

The Globalisation of Education: The Next Wave



Association of Pacific Rim Universities



CONTENTS

About the Project ////////////////////////////////////	01
Introduction ////////////////////////////////////	02
New Wave of Globalisation ////////////////////////////////////	02
Five Trends in the Tertiary Education Sector /////////	04
Challenges Ahead ////////////////////////////////////	08
Domestic Challenges ////////////////////////////////////	09
Regional Cooperation ////////////////////////////////////	13
References ////////////////////////////////////	15
Appendix ////////////////////////////////////	16

The Pacific Economic Cooperation Council (PECC) is an independent, multi-stakeholder organisation committed to the promotion of cooperation and dialogue in the Asia-Pacific. Founded in 1980, PECC is a network of member committees composed of individuals and institutions dedicated to this mission. The Council is one of the three official observers of the APEC process.

The Association of Pacific Rim Universities (APRU) aims to promote scientific, educational and cultural collaboration among Pacific Rim economies. In both its objectives and guiding principles, APRU embodies a commitment to global academic and research standards. Formed in 1997, APRU is a consortium of 42 leading research universities in the Pacific Rim.

This briefing paper is the outcome of a two-year research project undertaken by a task force composed of experts from PECC and APRU: Young-Chul Kim, Korean Educational Development Institute, Philippa Dee, The Australian National University, Jane Knight, Fulbright New Century Scholar Program, Leslevanne Hawthorne, University of Melbourne and OECD, Federico Macaranas, Asian Institute of Management, The Philippines, Morshidi Sirat, National Higher Education Research Institute, Malaysia, Rui Yang, Monash University, David Ang and Jayantee Mukherjee Saha, Singapore Human Resources Institute, and Christopher Pokarier, Waseda University, Japan. In addition to the lead authors of the papers, we would like to acknowledge the input and work of the many people who supported these papers. The papers will be published by the National University of Singapore and Kyoto University.

The editors of the volume and authors of this briefing paper are Professor Christopher Findlay. Head, School of Economics, University Adelaide, and Professor William Tierney, Wilbur-Kieffer Professor of Higher Education, Director, Center for Higher Education Policy Analysis, University of Southern California.

This project would not have been possible without the support of the APRU Steering Committee and the PECC Standing Committee as well as their respective members. We thank the APRU and PECC Secretariats for their support for the project, especially Dr Kenneth McGillivray and Mr Eduardo Pedrosa. We thank all of those involved in organising the initial brainstorming session for the authors, especially Jim Short from the Australian National University.

This project has benefited greatly from the wisdom and advice of a panel of advisors selected for their expertise and experience in the way tertiary education in our region is changing. We thank Dr David Strangway, Dr Edilberto de Jesus and Mr Vincent Quah for taking time to share with us their knowledge and experience in the field of education. Thanks also to Claire Hollweg for research assistance.

While acknowledging comments and input from our panel of advisors and the project team, any omissions and errors in the report are solely our responsibility.

William G. Tierney APRU

Correct Christopher C. Findlay PECC

Introduction

The rapid development and adoption of technology along with more open economies has created an integrated global economy. The globalisation process has brought with it significant changes in all areas of life, including tertiary education.

Tertiary education remains at the centre of economic well-being. It is necessary for growth, through its direct contribution to skills and workforce quality but also in the ways in which it adds what APEC Education Ministers have referred to as the "key competencies of the 21st Century [that is] critical thinking, creativity, teamwork and self-learning ...".¹ These contribute to entrepreneurship, mobility, and the capacity to process information and new ideas. The waves of globalisation affect the ways in which the sector makes these contributions.

Governments and institutions must act quickly to adapt to the new wave and to capture its advantages. Regional cooperation can add value by reaching a deeper understanding of the forces for change, sharing experiences to build confidence in the ability to adjust and to capture the benefits on offer, and removing impediments to integration. We outline the features of the new wave of globalisation, draw out five more-specific trends in the education sector that are associated with this new wave, and then identify challenges for institutions and for governments. We conclude with comments on the scope for regional cooperation to help build the confidence to capture the opportunities that are emerging.

The New Wave of Globalisation

The first wave of the globalisation of tertiary education mostly meant the movement of students across borders. The number of students in the Asia–Pacific moving overseas for their university education almost doubled between 1999 and 2006 (see Figure 1). The significant sending countries are identified in Figure 2 (which excludes China, which in 2006 sent over 400,000 students abroad). China shows the highest rate of growth in the period to 2006. Numbers moving offshore to study from Singapore and Malaysia fell over this period.

The new wave of globalisation includes the movement of teachers and whole institutions into overseas markets, joint degree programs offered by institutions in different economies, and distance learning programs, to mention just a few of its characteristics. It has a higher



¹ http://www.apec.org/ apec/ministerial _statements/ sectoral_ministerial/ education/2008_ education.html Source: UNESCO Institute of Statistics applied to Australia, Brunei Darussalam, Canada, Chile, China, Colombia, Ecuador, Hong Kong, China, Indonesia, Japan, Korea, Malaysia, Mexico, Mongolia, New Zealand, Peru, Philippines, Singapore, Thailand, United States, Viet Nam. Where data are not supplied, the data for the next available year are repeated





level of commercial motivation: Knight (2008) stresses not only the shift from student mobility to program and provider mobility but also the shift in orientation in the relationships between universities from development cooperation to what she calls 'competitive commerce'. Table 1 presents the features of international education in a different format, that is, in terms of the 'modes of supply' as applied in trade policy negotiations in trade and investment in services.

	Table 1						
	Modes of supply in education services						
	MODE	DESCRIPTION	EXAMPLES	WAVE OF GLOBALISATION			
1	Cross-border supply	Services flow from the territory of one member into the territory of another via telecommunications or mail	Distance learning, online education, commercial franchising of a course	Second Wave			
2	Consumption abroad	Refers to situations where a service consumer travels to another economy to obtain a service	Student mobility	First Wave			
3	Commercial presence	Implies that a service supplier of one economy establishes a territorial presence, including through ownership or lease of premises, in another to provide a service	Institutions moving into overseas markets – branch or satellite campuses	Second Wave			
4	Movement of natural persons	Consists of persons of one economy entering the territory of another to supply a service	Teachers moving overseas – normally connected to Mode 3	First Wave			

*Adapted from WTO website and Young-Chul Kim (2008).

The new wave offers access to skills in delivery, experience in curriculum design, teaching resources, quality assurance systems, and research capacity and an international perspective, all of which can add value for local partners. But it also brings competition and pressure for adjustment. Knight's (2008) classification of international education in Table 2 (adapted

from Knight, 2005) provides examples of the forms in which international cooperation occurs. We later discuss in more detail some of the issues involved in the choice between these modes of supply.

In the following section we outline five key trends associated with the new wave of globalisation in education.

Table 2			
Framework for cross-border education			
CATEGORY	FORMS OF MOBILITY		
People			
Students, Professors/Scholars, Researchers, Experts/Consultants	Semester/Year abroad, Full degrees, Field/Research work, Internships, Sabbaticals, Consulting		
Programs			
Course, program, sub-degree, degree, postgraduate	Twinning, Franchised, Articulated/Validated, Joint/Double award, Online/Distance		
Providers			
Institutions, Organisations, Companies	Branch Campus, Virtual University, Merger/Acquisition, Independent Institutions		
Projects Academic projects, Services	Research, Curriculum, Capacity Building, Educational services		

Source: Knight (2008)

Five Trends in the Tertiary Education Sector

In the early years of the 21st century five trends are prevalent throughout the Asia– Pacific with regard to tertiary education:

1. International student mobility continues to increase significantly

Kim (2008) forecasts that the number of international students will increase from 1.8 million in 2000 to 7.6 million in 2025, which implies annual growth of about 6 per cent a year over this period, compared to about 4 per cent in the last two decades of the last century. Asia expects to account for 70 per cent of global demand by 2025. Healey (2008) stresses in his review of the various forecasts that the outlook for mobility depends on changes in the capacities of students' home institutions. Mobility is a consequence of the combination of the impact of economic growth and structural change on the demand for education and the differences in demographic patterns among the region's economies. Important on the supply side is the established capacities in the developed but ageing economies. Commenting on the drivers of internationalisation. Healey (2008) highlights the response of institutions to incentives created by government policy, including researchintensive institutions. His list includes the response to the declining public subsidies for domestic students and the deregulation of tuition fees for foreign students.

The US and Europe remain important destinations for the students who move out of Asia in these forecasts. Australia has the highest proportion of international students of any OECD member (19.3 per cent of all students at Australian universities in 2005). However, new competitors are emerging for these traditional host countries, including some of the important sending countries, China and Singapore for example.

Furthermore, now linked to student mobility is a trend to two-step migration by international students into their host economies, which we discuss further below.

2. Providers and programs are increasingly mobile

The Asia–Pacific accounts for the bulk of the world's program and institutional mobility. Kim (2008), for example, reports a number of projects that illustrate the new wave of globalisation: he finds that many schools and universities in the Asia-Pacific region have recently begun developing joint programs with foreign educational institutions and e-learning programs, as well as selling or franchising courses to foreign educational institutions. These operations could be in cooperation with local partners (in forms of franchising) or as stand-alone operations. They offer varying combinations of teaching and research cooperation. While some new providers are working on partnerships with traditional institutions, others are developing new ways and are offering vocational and specialised services that challenge traditional academic teaching programs that operate jointly with research.

Examples of program mobility include:

- Korea: as of 2006, 14 universities were operating dual degree programs (where both institutions provide an award), and four universities were operating joint degree (that is, a single award) programs.
- Malaysia: since 1996, the government has encouraged foreign universities to establish branch campuses. There are five branch campuses of foreign universities and over 600 private colleges offering both local and foreign qualifications.
- Hong Kong: approximately 165 foreign educational institutions and professional bodies offered a total of 856 courses in June 2003, alone or with local partners.

China, which is the subject of extensive study by Yang (2008), reported a nine-fold increase between 1995 and 2003 in joint programs between Chinese and foreign institutions. In early 2003 there were 712 such programs, 37 per cent at a postsecondary or higher education level. By June 2007 this number had risen to 745, of which 169 were qualified to offer overseas awards. Over 50,000 students are enrolled in these sorts of partnerships. Yang reviews the issues associated with this rapid growth, including matters of quality assurance, legal status of the joint ventures and the cultural appropriateness of the curricula as well as the tensions between the commercial motivations for the partnerships and their contributions to institutional development. He points out that the changes in the structure of the sector also raise challenges for its governance. These issues are not peculiar to China.

The Singapore experience is also important (Olds, 2007). Another example of a joint program is the establishment of the Logistics Institute-Asia–Pacific by the National University of Singapore and Georgia Institute of Technology to conduct research and provide education. The Massachusetts Institute of Technology (MIT), the National University of Singapore and Nanyang Technology University have jointly implemented the Singapore–MIT Alliance Program to operate research and graduate teaching programs.

Some proposals have not been completed in their proposed format, including the establishment of a division of Johns Hopkins University in Singapore and of UNSW Asia. The latter case, in which it was proposed to establish not only teaching but also research activities in Singapore, is summarised in Box 1. The experience highlights a number of issues for both host countries and foreign institutions in setting up offshore. Drawing on the experiences of both these cases, Sidhu (2008) concludes that, while the forces for internationalisation are powerful and the expectations are high, there is a danger of over-stating the ease of implementation in a set of activities that involve direct interaction between people who have different experiences and communication styles. We return to the questions of the choice of strategies for internationalisation in Box 2 below.

Box 1

A Case Study of UNSW Asia²

Australia's University of New South Wales was set to establish the first private comprehensive university in Singapore. The offshore campus, known as UNSW Asia, was to be wholly owned and operated by UNSW. Enrolment of students commenced in February 2007, but in May it was announced that UNSW Asia would close at the end of June 2007.

The venture was considered to be at the forefront of the globalisation of higher education, representing both the desire of a world-class university to globalise and the supporting practices of a government.

UNSW Asia differed from most offshore universities that are primarily teachingonly by establishing itself as a researchintensive institution. The offshore campus was to offer a comprehensive range of undergraduate, postgraduate and research degree programs ranging from Engineering, Science and Technology to Business and Humanities.

The establishment of the University was to contribute to Singapore's goal of increasing the number of foreign students studying in Singapore. The final business plan agreed on by the UNSW and Singapore's EDB was for a recruitment target of between 10,000 to 15,000 students by 2020. The agreement also required UNSW Asia to have about 70 per cent international students. UNSW Asia was also anticipated to have contributed at least \$500 million per annum in direct spending to the local community.

On 23 May 2007 UNSW's Vice Chancellor Fred Hilmer announced that in view of poorer than anticipated student numbers in semester one, a decision had been made to close the campus on 28 June 2007. The University claimed financial problems as a result of the lower-than-expected enrolment, with only 148 students, 100 of whom were Singaporeans.

Sidhu's review of the failure of the campus highlights a number of issues in internationalisation. While these are relevant talking points, the relative significance of each has not been established and some are only evident in hindsight. The issues include the exposure of host governments to risks in applying a strategy of attracting foreign investors, in this case, education institutions, and how those risks might be managed. There is also the question of the allocation of the risks between the parties and the incentives which that risk allocation creates, while acknowledging the value of the overall strategy of attracting international investors.³

Concerns have also been expressed for staff and students who had made commitments to the new institution. Commentators who focused on the choices made by the investor institution underscored the importance of the design of marketing strategy, including pricing, and the nature of business planning required for success in an offshore location by an education institution. Sidhu reports various observations on how the decision to withdraw might have been implemented in the Singapore context and details comments that question whether local support could have been mobilised to adapt the original business plan.

² This case study is based primarily on material gathered and reported by Sidhu (2008).

³ See for example, the commentary by Siew Kum Hong at http://www. channelnewsasia. com/stories/ singaporelocalnews/ print/279180/1/.html

3. The importance of public provision is diminishing

Tertiary education was once largely the domain of public provision in Asia, but it is currently undergoing dramatic privatisation. The forms of privatisation are manifold, such that institutions are no longer 'only' public or 'only' private. Figure 3 shows the shares of different types of institutions compared to overseas study in Malaysia. Tierney (2008) reviews the forms of tertiary education in Malaysia. The rise in the share of private institutions and the fall in the number of students studying overseas and in public institutions is striking.

The entry of new and private providers shifts the relative importance of the government's role from being a provider more to being a regulator that oversees quality assurance.

4. The extent of public funding is also shifting

The weight on private contributions is increasing. The provision of public funding that remains is also likely to shift to consumers rather than providers. For example, in Australian institutions, the significance of Australian government grants has declined from 58% in 1995 to 41% of University revenue in 2006, while the share from overseas fee-paying students has nearly tripled and that from domestic students has risen from 17% to nearly 30%.⁴

Again, this experience is not specific to Australia. As the sources of funding diversify, public institutions are becoming more corporate and autonomous, leading to the application of more businessoriented decision-making criteria. Pokarier (2008) points out that Japan already has a relatively high level of private contributions and a greater role of private universities.



Source: Tierney (2008)

5. The interest in international research cooperation is widening and deepening

The research community is being asked to respond to issues that apply across borders, for example, to climate change. Cooperation is valuable as institutions respond to these sorts of issues. Cooperation and crossborder projects have a number of advantages (discussed by Brody (2007)). They include:

- building research capacity and drawing together the required research expertise,
- studying problems in situ,
- helping to capture economies of scale,

- avoiding costly duplication,
- providing research students with an international experience,
- combining research beneficiaries and helping avoid problems of freeriding and therefore underfunding,
- capturing the benefits arising from differences in relative costs in research inputs,
- gathering the insights from comparative studies,
- adding to the impact of research results,
- reducing technology transfer costs.

⁴ http://www.rba.gov.au/ PublicationsAnd Research/Bulletin/ bu_jun08/aus_exports_ education_services.html

There are real drivers for international cooperation, which is not merely reputation setting for newcomer or mid-ranked institutions. These include the growth of cooperative research activity, where in the region China, Korea and especially Singapore show high growth rates in research cooperation in the private sector (von Zedtwitz, 2006). Macaranas (2008) provides a number of examples, including reference to Yale's operations in China. Taking a supply chain perspective, he identifies the relative contributions of the partners to the research process, including technology development (Yale) and procurement for research (the local partners). Other examples are the growth of investment in research laboratories in China, Microsoft for example.⁵ Bell Laboratories established its first research facility outside the United States in China;⁶ by 2006 China was hosting about 750 international research facilities (von Zedtwitz, 2004, 2006).

As noted above, the extent to which research cooperation is tied to the delivery of offshore teaching is not clear, but a range of business models have attempted to elucidate this.

Challenges Ahead

The adjustment to the five trends just discussed is significant. The entry of new providers and the development of competition can undermine institutional and regulatory structures and lead to significant and painful adjustment of mature private and public institutions or systems of tertiary education that have been slow to anticipate these developments. Entrenched interests and government practices can inhibit adaptation.

Questions remain about strategic planning within institutions in the context of such market-driven developments, some of which we summarise in Box 2. There are questions about the design of policy at the domestic level, and about the opportunities for cooperation within the region.

Box 2

Challenges at the Institutional Level

1. Academic staff

Institutions will demand a highly skilled academic staff body for both teaching and research. There are challenges in each area. Teaching is about to undergo a sea change in the manner of conducting a class, but there is almost no infrastructure for upgrading the skills of faculty in some Asia–Pacific education systems. Developing economies focus on hiring academic staff with advanced degrees and research capacity. Access to capacity for research training for their staff is a priority. Many countries will need to build capacity to attract and keep academic staff.

2. Funding research in open markets

Many institutions will have to adapt to competition from new and possibly foreign competitors that undermine their traditional funding models. They must adapt to the separation of funding of teaching and research while meeting community expectations of their contribution to growth and development and participating in international collaborations. They will need to capture a larger share of research benefits as their funding sources diversify. They will also need to develop more partnerships with the private sector for research cooperation, including across borders.

⁵ See, for example, http://www.chinadaily. com.cn/english/ doc/2004-09/13/ content_373938.htm

⁶ http://blrc.edu.cn/ blrcweb/about.htm#blrc

Box 2

Challenges at the Institutional Level (continued)

3. Choosing a model for internationalisation

The previous model for higher education internationalisation was based on student mobility, alongside faculty exchange, research collaboration, internationalisation of curricula to include foreign language and international perspectives, and networks of institutions. To this set is now added program and provider mobility. Using the latter options with respect to higher education in general is akin to a 'buy' rather than 'make' decision by local institutions in economies with higher demands for education. Issues in that choice are discussed in detail by Macaranas (2008). They include quality assurance by the foreign provider and

'hold-up' problems once a commitment is made, plus uncertainties associated with policy change in source and host economies. Macaranas (2008) argues that the choice of model will vary between stages of development. Institutions based in emerging economies may prefer the 'buy' options. Others may prefer intermediate options. A further implication is that partner institutions in more mature economies have to think about how their associations and linkages add value to their objectives and how the activities are divided between the partners for greatest overall gain. However, as experience in the region has already shown, all models confront significant costs of doing business internationally.

Domestic Challenges

Many economies in the region face substantial policy reform challenges in order to capture the benefits of globalisation in this sector. These challenges vary according to stage of development.

Pokarier's (2008) study of Japan highlights the challenges associated with demographic change. It signals the difficulties facing economies at high levels of development. Japan's university system has met the expectation of universal education. Pokarier reviews the contributors to that success, including the role of private institutions and private contributions to the cost of education. But he points out how the rapid growth of the education system has brought problems of quality and longer term problems of structural adjustment, especially now with the decline in the student population. Not surprisingly, Japan has set goals for rapid growth in the number of international students in its institutions. Japan too may join the 'war for skills'. In June 2008 a group of LDP policymakers proposed to the Prime Minister to raise the foreign share of the Japanese population from less than 2% to 10% over the next 50 years.

Other economies at earlier stages of development continue to work towards the goals of providing higher levels of access to tertiary education. The nature and pace of adjustment in all economies depends on the extent of integration of education markets.

Table 1 lists the various modes of supply. Dee (2008) lists examples of the various policy impediments that might apply in these modes: this list is reproduced in the Appendix. Dee (2008) reports (based on Nguyen-Hong and Wells (2003)) indicators of the extent to which policy measures limit the delivery in each mode of supply. The



Source: Adapted from Dee (2008): includes Australia, Canada, Chile, China, Hong Kong, Indonesia, Japan, Korea, Malaysia, Mexico, New Zealand, Singapore, Thailand, United States, Vietnam

impediments to mode 1 transactions are, at least at present, relatively low. According to data at that time, some countries retained relatively high impediments to the movement of people, including China, Malaysia and Vietnam. The impediments to the movement of students out of their home countries, that is, imports of education via the mode of consumption abroad, and foreign establishment by education institutions, that is, commercial presence, are summarised in Figure 4 (where the indicators are on a scale of zero to one and where higher values indicate a higher level of restrictiveness).

The data in Figure 4 indicate that countries tend to relatively higher restrictions on commercial presence than on study abroad (in the figure there are more observations above the 45 degree line than below). The lower left quadrant contains economies with scores of less than 0.5 on both measures; the square dot shows average values of 0.23 for imports via consumption abroad and 0.39 for commercial presence.

Outliers in the top left quadrant, that is those with relatively high restrictions on commercial presence but not on study abroad, are Malaysia, Indonesia and China. Vietnam is the outlier in the lower right quadrant.

The effect of these restrictions is not to stop international transactions in either mode but to reduce their volume to levels below what they might otherwise be. In principle both are important. However, in econometric work Dee finds that the indicators of restrictions on the movement of students offshore are not significantly related to student flows: the apparently high levels of restrictiveness in China, Vietnam and Indonesia or Korea, for example, are therefore not affecting student outflows. Dee does, however, find that the policies affecting commercial presence have significant effects on student movements. Barriers in the source economy to importing education services via the inward movement of foreign campuses boosts the number of students from the source economy seeking overseas enrolment. Dee finds that 'the magnitudes suggest that if an economy with sample average barriers to FDI imports were to liberalise completely, it would send about 60 per cent fewer students overseas' (at the average level of restrictions on sending students abroad).

Dee also points out that these barriers to imports are not the only ones that matter for adjustment in markets for international education. Table 3 lists examples of barriers to exports of education services. These impediments are important. Using data reported by Dee (2008, Table 3), the average degree of restrictiveness for mode 2 export measures is 0.35, with less than half the variation in scores for the import modes of supply. Dee finds a significant statistical relationship between these scores and the movement of students: she reports econometric results that if 'an economy with sample average barriers to the inward movement of students were to liberalise completely, it would attract about 250 per cent more students-more than twice as many'.

Table 3
Examples

amples o	t harri	ers to	exports of	t ed	lucation	Service
	I Dall					3019100

MODE	RESTRICTION
MODE 2 Consumption abroad, e.g., foreign students entering to take local courses	 Numerical limits on the entry of foreign students Limits on what courses foreign students can enrol in Discriminatory enrolment criteria for foreign students Restrictions on local institutions recruiting foreign students Restrictions on foreign students gaining access to local employment while studying Restrictions on foreign students gaining access to tuition or other (e.g., transport) subsidies while studying
 MODE 4 Exit restrictions on domestic teachers Education or employment bond requiring teachers to serve minimum term of employment locally before they can go o Restrictions on funds transfers overseas by domestic teachers 	

Source: Dee (2008).

This result is significant for the institutions involved in provided education exports. As Dee points out, restrictions on exports may allow the providers to earn larger incomes than otherwise on provision of services to international students since prices in the markets for their services will be higher. Some part of this income may be dissipated in the management of the systems required within institutions in such highly regulated markets. But some other part of that income can be used to support other activities of the institutions that are not income generating, such as basic research. The split of income for these purposes is not clear and is a topic for further work. This concern is related to the earlier point regarding the challenges of funding research in more open markets.

More specific challenges at the economy level include the following.

1. Institutional type and the definition of quality

International rankings are much reported, thus institutions and Ministries are setting targets of higher rankings. There is a risk. Rankings create a 'one size fits all' mindset and privilege research institutions. Although some institutions in some countries will be research focused, the majority of institutions in all countries will be more focused on providing a quality education to an increasing number of students. The comparative ranking of universities in 'league tables' has the potential to diminish the credibility of these universities and to distract them from addressing the legitimate knowledge demands of their own people.

2. Institutional diversity and competition

Will the tertiary system produce graduates and re-graduates with the skills required? How will internationalisation and the capacity to operate in the global economy be handled, how will programs for re-training of those already in the workforce be designed, and will curricula be able to capture local as well as international cultures in more open markets for education? The proliferation of programs and players and the redirection of funding flows through the hands of households means these questions are more likely to be, and can efficiently be, resolved in markets. The growth of diversity can help meet the expectations of industry for workforce skills, for example, for specific skills on top of general capabilities, and for the interest in and capacity for lifelong learning.

Mukherjee and Ang (2008) stress the growing market in many economies for continuing or 'in-employment' education. This area attracts particular specialist providers, not necessarily those providing a full package of research and teaching. Pokarier (2008) also discusses some interesting cases of corporate universities in Japan. Traditional universities might operate in this market, but there are other models of provision emerging.

3. Quality assurance

Much is at risk if low-quality or fraudulent qualifications become closely linked with international transactions in education, as Knight (2008) explains. Those concerns might include lack of recognition of awards by local employers. Providers, too, find challenges in quality control in their more distant operations, yet they too have strong incentives to avoid reputational risk.

As governments around the region shift from funding public providers to funding consumers, the role of a Ministry of Higher Education moves to a greater contribution on the design or certification of quality assurance systems, which involves the recognition and establishment of the status of foreign providers. It should also apply to providers operating in new modes of supply (e.g., distance). Knight (2008) refers to examples of assurance systems in China, Malaysia, and Hong Kong. Setting up these systems may have high opportunity costs in some economies and thus these economies may adopt less elaborate mechanisms. At least a considered decision on quality assurance will be required: the principle will be to adopt arrangements that are not unduly burdensome given the nature of domestic regulatory capacity.

The solution is not only in government hands (Knight, 2008). More players are now involved in accreditation, including professional bodies and other non-government organisations, such as associations of particular disciplinary groups or schools. A significant aspect of quality assurance in higher education will be the active engagement of the staff themselves in international academic networks. As well, international communities of good practice in higher education management and services increasingly play a role.

4. Funding research

The funding of research will cease to be a complement to or packaged with the funding of teaching. Separate funding systems will be required as private, specialist teaching providers compete for students, at least at earlier levels of tertiary education, and diminish the surpluses earned by the traditional providers. The funding challenges also apply to graduate and PhD programs. Private participation in funding of research alongside government funding will matter more in the future, but not all countries have the institutional structures in place to organise those contributions or to provide evaluations of the returns to public funding that will become more transparent and open to scrutiny.

International cooperation in the design and delivery of research, integrated with research training, will become more valuable. Drawing on a case study of Malaysian experience, Morshidi et al. (2008) observe a number of different methods, and various points of entry, for institutions of different types. They stress the importance of understanding the links between teaching and research and the ability to use the expanding market for education as a 'driving force' for research. Given the variety of types of institutions in the region and the cultural variations, they also discuss the value of working on an 'Asia–Pacific framework for research and innovation'. Participation in various professional networks is seen as one of the building blocks.

5. Design of migration policies in host economies and the 'war for skills'

The pool of international students in some economies has become an important source of skilled migration. Hawthorne (2008) documents the extent to which many APEC and OECD economies are using this 'twostep' approach to migration. Competition for international students for this purpose through changes in immigration regulations will become more intense. Hawthorne argues that the level of future competition of this form will be 'unprecedented'. However, instability in student flows may follow. There is, in addition, the scope for migration-driven flows to rapidly distort international student movements by sector and discipline. Privatesector respondents to the opportunities that migration-driven student flows create add to the problems of quality assurance.

The critical parameters influencing the link between student flow and migration policy include the demographic trends in both source and host economies and the sensitivities of student flows to the particularities of migration policies. Hawthorne suggests continuing surveillance and monitoring of export education and migration policies, checking that student flows leading to migration are driven by workforce demands. In addition, she proposes establishing expectations about long-term trends in demography in the region and its impact on likely student flows. She also suggests work to find out which economies might shift from sending students to providing education.

Regional Cooperation

What should be done to build a regional community that is credible in terms of strategy for the education sector? We conclude with some responses to this question.

A simple first step is to develop new data collection systems that will support institution and policy decision making (see Box 3), but, more importantly, are the five areas where further cooperation is valuable.

Box 3

Cooperation on Data

Very little valid data exist in developing countries that enable an understanding of how to grow and plan in a manner that encourages strategic planning. In cases where data does exist, there are differences in the terms used and the systems for collecting information, including provider coverage. Relationships might be developed to enable systematic cross-border data collection and analysis, as occurs in other international business transactions.

1. Research cooperation

The proliferation of modes of supply of international education makes possible more linkages in research. Research cooperation will be required at the regional level to solve pressing issues, many of which also require a range of disciplinary inputs. Options for consideration include the joint funding of PhD programs, involving the sending economy's scholarship organisations and institutions/ employers, and foreign research and training providers. The returning students with research training provide the basis for extending research networks across the region. Laboratories working jointly at different stages of the same research project are already being established according to comparative advantage. There are

different models of how to build research and innovation systems, and there may be no one answer on how to get those right, other than that integration pays. The trends identified here facilitate the experimentation with and development of those systems across borders and across disciplines.

2. Human resource development

Domestic and regional associations can work together to increase the teaching and research capacity of the academic staff in the region. Staff mobility might be one mechanism. Commitment to openness in that mode of supply will be important. This mobility also supports the evaluation of innovation systems across borders. Another possibility is greater collaboration between business and industry and tertiary institutions.

3. Removing border measures and complementing the role of the GATS

Student-sending economies would send 60 per cent fewer students on average if the barriers to foreign campus establishment were liberalised completely. If an economy with average barriers to inward student movements were liberalised totally, it would attract more than twice as many students. Restrictive policies waste opportunities for gains from international exchange. The ability of the GATS to deal with these issues is limited. Some impediments are of a form that GATS does not specify as being required to be listed. Nor is it clear where impediments applying to foreign consumers (i.e., to exports of services) would be scheduled. Further, the GATS approach tends to be mode by mode whereas most education providers

work with packages of modes. A sectorwide convention or model is valuable and could be designed at a regional level.

4. Codes of practice on quality assurance

Codes of conduct are being developed for international delivery, including by UNESCO⁷ and the OECD. Some of the voluntary codes are based on global networks. Relevance of these for APEC members can be examined. A review of options and some evaluation of those already available and of the complementary role that might be played by regional academic networks and other private actors will help accelerate progress to good quality assurance systems.

While there is value in sharing experience in the design of solutions and the contribution of these complementary mechanisms, a single regional or international body is less likely to be successful in the Asia–Pacific given the diversity in the region. As Knight (2008) points out, there is no 'one way' to quality assurance.

5. The brain drain

In open markets and with the aggressive migration policies of the developed economies, developing economies will continue to be concerned about the risks they face from the loss of talent. Their concerns are heightened when their own public funds are used to pay for the education of the internationalised students. Analysis of the actual movement of students after graduation, the rate and timing of their return, the distribution of the costs of higher degree education between the home and host economies in the context of research cooperation, the implications for home and host labour markets, and the students' contribution to the regional community through diaspora effects are all topics for conversation at a regional level to understand the significance of the issue.

⁷ See www2. unescobkk.org/elib/ publications/087/ APQN_Toolkit.pdf

References

Brody, William 2007, 'College goes global', Foreign Affairs, Mar/Apr, 86(2), pp. 122-133.

Dee, Philippa 2008, 'International student movements and the effects of barriers to trade in higher education services', Ch. 3 in Christopher Findlay and William Tierney (eds), The Globalisation of Education: the Next Wave, World Scientific, forthcoming.

Hawthorne, Lesleyanne 2008, 'Demography, migration and demand for international students', Ch. 5 in Christopher Findlay and William Tierney (eds), The Globalisation of Education: the Next Wave, World Scientific, forthcoming

Healey, Nigel M. 2008, 'Is higher education really "internationalising"?', Higher Education, forthcoming.

Kim, Young-Chul 2008, 'The Asia–Pacific education market and modes of supply', Ch. 2 in Christopher Findlay and William Tierney (eds), The Globalisation of Education: the Next Wave, World Scientific, forthcoming

Knight, J. 2005, 'Cross-border education: an analytical framework for program and provider mobility', in J. Smart and W. Tierney (eds), Higher Education: Handbook of Theory and Practice, Springer, Dordrecht.

Knight, Jane 2008, 'Cross-border higher education', Ch. 4 in Christopher Findlay and William Tierney (eds), The Globalisation of Education: the Next Wave, World Scientific, forthcoming

Macaranas, Federico 2008, 'Business models in Asia–Pacific transnational education', Ch. 6 in Christopher Findlay and William Tierney (eds), The Globalisation of Education: the Next Wave, World Scientific, forthcoming

Morshidi, S., Ahmad Farhan, M.S., Ibrahim, K., Koo, Y.L., Nik Meriam, N.S., Norzaini, A., Yang Farina, A.A., Wong, W. 2008, 'Research and collaboration in an expanding higher education market in Asia–Pacific: the experiences of Malaysian universities', Ch. 8 in Christopher Findlay and William Tierney (eds), The Globalisation of Education: the Next Wave, World Scientific, forthcoming

Mukherjee, J. and Ang, D. 2008, 'Challenges and opportunities in the in-employment education market', Ch. 9 in Christopher Findlay and William Tierney (eds), The Globalisation of Education: the Next Wave, World Scientific, forthcoming

Nguyen-Hong, D. and Wells, R. 2003, Restrictions on Trade in Education Services, Productivity Commission Staff Working Paper, Canberra, October.

Olds, Kris 2007, 'Global assemblage: Singapore, foreign universities, and the construction of a "Global Education Hub", World Development, 35(6), 959–975.

Pokarier, C. 2008, 'Japanese higher education', Ch. 10 in Christopher Findlay and William Tierney (eds), The Globalisation of Education: the Next Wave, World Scientific, forthcoming

Sidhu, Ravinder 2008, 'The "brand name" research university goes global', Higher Education doi 10.1007/s10734-008-9136-2.

Tierney, William 2008, 'Forms of privatisation', Ch. 7 in Christopher Findlay and William Tierney (eds), The Globalisation of Education: the Next Wave, World Scientific, forthcoming

Von Zedtwitz, M. 2004, 'Managing foreign R&D laboratories in China', R&D Management, 34(4), 439–452. Available at http://ssrn.com/abstract=591620

Von Zedtwitz, M. 2006, 'Internationalization of R&D – perspectives from outside and inside of China', presentation 20 October, available at www.oecd.org/dataoecd/29/49/37738049.pdf

Yang, Rui 2008, 'Transnational higher education in China', Ch. 11 in Christopher Findlay and William Tierney (eds), The Globalisation of Education: the Next Wave, World Scientific, forthcoming

Appendix

MODE	LIMITATIONS ON MARKET ACCESS	DEROGATIONS FROM NATIONAL TREATMENT
MODE 1 Cross-border trade, e.g., downloading courses from the internet	 Restrictions on downloading educational material from the internet, be it from a domestic or foreign supplier Requiring foreign suppliers of internet education courses to be in a partnership or joint venture with a local institution An economic needs test attached to registration, authorisation or licensing of all education providers, including those supplying via distance education Restrictions on the recognition of qualifications obtained from any distance education supplier 	 Restrictions on downloading educational material from foreign internet sites Restrictions on which courses foreign suppliers of distance education can provide Restrictions on the import and distribution of educational materials or software from foreign institutions providing distance education Restrictions on the local accreditation of foreign distance education suppliers, or on the recognition of qualifications obtained from a foreign distance education supplier Restrictions on cross-border payment or credit card transactions
MODE 2 Consumption abroad, e.g., home students moving overseas to study	 Since the home economy has no jurisdiction over the foreign service supplier, it can mostly limit foreign supply only indirectly by restricting the local consumer. Such restrictions on consumers are unlikely to also affect local suppliers. Hence it is unlikely that there would be limitations on market access for imports of education services delivered via this mode. 	 Restrictions on foreign education institutions advertising locally or recruiting local students Quotas on the number of local students going overseas to study Foreign currency restrictions on local students studying abroad Restrictions on the recognition of overseas qualifications for institutional credit Restrictions on the recognition of overseas qualifications for professional licensing and accreditation
MODE 3 Commercial presence, e.g., foreign institutions establishing a local campus	 An economic needs test attached to registration, authorisation or licensing of all education providers A requirement that the foreign institution incorporate locally A requirement that the foreign institution operate in a joint venture with a local institution Restrictions on the number of foreign teachers that local institutions can employ Limits on foreign equity in local institutions 	 An economic needs test attached to registration, authorisation or licensing of foreign education providers A restriction that prevents foreign tertiary institutions from using the term 'university' in the title of their local campus Restrictions on the scope of services that the local campus of a foreign institution can provide Restrictions on the number of students that the local campus of a foreign institution can service A residency requirement on the management of the local campuses of foreign institutions Discriminatory quality assurance requirements on the local campuses of foreign institutions Restrictions on the recognition of those degrees Restrictions on the ability of the local campuses of foreign institutions Restrictions on the ability of the local campuses of foreign institutions to gain access to producer subsidies Restrictions on the ability of the students to gain access to consumer subsidies
MODE 4 Movement of natural persons, e.g., foreign teachers coming to deliver short courses	 An economic needs test attached to registration, authorisation or licensing of all education providers, including foreign teachers Quotas or economic needs tests on the numbers of temporary staff employed by local institutions Labour market testing for the contract employment of foreign teachers 	 Nationality of citizenship requirements to teach locally A prior residency requirement to teach locally Restrictions on the recognition of the qualifications of foreign teachers

© Association of Pacific Rim Universities & Pacific Economic Cooperation Council



The PECC International Secretariat 29 Heng Mui Keng Terrace, Singapore 119620 Tel: +65 6737 9823 | Fax: +65 6737 9824 E-mail: info@pecc.org