of high-authenticity experiences in which students engage; that is, experiences that either mimic closely (with high fidelity, if you will) the real world of work or embed students within real-world work settings.

16.2.1.2 Authenticity

Authenticity in this context is understood as the degree to which a learning environment mirrors the real world of practice. Clearly placements, being situated in that real world have an advantage in this regard, compared with simulations, which can be close approximations (as in the flight simulations used in pilot training) or poor copies of reality (as in classroom role-plays). But there are other dimensions of practice that must be articulated which are not necessarily present even when the student is situated in a placement or a very good simulator. These are autonomy of practice (appropriate to the professional context) and consequentiality of action (Smith, 2012).

16.2.1.3 Autonomy of Practice

When students graduate they will practice autonomously. If WIL serves to induct students into practice, then an appropriate degree of autonomy should be afforded to them during the WIL part of their studies. There will be some limits on this idea in some disciplines (e.g. medicine or psychology), but without autonomy the link to consequentiality of action disappears; there is no sense of risk-taking and so any commitment to try and 'get it right' independently will be degraded.

16.2.1.4 Consequentiality of Action

Practitioners' actions have consequences for their patients, clients, employers and, at times, the broader community. Sometimes these consequences are good (e.g., the creation of a new invention or an innovation in practice); sometimes they are not good (e.g., mistakes in clinical decisions, choices of wrong ingredients/chemicals for a process). Without an element of consequentiality, WIL experiences lack a defining characteristic of real-world practice; the degree of consequentiality is a matter of appropriate fit to circumstances, of course.

Placements are more likely than simulations able to afford to students the opportunity of consequential action, and are also more likely to potentially offer them autonomous practice opportunities, though the latter is greatly a function of the local arrangements in situ.

16.2.2 Placements

The most obvious form of WIL is the placement in which the student gains course credit for spending time in an actual workplace, doing (ideally) consequential and meaningful work for an employer, enterprise or other organisation such as a charity. The idea is that the work, being in the discipline area of the students' studies, gains

them real-world work experience which in turn makes them better candidates for successful transition to paid employment than they would have been without this directly relevant experience.

Placements are considered a win-win-win situation in which employers get access to recently educated labourers and potential recruitment stream candidates; students gain experience and job-market 'edge'; and universities can potentially acquit some of their broader responsibilities and commitments to producing work-ready graduates.

16.2.3 Simulation

It is not necessary for students to be in a workplace to experience some aspects of authentic work and this has given rise to an increased interest in simulation as a form of WIL. Without incurring some of the administrative costs associated with finding and managing placement opportunities, simulations can provide the feature that is at the heart of placement: authenticity. Authenticity is the degree to which the experience had by the student is similar to that which the real workplace situation would provide. In tandem with the development of an interest in broadening the use of placements in higher education, the discourse about WIL has evolved also, and in recognition of the essential role that authenticity plays in the understanding of the WIL curriculum, simulated environments are also being included under the WIL rubric.

Simulations, like placements, are not new in some disciplines; for instance in aviation, simulation emerged as early as 1910, and was *de rigueur* in commercial aviation training from about 1960 when digital control systems were introduced (Page, n.d.). Similarly, in medical education 'standardised patients' have been used to simulate medical encounters since the 1960s (Rosen, 2008).

Simulations are important because placements are an expensive alternative to classroom learning environments, require considerable managerial oversight, preparation, relationship management and supply-chain growth strategies and investments that are not incurred for classroom learning environments, and they reduce the amount of control over quality compared with classroom environments; simulations can bring about some of the learning that would occur in placements, and can be cheaper. Simulations are not necessary inexpensive (e.g. flight simulators cost millions to acquire), but in some situations are seen as less costly or more controlled or convenient alternatives to placement. Simulations bring other benefits also, compared with placements, as a way to inject authenticity into the learning environment.

Simulations solve three of the basic problems in the quality control arena: first, they allow standardisation of experiences and thus leverage some guarantee about the nature, depth and quality of learning that occurs; second, they facilitate supervision by teaching personnel, which increases quality control surveillance; and third, they allow for programmatic control over the variety of situations to which students

are exposed. However, simulations by necessity lack one of the elements of authenticity – real consequences of action. As a result, simulations, even very good ones such as flight simulators, may not provide the full gamut of authentic experiential learning; of course the degree to which this is a critical limitation is contingent upon the fit with learning goals that the simulation is designed to achieve.

16.3 Outcomes from Work-Integrated Learning

16.3.1 Employability and Employment from Experience

One important reason for the enthusiasm around WIL is the idea that preparation for the world of work is an important goal of higher education. This idea has enjoyed support from three significant stakeholders: government – which sees higher education as a key contributor to workforce and innovation development; students – especially where there are costs associated with higher education and obtaining employment is seen as an appropriate return on investment; and employers who periodically critique the level of 'fit' between what they perceive as their needs and what they perceive are the attributes (skills, attitudes, values, behaviours and knowledge) of graduates entering the workforce.

Of course, a problem that emerges for higher education providers in the current climate is that that employment is not necessarily a by-product of employability, but is rather a function of market opportunities. This is a matter beyond the scope of the present chapter, however.

The idea of preparation for employment, however, often is replaced by a more concrete and measureable notion of being employed; in other words, employability and employment are sometimes conflated under one term, or the notion of employability is metonymically obscured in the repeated focus on employment. This has been a central concern among the higher education community since Lee Harvey started his seminal work on employability. As he put it

...employability is not just about getting a job; it is about developing attributes, techniques, or experience for life. It is about learning, and the emphasis is less on "employ" and more on "ability." In essence, the emphasis is on developing critical reflective abilities, with a view to empowering and enhancing the learner. Employment is a by-product of this enabling process. (Harvey, 2005, p. 13)

The idea of preparation for employment can mean as little as 'has had experience in the workplace', and it is sometimes the case that curricula are set up to provide exactly that, and no more, and legitimately so, given the contexts in which they are found. Legitimacy notwithstanding, there are obvious limits to the setting of such low goals for a WIL curriculum; the expense involved in getting students into the opportunity quickly seems to outweigh the outcomes, and the opportunity seems to be a relative waste of resources given what could have been attained with a richer set of aims.

Employability on the other hand brings its own challenges. In spite of the interest in the concept and the informal growth in its putative sub-dimensions there is little to guide researchers in its conceptualisation and measurement, and there is no agreement on the best way to approach this problem. A recent project in Australia has derived an empirical model of the sub-dimensions of employability listing them as: professional standards, readiness to commence work, collaboration skills, lifelong learning, integrative thinking and informed decision-making (Smith, Ferns, & Russell, 2014). However there are many ways to approach the conceptualisation and measurement of employability.

16.3.2 Professional Competency

An obvious candidate outcome of WIL curricula is competency in some or other set of professional or workplace skills. In this way, competency is seen as highly focused on practice; in this view it is about the ability to do something competently. But professional practice is multi-dimensional and competency is a term used more broadly across a range of domains of practice, including applied reasoning. As Girot (1993) observed over two decades ago with respect to nursing:

If competence is concerned with the ability to coordinate cognitive, affective and psychomotor skills, in the carrying out of nursing activities, all three elements of learning needs to be addressed in the process of assessment. (p. 84)

There has been a focus on the development of clinical skills especially (e.g., in nursing, medicine, physiotherapy), however general professional competency spans psycho-motor, cognitive and affective domains (Epstein & Hundert, 2014). This is true in both the medical/clinical disciplines and in other non-clinical professions such as engineering and architecture. But equally this multi-dimensional notion of competency can be applied in non-professional or semi-professional occupations (e.g., event management, urban planning or property valuation). Epstein and Hundert put it this way:

Building on prior definitions, we propose that professional competence is the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served. (Epstein & Hundert, 2014, p. 226)

A slight re-ordering and clustering of their dimensions is instructive, for it highlights the trajectory of this essay – from skills, through integration, to ethical practice. They propose the judicious use of:

- technical skills and communication (the skills focus in the employability and generic graduate attributes agendas);
- knowledge and clinical reasoning (integrative thinking and application of knowledge to practical problems in the workplace); and
- emotions, values and reflection.

I discuss the first two of these in the ensuing sections on assessment and quality assurance and elaborate an argument related to the third (emotions, values and reflection) in the second part of this chapter – the critique and discussion section.

16.3.3 Integrative Learning

The application of knowledge in situ seems a simple notion, but is much more difficult to define and assure than it first appears to be. Even were we to assume that students embarking on placement have in their minds the canonical knowledge of the discipline, and even where their placements afford opportunities to apply that knowledge to a problem for which the knowledge is relevant, we do not have easy access to evidence that they have in fact done the things we would regard as having applied that knowledge to the problem, let alone applied it correctly (Smith, 2014, p. 214). Nevertheless this idea of the application of knowledge in situ is *de rigueur* in WIL.

To address this problem we need to be very explicit about what we mean when we say 'apply theory to practice' and assess according to that. One attempt has been made to be very explicit and clear about this notion (Smith, 2012) and that has resulted in a focus on the notion of 'integrative learning'. This has been operationalised as a mix of: attempting to apply knowledge in situ; reflecting on that attempt; reflecting on/evaluating workplace practices in light of known canonical knowledge; and, evaluating/re-assessing canonical knowledge in light of workplace practices. In this way the idea of applying knowledge is seen as a dialectic between experience and canon.

16.4 Assessment of Work-Integrated Learning Outcomes

16.4.1 Assessment Options, Contexts, Purposes and "Fit"

Based on the discussion of WIL outcomes above, it is possible to review implications for student assessment and quality assurance. The discussion of assessment below makes the assumption that it is a pedagogically sound practice to align assessments with intended learning outcomes (Biggs, 1996); therefore the discussion of assessment proceeds stepwise through the three categories of learning outcome described above.

WIL curricula, it has been argued, are designed to give students opportunities to:

- Experience the world of work;
- Develop competency in skills, professional abilities, professional attitudes and attributes;
- Apply their knowledge and skills in situ (Smith, 2014, p. 211).

The assessment of students' outcomes can be designed with a view to aligning assessment activities with the outcomes they serve.

16.4.1.1 Experiencing the World of Work

There are two ways of conceptualising and assessing this goal: (1) mere exposure usually accompanied by reflection; and (2) use of Kolbian processes to learn inductively from the experience (Boud & Solomon, 2001; Boud & Walker, 1991; Billett, 2001, 2004, 2008; Kolb, 1984) and thereby generate some insights about practice. The second of these is not relevant to our concerns as it does not connect with disciplinary canonical knowledge, but rather uses experience to generate a kind of practice-theory.

Exposure to the experience of the work-world can be assessed effectively using devices that trigger students' reflections upon the experience. Open-ended protocols work best for capturing a holistic account of the totality of the experience, however this approach creates a challenge to reliability since each student's account will be idiosyncratic. Thus they should be marked against a rubric of criteria and standards in a criterion-referenced assessment framework. In this way validity and reliability issues can be addressed, which in turn will help with accreditation purposes of assessment. As well, such protocols can be given an appropriate connection to disciplinary canonical knowledge (Smith, 2014). As well as stabilising validity and reliability (by using criteria and standards descriptions to guide marking) this approach remains open to the different themes that different students will want to address (Bates, 2003, 2005, 2008; Boud, Keogh, & Walker, 1985). Experience alone however does not capture and exploit the full raft of possibilities from WIL curricula.

16.4.1.2 Competency Assessments

A focus on skill development and application has underpinned many WIL curriculum designs. This makes sense especially in disciplines in which skills and practice, rather than knowledge, are defining characteristics. Thus the assessment of skill is well-established in some disciplines, and there are several approaches that have been tested for validity and reliability. The use of standardised patients and objective structured clinical exams (OSCEs) in medical education are clear examples of this. In recent times endeavours in this direction have resulted in highly sophisticated and validated instruments (e.g. Dalton, Davidson, & Keating, 2011).

A comprehensive review of the field of assessment of professional competence by Epstein and Hundert (2014) showed how complex a task and sophisticated a field this was, because it involved a large range of different abilities, some beyond basic skills:

In addition to assessments of basic skills, new formats that assess clinical reasoning, expert judgment, management of ambiguity, professionalism, time management, learning strategies, and teamwork promise a multidimensional assessment while maintaining adequate reliability and validity. (Epstein & Hundert, 2014, p. 226)

However, after noting that progress had been made assessing a broader range of abilities, they concluded that:

Although curricular designs increasingly integrate core knowledge and clinical skills, most assessment methods evaluate these domains in isolation....Few reliably assess clinical reasoning. (Epstein & Hundert, 2014, p. 230)

Here, Epstein and Hundert point to the one domain of assessable outcomes of WIL curricula, which, though relatively less well-recognised, is at the heart of the enterprise: the assessment of the students' abilities to apply knowledge in a work-place context, to a real problem.

16.4.1.3 Integration – Applying Knowledge In Situ

Drawing on the definition given above, the assessment of integrative learning should focus on the dialectic between canon and practice, in ways that cause the students' attempts at application and their reflections (on the attempt, as well as on the knowledge and the practice) to be made explicit. But there are many contexts and disciplines in which this can be given a more precise form. In the clinical disciplines especially but in many if not most others, there is the need for practitioners to make decisions daily – either diagnostic decisions about what is going on, or action decisions that rely on predictive abilities informed by canonical theory – in order to enact professional practice. These decision moments provide rich ground for the assessment of a particular kind – the assessment of *justifications*. By 'justifications' I mean giving reasons why an interpretation of reality is justified by reference to theory (e.g., in medical contexts: why this diagnosis rather than that) or why a proposed action is the right one given the circumstances, again based on theory. The use of justifications as a way to get at applied-theoretical reasoning opens up rich territory for the assessment of integrative learning.

A further complexity with placement WIL is the need for the workplace supervisor to play a role in assessment. Most would agree that this is an important role for employer partners to play (Orrell, 2011; Precision Consultancy & Commonwealth of Australia, 2007). Even where there is a tradition of (unpaid, but well developed) supervision arrangements, these have been challenged by demands for payment for the service, on the argument that it takes clinical time from practitioners. The role of employers as collaborators in the design and conduct of placement experiences, including supervision and assessment of students, is emerging as a key challenge for the future of WIL.

16.5 Quality Assurance in Australian Higher Education

An implication of the emergence of WIL in higher education curricula is that quality assurance models used for decades in the sector are not well-suited for the purposes of assuring the quality of these complex curricula forms. The reasons are fairly obvious.

First, the 'system' being evaluated or quality-assured in current approaches is one in which there is considerable control over the teaching and learning process within the university, or, at least, over what the university injects into that process – the teachers and their practices. The evaluation of teaching has a long history and has been used for decades to, at first, enhance quality, and more recently and more frequently, to monitor and control quality. In the case of placement WIL there is relatively little control exerted by universities over what happens to students.

Second, WIL curricula that involve placements also involve 'outsiders', industry partners, professional practitioners and so on. Triadic relationships between student, university and professional partners are complex and the university or program/unit convenor does not have the same control over the production process (i.e. the curriculum) that they do when the production occurs within the university. The student is in the hands of the industry or professional partner for the duration of placement activities.

Simulations provide an interesting opportunity here. Because simulations do not necessitate the involvement of outsiders, there is a greater degree of control that the teacher has over students' experiences. This in turn lends itself to standardisation of both the student experience and the assessments used.

16.5.1 Process/Input Evaluation

One approach to quality assurance is to appraise the quality of the production process against criteria and use the appraisal results to amend the process itself. This can be done for WIL criteria when we understand enough about the mechanisms by which the elements of the process produce particular outcomes. There has been progress towards this end which points towards the possibility of such an approach. It is possible to think of WIL placements as featuring four fundamental processes or attributes (Smith, 2012):

- Authenticity (doing meaningful, consequential work with appropriate autonomy);
- Preparation and support (being given psychological and pedagogical induction, learning-focused supervision and psychological and pedagogical debrief);
- Activities that focus on integrative learning (getting students to reflect upon their
 experience in light of canonical theory, canonical theory in light of experience,
 and their attempts at applying their knowledge in practice); and
- Assessments that focus on integrative learning (assessing students' abilities to apply theory in context in a range of ways).

There is evidence of the criterion validity of this scheme in studies showing the relationships between these elements and student outcomes (Smith & Worsfold, 2013a). It is possible to operationalise these concepts in a way that makes a quality assurance scheme workable.

A process approach to the evaluation of simulation quality will need to focus on the degree of authenticity, the scope of the simulation experience as compared to the 'real thing', and the degree to which integrative learning was the focus of assessment protocols.

16.5.2 Outcome Evaluation

One can also focus one's evaluation or quality assurance on outcomes. This is commensurate with what was said earlier about focusing on the integrative learning outcomes of WIL. Assessment typically is focused on individual student outcomes. From the point of view of quality assurance the focus shifts to the performance of whole cohorts of students.

This is emerging as a key approach in some disciplines. For example the American Association for Collegiate Schools of Business (AACSB) uses an approach to quality assurance called 'assurance of learning' in which the focus is squarely on the students' learning outcomes. These are aggregated to unit/subject cohort level and the teaching staff look at the distributions across the performance categories or the distribution of marks. If they do not meet internally generated benchmarks for acceptable cohort performance, then work is done to improve the teaching processes. Such an approach, though attractive, is less likely to work for WIL because of the lack of control academic staff have over the process itself. Nonetheless, it is a direct approach that looks to the outcomes first and foremost.

For it to work, of course, there needs to be clarity around the objectives and outcomes of WIL curricula, whatever these may be. We find ourselves returning full circle to the concerns with which we commenced this essay – the purposes and goals of WIL curricula in university contexts. The conceptualisation and operationalisation of employability is a complex discussion in its own right, and we have elaborated a definition of integrative learning as a key outcome. Whether the outcomes are integrative learning or employability, clarity and explicitness are required before evaluation of outcome achievement can take place.

An outcome-focused approach requires the use of assessments that explicitly test integrative thinking, by requiring students to produce justifications for their actions in the workplace, for instance. The use of aggregate performance data for a cohort of students will only be possible with the advent of validated and reliable testing instruments (such as the instrument as developed by Dalton et al. for physiotherapy (Dalton et al., 2011)) which target integration; this is an onerous task and may not be suited to all disciplines.

Again, simulations have the benefit of standardisation of experiences and assessments, at the cost of some elements that placement provides such as consequentiality. Thus, although an outcome-based approach to quality appraisal may be more easily achieved, the quality of the experience is already compromised for some outcomes by the process of simulation itself. The key here is the fit between the desired outcomes and the educational processes used.

16.6 Discussion and Critique: The 'Ideological University', Globalisation & Work-Integrated Learning

It is instructive and sometimes fruitful to take a step back from the minutiae, to gain a better perspective on the phenomena that occupy our deliberations. In this section, the previous discussion of the discourses that have underpinned the emergence and development of the generic graduate attributes and employability skills agendas are put into a broader, more theoretical context. Drawing on Barnett's (2013) writings, I situate these discourses in the broader notion of the 'imagined university' and develop an argument that derives a classification scheme for the outcomes of the 'entrepreneurial university' (a case in point of the imagined university). From this point it is easier to see the shortcomings of this conception of the university and its role and purposes. A proposal is made for a remediation of those shortcomings.

Barnett posits that imagined universities can be located in a three-dimensional conceptual space, occupying positions on the following axial continua: depth/super-ficiality, endorsement/criticality and optimism/pessimism. 'Depth' refers to the degree to which a conception pervades the organisation (structurally and, one might say, discursively); at its opposite are conceptions that are "superficially attractive and even utopian, and yet without purchase" (Barnett, 2013, p. 55). 'Endorsement' is the degree to which a conception is used within a university to maintain existing power structures and relations – it is essentially conservative in this sense; at its opposite is criticality, the idea of the university as a centre of critical consciousness. Finally, the 'optimism-pessimism' dimension indicates the dispositional perspective of those with an interest in universities as institutions – some viewing the future of the university as bright, others viewing that future as bleak (Barnett, 2013, p. 55).

Ideological universities, according to Barnett are those whose 'idea' is deep, endorsing and optimistic. Their underpinning discourses are deeply embedded culturally, drive decision-making and strategy, are un-questioned, are used to maintain the status quo of power relationships within and beyond, and constitute a forward-looking, collaborative approach to engagement with stakeholders (government, students, and industry). The increasing saturation of discourses about the purposes and role of university education in the last 20 years with economic imperatives has seen the continued refinement of the corporatisation of the sector and is a case in point. This comes with an emphasis on the entrepreneurial exploitation of intellectual property, the development of the knowledge economy, and increased financial accountability at every level from departmental budgets to questions about the economic relevance of the arts.

In Barnett's terms the "entrepreneurial university" is one of the ideological-mode conceptualisations of the university (Barnett, 2013, p. 80). Entrepreneurial universities, he says, are associated with the ideas of "innovation, income generation [and such universities are] self-consciously intent on identifying and projecting the services and products for which it might find customers...in different markets" (Barnett, 2013, p. 78). Those markets could be exploited through the sale of educational products, the sale of expertise-consultancy, the exploitation of research outcomes or the creation of 'spin-out' companies (Barnett, 2013, p. 78–79).

The parallels with the previous points about the motivations for engaging in WIL are obvious, but in case they are not sufficiently so, let me restate that the case for WIL is embedded firmly in economic arguments about the new globalised and knowledge-based economy and the universities' role is feeding the supply chain of knowledge workers, professionals and entrepreneurs that will allow the nation to maintain economic wellbeing.

These discourses often feature an urgency related to what might best be described as an 'economic race'. As other nation states gear up their education institutional activity as well as their economic activity, we agonise over the possibility that we will slip behind in this race. This is seen time and again and shows how significant the link is between education (all levels, but especially tertiary and higher education) and wealth. The 'pathway to success/salvation', in this view, is through innovation and the production of new ideas, technologies, engineered objects, chemicals, processes and so on that can be brought under the purview of intellectual property rights and exploited.

Taking this view to its logical conclusion, the university system might be seen as producing a number of specific identities: (1) 'knowledge workers', a new working class for the knowledge economy, whose work aids and assists the system and other players within it, working to support capital, innovation, and 'keeping up'; (2) the professional class, which is not a new category, but one that can be seen as an essential outcome of the higher education system, vital for ongoing system maintenance and service to the population; (3) a new class of entrepreneurial thinkers who integrate disciplinary knowledge, entrepreneurial practices, and intellectual property awareness or 'savvy'.

These three classes can be situated in a matrix, the two axes of which are related to the degree to which they use or apply imagination, and the degree to which they rely on a networked or distributed system of connections with others to achieve their ends. Looked at against these axes a fourth class becomes apparent – a group that uses creativity, but does not exploit it for financial gain; the 'creatives'. Again, this group is not a new class per se, but becomes visible when the scheme is applied (see Fig. 16.1). This 'imagined university' notion helps us to again situate the public enthusiasm for WIL, in the discourses that are deployed to promote it, because they are the same discourses that give definition to the neo-liberal notion of the university, its goals and broader purposes.

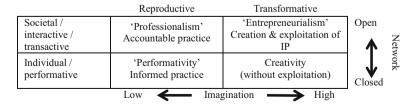


Fig. 16.1 Four identities produced by the globalised university

In the reproductive quadrants of Fig. 16.1 are the 'jobs' and 'professions', by and large less innovative, less imaginative, and therefore more reproductive of current practices. WIL helps to assure that graduates perform well as individuals by creating a better learning environment and approach in which to develop abilities in applying existing knowledge to workplace situations. Practice here is knowledge-informed, and WIL helps to ensure competence in skills and in the integration of knowledge and practice.

On the more creative and transformative side of Fig. 16.1 sit the purely creative activities of individual (non-exploitive) artisans and the entrepreneurial creators of new intellectual property for exploitation in the global market. The rhetoric around the future of the global economy is a rhetoric of innovation and the exploitation of intellectual property rights, although the language is often less direct. WIL feeds this political end when it is seen as a means by which knowledge transfer can be facilitated from knowledge creators within research organisations to knowledge exploiters in the economy. New applications of knowledge help to create added value and new products for sale in global marketplaces, which contribute to the national economic bottom line.

This way of thinking about the imagined university does two things: it helps us see what is being imagined, and it helps us see how WIL is constituted as an *aide* to the production of the intended outcomes of the imagined system. Although helpful in its own right, this abstract digression reveals a gaping deficit in the thinking that underpins the act of imagining the university and its outputs this way; it is to the exploration of this deficit that the final section of this paper is dedicated.

16.7 Conclusion - From 'Higher' to 'Hire' and Back Again

Returning to Aristotle, then, one of his possible goals for education was 'virtue'. The problem with the view articulated so far is that, although it may make good technical and instrumental sense to understand the curriculum in this way, therein lies its gravest shortcoming: it is too instrumentalist by far. There is no place in such a scheme for virtue, for the ethical consideration of either the consequences of our educative practices or the actions of the people those practices produce.

The global financial crisis that tarnished the economic fortunes of so many during 2009 (and beyond) was not a consequence of the actions of bad people – it was the consequence of the bad actions of technically very good people. The ability to create instruments that embodied 'derivative' value, layered one-upon-another, and sell them on in a merry-go-round of wealth creation, was a piece of polished genius, the result of a fine higher education. The problem was not the technical proficiency of the derivative instruments but the ethical consideration of the consequences of building layers of wealth on a tenuous foundation. There was not a great deal of thought given to the consequences of a decline in the value of the foundational goods that underpinned the derivatives.

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Similarly, the practice of 'fracking' is a kind of triumph of technology; in that sense it represents a scientific/engineering pinnacle of higher education, one that we might well celebrate. The trouble with fracking is that it carries with it a range of environmentally harmful consequences, including poisoned aquifers and water ways. So the technical efficiency of the practice, the proficiency of the practitioners, and the genius of its creators, is not in question here, but rather the lack of ethical consideration of the consequences of the practice. Miller describes this as a "misappropriation" of the implications of knowledge created in the academy (Miller, 2008, p. 111).

As governments and universities both look solely to performance indicators such as employment, employability, intellectual property creation and exploitation, and economic growth, to judge higher education, they conspire or collude together to elide one of its unique contributions – the transformation of individuals, morally. We need to be reminded occasionally of the possibility that education transforms people not just in merely instrumental ways; it is capable of transforming them morally. Failure to do so would result in an incomplete education; as noted above Epstein and Hundert's (2014) multi-dimensional perspective on professional competency includes three broad areas – skills, reasoning and values.

Instrumentalist outcomes, and the processes that support or facilitate their development, need to be understood in a broader context, a consequentialist ethical context, one that brings to bear on each action, decision, and invention, at least the consideration of the myriad of possible impacts that each may have, on a broad range of constituents. And 'constituents' might be understood widely here also, to include other animals or ecosystems.

To achieve this, assessment of abilities-in-context, would need to have a broader scope for context than just the operating environments into which new graduates are expected to pour, and in which we all are hoping they will perform with excellence. To achieve this broader perspective-taking would require our teachers to facilitate students in reflecting upon the broader social context and consequences of their profession, their discipline, their work context and their actions. It is this broader context of operation that will give ethical meaning to the actions performed in work-places, and it is only this broadening of perspective-taking that will free us of the myopia of the short moral horizons created when we focus only on immanent performances, immediate local consequences and economic gains. This is more likely a task for the academic and institution rather than one for employers supervising placement students; the latter have taken their bearings from their moral compasses and set their courses.

With the emergence of the emphasis on WIL in discourses on the idea of the university, we see playing out a particular case of what Barnett calls the "dynamic relationship between idea and form" in which ideas about the university impact on the structural and procedural form of the institution, and, in equal measure, innovations in form impact on the ideas we have about what constitutes the institution (Barnett, 2013, p. 77). WIL is a good example of this. Discourses about the quality of graduates (measured in terms of their employability or work-readiness), motivated by the contextual discourses of economic urgency, with their attendant poten-

tial risks and pay-offs of different action trajectories, have placed WIL at the heart of decisions about what form curricula should take. But even as curricula are rearranged, resistive discourses emerge (or re-emerge) about the appropriacy of these emphases on work-place performance, employability and so on (Holmes, 2001).

To arrest a further spiralling and narrowing of our conceptions of the outcomes and purposes of universities towards the instrumental and economic imperatives of the state, WIL curricula must incorporate ethical, environmental and sociological dimensions; interestingly, placement WIL curricula may be an ideal ground for the development of these dimensions of thinking. Because students 'interface' with the real world in placements, they have an opportunity to consider the ethical, environmental and sociological consequences of the activities they have engaged in or witnessed. For this to have educational value it would need to be scaffolded, guided by appropriate sensitising literature, challenging questions that trigger broad, multidimensional thinking, and supportive workplace supervisors; considerable investments that will take time and commitment to realise.

The assessment and quality assurance regimes for this higher level of outcome would have to align with the outcome itself. This will require operationalisation and validation of assessment tasks and items, and the creation of quality assurance measures that target the ability of students to reflect upon the broader consequences of their workplace practices, indeed of the industries in which those practices are situated. This in turn may require educators to develop their curricula even more to incorporate ecological or sociological perspectives on the disciplines they teach.

Universities serve multiple stakeholders in different ways and disciplinary curricula often serve at least these three: (1) students-as-customers; (2) accreditation agencies, as quality assurors; and (3) the community or employers as clients or consumers of the products of education. The growing interest in WIL is premised on the view that education is a societal good, rather than either an end in itself or a means to a better life for individuals; it is seen as good for national productivity and the economic wellbeing of the state. But securing outcomes from any educational process requires a prior step, namely establishing clarity about the goals one is seeking to have the system produce. Clarity around the goals is essential before thinking about how WIL might best be configured to produce those goals and whether and how WIL might allow us to assure not only economic competitiveness but also the promotion of inclusive and ethical practices.

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Chapter 17 The Development of Quality Assurance Practice in Japanese Universities

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Abstract In the era of globalisation, quality assurance mechanisms promote accountability and provide impetus for improving learning and teaching in Japanese universities. This chapter traces the development of quality assurance practices in Japan and situates it within the changing context of market forces and socioeconomic concerns in the Japanese society. We began our discussion with a brief description of the status of higher education in Japan before World War II, highlighting the important role of entrance examination as a critical step for assuring education quality. During the post-WWII period, the quality assurance mechanism was initially administered through an accreditation process based on the US model, which was later replaced by a system of self-monitoring and evaluation. Under the influences of marketization, the institution-based self-evaluation process was considered insufficient and third-party external review was implemented in 2000s. Looking into the future, we anticipate that the Japanese quality assurance system will be increasingly challenged by internationalization of higher education in Japan and other parts of the world.

17.1 Introduction

Japan has achieved a status of universal education in its higher education provision. According to the records of the Ministry of Education, Culture, Sports, Science and Technology (MEXT), there were 783 universities serving a student population of over 2,876,000 in 2012. Massification in higher education inevitably begets an

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immediate challenge for the need to develop a responsive quality assurance system accommodating an array of higher education institutions including post-secondary colleges, institutes, and private and public universities. Expectedly, Japan has developed complicated quality assurance processes in response to its sophisticated higher education system. However, significant issues such as student mobility (see Huang, 2016, Chap. 2 in this volume) and off-shore degree programs associated with globalisation will continue to pose a constant challenge to the Japanese quality assurance system.

Quality assurance processes are developed within the context of changing needs of the Japanese society. Our historical account of the quality assurance system in this chapter illustrates this important consideration. Another point for reflection is the need to understand quality assurance as both an official process governed by a statutory policy framework and as an unofficial engagement by key stakeholders including employers and students whose interest rests upon an effective educational system for delivering its anticipated outcomes. Exploring constructive ways to include voices from various stakeholders in the quality assurance process is a major direction for developing a quality assurance system that is responsive, accommodative and trustworthy. Yamazumi (2016) in Chap. 18 of this volume provides an example of how such a form of quality assurance can be developed to promote learning and teaching in teacher education programs. In this chapter, we provide a historical account of the development of quality assurance system in Japan's higher education sector.

17.2 Higher Education and Examination as Quality Assurance During the Pre-World War II Period

Between the sixteenth and mid nineteenth century, the central Shogun government (*Bakufu*) ran a feudal system in Japan, thereby closing most of the country for overseas powers. An exemption to this restriction was the Dejima port in Nagasaki, which allowed for Western influenced learning in medicine to take place. The development of the Japanese higher education system can be traced back to the nineteenth century, during which the Meiji Revolution took place. This revolution ended the feudal system and brought modernisation to Japan. A by-product of this development was that, from 1868, clans and private leaders in industrial and financial conglomerates (*zaibatsu*) in Japan established small higher education institutions.

The knowledge-seeking character of the Japanese nation, together with a large amount of international academic work being translated into Japanese, led to the development of modernised Japanese educational institutions in the Meiji era towards the end of the nineteenth century. During this period astronomy, mathematics, medicine, weaponry, Chinese literature, Chinese philosophy, Japanese history, Japanese linguistics and Japanese literature were researched and developed. In particular, Japanese research into astronomy and mathematics reached high international standards during this period. Modernising Japanese higher education

continued and this meant that instruction in Japanese was possible for most subjects at graduate level. Nevertheless, the demand for a performing higher education sector to suit a modern society had caused the Japanese government to hire 78 foreign teachers and send Japanese students to European and American universities. These foreign teachers provided immersion instruction to local Japanese students and brought a much-needed international perspective to Japanese higher education. In terms of lasting impact on the sector, it was the returning Japanese students who had secured jobs at national or local government institutions, or worked at universities in Japan that brought forward a new direction in Japanese higher education - the setting up of private universities. During this modernisation period in the history of Japanese higher education, Umeko Tsuda and Jo Niijima became well-known for their role as founders of the private Tsuda College and Doshisha College. Several Japanese flagship government universities were also established during this period; Tokyo University was established in 1877 and Kyoto University followed 20 years later. This trend continued well into the twentieth century, with the Japanese government establishing new imperial universities in 1907, 1910, 1918, 1931 and 1939.

Although the Japanese government concentrated their educational investments on these imperial universities, the establishment of private institutions with specific missions of promoting the development of democracy and independence of learning did not slow down. For example, Yukichi Fukuzawa established Keio Gijyuku as a Dutch-language school in 1858, which became Keio University in 1890. Shigenobu Okuma established a private Tokyo polytechnic school (*senmon gakkou*) in 1882, which became Waseda University in 1902. These private universities were officially recognised by the Japanese government in 1920. Other private polytechnic schools in Tokyo, such as the Tokyo Institute of Technology and Hitotsubashi were also established in this period, which were recognised as university institutions in 1929 and 1920, respectively.

Enrolment based on meritocracy, rather than students' social status has set Japanese imperial universities aside from top-ranked universities in the UK and USA, such as Harvard University, Cambridge University and Oxford University, where student selection was seriously skewed by social class. Students' performance in university entrance examinations was the sole consideration for enrolment in these leading Japanese universities. Private universities, being financially independent, had a further advantage of being able to recruit a large number of students and construct their own curriculum to focus on topics such as free society, freedom of speech, human rights, socialism and communism, which were not normally offered in government controlled universities. This tendency was enforced during the Taisho era, which took place between the Meiji and the Showa era and lasted from 1912 to 1926.

Prior to Japan's involvement in WWII, the Taisho Democracy ended when Emperor Hirohito, the successor of Taisho, reverted back to an authoritarian system. Freedom of speech was abandoned. During WWII, Japanese youths were required to join the army. By October 1944, 130,000 university students were recruited as soldiers and 6000 of them subsequently lost their lives in the war when they were forced to conduct suicidal air attacks. The fate for Japan changed for the worse after

American and British intelligence managed to break secret codes in telegrams which contained classified military information on routes of Japanese warships and targets of air attack. This was followed by massive destruction to major cities in Japan, of which the atomic bombings of Nagasaki and Hiroshima in 1945 are widely known. The Japanese government finally surrendered on 15 August 1945 and by that point in time, the number of war victims in Japan reached over 3.2 million. Understandably, this war had major consequences on the economic and educational climate in Japan.

Obviously, there was no formal quality assurance process and mechanism prior to the end of WWII. The responsibilities to ensure education quality resided with individual institutions and academics. Examination was seen as the most important means to upholding education quality during this period. Aligning with an elite higher education system, it can be said that entry examination was an effective way to assure quality outcomes, as the best possible students are recruited. Quality assurance was ensured through competitive and selective entry. The government control was seen mainly through its strict policies and rules governing the establishment of universities, which was relaxed in the post-war recovery. Nevertheless, selective entry still prevails today. This unofficial quality assurance process at the point of entry has served the Japanese system well in the past century. However, with the advancement of globalisation and oversupply of university places, this once effective mechanism for ensuring higher education quality has now become problematic. In particular, it has become untenable to base the pursuit for quality on selective entry, when the Japanese system has achieved universal access and alternative ways for entering university, even prestigious universities, are available in the twenty-first century.

17.3 Post-War Economic Recovery, Expansion of Higher Education and Quality Assurance

17.3.1 Japanese Economy in the Post-War Period

In July 1944, senior financial officers of 45 countries gathered to discuss an international monetary system that was designed to help restore the global economy. Named after the location where this system was founded, the Bretton Woods System contained four main agreements: US dollars would be the capital money, a gold standard was set with one ounce of gold being equivalent to 35 US dollars and with one US dollar being 360 yen at the time, the International Monetary Fund (IMF) would be established, and the International Restoration Bank, renamed World Bank in 1946, would be established.

The Bretton Woods System contributed significantly to Japan's post-war recovery. The agreed gold standard ensured the stability of the exchange rate and thereby promoting international trade between Japan and other countries. Utilising financial support from the World Bank, Japan was able to construct its bullet trains system (*shin-kansen*), the Tomei Highway, and the Kurobe Dam.

However, the financial situation changed worldwide after the so-called Marshall Plan had been established. This plan was initiated by the United States in 1947 in order for Western Europe to receive financial aid from the United States and to curb the spread of communism. The Soviet Union rejected the Marshall Plan and set up the Molotov Plan, which provided support to Eastern Europe. The money spent by the US government to assist post-war restoration in Western Europe created a situation where there were more US dollars circulating in the United States than there was gold to back it up. This inevitably led to a decrease of the value of the US dollar, which caused the then President of the United States Nixon to implement a series of economic measures. The last measure part of this 'Nixon shock' was a revision of the measures set by the Bretton Woods System: the Smithsonian Agreement. In 1971, ten countries decided to re-establish a fixed exchange rate internationally, but without the backing of gold. The value of gold increased from 35 to 38 US dollars and one dollar was then worth 308 Japanese yen, a decrease from the previous 360 yen. A continuing pressure on the official exchange rate of the US dollar eventually led to the adoption of a floating exchange system in 1973. This made the world economy sensitive to social instabilities and any minor changes of policy.

The Japanese economy recovered steadily during the post-war period and this resulted in the export of a great number of Japanese goods to the United States. In 1985, however, the G5 (United Kingdom, United States, France, Japan and West Germany) met in the Plaza Hotel in New York, to stop the overflow of Japanese goods in the United States, to discuss how to increase appreciation of the yen and how to reduce the value of dollars. As a result of this Plaza Accord, one US dollar devalued from 240 yen in 1985 to 70 yen in 1995 after fluctuating daily. Japan then faced serious trade friction, and the period after the Plaza Accord can be referred to as the 'lost 20 years of economic recession'. During this period, the 'bubble economy' took place; obtaining loans was made easy in order to stimulate the Japanese economy during times of decreasing export trade. Many Japanese corporations established local factories all over the world, thereby surpassing the lack of free trade agreements in Japan. The bubble economy ended in 1991, leaving the Japanese economy in a state of recession.

17.3.2 Expansion of Japan's Higher Education System and the Need for Quality Assurance

Immediately after World War II, the United States' Supreme Command of Allied Powers (SCAP) or General Head Quarters (GHQ) occupied Japan and implemented reforms such as the abolishment of financial conglomerates (*zaibatsu*) and carried out land reforms that aimed to reduce the power of wealthy land owners and give more land to the tenant farmers. GHQ also wrote an initial constitution, including the Educational Law. Traditionally, though, the Japanese establishment system relied on the system of charters based on strict legal regulations similar in those

found in Europe (Amano, 1986) for establishing universities. The post-war GHQ government relaxed the legal regulations governing the establishment of universities by following the American model using looser regulations. A new university system based on the American state university model has led the Japanese government to establish in each of its 46 prefectures at least one public comprehensive university. The principle of equal opportunities of education allowed for an increasing number of universities to accommodate the educational demand of the country. New universities were established in the post-war period in order to supply trained manpower to fuel the economy recovery.

Since relaxed standards of university establishment were adopted, there was a need to ensure education quality in Japan's newly developed university system. In 1947, the Japan University Accreditation Association (JUAA) was established as a voluntary organisation independent of the Ministry of Education for assuring education quality. JUAA functioned as a substitution for legal authorization by the Ministry of Education until 1956, after which the Ministry put more rigorous establishment regulations into place. Since the major cities were completely destroyed during the World War II, the JUAA assessment criteria initially focused on the external environments of educational institutions, such as the size of the campus, building areas, the number of lecture rooms relative to the number of students, the number of faculty staff per student and the number of books in the library. However, due to the voluntary nature, only a small number of universities were accredited by JUAA during the post-war period (Baba & Hayata, 1997).

Japan's higher education continued to expand steadily in response to the post-war economic recovery and the advance of the Bubble Economy. Growing demands for highly trained and skilled employees were unanimously found across different business and industrial sectors of the Japanese economy. As a result, 460 higher education institutions had been established by 1985, including 95 national universities, 34 public universities and 331 private universities accommodating a total of 1,848,698 students. A majority of these higher education institutions were privately set up and managed.

As access to higher education has become less competitive, academically less capable students who did not have a chance to secure a university place in the prewar period, were now accepted to various undergraduate programs. In response, higher education institutes were forced to provide remedial education to those who had not sufficiently learned foundation subjects in junior and senior high schools. Continuing its agenda on expanding the higher education sector, the University Council of Japan and the Japanese government deregulated the standards for university establishment (Yonezawa, 2002) in 1991. Prior to the deregulation policy, curricula of university education were strictly controlled. The need for quality assurance has become more acute as higher education continued to expand and students from diverse backgrounds were accepted into universities.

17.3.3 Quality Assurance Through Self-Monitoring and Self-Evaluation

In the absence of sanction or reward, not every Japanese university was accredited during the post-war period. In addition, cyclical review was not part of the accreditation and therefore limited effort was expended to continue reviewing the educational quality of universities that have been accredited by JUAA. Several important socio-economic factors have contributed to the need for institutional-based self-monitoring and evaluation. One of the most important considerations was the oversupply of university places and as a result there was keen competition between universities in student recruitment.

Against this background, the University Council made a recommendation to the Ministry of Education that universities should conduct self-evaluation and monitoring to ensure educational quality. Paralleling this call for self-monitoring on educational quality, the University Council also suggested the removal of control on university establishment allowing autonomy and flexibility in program design and curriculum development.

The self-evaluation initiative was welcomed by the university sector. Within a decade, over 90 % of universities had established institutional based policies and procedures governing the implementation of quality assurance through self-monitoring and self-evaluation (Shimizu, Baba, & Shimada, 2000). While some universities took a step forward and commenced external evaluation, the University Council did not favour the use of external quality assurance parties. Yonezawa (2002) described that few universities (15.1 %) utilised JUAA's external assessment.

Using a survey, Yonezawa (2002) investigated Japanese universities' engagement in self-monitoring and evaluation for quality assurance. The survey findings located several interesting differences in university's responses to self-monitoring and evaluation. A key difference was that private universities were more concerned about evaluation with students while universities offering studies on medicines, natural sciences and engineering focused more on items evaluating research activities. In short, institution-based evaluation varied across universities. Despite the differences in the focus of internal review across universities, self-monitoring and evaluation essentially endorsed management autonomy and this has contributed to re-engaging universities with quality assurance activities.

17.4 Market Competition and Quality Assurance by Third Parties

17.4.1 Globalisation and Japanese Economy Since 2000

The 'bubble economy' ended in 1991, as was the case with the communist Soviet Union. In the mid-1990s, globalisation became a buzzword to describe the growing integration of the international economy. The global economy transformed itself

into a freer competitive society, supported by the Washington Consensus. This agreement, presented in 1997 and adopted by the IMF and the World Bank, advocated a set of economic policies embracing the reduction of government controls, the reduction of government budget, and the promotion of privatisation and trade liberalization (McWilliams & Piotrosky, 2005). These neo-liberal economic principles have affected Japanese major national or public corporations and national universities. For example, the Japanese Highway Corporations was privatised in 2004, followed by the Japan Postal Service Public Corporation with 240.000 workers in 2005. From 1997, banks and security companies drifted toward bankruptcy. The twenty-first century started with the restructuring and amalgamation of corporations, which meant that many people lost their life-long employment opportunities. As a result, young generations now change jobs after 3 or 5 year of service. The Japanese tradition of loyalty to the workplace and life-long employment appears to have disappeared in recent years.

The reduction of government controls, hence the reduction of government budget and the increase of privatisation took place in higher education in Japan as well. In 2004, all national universities in Japan were incorporated. Just like private companies, the presidents of national universities were given more management autonomy and the funding came to be based on each institution's publicized 6-year goals and plans, along with the achievements of these goals. The principle of costeffectiveness was reinforced, making education an important industry in Japan. The privatisation of national universities, thereby forming corporate universities, reduced the government cost by 110 billion ven per year. The government offers operating cost to private universities by application, based on the explicit proposals of reforms made by private universities. However, there is still a big difference in government funding between corporate and private universities: in 2010, corporate universities received 1158.5 billion yen, compared to 439 billion yen for private universities; in 2014, 1130 billion ven went to corporate universities, and 320 billion yen to private universities. Depending on the performance and achievement, the former national universities will have to undergo drastic restructuring and downsizing.

17.4.2 Changing Work and Socioeconomic Conditions

Neoliberal principles of marketization, privatisation, efficiency and performativity have shaken an important work practice in Japan – life-time employment. Japanese companies, especially the big ones, used to operate on the practice of having a stable workforce and many of their employees had joined the companies immediately upon graduation. The key recruitment criteria were never based on knowledge or special skills, but rather focused on the university candidates had graduated from. Graduating from a prestigious university is considered a guarantee of life-time employment in established Japanese enterprises. Supporting this practice of

recruitment was the notion of so-called 'trainability': the potential ability of graduates to work effectively after receiving on-job training. Graduates' learning and achievement at the university was not an important consideration, since the business sector was prepared to spend tremendous levels of cost to train graduate employees. Due to this recruitment system, high school students work hard to pass entrance exams to prestigious universities. Cram schools, where students spend a significant amount of time learning exam-taking skills and completing mock exam papers, became popular throughout the educational system. This created the so-called 'education fever' and 'entrance exam hell' in the Japanese society. Learning pressures became so strong that some pupils committed suicide after failing to deal with examination pressure or not passing the entry examinations.

Nevertheless, the work conditions have changed in Japan. The practice of lifelong employment is increasingly considered ineffective, costly and failing to improve productivity. Japanese employers have begun to put more emphasis on university education and demand graduates to demonstrate the required knowledge and skills critical for employment. Due to the high cost involved in on-job training, Japanese employers expect that university education and training are transferrable to the workplace. Inevitably, Japanese employers have to engage in a competitive process to locate and recruit capable graduates who require limited training. In the past, Japanese companies often held their career talks with university students 2 years before their graduation. On recognition that graduates should spend more time on their education and developing critical knowledge and skills for work, Japanese companies were encouraged to delay their recruitment process. For example, the Federation of Economic Organisation, the nation's most powerful business lobby group with 1300 major Japanese companies among its members, urged member firms in 2012 to start holding explanatory sessions after the second trimester for third year students. In 2014, the starting date of the career sessions was even moved to the first term for students in the final year of their studies. This means that job hunting was no longer an immediate concern for students in their second or third year of their degree program. This arrangement with the business sector helps shift students' focus to learning and also sends an important message to the university that the business and industrial sectors expect graduates with a high level of employability.

In response to this call for ensuring employability, many Japanese universities introduced internship and other work experience components with local and international companies in their degree programs. Another factor that has heightened the need for Japanese universities to examine their practices in light of students' employability is the widespread of unemployment among graduates. According to the Ministry of Education and Labor, as of October 2010, only 57.6 % of university students scheduled to graduate in March 2011 had already secured job offers for after graduation. In the context of youth unemployment, 140,000 university graduates failed to find jobs which accounted for 30 % of the total population of unemployed youths. The oversupply of university places and alternative access to university education are of course important factors that have contributed to the

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issue of unemployment among university graduates. To increase youth employment, the Japanese government provided subsidies to companies that employ university graduates within 3 years of graduation.

Several observable changes within the Japanese society have also contributed to destabilizing the notions of life-time employment and trainability. First, the family system in Japan has changed. The respect for elders and seniors originated from the Confucian tradition deteriorated. Three-generation households were no longer the norm in Japan and many nuclear families arose out of intergenerational tensions that had grown intolerable. Second, at the personal level, Japanese are keen to pursue personal fulfilment and have begun to value personal achievement to an extent that the collective interest is no longer a consideration in employment within in a company. Often, young Japanese do not stay in a job for more than 5 years and the acceptance of an unmarried life as a way for broadening horizons and freedom from parental burden has fuelled this process of employment mobility. On the positive side, career-minded women are increasingly turning their backs on marriage and significantly expand the employment pool, which undoubtedly will worsen the unemployment issue. However, from the employer's perspective, this means that it will be easy to fill up vacant positions with capable employees from both genders. This tendency became more observable after the introduction of equal opportunities programs among female and male workers in 1985. Expectedly, this has set off chain effects in the Japanese society resulting in low birth rate and an aging society.

17.4.3 Changing University Environment

Japanese universities are not immune for the global waves of change. Marketisation and competition at the global level have already induced new policy directions governing student selection, curriculum design and work focus. At the turn of century, several observable trends were at force in Japanese universities, including internationalisation, curriculum reform for global engagement, and competition for research funds and improving global ranking. These trends do not just influence learning and teaching in Japanese universities, they also beget a need for more concerted efforts on assessment of education quality. To a great extent these trends are responses addressing the changing needs of the Japanese economy, especially in relation to maintaining competition and promoting employability.

The rapid invasion of the global economy into the Japanese society resulted directly in a policy response through internationalisation in the higher education sector. The Japanese government provided competitive funding in the form of key initiatives, including Global 30 in 2011, Global Leadership Studies in 2013 and

Super Global Universities in 2014. In accordance with the Global 30 policy, 13 public and private universities received government funding to promote internationalisation of higher education by offering degree programs using English as medium of instruction to attract internationals students. Under this scheme, new degree programs such as the Double Degree Program conducted through collaboration with top ranking universities in other parts of the world offer study abroad experiences and have been used to recruit foreign students.

As part of the internationalisation process, many university programs have incorporated global engagement as a major learning focus and outcome. An exemplary model is the establishment of Global Leadership Studies. This curriculum program is inter-disciplinary and multi-national in nature. Participating students engage in inter-disciplinary studies of global issues, such as global warming, the aging society, disaster management and epidemics. Face-to-face interactions, cyber interactions and on-demand lectures in relevant subject matters by the prominent experts in the field are provided. These arrangements provide students with abundant opportunities to discuss their understanding of and solutions to problems caused by globalisation and global economy, thereby inducing the development of inter-cultural understanding and appreciation of multiple perspectives.

As an extension to the Global 30 policy, the Super Global Universities initiative aims to raise the standards of research universities and improve Japanese universities' global ranking. This initiative will run until 2023 with a designated budget of \(\frac{\text{\frac{47.7}}}{1.7}\) billion granted through a competitive process. It is now customary that individual professors have to submit research plans for seeking competitive research grants to the government almost every 3 years, or annually to their employing university. This new funding practice promotes research engagement and productivity, which is a stark contrast to previous practice that assigned research funds to professors annually without undergoing any rigorous assessment.

The pursuit for global competitiveness has radically changed the learning environment in many Japanese universities (cf. Yonezawa, 2007). The overall student population grows, and the number of students coming from overseas and going overseas is on a sharp rise as well, as a result of the internationalisation policy. Japanese students are given more opportunities to learn about the changing world and more importantly the internationalisation policy brings many opportunities to interact with students from different parts of the world. At the university level, the internationalisation policy challenges university academics to reform their learning and teaching practices to meet students' changing needs, which is certainly an important criterion for assessing education quality. Japanese universities' research productivity is of course another important area of assessment in quality assurance. The crunch question concerns the extent to which education and research qualities can be assessed efficiently by self-monitoring and evaluation while facing these changes within the university sector and those in different parts of the Japanese society (Yonezawa & Mori, 2009).

17.4.4 Third-Party Evaluation

Responding to new waves of changes driven by globalised changes, the Japanese quality assurance system can no longer rely solely on self-monitoring and self-evaluation processes, as these institution-based efforts still lack an objective base for ensuring education quality that is derived from a consistent set of assessment criteria that can be applied to different higher education institutions. External third-party assessment based on a set of unified criteria is urgently needed to support the pursuit of performance for the higher education sector as a whole. In response, the Japanese government amended the School Education Law in 2002 and stipulated the requirement of engaging in a third party external assessment by an accredited agency through a cyclical process for all universities, colleges, law and other post-graduate schools. Universities and colleges are evaluated once every 7 years on their teaching, research, management activities. A 5 year cycle was designed to evaluate graduate schools' goals, curriculum design and teaching activities. The corporatization of national universities in 2004 can be seen as part of the government's pursuit of accountability, transparency and performance.

Some may consider that the Japanese quality assurance system has become centralized as a result of the stipulation of external assessment. It is in fact the first time in the Japanese history that all the universities are held accountable for their practices and outcomes. Nevertheless, a more accurate description is that the quality assurance system itself has become diverse. The self-monitoring and self-evaluation processes still continue, and form an important step for external third-party assessment. In other words, two layers of accountability have been installed for all the higher education institutions in Japan since 2002. This is in line with an international trend that upholds the importance of accountability and transparency in informing the design of quality assurance practices in other parts of the world (e.g. Dill, 2000).

Within the past decade, several major agencies were certified to conduct thirdparty external assessment on education quality. The Japan University Accreditation Association (JUAA) was certified by the MEXT in 2004, as the first certified evaluation and accreditation agency for universities. JUAA performs certified evaluation and accreditation activities in seven categories of educational institutions: universities, junior colleges, law schools, professional graduate business schools, professional graduate schools of public policy, professional graduate schools of public health, and professional graduate schools of intellectual property studies. JUAA conducts external assessment in two focused areas, assuring the quality of university education and supporting improvement through accreditation processes by monitoring performance based on subsequent progress reports. The JUAA evaluates educational organisations based on ten criteria (see Appendix). Two other certified agencies for conducting third party external assessment are the National Institution for Academic Degrees and University Evaluation (NIAD-UE) and the Japan Institution for Higher Education Evaluation (JIHEE). Both NIAD-UE and JIHEE were officially certified to conduct external assessment on university education and research activities in 2005. Their goals and focuses on assessment are similar to those of the JUAA. The external assessment conducted by JUAA, NIAD-UE and JIHEE is comprehensive, covering university operations and practices in management, admission, teaching, learning and research using a set of criteria to decide whether an institution meets the standard. As data driven assurance processes are used, these agencies require the targeted university to compile and submit self-monitoring and evaluation reports prior to the conduct of official visit by external examiners. This rigorous process ensures that higher education institutions play an active role in the external assessment by these government-certified external agencies.

In addition to these MEXT-certified agencies described above, the Japan Accreditation Board for Engineering Education (JABEE) was also certified to conduct external assessment. JABEE is a voluntary third-party accreditation organisation established in 1999. JABEE was established to foster international collaboration and to contribute to professional development through accreditation of education programs in engineering, agricultural and science departments in higher education institutions. In 2010, JABEE was officially certified as an evaluation and certification agency for Professional Graduate Schools in the industrial fields of information technology, engineering, and nuclear Technology. JABEE uses four 'common criteria' to accredit education programs: learning outcomes, educational methods, achievement of learning outcomes, and educational improvement. A special effort is made to ensure that the Japanese qualifications in these professional areas are recognised internationally and that graduates from these science programs are capable of seeking employment in local and international markets.

17.5 Future of Quality Assurance in Japan

In concluding our discussion of the development of quality assurance practices in Japan, it is important to point out that quality assurance and influences arising from political and socioeconomic areas are intricately related. To a great extent, quality assurance practice is reflective of salient political and socioeconomic influences, as illustrated in the Japanese case in this chapter. In the era of globalisation, these influences on quality assurance are not confined to changes within the national boundaries. More often than not, pervasive influences are derived from global changes and megatrends induced by globalisation, which in turn, trigger the formulation of new policies, initiatives and practices responding to these globalised changes. The installation of third-party external assessment practices on quality assurance is illustrative of this complicated process.

With the advancement of globalisation, transnational cross-border external examination may soon be a new challenge that might reform quality assurance processes in Japan and other parts of the world. In 2012, the OECD proposed the guidelines for quality provision in cross-border higher education (Vincent-Lancrin &

Pfotenhauer, 2012). Many countries have begun the process of considering and developing the national frameworks for quality assurance, accreditation and recognition of qualifications to meet the needs of international qualification standards (cf. Yonezawa & Meerman, 2012). In Japan, the JABEE has already taken international recognition and transferability into consideration for assessing degree programs for science and engineering professionals. Following this trend, it is recommended that the three MEXT-certified accreditation agencies should actively pursue international recognition of accredited qualifications, which will ensure that Japanese university qualifications are recognised as meeting international standards. To achieve this, certified accreditation agencies in Japan should seek participation in the work of international quality assurance agencies such as the International Network for Quality Assurance Agency in Higher Education (INQAAHE) and the Asia Pacific Quality Network (APQN).

17.6 Conclusion

As can be seen in the case of Japan, quality assurance is increasingly becoming an open system responding to societal and economic changes. As higher education evolves in unexpected ways, the new educational landscape demands innovation and flexibility from the institutions which serve Japanese learners. Beyond high school, more students than ever before will likely to adopt a 'cafeteria approach' to their education and take classes at multiple institutions; a few could stem from MOOCs, some from a university abroad and some from other institutions within Japan. Japan aspires to develop a world-class higher education system which creates new knowledge, contributes to economic prosperity and global competitiveness. In this context, Japan needs to build on its comprehensive higher education system and has to ensure that higher education is accessible to all citizens in Japan throughout their lives. The educational system should give students in higher education the workplace skills they need and at the same time students should be instructed to adapt to a rapidly changing society. Smith (2016) in Chap. 16 of this volume argues that integrating work based learning and skills in university courses and programs poses a challenge to assessment design and quality assurance. From a student's perspective, they are expected to benefit from these new forms of learning in their university education and be able to adapt to a world and work environment altered by technology, changing demographics and globalisation. In this everchanging educational landscape, quality assurance plays a significant role not just in assuring educational quality but also providing impetus and means for reviewing, evaluating and improving university education quality. Urgent attention is required for international cooperation on designing quality assurance frameworks to cover learning and teaching activities that are conducted in off-shore programs and international campuses.

Appendix

Ten criteria for the quality assurance and accreditation by JUAA

| Criteria | Explanation |
|--|--|
| 1. Mission and goals | Universities must define appropriate goals based on their own mission for the objective of cultivation of human resources and other objectives in education and research, and must make them public |
| 2. Educational and research structure | Universities must establish necessary structures to carry out educational and research activities based on their own missions and goals |
| 3. Faculty members and faculty structure | Universities must clarify the ideal image of faculty members and the policy for organizing faculty structures in order to realize their own missions and goals, and use these as a basis to develop their faculty structures |
| 4. Educational program, instruction and outcomes | Universities must specify educational objectives and use them as a basis to clarify their diploma policy and curriculum policy in order to realize their own missions and goals. Universities must also follow such policies to develop and enrich their educational programs and instructions to achieve sufficient educational outcomes, and confer degrees appropriately |
| 5. Student admissions | Universities must stipulate proper admission policies in order to admit students in a fair and correct manner in accordance with their own mission and goals |
| 6. Student services | Universities must provide satisfactory services for learning support, student support and career path support so that students can concentrate on their studies |
| 7. Educational and research environment | Universities must develop and manage appropriately a learning environment and an educational and research environment that enables students to study and faculty members to carry out educational and research activities in a necessary and sufficient manner |
| 8. Social cooperation and social contribution | Universities must consider ways to cooperate with society, as well as openly contribute the results obtained from their educational and research activities |
| 9. Administration and financial affairs | Universities must carry out appropriate administration and management in accordance with written rules and regulations in order to exhibit their functions smoothly and sufficiently. Universities must also establish the appropriate organization for clerical work, as well as establish and manage a necessary and solid financial base in order to support, maintain and improve education and research |
| 10. Internal quality assurance | Universities must develop a system for assuring the quality of their education, regularly conduct self-studies, and publish information about their current state in order to realize their own missions and goals |

Source: Japan University Accreditation Association (2010), pp. 1–3, retrieved from http://www.juaa.or.jp/en/images/accreditation/standard_university.pdf

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Chapter 18 Quality Assurance in Teacher Education: Implications for Promoting Student Learning

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Abstract This chapter considers how to foster new approaches to learning and ensure quality in Japanese universities by analysing a case of quality assurance in a pre-service teacher education program in a Japanese university. Taking as an example university students' learning in a teacher education program combined with an experimental educational project, this chapter proposes a new model of pre-service teacher education in the face of globalised processes and knowledge economies. Drawing on the framework of the cultural-historical activity theory, new forms of teacher education are exposed as facilitating university students' expansive learning to collaboratively construct new concepts and implement them in practice. By developing coursework connected with practical experimentation to bridge the gap between theory and practice, the new model ensures the quality of teachers as researchers who investigate how people learn and develop, and research the meaning of life alongside children.

18.1 Introduction

In 2008, the Central Council for Education in Japan submitted a report to the Minister of Education, Culture, Sports, Science, and Technology, entitled *Toward Building Bachelor Courses* (Central Council for Education in Japan, 2008). The report included the following passage: Japan's universities are currently unable to clearly demonstrate the capabilities of Japan's bachelors in response to requests for evidence from inside and outside of the country. The nation has thus far neglected to tackle this issue with any vigour (p. 9). The report went on to state the need for building a quality assurance system in the higher education sector. In 2012, in its deliberation summary, *Toward Universities that Offer Lifelong Learning in an Age of Uncertainty and Nurture Capabilities for Subjective Thought* (Central Council for Education in Japan, 2012b), the council indicated that with regard to the ideal

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role of bachelor course education today for students, the most important assets for making their way in life are: at university, to hone the specialised knowledge and general capabilities needed to identify problems that do not have answers, thinking about the causes, and deriving the best solutions; and to acquire techniques and skills supported by an intellectual foundation developed through high-quality, effective education based on experimental and experiential activities (p. 3). In this way, the assurance of high-quality learning has become an increasingly central issue in Japanese higher education, in order to prepare university students for living in a globalised, knowledge-based society. As the world has rapidly changed in the last few decades to a twenty-first century knowledge age, the demands of higher education suggest a need for 'twenty-first century learning' that focuses on 'learning to learn and innovate' and the "4C's: critical thinking, communication, collaboration, and creativity" (Trilling & Fadel, 2009, p. 49). This is why quality control or learning outcomes are central in higher education under the influences of globalisation. The common concerns about learning opportunities aimed at developing twentyfirst century competences and skills of students in universities throughout the Asia-Pacific region should be closely tied with more sufficient "work-integrated learning" to teach and assess the "generic graduate attribute and/or employability" as Smith (Chap. 16, p. 327) points out. In Chap. 17, Nakano, Ng, and Ueda illuminate that in Japan, there have also been prominent calls from the government and industry bodies for higher education to "demand graduates to demonstrate the required knowledge and skills crucial for employment" arising from drastically changing work conditions and the widespread unemployment among graduates in Japan (pp. 355– 356). This sort of call for ensuring employability causes Japanese universities to examine their practices in ways that provide students with education and training that are transferable to workplace settings.

In this chapter, I link the status of quality assurance in Japanese university education with the shift from a teaching-centred to a learning-centred approach. I also consider how to foster this new approach to learning and ensure quality using a case study of quality assurance in a pre-service teacher education program conducted at the undergraduate level in a Japanese university.

Faced with a significant number of teachers retiring in Japan, as in many other countries, ensuring teacher quality and high-quality teacher education programs has become a serious global concern and source of debate. Globalised processes and future knowledge economies require acknowledging high-quality education systems and high-quality teachers. In other words, our historic shift to a globalised, knowledge-based society increases "the cognitive requirements of most employment and of life in general," so that the kind of high-quality learning and teaching, and high-quality teachers as well, are required to equip students to become "strong thinkers and problem solvers" (Darling-Hammond, 2006, p. 9). Therefore, how to ensure the quality of teacher preparation at the higher education level has become a pressing question for educational reform within globalised processes. From the perspective of assessment and quality control, another important question is how to ensure that pre-service teachers are supported to develop the required professional capabilities and use these new capabilities confidently in engaging students to learn

in a networked, knowledge-based world. The key concern here is to identify these professional capabilities. A central characteristic that is adequate and relevant for a globalised world is a teaching capacity that responds to "human diversity and aims for cognitive flexibility" (Darling-Hammond & Snyder, 2000, p. 524). Accordingly, quality control of new forms of teacher education under the influences of globalisation needs to assess new kinds of professional capabilities such as "sophisticated judgments grounded in disciplined experimentation, insightful interpretation of (often ambiguous) events, and continuous reflection" (p. 524). The targeted teaching capacity in this assessment is not to implement uniform techniques or routines but to diagnose and make use of variability.

What must be emphasized is the importance of learning as an essential part of an assessment model. In other words, before we can assess teachers' new capabilities in the twenty-first century knowledge age, it is important to make sure that preservice teachers are given opportunities and adequate support for them to develop these new capabilities. New forms of assessment can serve as powerful professional learning experiences. However, it remains the case that the current assessment practices in pre-service teacher education programs strongly focus on "after-instruction tests" or "summative assessments" as "assessments of learning" and downplay the value of "during-instruction evaluations" or "formative assessments" as "assessments for learning" (Trilling & Fadel, 2009, pp. 130–131). Traditional assessment practices that have focused on memorizing the content evaluate students' professional learning experiences limited to knowing uniform techniques or routines of the old transmission teaching model. The lack of new forms of assessment creates boundaries that make it difficult to foster students' authentic learning for the new challenges of teachers' practices under the influences of globalisation.

Learning is becoming increasingly important in terms of overcoming today's global crises, living amid cultural diversity, and building a sustainable society, while at the same time giving hope to the children of the next generation (see Trilling & Fadel, 2009). Learning truly holds the key to society's future in a globalised context. One approach to innovating the forms of teaching and learning in today's educational institutions is to achieve a transition from teaching and learning that accepts culture to teaching and learning that creates culture. The current globalised knowledge economy also requires "higher levels of imagination, creativity, and innovation to continually invent new and better services and products for the global marketplace" (Trilling & Fadel, 2009, p. 49). Thus, the challenges posed by globalisation put "creativity and innovation as a high priority" (p. 57) in students' outcomes of learning. In parallel, educational reforms in several settings are increasingly concerned with how to shift school practices to foster greater agency—the intellect and the energy to act—as well as greater creativity among the various actors, especially students, who have tended to be poorly prompted and supported in the context of traditional schooling.

Currently, teachers are no doubt the key to such educational changes. However, we cannot bring ourselves to accept an individualistic apprenticeship training model between an experienced teacher and a novice because it is founded on the one-directional development of an individual teacher. Instead, the collective processes

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of teachers' learning are required to create collaborative cultures both within and outside schools to effect school changes.

In this way, there is now a call for a shift in professional development from 'closed autonomy' to 'networked hybridity'. In other words, the need is no longer for isolated, closed-off expertise, or linear, vertical mastery, but rather for collaborative learning and 'collaborative and networked expertise', making learners and practitioners able to generate horizontally expanding synergistic effects across the boundaries between organisations, work types, specialty fields, etc. These have become the new objectives of professional development.

Similarly, the Science Council of Japan proposes the common concept of the '21st century intellect for collaborating' as a new quality of university graduates across different academic fields of study in their 2010 report *On Field-Specific Quality Assurance of University Education* (Science Council of Japan, 2010). The professional prepares to function as not only an agent in the professional field, but also a good citizen who is engaged in collaborating with and crossing boundaries between various professionals to solve complex real problems in a current society and world that is faced with the globalised processes and knowledge economies.

These new forms of professional development through university education can be analysed using the 'cultural-historical activity theory' (Engeström, 1987, 2008; Leont'ev, 1978; Sannino, Daniels, & Gutiérrez, 2009; Sannino & Ellis, 2013). Activity theory offers a conceptual framework that views the 'object-oriented collective activity system' as the basic unit of analysis for human practices and development and as a rich source of ideas and tools for modelling future innovative activities. The historical transitional age is currently continuing to move toward globalisation in every field of human activity, even if the activity is physically limited to local areas. In this regard, new forms of human activity are experiencing accelerated paradigm shifts from mass production based systems to new systems based on inter-organisational collaboration, partnership building, and networking across cultural, organisational, and occupational boundaries (see Engeström, 2009; Spinuzzi, 2012; Yamazumi, 2009). As human activity rapidly changes to partnering and networking among diverse cultural organisations, learning and development in all kinds of educational practices must also be studied to facilitate their movement and collaboration, ultimately bridging the divisive boundaries and gaps traditionally existing between such systems. A current 'third-generation activity theory' (Engeström, 1996) expands the limits of a single activity system and adopts as its units of analysis different activity systems that interact with each other. This new framework promotes empirical intervention research on designing and implementing networks, dialogues, and collaborations to link these systems.

In this context, drawing on the framework of the third-generation activity theory, this chapter examines the quality of pre-service teacher education at the undergraduate level in a Japanese university. It focuses particularly on the improvement in students' learning, as they strive toward such a new goal as collaborative and networked expertise. The ensuing discussion is based on a case study as an example of quality assurance in the Japanese university education system.

18.2 Activity Theory and Pre-service Teacher Education

18.2.1 Activity Theory in the Globalised Changing World

As work and organisations are radically changing due to globalisation, forms of human social-practical activity are rapidly moving to inter-organisational networking, collaborating, and building partnerships across cultural, organisational, and occupational boundaries. Learning and development at work occur in increasingly complex and continuously changing multi-organisational fields, which necessitate a horizontal movement for responsible and inclusive practices. Therefore, for practitioners, the challenge of collaborative learning suggests the potentiality of interorganisational, inter-professional, and boundary-crossing learning that generates dialogical configuration knowledge and activity between those who learn, work, and live together.

Additionally, in the professional development of teachers, we note that Lieberman and Miller (2004, pp. 10–11) urge that "as a profession, we must refashion the old realities of teaching into new ones if we are to meet demands of the new century". The authors subsequently formulate the following three transformative shifts: from individualism to professional community; from teaching at the centre to learning at the centre; and from technical and managed work to inquiry and leadership. In such a transformation, they explain the second shift in the following terms:

When teachers shift their attention from the act of teaching to the process of learning, they corroborate for each other that 'one size fits few' (Ohanian, 1999). By looking collaboratively at student work and designing curriculum, assessments, and instructional strategies together, they gain the collective knowledge, confidence, and power to co-construct alternatives to standardized approaches and measures. (Lieberman & Miller, 2004, p. 11)

In line with this, Hargreaves and Fullan (1998, p. 116) write that "just as the principal of the last decade ... was urged to develop collaborative cultures within schools, the principal of the next decade should be leading the way to redefine collaboration so that it encompasses allegiances with groups and individuals outside the school".

With human activity quickly changing to networking and partnering among diverse cultural organisations, a new generation of learning theory in educational settings needs to focus on networked learning that goes beyond 'encapsulated' learning similar to the traditional learning found in schools that exists within institutional boundaries. Cultural-historical activity theory is a new paradigm that analyses and redesigns how human learning occurs in the interactions between individuals and collaborations within communities. In particular, activity theory focuses on the learning and development that emerge in the institutionalized contexts of practical activities as culturally and historically mediated within a society. This new paradigm in the fields of learning and development has become increasingly influential in educational studies in Japan over the past two decades (Yamazumi, 2006, 2009).

Yrjö Engeström (1996, pp. 132–133), a leading activity theorist, discusses the historical development of activity theory based on the idea of three generations. The

first generation is represented by Lev Vygotsky (1978), who regarded human behaviour as actions oriented toward objects. He showed that the development of behaviour is above all mediated by the use and creation of cultural artefacts such as tools, signs, symbols, ideas, and technology. The second generation began with Aleksei Leont'ev (1978). The novelty of his conceptualization associated activity with the new elements of the division of labour and cooperation, and showed that activities motivated by objects are formed in the collective, rather than individual dimension. Engeström (1987) then developed a systemic model for understanding the concept of human activity as addressed by these two earlier generations, that is, understanding subjects' collective activity oriented toward objects that are mediated by cultural artefacts. This collective activity system model also includes the following components as the socio-institutional infrastructure of activity: community, rules, and division of labour.

A current *third generation* of activity theory (Engeström, 2001) challenges the new potentialities of the activity theory by expanding the previous generations. It therefore exceeds the limits of a single activity system and adopts as its unit of analysis 'multiple different activity systems' that mutually interact, thus promoting empirical intervention research to design and implement networks, dialogues, and collaboration between these systems.

18.2.2 Toward a New Model of Transfer to the Practice of University Learning

As Darling-Hammond (2012) points out, the quality, duration, and timing of *clinical experiences* for candidates in university's pre-service teacher education is an important matter: "Research suggests that candidates learn more from their fieldwork and coursework when they have opportunities to connect their coursework in real time to practice opportunities in the classroom" (p. 137). In other words, it is crucial that university students are afforded opportunities to apply theoretical knowledge learned from their coursework to problems in specific contexts of their fieldwork. This is a kind of transfer of learning to practice.

From the perspective of the third-generation activity theory, Tuomi-Gröhn (Tuomi-Gröhn, 2005, 2007; Tuomi-Gröhn & Engeström, 2003) argues for a new form of transfer in the practice of university learning. She states that the 'developmental transfer' of learning is brought about through interactions between multiple activity systems. Taking *internships* as an example, she perceives the developmental transfer of learning through university based coursework to teaching practice at school as a process that occurs when university education faculties and partnering schools are both engaged in collaborative interaction, with both parties learning something new from each other. This type of transfer occurs through negotiation and exchanges between disparate cultures. According to Tuomi-Gröhn (2005), in an

internship, a university plays a new role as an agent of change. This applies especially to internships closely connected to projects where partnering schools are developed. For pre-service teachers, schoolteachers, administrators, university educators, and researchers to take on collaboratively the challenge of implementing a complex project such as the provision of internship at a school site, a new set of knowledge and skills is critical. This will ensure the successful implementation through constant interaction and collaboration of professionals and workers from different sites to co-construct connecting networks where disparate entities intermix.

In these places and zones, that is, the structural connective networks where disparate entities intermingle, there occurs a developmental transfer to the practice of school learning, which is brought into focus by Tuomi-Gröhn (2005). She labels these places 'boundary zones'. In the sense that it is possible to discover and construct new practices from two different, yet interrelated activity systems (i.e., universities and school workplaces), these activities can be referred to as 'boundary zone activities', which are given meaning in the following way:

The aim of the collaboration between the school and the work is to create a new boundary practice, developmental project at the workplace, which is at the boundary zone between them, not belonging to each of them. The prerequisite of the boundary practice is the creation of new meaning, reshaped object of the work, which further produces an entirely new activity system: boundary zone activity. The subject of this activity is a collaborative team of boundary crossers: student, mentor at the workplace and teacher (Tuomi-Gröhn, 2005, p. 35).

Such boundary zone activity can be conducted through the 'Change Laboratory' method that Engeström (Engeström, 2007; Engeström, Virkkunen, Helle, Pihlaja, & Poikela, 1996) has applied in diverse intervention studies. The 'Change Laboratory' is a well-defined intervention method used in a broader interventionist methodology known as developmental work research (Engeström, 1991, 1996, 2005). The method is based on "work practice by the participants in dialogue and debate among themselves, with their management, with their clients, and—not the least—with the interventionist researchers" (Engeström, 2007, p. 370). Its intervention is implemented as a rich set of tools available for facilitating, supporting, and following cycles of 'expansive learning' by participants: analysing, reflecting, criticizing, and discussing perceived disturbances and contradictions in their existing work and organisations; modelling and implementing a problem solution for the new practice; thus, mastering their own models and visions for the community and organisation's future. This expansive learning proposed by Engeström is a new theory of learning, which is placed at the centre of activity-theoretical intervention research (Engeström, 1987, p. 322; see also Illeris, 2009): "In expansive learning, learners learn something that is not yet there. In other words, the learners construct a new object and concept for their collective activity, and implement this new object and concept in practice" (Engeström & Sannino, 2010, p. 2).

18.3 Twenty-First Century Teacher Education in Japanese Universities

In the report *On General Strategies for the Improvement of Teachers' Abilities throughout their Professional Lives* (Central Council for Education in Japan, 2012a, p. 1), the following views were expressed regarding the current state of pre-service teacher education as well as regarding the improvement of teachers' teaching abilities:

- It is becoming increasingly necessary to respond to various challenges of a
 sophisticated and complicated nature that go together with drastic changes in
 society, such as globalisation, the emphasis on information technology, and the
 decrease in the number of children and increase in the number of elderly. Hence,
 it is necessary to respond to changes in the human resource development model
 required by school education.
- With this in mind, to nurture the abilities necessary for success in the twenty-first
 century, schools, in addition to emphasizing the acquisition of basic/fundamental
 knowledge and skills, will henceforth need to put new emphasis on developing
 the thinking, decision making, and expressive abilities of students, as well as
 enhancing their motivation to learn and fostering their ability to form diverse
 kinds of human relationships.
- In the future, it will be desirable both to train teachers who support these new
 methods of learning and to establish an ideal model of the continually learning
 teacher.
- It has also become necessary to make practical use of Information and Communications Technology (ICT) to cope with various challenges—including bullying, violence, and school non-attendance—and to enrich special needs education.
- Based on the above, it will be necessary to undertake integral reforms to offer sustained support to teachers who continue to learn throughout their whole professional career, by partnering and collaborating with local municipal board of education and universities.

Additionally, based on the model of the 'continually learning teacher', this report proposed to clearly rank teaching as a highly specialised profession by raising preservice teacher education programs from the current 4-year undergraduate level to the graduate level. In doing so, the report emphasizes advancing initiatives that ensure the quality of the pre-service teacher education programs currently administered at the undergraduate level. As we can see in the recent reforms of university education in Japan, including in the field of pre-service teacher education, the knowledge and skills that university students should acquire are being clearly defined, and there is a general shift in emphasis from 'What will university students be taught?' to 'What will university students become capable of?' As to ensuring the quality of teacher education programs, it is considered important to implement a core curriculum focused on "exploratory practical coursework that emphasizes the

relationship between theory and practice" (Central Council for Education in Japan, 2012a, p. 8).

As mentioned above, bridging the gap between the theoretical concepts appropriated in the university classroom and practical teaching experiences gained in schools has been one of the core challenges for curriculum development in teacher preparation education. Concerning the timing of clinical experiences, as Darling-Hammond (2012) discusses, the research advocates that in pre-service context, "courses that occur during or after the time candidates have been in the field appear to be more salient than front-loaded courses where theory is learned in the absence of practice" (p. 137). Carefully constructed field experiences can enable candidates to reinforce, apply, and synthesize the concepts learned in the university classroom. Arranging field experiences in school in the early phase of a teacher preparation program can help shift pre-service teachers' perspectives from a *student's* to a *teacher's* (Denton, 1982). This shift allows pre-service teachers to examine the dynamics of a classroom. In this way, early field experiences in teacher preparation education have a beneficial effect on theoretical learning by providing a meaningful context for the subsequent acquisition of teaching techniques.

As a praxis model of teacher education to bridge the gap between research and practice on how people learn and develop, Gutiérrez and Vossoughi (2010) propose a promising approach known as the 'social design experiment', developed through the University of California, Los Angeles (UCLA) UC Links/Las Redes partnership. UC Links is a consortium of seven University of California (UC) campuses as well as a network of university and community partners, which work together to create and sustain innovative after-school programs (see Cole, 1996). Among the UC Links programs, UCLA Las Redes conducts a collaborative project for public elementary school students from non-dominant communities at the Las Redes afterschool program and in the university-based course. The important point to note is that university students enrolled in the three-quarter sequence of courses in the Teacher Education Program at UCLA study cultural-historical theories on learning and human development with a Vygotskian approach, while practicing these theories with elementary students at the Las Redes after-school club. In this respect, Gutiérrez and Vossoughi write that "university students work to develop children's problem-solving and mathematical skills and college-going literacies through participation in meaningful literate, technological, and mathematical practices" (2010, p. 105). Through examining the university students' blending of course reading (study of theoretical concepts), a jointly authored data-driven research report, and a self-reflection paper with their educational practice at the after-school club, Gutiérrez and Vossoughi observed that such a new form of pre-service teacher education can engage candidates in 'reflective practice' and robust teacher learning. This kind of reflective practice as a new model for pre-service teacher education enables university students to "see anew the teaching and learning processes at work" (2010, p. 101), which robustly helps them develop a coherent and orienting framework for teaching and learning that has both heuristic and explanatory powers.

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Invoking the framework of third-generation activity theory discussed in the previous section, I will now illuminate and analyse an experimental project called 'New School', a new model for pre-service teacher education at Kansai University in Osaka, Japan. The project strongly identifies with the teacher education program at the aforementioned UCLA Las Redes.

18.4 Creating a Hybrid Activity System for Teacher Education: A Case Study of Kansai University's Program

18.4.1 After-School Educational Practice in a Course in the Teacher Education Program

'New School' (NS) is an after-school project for local municipal elementary school children conducted by our research group in collaboration with a course in the Elementary School Teacher Education Program at Kansai University. This project in Osaka has two interconnected developmental aims. One is to create a *hybrid activity system* that attempts to transform the pedagogical activity of traditional schooling based on the cooperation of the following partners: Kansai University, a local municipal elementary school, families, experts, and community organisations outside the school (Yamazumi, 2006). The second aim is to obtain a new model of pre-service teacher education that provides university students with meaningful opportunities to connect their coursework in real time to practicing educational work (Yamazumi, 2008, 2009). In other words, NS develops the boundary zone mentioned above whereby multiple deferent activity systems—*learning and playing, practicing and working*, and *researching*—meet, interact, dialogue, and collaborate with each other.

Since 2005, all parties in NS have been involved in designing and implementing mixed grade, group- or project-based learning and networks of learning. Participating university students at Kansai University, who want to become elementary school teachers, are enrolled in a two-semester (spring and fall) sequence of courses—School Participation and Fieldwork I & II—as part of the first or second year of the 4-year Elementary School Teacher Education Program at Kansai University. In essence, elementary school children, with the support of the university students, engage in fun, creative, and collaborative learning processes. Inspired by everyday activities and practices, the children work on themes, such as food, eating, cooking, gardening, farming, personal well-being, ecological awareness, environmental responsibility, and creating a sustainable future. The NS activities thus develop agentive, critical, and creative learning abilities among the children in the project. NS seeks to encourage project-based collaborative learning activities for children and other participants on the topic of sustainable living. This kind of activity can be called 'From the Seed to the Table'; in other words, from their experience of

agriculture by growing organic food and learning about ecology to learning about 'slow food' through cooking lessons.

In the NS activities, the children and university students carry out project-based learning about *Suita Kuwai* (the aquatic Japanese Arrowhead plant). Suita Kuwai is a traditional vegetable unique to Suita City in Osaka Prefecture. It originated and evolved in the Suita region, where the children live, and has been well-known for generations as a soft, sweet, and distinctive-tasting vegetable. Being a half-cultivated, half-wild vegetable, however, it quickly disappeared amidst the wave of urbanization, and at one point, it was even on the verge of extinction. In recent years, local farmers, experts, citizens, and government agencies established a network to revive Suita Kuwai, promote its protection and proliferation, and ensure that it is passed onto future generations.

Activities and units developed by the NS project were incorporated into schools, especially into the curriculum units in the 'Period for Integrated Study', which deals with interdisciplinary and cross-curricular themes for third-grade and older students, in addition to their regular school subjects in Japanese schools (Yamazumi, 2010a, 2010b). The content of these periods is not prescribed in the national curriculum standards, but schools are expected to make efforts to develop and conduct distinctive project-based learning activities for them. As part of this expansion, four municipal elementary schools in the Suita school district conducted Kuwai-themed units (Yamazumi, 2013). The children and their teachers created an irrigated field for Kuwai in the schoolyards with the support of a local farmer, experts, and regional government agencies. The children planted the seedlings in June and then cultivated them and observed their growth. In December, the children harvested the vegetables and then cooked and ate them. For example, they make bread using Kuwai, known as 'Suita Kuwai Rolls', with the help of an owner and chef of a nearby bakery. In addition, they prepared the vegetables for sale at their school festival.

From the perspective of the third-generation activity theory on interacting activity systems with a partially shared object, it is possible to characterise NS as a boundary organisation that creates an emerging hybrid activity system in which multiple different activity systems interact and engage with each other, expanding their own objects and partially sharing a new object. In particular, the NS project can serve as a *mediating system* (see Mehan, 2007) between local elementary schools and expert groups and community organisations outside schools—community activities and productive practices—offering new forms of school learning activity to children and providing a range of resources, such as university students, researchers, experts, and practitioners from outside the school, and physical facilities and equipment for school activities. Figure 18.1 is a schematic representation of NS as a mediating system.

With the development of NS, it increasingly mediates the emergence of networked hybridity. As Gutiérrez and her colleagues (1999) argue, hybridity and diversity should be understood to include not only racial, ethnic, socioeconomic, and linguistic hybridity and diversity, but also hybridity and diversity in the mediating artefacts (tools and signs), roles, and activity systems themselves. As the authors note, "Hybridity and diversity, then, are not problematic but rather are viewed as

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Fig. 18.1 New School as a mediating system



important cultural resources in children's development" (Gutiérrez, Baquedano-López, & Tejeda, 1999, p. 287). In the following, I analyse some data and findings from the implementation of NS activities in order to illuminate the implications for promoting university student learning interconnected with such hybrid educational practice as crossing the boundaries between multiple activity systems.

18.4.2 University Students' Learning from Consolidating Contradictory Perspectives

As mentioned above, hybridity is clearly an important resource for developing new activities because it can produce invention and innovation through the processes of emergence by "putting disparate ideas together or by connecting different and diverse minds, or both" (Hargreaves & Fink, 2006, p. 163). However, hybrid forms of activity are riddled with tensions and contradictions, since they take shape without standardized procedures and scripted norms. Boundary crossing as well as sideways movement and learning between partners and practitioners in networked activities are required as the innovative hybrid activity expands.

From July to December 2006, the NS project conducted seven reflective sessions for the course seminars in the Teacher Education Program to facilitate, support, and follow participants' expansive learning (see Sect. 18.2.2) while implementing mixed-grade, group, and project-based learning units. The participants comprised Kansai University students who enrolled in the course and served as tutors for the children, the research coordinator of the research group who served as the principal NS practitioner, and the university professor who taught the course.

These reflective sessions were based on the 'Change Laboratory' methods and approaches (see Sect. 18.2.2). During the sessions, after watching a video of the children's group work, the participants offered personal assessments of the mixed-grade and group-based learning as an alternative to traditional school learning. The participants' expansive learning illustrated the act of learning for collaborative contributions to solving actual problems and forming new perspectives to reshape



Fig. 18.2 A reflective session in the course seminar focusing on the New School project

learning in NS. This expansive learning process first involved an analysis of the contradictions and collaborative discussions around concrete cases that were carefully selected from all videotaped units and field notes.

The third case study was held on September 12, 2006, as shown in Fig. 18.2. The principal of the local municipal elementary school, a farmer, a nutrition professor, and a senior nutritionist were invited. During the session, one university student, who was charged with being the tutor of a children's mixed-grade group, confessed the following hesitation concerning his own relation to the children in their project work:

Excerpt 1

University Student 1: There are things we have to do here, aren't there? I may be wrong in saying 'have to', but aren't there often times when something is finished, and the children ask, 'It's finished. What's next?' If a child is playing while saying this, I just can't get angry with him. Because he's enjoying himself, and we're outside of school, and children naturally play. So I can't get angry with them. If this were a school, the teachers would say, 'Hey!' and become strict.

University Student 1 as well as the other university students involved in NS encountered a problem in which their actions involved an under-explored emotional dilemma, resistance, and insecurity about what is best: controlling the children or allowing them to play freely. University Student 1 commented that because NS is different from school, he experienced difficulties in guiding the children's individual behaviour. Such conflict could be derived from the contradictions between the different logics of traditional school learning and the alternative forms in the NS project.

From the conceptual framework of activity theory (Engeström, 1987), the contradiction faced by humans in their activities is viewed as a driving force for development. These contradictions are faced and identified between "multiple motives embedded in and engendered by their historically evolving communities and objects" (Engeström, 2006, p. 3). They obstruct, but also they energize efforts in collaborative change. In the reflective session, the principal of the local elementary school offered the following response to University Student 1's comments in Excerpt 1:

Excerpt 2

Principal: Certainly, even in schools during group work, some children finish earlier than others. Some children just want to get things out of the way when you say, 'You should do this'. As the professor told us, conscientiously planning how to get the children interested in the next topic depends on our abilities as teachers. To avoid that situation, teachers should prepare plans B and C so that when a child finishes early, the teachers can provide him or her with other things to do.

Note that the principal acknowledged that the university student's problem was also faced by school teachers ("even in schools") and proposed a solution that depended on their "abilities as teachers" to assign a series of disconnected, though repeated learning tasks (plans B and C) to maintain the children's interest. This proposal reflects a dominant idea about pre-service teacher competencies to manage classroom lessons in schools. The exchange characterises the second type of contradiction: contradictions between the activities of in-service teachers, pre-service teachers enrolled as students at the university, and the children. Such contradictions are closely connected with the contradictions existing between the institutional logic of school activities and the NS activities mentioned above. In this way, creating collaborative inquiry and discussions among diverse participants from multiple activity systems could allow contradictory perspectives to enter the dynamics of a classroom. Therefore, the seminar engaged in the reflective practice could provide the university students as pre-service teachers with meaningful opportunities to facilitate their expansive learning in the boundary zone.

18.4.3 Practicing Theoretical Concepts with Children

Cox Suárez (2006, p. 33) mentions that one significant dilemma in teacher preparation education is "how to help pre-service teachers see beyond a focus on practical, 'cookbook' strategies and packaged curricula to a professional, collaborative dialogue sparked by critical thinking, curiosity, and reflection on children's learning". In order to go beyond encapsulated boundaries of standardized procedures and scripted norms, practitioners should be required to engage in "collaborative concept formation as expansive learning," which was analysed by Engeström and his colleagues (Engeström, Pasanen, Toiviainen, & Haavisto, 2005, pp. 48–49) for a new collective activity. Responding to the essential dilemma in teacher education, Cox Suárez (2006) proposes a supervision seminar for pre-service teachers in which

participants co-construct the meaning and collective understanding of children's learning by the sharing processes of their own documentation of classroom learning and teaching, with the aim of observing, recording, making visible, and interpreting the learning of children.

Taking the children's group-based learning activities in the NS project as an example, let me consider the university students' collaborative concept formation in the course connected with practicing NS. In 2010, the children's group-based learning activities in NS included creating original scripts on the theme of Osaka's traditional vegetables and then performing dramas for the public at a city museum. Such NS activities exemplify how new patterns and processes of learning emerge based on and mediated by the participants' ideas and strategies in a 'collaborative self-government'. This concept suggests a new form of pedagogy and creative collaborations through real life-activities. Two university students, who were enrolled in a second-year course in the Elementary School Teacher Education Program and were tutors to the participating children, described the reactions to their collaborative work with the children in coursework submitted in 2010:

Excerpt 3

The children spoke up about their own ideas and requests regardless of their grade, and exchanged opinions, like 'I think we should do this', or 'If it were me, I'd do that'. The children were exchanging opinions freely among themselves. I think that the children had the most fun with creating props....One child thought of presenting the texture of the Kuwai using crunched-up paper, while some Grade 6 girls cut and pasted coloured construction paper, and created beautiful storytelling picture cards all by themselves. All of the materials and tools for creating these props were available, and the children put together some very high-quality pieces. (from University Student 2's report)

Excerpt 4

When I actually started working with New School, there was one point that was a little different from what I had imagined; namely, the children acted much more autonomously than I had expected. They didn't just do what they were told; the children undertook these activities based on their own approaches, saying, 'think we should do it this way', or 'I want to do it this way'. The children created their own rules when they began these activities, and I felt that this approach tied into even more autonomous activities. (from University Student 3's report)

Collaborating with the children in their collective creation of juvenile dramas, the university students became attracted to the children's attitudes toward autonomous activities, manifested in such statements as "I think we should do it this way". According to Vygotsky (1997, p. 233), this kind of children's autonomy derives from the result of "the social coordination of one's own behavior with the behavior of the group". For instance, in playing a game, the child "obeys the rules of a game not because he is threatened with punishment ... but only because observing the rules vouchsafes him the inner satisfaction that comes from a game, because here he acts as part of the general enterprise that is formed out of a group at play" (p. 233). In this manner, the university students and our research group in the university-based course were constructing the concept of collaborative self-government, applying it to collective creative activities of NS, focusing on the need and ability to create.

University Student 3, whose previous report is quoted above, again described her thoughts concerning the instillment of independence in elementary school children in the passage below, which was submitted as part of her graduation thesis in 2012. In it, she cites her experience from 2010 with the NS project:

Excerpt 5

In the New School, children devised rules before an activity started. Typically, most schools have their own pre-set rules; however, the New School is unique....[A]llowing children to make their own rules helps others to better understand them and develop a respect for their personalities while giving the children responsibilities.

In the report, she quoted a passage from Vygotsky's book *Imagination and Creativity in Childhood* that she read in the seminar, and reflected on the author's concept of children's learning and development and its meaning and relationship to the theatrical activity that the New School children created:

Excerpt 6

Vygotsky states that the important aspect of theatrical activities is not good feedback from the audience or a good performance, but that 'the children are now making, creating, and practicing creative imagination and its concretization'. Children happily perceive themselves as excellent actors, even though others may not share their view. I do not believe that I would have discovered this concept without taking part in the theatrical activity at the New School or reading books such as Vygotsky's.

18.5 A New Form of Assessment for Powerful Pre-service Teacher Learning

Here, I will turn to a discussion of the relationship between the NS project examined in the previous section and the need for quality assurance or improving assessment under the influence of globalisation. The NS project and its results can be taken as a new form of assessment of learning outcomes for pre-service teacher education in a globalised world. In order to afford pre-service teachers opportunities to develop their own professional capabilities for responding to a globalised, knowledge-based society, we need new forms of assessment that evaluate what they know beyond the university classroom and authentically assess their ability to solve problems in specific contexts and apply knowledge to new challenges of practice. As Darling-Hammond (2006) notes, an increasing number of teacher education programs at universities in the United States of America are using authentic assessments of teaching as both assignments and assessments that "require candidates to *use* their knowledge to produce teaching actions and analyses" (p. 113).

Darling-Hammond and Snyder (2000) examine how such authentic assessments tools as cases, exhibitions of performance, portfolios, and problem-based inquiries (also known as action research) effectively allow pre-service teachers "the application of theoretical principles to problems in specific contexts while appropriately complicating efforts to draw generalizations about practice" in exemplary teacher education programs (p. 524). In doing so, they create a strong bridge between theory

and practice. Each assessment tool provides a means for structuring the learning process in a teacher education program as well as for assessing prospective teachers' developing abilities. Interestingly, each in its own right assesses important aspects of teaching and reflects a different metaphor for teaching, as Darling-Hammond and Snyder (2000) point out:

Cases, for example, develop and assess teachers' abilities as decision makers. Exhibitions draw upon the performances of teaching and reflect the teacher as an artist. Portfolios support the teacher as a continuous learner who reflects on practice. Research and inquiry develop teachers as social science analysts. Used in combination, as many teacher education programs employ them, such tools allow novices to integrate different areas of learning and to apply them in different ways that, together, include many dimensions of a professional teaching role. (Darling-Hammond & Snyder, 2000, p. 529)

Based on this classification, the NS project as an assessment tool is linked primarily to teacher research and inquiry. It may equip pre-service teachers with the necessary attitudes, as John Dewey (1929) noted in his *Sources of a Science of Education*: "...[T]he final reality of educational science is not found in books, nor in experimental laboratories, nor in the class-rooms where it is taught, but in the minds of those engaged in directing educational activities. Results may be scientific, short of their operative presence in the attitudes and habits of observation, judgment and planning of those engaged in the educative act" (p. 32). In this way, the NS project points to the need for new forms of assessment and quality control that are less static or traditional (pen and paper) and more reflective, learning focused and experimental in nature.

From the viewpoint of building teachers' capacity, it is notably important that a new assessment tool such as the NS project can transform pre-service teachers' understandings of teaching "from a private and hidden act into community property" (Darling-Hammond & Snyder, 2000, p. 540). Elmore (2002) criticizes schools for being strongly organised based on the "ethic of atomized teaching—teachers practicing as individuals with individual styles" (p. 7). According to him, they are not supportive of problem solving based on cooperation or collaboration. In schools, "an extremely peculiar view of professionalism" (p. 7), that is, autonomy in practice, is the default culture of schools. However, assessment practices using problembased inquiries can go beyond such atomization of teaching and serve as powerful learning experiences in which "teaching is treated as community property" and thus "problems, conjectures, analyses, and interpretations can be examined" by collaborating practitioners (Darling-Hammond & Snyder, 2000, p. 540).

As the NS project is still evolving, it will be difficult to pinpoint in a cookbook fashion these assessment strategies in detail. Nevertheless, the reflective sessions in the NS project as described in the previous section can be taken as an empirical base for advancing an argument for assessment strategies that are dialogical, collaborative, reflective, and learning based. The NS project as a new assessment tool can afford university students the opportunity to develop their teaching capabilities in response to the globalised, knowledge-based world. As Darling-Hammond (2006) states: "Such studies can reveal a teacher's disposition and skills for responding to problems of practice with strategies that may lead to improvement, instead of personal coping mechanisms" (p. 151).

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18.6 Conclusion

As it is becoming increasingly necessary to respond to the various challenges of globalised processes and future knowledge economies, in the recent reforms of university education in Japan, quality assurance is strongly urged to clearly define the knowledge and skills that university students should acquire. This has subsequently led to a shift in emphasis from 'What will university students be taught?' to 'What will university students become capable of?' In this context, high-quality, effective education based on experimental and experiential activities is increasingly acknowledged to promote university students' learning for acquiring techniques and skills supported by an intellectual foundation to help them make their way through life in an age of uncertainty. Additionally, as for ensuring the quality of pre-service teacher education programs in Japanese universities, it is considered important to implement the creation of a core curriculum, which has as its main criterion exploratory practical coursework emphasizing the relationship between theory and practice. The new concept for reforms in teacher education is thus the 'continually learning teacher'.

However, as the world shaped by globalisation rapidly changes and appears more out of control than ever, we must examine the kind of learning necessary to prepare university students for continually discovering and constructing new practices. The following passage by Engeström (2013) is very insightful in this respect, as it acknowledges the need for high-quality professional development in higher education:

...[I]nstead of controlling the world, we should accept that all our designs have unintended consequences and drift in unexpected ways. Thus, instead of pushing grand designs through at any cost, we might cultivate tentative solutions by means of experimentation, first locally and, when working solutions are found, by generalizing and spreading them through dialogue and further experimentation. (Engeström, 2013, p. xv)

This type of shift—from central absolutistic control toward local experimentation and dialogue—calls for the qualification of professionals and practitioners as researchers. Drawing from the concept of the 'teacher as researcher', Rinaldi (2003, p. 2) considers her idea about "the normality of research", which defines research as an attitude and an approach in everyday living, schools and life. Typically, research is not part of school work or daily life, because research characteristics such as doubt, error, curiosity, marvel, and amazement are viewed as weaknesses expressing fragility and uncertainty, which must quickly overcome if they enter the context of life in schools. However, as Rinaldi illuminates, searching and researching the meaning of life must be important values and qualities in schools because only these aspects can "guarantee us that which is new, that which is moving forward" (p. 2).

In this way, ensuring the quality of teachers as researchers can be a new and promising concept for pre-service teacher education in Japanese universities as well as universities in other countries, including the Asia Pacific, which are currently facing the globalised processes as well. Our examination of the courses in the Elementary Teacher Education Program at Kansai University combined with the

practical experience of the NS project sheds light on a new model of teacher preparation education, which can be expected to ensure the qualification of teachers as researchers. Such a new model of pre-service teacher education would provide university students as teacher candidates with the relevant opportunities to engage in collaborative reflective practices, like investigating how people learn and develop, or researching the meaning of life alongside children who can also be 'researchers'. This type of learning for university students would generate *knots* that can bridge the gap between theory and practice for creating "a context in which words such as creativity, change, innovation, error, doubt and uncertainty, when used on a daily basis, can truly be developed and become real" (Rinaldi, 2003, p. 3).

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