# Crossing Borders in East Asian Higher Education

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# Crossing Borders in East Asian Higher Education

Edited by
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Springer
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First published 2010
ISBN 978-94-007-0445-9 e-ISBN 978-94-007-0446-6
DOI 10.1007/978-94-007-0446-6
Springer Dordrecht Heidelberg London New York



Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

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# List of Abbreviations

| | |
|---|---|
| AMP | Advanced Management Program |
| AMTB | Attitudes/Motivation Test Battery |
| APEC | Asia-Pacific Economic Cooperation |
| CEPA | Closer Economic Partnership Agreement |
| CFCE | Chinese–Foreign Cooperation Education |
| CGSs | Chinese Government Scholarships |
| CGSP | Chinese Government Scholarship Program |
| CityU | City University of Hong Kong, The |
| CMU | Carnegie Mellon University |
| CUHK | Chinese University of Hong Kong, The |
| DTI | Design Technology Institute |
| EDB | Economic Development Board |
| EMB | Education and Manpower Bureau |
| ERC | economic review committee |
| GATE | Global Alliance for Transnational Education |
| GATS | General Agreement on Trade in Services |
| GDP | gross domestic product |
| GIT | Georgia Institute of Technology |
| GIST | German Institute of Science and Technology |
| GSB | Graduate School of Business (University of Chicago) |
| HEIs | higher education institutions |
| HKU | University of Hong Kong, The |
| HKUST | Hong Kong University of Science and Technology, The |
| IEA | International Association for the Evaluation of Educational Achievement |
| IIT | Indian Institute of Technology |
| IMF | International Monetary Fund |
| JASSO | Japan Student Services Organization |
| JDDPs | joint dual degree programs |
| JHU | Johns Hopkins University |

| | |
|---|---|
| KBS1 | knowledge-based society 1 |
| KBS2 | knowledge-based society 2 |
| KI | Karolinska Institutet |
| KMEHRD | Korean Ministry of Education and Human Resources Development |
| LCTLs | less commonly taught languages |
| LU | Lingnan University |
| MANOVA | Multivariate analysis of variance |
| MBA | Master of Business Administration |
| MEXT | Ministry of Education, Culture, Sports, Science and Technology (Japan) |
| MIT | Massachusetts Institute of Technology |
| MOE | Ministry of Education |
| MRPs | mainland Chinese research postgraduates |
| NBS | Nanyang Business School |
| NCUES | National Colleges and Universities Enrollment System (China) |
| NTI | Nanyang Technological Institute |
| NTU | Nanyang Technological University |
| NUS | National University of Singapore |
| ODA | Overseas/Official Development Assistance |
| OECD | Organisation for Economic Co-operation and Development |
| OIA | Office of International Affairs |
| PCER | Presidential Commission on Educational Reform |
| PISA | Programme for International Student Assessment |
| PolyU | Polytechnic University of Hong Kong |
| PRC | People's Republic of China |
| R&D | research and development |
| RAE | Research Assessment Exercise |
| RPg | research postgraduate students |
| S&T | strategy and technology |
| SAR | Special Administrative Region (Hong Kong) |

| | |
|---|---|
| SCI | Science Citation Index |
| SIM | Singapore Institute of Management |
| SJTU | Shanghai Jiao Tong University (China) |
| SLA | second-language acquisition |
| SMA | Singapore–MIT Alliance |
| SMU | Singapore Management University |
| SPACE | School of Professional and Continuing Education (Hong Kong) |
| THES | Times Higher Education Supplement |
| TIMSS | Trends in International Mathematics and Science Study |
| TLI-AP | Logistics Institute-Asia Pacific, The |
| TUJ | Temple University, Japan |
| TUM | Technische Universitat München |
| UGC | University Grants Committee |
| UNNC | University of Nottingham, Ningbo, China |
| UNLV | University of Nevada, Las Vegas |
| UNSW | University of New South Wales |
| UPGC | University and Polytechnic Grants Committee |
| UR | Uruguay Round |
| WCUs | world-class universities |
| WTO | World Trade Organization |

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# Foreword

Asia is traditionally "where it's at" in international higher education because the majority of the world's internationally mobile students and professors have come from Asian countries, including South Asia, and have gone to North America, western Europe, and recently Australia and New Zealand. Many of these students and professors did not return to their home countries, creating what used to be called "brain drain." Now, as this book shows, the traditional one-way traffic from Asia to the West has become much more complex. East Asia, particularly, has become actively engaged in international higher education initiatives of its own as higher education systems expand and become better developed.

*Crossing Borders* contributes to the emerging study of how East Asian countries have developed their own international higher education programs and how the region is being affected by this new phenomenon. The programs discussed in this book, and the broader trends identified, present the most important developments in international higher education in decades. These trends will have a significant impact on global flows of students and professors, on relations among East Asian nations, and on how academic systems develop in the region.

The countries involved, especially the larger ones, will become less dependent on the West for ideas, destinations, and programs. As this book argues, there will be more intra-Asian higher education relations, and, perhaps, a bit less with traditional partners in the West. The "traditional" sending countries—China, South Korea, and Japan—now attract students, mainly from other Asian countries, to study in their countries. Indeed, China has about as many students coming to study there as the number of its own Chinese students leaving the country each year to study abroad. Further, while the United States and other major Western destinations remain the most popular, many Chinese students are now choosing to study in Japan and South Korea.

A few East Asian countries are creating sophisticated international higher education policies of their own. Again, China, as the largest country, has established active programs that succeed in attracting students from abroad. It has invested large sums in facilities for international students, and has also made government scholarship funds

available to some international students. Moreover, hundreds of centers that focus on Chinese language and culture called Confucius Institutes are being established around the world, often on university campuses. These institutes are able to provide information about study abroad opportunities in China. Japan was first to initiate an international higher education strategy, with a government-based goal of "100,000 international students by 2000." While this was attained later than expected, the number of international students in Japan has now exceeded the original goal. Foreign students in Japan overwhelming originate from other Asian countries—with the largest number coming from China and South Korea. Malaysia also operates an extensive international higher education sector as part of its national strategy aimed at attracting students, mainly from the Muslim world.

Much of East Asia's involvement in international higher education is mainly through students going abroad to study, branch campuses, or other collaborative programs with universities from Australia, the UK, and to a lesser extent the United States. A few other European countries are modestly involved as well. Similar initiatives exist in Indonesia, Vietnam, Cambodia, and Thailand. Although students from these countries study in other Asian nations, the majority of them still go to the West for study, and with very few exceptions, international degree programs in these countries are offered by Western universities.

*Crossing Borders* makes an important contribution by providing a rich analysis of the various permutations of Asia's cross-border higher education thinking and activities. The 21st-century realities are complex and varied. Hong Kong and Singapore are among the world's most internationalized higher education environments and are thus worthy of special analysis. Both countries early on recognized that to survive as higher education hubs—and for that matter as successful and sophisticated economies—they would need to be linked to the rest of the world. Their universities are expected to cement their global economic integration in areas such as business and commerce. Choosing to use English as the medium of instruction certainly helped, but a clear policy of recruiting the best professors from around the world was instrumental in Singapore and Hong Kong. Both South Korea and Japan have also recognized that that their economies depend on integration with the region as well as on continuing international initiatives. However, this is easier said than done in countries such as Japan and Korea where once can sense an overwhelming salience of their own cultures.

The role of English in Asia's international higher education initiatives is complex. Many East Asian countries now offer degree programs in English to attract international students as well as to improve the English competency of domestic students. For example, master of business administration degrees are offered in English by local institutions of higher learning in most East Asian countries—additional English-language degrees are offered by foreign institutions operating in East Asia as well. Professors in many disciplines are asked to teach in English, and the greatest demand on their professional advancement involves publishing in internationally recognized scholarly and scientific journals—most of which are in English. This is part of the region's internationalization strategy. However, internationalization strategies will inevitably create unanticipated consequences too. At the very least, there will be problems pertaining to the academic use of Asian languages and for the continued development of scholarship, especially in the social sciences and humanities, in those languages. It may also be problematic for many students, and some professors, whose knowledge of English may not be up to appropriate standards.

East Asia is engaged in a significant number of internationalization strategies. While much less discussed than the Bologna initiatives of the European Union—and much more scattered due to the lack of an Asian regional strategy for internationalization—Asia's regional cross-border programs are slowly expanding. Discussions under the auspices of ASEAN have been taking place, but no significant regional initiative comparable with that of Bologna is under way. Thus far, selected East Asian nations are pushing forward with their own initiatives, many of which share common elements. But without a shared cross-regional common approach, East Asian internationalization will not have the impact that the Bologna process seems to be attaining. *Crossing Borders* brings out the complexity of the issues within the scope of the current activity taking place in East Asian higher education. No matter what, the time has come to look to a broader and more integrates regional perspective.

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# 1
# Transformations in Higher Education: Crossing Borders and Bridging Minds

David W. CHAPMAN, William K. CUMMINGS &
Gerard A. POSTIGLIONE

This book examines issues that have emerged as higher education systems and individual institutions across East Asia confront and adapt to the changing economic, social, and educational environments in which they now operate. The focus is on how higher education systems learn from one another and the ways that higher education institutions collaborate to address new challenges. The sub-theme that runs throughout this volume concerns the changing nature of cross-border sharing in higher education. In particular, the provision of technical assistance by more industrialized countries to lower and middle income countries has given way to collaborations that place the latter's participating institutions on more equal footing. At the same time, the number of partnerships linking higher education systems within the larger East Asia region to one another has increased.

The central premise of this book is that national borders are not as relevant as they were in the past. Global telecommunications, the international flow of funds, and even some internet-based education programs operate largely outside the purview of national governments. While many governments may still control (or try to control) the flow of people, there is a substantial transnational flow of commerce, communications, and ideas that are supranational and operate beyond the effective reach of governments. Even as boundaries become more porous and permeable, there is growing acceptance of the view that cross-border collaboration, if done well, can offer mutually beneficial advantages on multiple levels. There is a new recognition that the intensified international sharing of ideas, strategies of learning, and students is not only extremely valuable to systems and institutions but essential to their long-term survival. To this end, the volume chapters variously examine motivations, goals, mechanisms, outcomes, and challenges associated

with cross-border collaboration in higher education.

Chapter authors employ different lenses when analyzing the national and institutional responses to these shifting dynamics. Some focus on East Asian higher education systems as they begin to move from the periphery of world attention to center stage. Others examine how institutions negotiate the balance between collaboration and competition as they seek new ways of operating. Still others explore the paradox of increased homogeneity across higher education systems, even at a time when many systems seek unique solutions to the challenges they now confront. The common element shared by all chapters is that higher education across East Asia is commanding renewed international respect. Moreover, decisions being made about international collaboration by governments and higher education institutions have ushered in a new era for East Asian higher education.

## Perspectives on the East Asian Case

Economic globalization has made it more urgent for East Asia to consider how its long-term success may depend on its ability to constitute itself as a regional block in the same way that the European Union, North America, and other mega-regions have been converted into integrated multinational economic systems. It may be some time before East Asia becomes a free trade zone with a common currency and convertible educational credentials across colleges and universities. However, the region already has begun to acknowledge its shared cultural traditions, historical affinities, and developmental experiences. While there is a degree of cultural, especially linguistic and religious, diversity that exceeds that found on any other continent, there are also highly salient themes that East Asian societies share. These include harmony, moral cultivation, social networks, paternal leadership, and political authoritarianism. These themes play on even as civil societies in most of East Asia strengthen. The pre-colonial era is increasingly viewed as a time of free trade amid harmonious interchange. For most countries, colonialism affected statehood and forms of governance, as well as language, schooling, and especially higher education. While colonialism intensified cross-national difference, its education systems led to a convergent form of schooling.

The surge of Asian values discourse of the 1980s and 1990s was tempered by the economic crisis that transitioned into the new century. In the Southeast, ASEAN is a symbol of regional identity and mutual

respect. In the Northeast, the complex historical legacies of the 20th century have not slowed the economic rise of China, South Korea, and Japan, countries that share an intimate cultural and educational heritage. Now, these two power centers, North and South, have intensified their educational interchange and cooperation, with China playing a major role. With a vast land mass that spans North and South and a massive population, China has steered its meteoric rise with an astute leadership that consistently espouses a vision of East Asia's shared prosperity and harmony.

East Asia's aspirations are reflected in the plans of its national leaders, education ministers, and university presidents. They call for the building of world-class universities. Backed by China's 2/11 and 9/85 programs, Japan's Doyama Plan, and South Korea's Brain Korea 21, national flagship universities in Northeast Asia reach for world-class standards; several universities in Southeast Asia claim they already have achieved this global status.

What remains certain is that East Asian countries use higher education to open and cross borders. Their top universities have become institutions to repackage cultural heritage within shifting socio-cultural contexts in order to fulfill the penultimate East Asian aspiration—to be the major sphere of global prosperity in the second half of the 21st century.

Decades from now, the legend of crossing borders and bridging minds will be assessed as myth or reality. Regardless, it has already become a major driver of a new era in East Asian higher education. The full potential of higher education systems and institutions in the process of crossing national borders and bridging minds continues to unfold. This process is still in its infancy, and it would be premature to project its long-term outcome. However, the time is ripe to explore some of the fundamental issues associated with and provide case studies from the East Asian region.

Higher education development across East Asia is still very uneven, both within and across countries. Massification of higher education has placed added pressure on universities to promote the capacity for innovative thinking within the volatile global environment of competitive market economies (Suárez-Orozco & Qin-Hilliard, 2004). Thus, border-crossing becomes part of the strategy to build capacity to compete, attract students to offset demographic effects, strengthen statehood, and deepen international alliances. Even with the diverse religious and ideological

orientations, and rapid socio-political transitions, East Asian societies, with few exceptions, are noted for executive-led government, consensus-driven management styles, and gradual but steady struggles to democratize within slowly incubating civil societies (Henders, 2004; Watson, 2004). As the chapters in this volume illustrate, the way in which crossing borders in higher education occurs is shaped by historical experiences (Cookson, Sadovnik, & Semel, 1992; Cummings 2003). At the same time, macroscopic themes such as globalization, decentralization, and privatization continue to plow their way across the landscape of discourse about the reform of university governance (Bjork, 2006; Mok, 2004).

How East Asia reconciles this historical transition is a formidable area for exploration (Cummings & Altbach, 1997; Fung, Pefianco, & Teather, 2000; Mok, 2006; Morris & Sweeting, 1995; Tan & Mingat, 1992; Thomas & Postlethwaite, 1983). Therefore, this volume does not ignore the premise that border-crossing in higher education is shaped, to some extent, by socio-historical contexts that include cultural traditions, colonial experiences, and postcolonial transformations, all culminating in a set of new pressures affecting the roles and strategies of higher education systems and institutions.

## Pressures Affecting Higher Education

The forces fueling greater cross-border collaboration provide a starting point in this exploration of new roles and strategies. Among the most dramatic developments across East Asia are the rapid expansion and diversification of higher education systems and the increased prominence being given to higher education within national economic development plans. This prominence is due largely to the convergence of five trends within the region: (a) changing demographics; (b) the success of many countries in expanding access and raising the quality of their primary and secondary education systems; (c) increased economic integration among countries, often described as globalization; (d) the shift from product-based to knowledge-based economies; and (e) improved communication systems linking countries. In responding to these factors, higher education institutions (HEIs) have been confronted with new demands for access, quality, economic self-sufficiency, transparency, and relevance. Many institutions have responded with creative programs and strategies. But some struggle as they search for relevant and cost-effective approaches to juggling the competing demands of their multiple audiences.

*(a) Changing demographics*

In general, demand for higher education across Asia has grown rapidly and will continue to grow, with the highest enrollments in East Asia (Asian Development Bank, 2008). Demand is influenced by the size of the school-age population, the rate of population increase, primary and secondary school participation and completion rates, rising family incomes, cultural traditions that value higher education, willingness of urban households to invest in higher education, and a more competitive labor market. The pattern across the majority of countries is that more students are entering general education, a higher percentage are finishing secondary school, and an increasing proportion of those graduates want to continue to higher education. However, we are beginning to see a sharp rise in unemployment among graduates, particularly in China. But there are wide variations on this theme. At the other end of the spectrum, in Japan and Korea, for example, higher education enrollments are dropping as the number of secondary school graduates shrinks. In both countries the number of college enrollment places is about the same as the annual number of secondary school graduates. The unemployment rate of university graduates is very low, and governments are pressed to consider importing talent and specialized personnel from other countries. Both Japan and Singapore look to mainland China and other neighboring countries with an eye to recruiting students who will sign on to short- and long-term work contracts after graduation.

*(b) Success in expanding access to primary and secondary education*

East Asian nations have been enormously successful in popularizing nine-year free and compulsory basic education. Most states have been willing to invest heavily in basic education and leave the bulk of higher education to the private sector. The notable exceptions have been Singapore and Hong Kong, but even there the situation is changing as privatization takes hold. The remarkable success of many countries across East Asia in expanding access to primary and secondary schooling is now fueling a sharply increased social demand for access to post-secondary opportunities. This demand is understandable and unstoppable. Primary and secondary schools provide students with grounding in basic literacy, numeracy, and other vital skills; higher education offers the depth and flexibility people need to thrive in the modern workplace (World Bank, 2000). Given the important role highly educated people

play in social and economic development, investment in higher education is strongly in the public interest. The issue is not primary and secondary education versus higher education but achieving the right mix among the three levels (World Bank, 2000). Having willingly saddled up to the global discourse on the knowledge economy, East Asian countries have opened a variety of channels beyond primary and secondary schooling to what was formerly the higher elite sector of the education system. Many countries, notably China and South Korea, are even willing to risk the student unrest that may go with expanding higher education across their societies.

*(c) Economic integration*

Increased economic interdependency among countries (sometimes termed "globalization"), speed of communications, and the increasing importance of technology in business and government have created new demands for higher level technical, managerial, and administrative skills. Evidence consistently shows that countries that invest heavily in higher education benefit economically and socially from that choice. For example, Schleicher (2006) found that in OECD countries every dollar invested in attaining high-skills qualifications results in more money back through economic growth. This investment provides tangible benefits to all of society, not just the individuals who benefit from the greater educational opportunities (Asian Development Bank, 2008).

It is reasonable to assume that, in the robust economies of East Asia, a similar pattern would hold true. While most East Asian countries seek increased economic globalization and are willing to enter a phase of massification in the tertiary education sector, they are apprehensive about taking on what is a formidable financial burden. This is especially so for the developing countries such as China, Vietnam, Malaysia, and Thailand. Such nations have little choice other than to begin charging fees and to strongly support the private sector's move into widespread fee-paying higher education. Before long, these developments see these nations becoming part of the global economic integration as overseas providers enter the domestic landscape.

*(d) Shift to knowledge-based economies*

International finance, business management, and national governance increasingly depend on automation, high-speed communication, and complex information flows that require high levels of administrative

sophistication, technical proficiency, and analytic capacity. Secondary education alone cannot provide the needed managerial and technical leadership for modern business, industry, and government. Economic and social development also increasingly depend on the innovation that universities can potentially foster through their role in carrying out research and development and in training workers for the knowledge economy (Asian Development Bank, 2008; LaRocque 2007). There is a widespread view in East Asia that ability to innovate is crucial if this region is to be globally competitive. There is also the view that the university systems of the West have done far better in this respect. Cross-border higher education programs can thus become a means of bridging the innovation divide.

*(e) Improved communication systems*

Improved communication systems have revolutionized cross-border commerce in many areas. Information about new products and services, competitive product pricing, and user satisfaction is instantly available and can be widely shared. These communication systems have allowed higher education to advertise their programs to potential students, deliver online courses to students otherwise unable to access a campus, and foster collaboration among researchers across widely dispersed universities. Cooperation and competition among higher education systems are no longer constrained by weak communications. Some countries have tried to hold back the tide by closely monitoring cross-border information flows, although this approach has been less the case for educational courses and programs and more the case for ideas and academic dialogue. While countries have generally been unsuccessful in stopping issues-based academic exchanges, they continue to try.

## Problems Facing Higher Education across Southeast Asia

Although demand for higher education is rising rapidly, higher education systems across the region are expanding chaotically, as the World Bank (2000) observed. Many public institutions suffer from underfunding, lack of vision, poor management, and low morale. While many countries have increased their public expenditure on education, some, such as Thailand, have decreased it. Most of East Asia is below the recommended 6% expenditure of gross domestic product on education, including China, which has hovered near 3%. Malaysia, with 8.5% of

GDP going to education, towers above the rest. At the same time, low-quality private institutions have proliferated but with little effective quality control (Asian Development Bank, 2008; World Bank, 2000).

A key reason for the low quality is that, during the rapid system expansion that characterizes the region, the demand for qualified college and university instructors has outstripped supply. This shortage has been exacerbated by the ever-increasing alternative employment opportunities for highly educated personnel within the growing economies of the region. Many institutions lack the resources to pay salaries competitive with the private sector opportunities available to would-be faculty members. These institutions also face the related challenge of holding the attention and loyalty of those instructional staff they do hire. Many faculty hold supplemental employment, which competes for the time they would otherwise commit to their teaching and research.

*Quality*

Higher education institutions across East Asia are not consistently distinguished in international quality rankings. While ranking systems differ considerably, no Asian university outside of Japan or Australia is yet to rank in the top 100 in the Shanghai Jiao Tong University Rankings of university quality (Shanghai Jiao Tong University, 2008). On this ranking system, only one Asian university ranks in the global top 20 and only eight ranked in the top 100 higher education institutions in the world. Of those, six are in Japan and two are in Australia. Other ranking systems offer a different view. In 2008, the Times Higher Education Supplement rated the University of Hong Kong as 18$^{th}$ in the world, while other East Asian universities, such as Kyoto University, the National University of Singapore, Peking University, Osaka University, Tsinghua University, and the Chinese University of Hong Kong were ranked in the top 50.

The quality of higher education institutions is indeed a pervasive concern in many countries, a situation created, in part, by rapid system growth without sufficient attention to the conditions of success. Efforts to address concerns about quality have often involved international collaborations aimed at developing faculty competence in content and pedagogy, the direct transfer of academic programs, and assistance in designing and implementing quality assurance programs. However, there is no mistaking the aspirations shared by several East Asian systems to have world-class universities and governments. Singapore, Hong Kong, China, South Korea, Japan, and Malaysia particularly have shown their willingness to

provide the financial sums necessary to propel their flagship institutions further ahead in the international league tables. Moreover, flagship institutions consider that border-crossing strategies play a key role in "knowing the competition."

*Relevance*

Two central aspects of relevance concern the extent to which the knowledge and skills of secondary school graduates align with the entrance requirements of higher education institutions (HEIs) and the extent to which the knowledge and skills of higher education graduates align with the needs of the labor market. Some countries face problems in both respects. Cross-border collaborations provide a means through which institutions can see how counterparts in other countries have addressed these issues and can secure expertise needed to address these issues in their own context.

One of the more prominent international trends affecting universities is the call of governments and the private sector for colleges and university institutions to increase the relevance of the education they offer and the research they conduct. This demand is being felt across all dimensions of scholarship. One of the most visible manifestations is the weakening of traditional disciplinary boundaries. Academic staff are being challenged to make their research more multi- and interdisciplinary. Pragmatic traditions in business and commerce, emergent civil societies, and dependency on international economic trends act together to ensure that relevance embeds itself in the guiding discourse of universities. In East Asian higher education, some factors also work against relevance, including the many decades when universities were relatively insulated from society, and the lack of large numbers of alumni to anchor universities to a wider assortment of public concerns.

In many countries, higher education institutions grapple with the tension occasioned by the need to align their entrance standards and curriculum to students' prior level of learning versus the need to align their curricula to international standards. Higher education institutions are being pressured to divert resources to providing remediation, are failing to meet international quality expectations, and are incurring extremely high dropout rates because poorly prepared students are unable to do university-level work. While some may be experiencing only one of these difficulties, most are experiencing some combination of all three.

The articulation between secondary and higher education requirements is further complicated in some countries where responsibility for these levels of education is split between a ministry of education and a ministry of higher education. If communication between ministries is weak, alignment of curriculum and accuracy of expectations tend to suffer.

Even as demand builds for greater access to higher education, graduates in some countries are having difficulty securing employment. In some cases, the reason why relates to employers' concerns about the quality of the education students received. In other cases, the reason resides with students having only limited information about existing and projected employment opportunities, entry points for access to desired careers, and career ladders associated with desired professions. Some higher education institutions, such as Cantu University in Vietnam, have undertaken graduate tracer studies and employer surveys as a basis for assessing the relevance of their curriculum and instruction methods. Many other higher education institutions would benefit from doing so.

*Access and equity*

Given the importance of higher education in national development, and the clear returns to individuals who earn a higher education, it is important that opportunity to access higher education is fairly distributed. The benefit stream that flows from earning a higher education needs to be available to all. While considerable progress has been made over the last decade in reducing disparities due to gender, ethnicity, urban/rural divide, and income, these continue to block access for some. This situation is also evident in relation to accessing overseas higher education. Some societies prefer sending sons rather than daughters far away from home. In the case of students from ethnic minority regions, and East Asia has nearly two hundred million, many learn through their native language while learning the national language but must also learn English (or some other foreign language) if they are to gain access to study overseas (Postiglione, 1999). Access to opportunity for higher education that is limited by family resources or background distorts the distribution of benefits in a society and impedes inclusive economic and social development. International collaborations provide a mechanism through which universities can access international models for promoting access and equity.

In the case of China, the breakneck-paced expansion is clear. In 1995, only 4% of the 18 to 22 age group was involved in higher education in

1995. By 2005, the proportion had reached just over 20%. China's human resource blueprint published in 2003 set out the nation's long-term expansion plan for higher education. Before 2010, the entrance rate for higher education would be raised from around 13% to over 20%, thereby reaching the level of a moderately developed nation. However, UNESCO reported that, as of July 2003, China already had the highest number of college and university students in the world, followed by the United States, India, Russia, and Japan (Xing, 2003), By 2007, China's largest city had a gross enrollment ratio exceeding 60% (Shen, 2003). Between 2010 and 2020, the gross entrance rate of higher education is set to exceed 40%, and from 2021 to 2050 to reach at least 50%. All social groups gained in access to higher education, yet the proportions tilt in favor of urban middle-class males.

*Cost and financing*

Higher education across much of East Asia is still primarily concentrated in public universities and largely publicly financed. Two significant changes during the 1990s have been (i) the growth of private institutions and (ii) financial diversification in public institutions through introduction of tuition fees and increased reliance on non-government sources of funding, such as research and consultancy income (Asian Development Bank, 2008; Woodhall, 2001; World Bank, 2000). One outgrowth of these changes is an intense interest in the creation of new income streams. As a number of the chapter authors argue, a motivation of many higher education institutions for entering into cross-border programs is their belief that such programs will yield a positive economic return.

A related issue is faculty compensation. As competition for qualified college and university instructors intensifies, many East Asian colleges and universities are being forced to rethink their personnel policies, including faculty salaries and compensation practices. A pattern of underpaying university faculty while allowing (and even encouraging) them to supplement their income through second jobs that range from private consulting to work as semi-skilled labor has become a rather common way of subsidizing higher education across the developing world. Instructors reap the prestige of a university appointment; universities gain a teaching staff at low cost. Places like Hong Kong and Singapore have adhered to staff compensation packages compatible with Western countries and have been successful in recruiting large numbers

of high-quality academic staff from overseas. While universities in China may recognize the need to reform personnel policies in the academe, long-entrenched habits left over from the days of the planned economy have been enough to scuttle much needed reform. Inevitably, universities that seek to improve the quality of their instruction and to create new funding streams through research and university-based consulting will need to seek ways to recapture the time, energy, and loyalty of their instructional staff on behalf of institutional priorities. Cross-border programs are viewed by some institutions as a way of creating an incentive for their faculty (e.g., expanded international connections) and as a mechanism for securing low-cost technical assistance in capacity development under the rubric of running a collaborative program (Li, 2005).

## Chapter Overviews

Chapters in this volume are organized into six sections. Given China's prominent role in the region, three sections focus on internal and international higher education collaborations in this country. While cross-border collaboration can involve different dimensions of the university mission, one of the largest relates to the provision of academic programs. Within East Asia, China is somewhat unique in its role as both an importer and exporter of higher education. While domestic enrollments in higher education have surged, from 3.4% of the age cohort in 1990 to 21% of the cohort in 2005, there also has been a dramatic rise in the number of international students attending Chinese universities and the number of international programs within Chinese universities. The last chapter considers the future prospects of national and cross-national experience with college and university collaboration across other countries of East Asia.

In Chapter 2, Gerard Postiglione provides an overview of higher education in the East Asian region, raises questions about the relevance of world systems platforms, and argues that the rise of East Asian knowledge systems will increasingly hinge upon the speed, depth, breadth, and changing nature of border-crossing in higher education. The Northeast Asian countries of Japan, South Korea, and China, with their embedded cultural traditions of Confucianism, have expressed aspirations to make their flagship universities into world-class institutions. Southeast Asia, being far more diverse in terms of religious and other cultural traditions and its experiences with colonialism and statehood, has encased its universities in the global discourse of knowledge economics. However, this discourse is sometimes used by the state to fuel

competitive nationalism and counter the potentially disruptive effects of civil actions by a more university-educated citizenry. Postiglione also argues that the more pragmatic academic curriculum of private higher education in meeting popular demands for higher education steers a path away from the traditional emphasis on building a broadly educated citizenry. Fee-paying higher education becomes more of a calculated investment for both the individual and the state. International aid agencies provide the loans and foreign expertise to strengthen the consensus-bound foundations of the global knowledge system.

In Chapter 3, William K. Cummings takes up the "tilting to Asia hypothesis," which suggests that, for a variety of reasons, Asia is beginning to catch up in science and technology with the West and that Asia could easily surpass the United States in 15 years. Cummings considers how, through this process, the region is becoming tied to positivistic views of science as a unitary knowledge system, and if Asia's challenge to that way of thinking over the long term will bring about a change of framework. In particular, he points out that the Japanese approach to science is an interactive one, where theory and application flow back and forth, rather than theory being the driving application. With reference to the larger East Asian region, he stresses that each area (Japan, Korea, China, Singapore, Malaysia, the Philippines, Indonesia, Oceania, and India) is unique, with different contexts, traditions, and resources. He notes, however, the sentiment in the region to enhance intra-regional collaboration and to bring forward a common direction in the strategies used to produce academic sector knowledge, albeit with distinctive national visions and achievements. Thus, we can look forward to different academic systems in the region developing distinctive directions of excellence in the decades ahead.

In Chapter 4, Ruth Hayhoe and Jian Liu examine the remarkable emergence of China as a participant in cross-border education. They argue that the growth of cross-border programs is giving China a new centrality in global academic affairs. Long relegated to a peripheral status, higher education in China is now assuming a prominent position. Hayhoe and Liu posit that Chinese higher education does not emerge from the same positivist tradition that characterizes Western university education. Grounded in the Confucian scholarly tradition, the Chinese approach tends toward dialogue, tolerance, and an appreciation for a variety of approaches to knowledge formation. These authors chronicle

the significant shift underway in China's relationship with the global community. Chinese values of self-mastery, social responsibility, and intellectual freedom stand in contrast to the Western traditions of autonomy and academic freedom. Their focus on three major issues associated with the prospective rise of China from a peripheral position in the global community to a more central one provides an overview of the three recent developments in the area of cross-border education that signify China's rising academic influence. These are the dramatic rise in the number of international students attending Chinese universities, the establishment of a large number of international programs within Chinese universities, and the creation of Confucius institutes in collaboration with universities and other non-governmental organizations around the world. The authors' profound review of the history of modern universities in China reflects on their institutional culture, and asks what kinds of academic influences are likely to flow through the new channels that are opening up, and what they could bring to a re-shaping of global intellectual culture. By considering some basic features of Chinese epistemology, the authors suggest that China's greater centrality in global academic affairs might strengthen "a dialogue among civilizations" that enhances "difference" in the face of what are often seen as the homogenizing influences of economic globalization.

Brian Yoder, in Chapter 5, looks at the forces of globalization on six Chinese universities by examining the manner and extent that each adapted to pressures for increased research productivity. Yoder views globalization in terms of the dynamics that link global, national, and local policy processes. He describes a complex web of transnational networks and relations among states, non-governmental organizations, communities, international institutions, and multinational corporations. Using that framework, he looks at the interplay of national and local policy processes as a basis for explaining why some Chinese universities have adapted globally held ideas about research while others have not. According to Yoder, the transnational networks that appear to have had the greatest influence on Chinese universities' adaptation of globally held ideas about research have been the university-created and university-controlled partnerships with universities in other countries. Yoder's focus on the relationship of globalization to recent trends in Chinese university reform goes beyond speculation in that he offers a specifically empirical approach to reviewing reform at the six leading institutions. By making a distinction between three globalization perspectives—the

hyper-globalists, the skeptics, and the transformationalists, Yoder observes that China arrived at its current reform agenda by looking at other countries it believes are successful. Many of the centrally articulated reforms are embodied in Project 2/11 and Project 9/85. Here, some of the needed practices are seen as economic: universities should develop alternative sources of funding, but they should also engage in activity that does not necessarily contribute to economic growth. For example, professors' advancement should be based on quantity and quality of research rather than on teaching. Yoder tends to align with the transformationalist perspective. Globalization, he claims, does not diminish the role of the nation-state even though governments increasingly are focusing outward to seek new strategies that allow them to engage successfully with a globalizing world. The power of national governments, he says, is being reconstituted and structured in response to global complexity. Thus, in China, the government is adjusting its policies to adapt to a more interconnected world.

In the effort to learn from international experience, Chinese colleges and universities have often looked to top higher education institutions in the United States as models. In Chapter 6, Kathryn Mohrman argues that many characteristics of higher education in the United States are worth emulating, but not all of them. She offers a series of cautions about adopting United States-based practices with insufficient attention to their appropriateness for China. In particular, she warns against too narrow a definition of quality. Many higher education institutions in the United States place enormous emphasis on scholarly productivity, often measured as number of scholarly publications. This focus is sometimes at the expense of time devoted to teaching. She also warns of the risks of overreliance on institutional rankings as the basis for comparing the quality of colleges and universities. Such ranking inappropriately narrows the range of attributes considered valuable. In particular, qualitative factors associated with excellence may be ignored because they are difficult to measure. She also warns of the problems posed by the use of financial aid as a student recruitment device to shape an incoming class of students rather than awarding this money on the basis of financial need.

Cross-border higher education sometimes serves diplomatic as well as economic and educational purposes. As part of its Overseas Development Assistance (ODA) commitments, China offers scholarships as a means of building international goodwill and long-term relationships.