

Introduction and Overview

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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 are] 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 a new wave of globalisation in this sector and to capture its advantages. Regional cooperation can add value by reaching a deeper understanding

¹ http://www.apec.org/apec/ministerial_statements/sectoral_ministerial/education/2008_education.html

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.

The scope and issues associated with the new wave of globalisation of education were the topics of a research project whose results are reported in this volume. Drawing on the work of the contributors, in this chapter we draw out five more-specific trends in the education sector that are associated with this new wave, and then identify the challenges for institutions and for governments. We conclude with comments on the scope for regional cooperation to help build the confidence to capitalize on emerging opportunities.

THE NEW WAVE OF GLOBALISATION

The first wave of the globalisation of tertiary education primarily meant the movement of students across borders. 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 level of commercial motivation: Knight stresses in Chapter 4 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’. She also provides a framework for classifying international education (adapted from Knight, 2005) and 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.

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.

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

FIVE TRENDS IN THE TERTIARY EDUCATION SECTOR

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

1. *International student mobility continues to increase significantly*

In Chapter 2, Kim reports forecasts that the number of international students will increase from 1.8 million in 2000 to 7.6 million in 2025, which implies an 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 are 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 research-intensive 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 students moving out of Asia in these forecasts. Of the OECD members, Australia has the highest proportion of international students (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, such as China and Singapore.

Furthermore, now linked to student mobility is the trend towards 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. A number of projects that illustrate the new wave of globalisation are reported by Kim in Chapter 2. 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.

China, which is the subject of extensive study by Yang in Chapter 11, 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 post-secondary 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). Mukherjee and Ang review aspects of the Singapore approach in Chapter 9. Some proposals for new projects in Singapore have not been completed in their proposed format, including the establishment of a division of Johns Hopkins University in Singapore and of the University of New South Wales Asia. 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 overstating the ease of implementation in a set of activities that involve direct interaction between people with different experiences and communication styles.

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. In Chapter 7, Tierney 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 that of a provider to one of 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 per cent of university revenue in 1995 to 41 per cent in 2006, while the share from overseas fee-paying students has nearly tripled and that from domestic students has risen from 17 per cent to nearly 30 per cent.² 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 business-oriented

² http://www.rba.gov.au/PublicationsAndResearch/Bulletin/bu_jun08/aus_exports_education_services.html

decision-making criteria. In Chapter 10, Pokarier points out that Japan already has a relatively high level of private contributions and a greater role of private universities.

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, climate change. Cooperation is valuable as institutions respond to these sorts of issues. Cooperation and cross-border 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*,
- providing research students with an international experience,
- combining research beneficiaries and helping to avoid problems of free-riding and therefore underfunding,
- helping to capture economies of scale,
- avoiding costly duplication,
- 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.

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; in the region, China, Korea and especially Singapore show high growth rates in research cooperation in the private sector (von Zedtwitz, 2004, 2006). Macaranas provides a number of examples, including a reference to Yale's operations in China, in Chapter 6. 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). 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 discussed above is significant. The entry of new providers and the development of competition can undermine institutional and regulatory structures and lead to significant and painful adjustments for 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. There are questions about the design of policy at the domestic level, and about the opportunities for cooperation within the region.

Challenges at the institutional level include meeting the demand for a highly skilled body of academic staff for both teaching and research. 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.

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 for teaching and research while meeting community expectations of their contribution to growth and development and participation 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.

The previous model for the internationalisation of higher education was based on student mobility, alongside faculty exchange, research collaboration, internationalisation of curricula to include foreign languages and international perspectives, and networks of institutions. Added now to this set is program and provider mobility. Using the latter options with respect to higher education in general is akin to a 'buy', rather than a 'make', decision by local institutions in economies with higher demands for education. Issues involved in that choice are discussed in detail by Macaranas. 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 argues that the choice of model will vary between stages of development. Institutions based in emerging economies may prefer the 'buy' option, while others 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 in doing business internationally.

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 the stage of development.

Pokarier's 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 Liberal Democratic Party policymakers proposed to

the Prime Minister to raise the foreign share of the Japanese population from less than 2 per cent to 10 per cent over the next 50 years.

Other economies at earlier stages of development continue to work towards 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.

In Chapter 3, Dee lists examples of the various policy impediments that might apply in these modes. She finds that countries tend to have relatively higher restrictions on commercial presence than on study abroad. 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 be otherwise. 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, Indonesia or Korea, for example, are therefore not affecting student outflows. Dee nevertheless finds that the policies affecting commercial presence have significant effects on student movement. 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. These impediments are important. She finds a significant statistical relationship between these scores and the movement of students and 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’.

This result is significant for the institutions involved in providing education exports. As Dee points out, restrictions on exports may

allow the providers to earn larger incomes than otherwise from the provision of services to international students, since prices in the market for their services will be higher. Some part of this income may be dissipated in the management of 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 often reported, leading institutions and ministries to target higher rankings. There is a risk involved in this. Rankings create a 'one size fits all' mindset and privilege research institutions. Although certain institutions in certain 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 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, such as for specific skills on top of general capabilities, and for the interest in and capacity for lifelong learning.

In Chapter 9, Mukherjee and Ang 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 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 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 Ministry of Higher Education plays a greater role in 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 refers to examples of assurance systems in China, Malaysia and Hong Kong. Setting up these systems may have high opportunity costs in some economies; they may thus 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 the hands of the government. 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. In addition, 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, in Chapter 8 Morshidi *et al.* 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. In Chapter 5, Hawthorne

documents the extent to which many APEC and OECD economies are using this ‘two-step’ 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. Private-sector respondents to the opportunities created by migration-driven student flows 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 recommends 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 its 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. More importantly, there are five areas where further cooperation is valuable.

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 resolve 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 single answer on how to get those right, other than stating that integration pays. The trends identified here facilitate the experimentation with and development of those systems across borders and 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. As discussed, 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 sector-wide 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 those by UNESCO³ and the OECD. Some of the voluntary codes are based on global networks. The relevance of these for APEC members can be examined. A review of options and some evaluation of those already available and of the possible complementary role of regional academic networks and other private actors will help accelerate progress towards good quality assurance systems.

While there is value in sharing experiences 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 points out, there is no ‘one way’ to quality assurance.

5. *The brain drain*

In open markets and with the aggressive migration policies of 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.

³ See http://www2.unescobkk.org/elib/publications/087/APQN_Toolkit.pdf.

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