

THF Literature Review

May 2016

DEFINING HIGHER EDUCATION ISSUES AND CHALLENGES IN SOUTHEAST ASIA/ASEAN WITHIN THE INTERNATIONAL CONTEXT

Thammika Songkaeo

The HEAD Foundation

thammika@headfoundation.org

Loke Hoe Yeong

The HEAD Foundation

hyloke@headfoundation.org



The
HEAD
Foundation

Introduction

What are the key issues and challenges in higher education in Southeast Asia at present? How do they relate to global developments in higher education? What lessons can be gleaned from a study of higher education at a regional level in Southeast Asia, especially as regional bodies such as ASEAN seek to address higher education issues?

Through a consideration of the three questions above, this literature review seeks to provide an overview of the key higher education issues in Southeast Asia – defined as the ten member states of the Association of Southeast Asian Nations (ASEAN).¹ The approach taken here begins with a consideration of the policy priorities identified by national governments and regional organizations, as gleaned from their blueprints and periodic plans for education policy in their respective countries. The paper then discusses the wider policy and academic literature on these key policy areas, in the context of the countries of Southeast Asia.

The dominant themes identified in this review – *massification*, *privatization*, and *internationalization* – in higher education in Southeast Asia are highly intertwined. They are further intertwined by six sub-themes: *research capacity*, *autonomy and corporatization*, *foreign branch campuses*, *sector diversification and differentiation*, *the academic profession*, and *the use of technology*.

The authors prepared this literature review in tandem with research conducted for the International Comparative Higher Education Finance and Accessibility Project led by Bruce Johnstone (SUNY Buffalo), in cooperation with The HEAD Foundation.² The ten Southeast Asian country profiles from that project database, which present data and issues on higher education, should be ideally be read complementarily with this paper, which presents the conceptual and policy issues of the region.

In so doing, this paper aims to highlight that all the key themes in higher education policy making are in fact highly intertwined. This is admittedly an economics-centric approach, since it represents a bias in some ASEAN countries that higher education should be geared towards the national needs of the economy, rather than a more humanistic vision for education. Hence, one might point out the absence of coverage here on a topic like *student activism* – one that is important and cannot be discounted by university bureaucrats, but which falls out of the scope of this review.

In seeking to probe the conceptual and policy issues behind terms such as “massification”, “privatization” or “internationalization” that are commonly thrown out in the policy discourses, the paper takes a necessarily academic approach to tease out their meanings, while also being conscious in relating them to practical issues and challenges faced in the region. This academic approach is necessitated by the ambiguity behind what the term “higher education” itself means, in popular parlance and in the media. Should diploma-granting institutions such as polytechnics be considered part of the higher education fray? What then about technical and vocational education and training (TVET) institutions?

¹ The ten member states being, in alphabetical order: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Vietnam.

² Currently hosted at: <http://gse.buffalo.edu/org/inthigheredfinance/>

The larger purpose of this literature review, therefore, is to equip those studying higher education in Southeast Asia with the necessary conceptual lens to engage in a meaningful and informed policy debate.

Can higher education in Southeast Asia be studied as a region?

It is perhaps counterintuitive to study the issue of higher education as a regional phenomenon in Southeast Asia, given the region's diversity in terms of income levels, socio-cultural histories and background. But the fact is that the Association of Southeast Asian Nations (ASEAN) is one geographical entity that can be very clearly defined – in terms of ASEAN membership. Conversely, it is harder to agree what definitively constitutes “Northeast Asia”, “Asia” or “Asia Pacific”. Education is one remit of ASEAN regionally, albeit low in priority, given the stark intra-regional diversity and inequalities. There are policy pronouncements that seek to emulate European Union initiatives like the Bologna Process; but higher education as policy arena in ASEAN is nowhere as integrated as in the EU, admittedly.

It has been argued that “it was not until the Bologna Process... that we witnessed the first substantial incorporation of higher education into regionalism agenda” (Robertson & Olds, 2014). But Europe's Bologna Process is just one example of higher education studied as a region. Organizations, scholars, and critics have also studied higher education as a region for Latin America (Tessler, 2013) (COHA, 2012). Organizations, such as Alfa Puentes, aim to build “capacity of university associations in fostering Latin American regional integration.” The World Bank, too, published “Higher Education in Latin America: The International Dimension” in 2005. North America's, South America's, as well as various regions of Africa's higher education have also been studied similarly (Nganga, 2010) (The Inter-University Council for East Africa, 2013).

Morshidi Sirat, Norzaini Azman and Aishah Abu Bakar (2014) suggest that it is sensible to study higher education as a region for Southeast Asia, writing that the harmonization of higher education is “the process that acknowledges diversity of higher education systems and cultures within the region, while simultaneously seeking to create a ‘common educational space’ (Wallace, 2000; Enders, 2004). This system could be developed or constructed on the basis of a common – but not identical – practices and guidelines for cooperation in education. They add that “The idea of harmonizing higher education systems in Southeast Asia was inspired by the development of regionalism in higher education in Europe, specifically the establishment of the European Higher Education Area (EHEA). The idea of regionalism in higher education in Asia or Southeast Asia is a very exciting idea, indeed.”

Particularly since the 2000s, regional and global organizations have been studying Southeast Asian higher education as a regional concept. These organizations include UNESCO Bangkok, SEAMEO RIHED, ADB, and the World Bank. In 2006, UNESCO Bangkok and SEAMEO RIHED published “Higher Education in Southeast Asia,” an in-depth study of the different higher education systems in the region, in which the authors argue that, “For constructive and productive cooperation, policy makers and practitioners must be well-informed about higher education development and trends in other countries so that they can convert

such information into useful policies and practices within the confines of their national needs and circumstances” (p.1). The ADB’s 2011 study “Higher Education Across Asia: An Overview of Issues and Strategies” focuses on Southeast Asia, though it includes other Asian countries as well.

What is “higher education”?

In the often politicized – and “mediatized” – discourses in the real world though, a “university” can be a rather different institution in different countries, in terms of quality, governance and even in kinds of qualifications which it awards. The UNESCO Institute of Statistics publishes the International Standard Classification of Education (ISCED), which clearly defines each level of education qualification in an effort towards a set of standards (UNESCO Institute of Statistics, 2012). Tertiary education, in their definition, comprises ISCED Levels 5 short-cycle tertiary education) to 8 (doctoral or equivalent level).

Nevertheless, this paper includes coverage of the technical and vocational education and training (TVET) sector, given the Southeast Asian context where investments in it are much needed in low-income countries, rather than a proliferation of universities teaching more abstract degree courses. In Singapore meanwhile, there is increased government investment in the polytechnic and TVET sectors through the government’s new “SkillsFuture” programme that emphasizes skills training. This represents a continued bid by the Singapore government to pre-empt the negative effects of post-massification, which include graduate unemployment and under-employment, as in South Korea and Taiwan.

Academics and policy documents agree that it is difficult to define higher education in one way. UNESCO, in accepting a broadly inclusive definition, has said that:

In recent times, changes have accelerated, and have become so numerous and diversified that even a definition of what higher education is has become an arduous task indeed. From a pragmatic point of view, we define as higher education all types of education (academic, professional, technical, artistic, pedagogical, long distance learning, etc.) provided by universities, technological institutes, teacher training colleges, etc., which are normally intended for students having completed a secondary education, and whose educational objective is the acquisition of a title, a grade, certificate, or diploma of higher education (UNESCO, 1998).

Others, such as the government of Singapore, refer to higher education to mean university, polytechnics, technical and tertiary arts education (Singapore Ministry of Education, n.d.). In Thailand, higher education refers to universities, community colleges, and TVET institutions.

Massification

As UNESCO (2004) notes, “the most popular terms in characterizing the higher education expansion trends are those coined by the American higher education researcher Martin Trow (1970, 1974, 2000): ‘elite’, ‘mass’ and ‘universal’ higher education”. ‘Elite’ here refers to higher education when a maximum of 15% are

enrolled; 'mass' refers to when a maximum of 50% are enrolled; and 'universal' refers to when more than 50 % are enrolled (UNESCO, 2004). Across the world, the massification process has meant a great more number of students being enrolled in higher education. By 2030, 414.2 million people are expected to be enrolled in higher education, a rise of 314% from the worldwide enrolment in 2000. Only five years later, in 2035, the number of students enrolled in higher education globally is expected to exceed 520 million (Calderon, 2012).

A host of problems accompany the rapidly growing student enrolment numbers. Certainly, there access and equity issues are discussed, as massification begs the questions of who does, shall, and can have access to education and in what ways is and/or can be made education equitable (SEAMEO RIHED, 2011). Access and equity concerns pertain to every Southeast Asian nation, from Brunei to Cambodia, with the Bruneian government, for instance, realizing that private education might need to play an increasing role, since seats at public universities are limited, and the Cambodian government realizing that many students need a more flexible path to enter higher education, and that secondary schooling should not be the only means for students to enter a higher education institution (ADB, 2012).

Furthermore, as Anthony Welch (2011) notes, one of the most concerning characteristics of increased enrolments is: "Each country wishes to deploy its resources in higher education to greatest advantage – to increase national competitiveness; enhance its economic growth rates; and raise its prestige internationally. Yet this occurs at the same time as nations worldwide struggle to reconcile the conflict demands of an endlessly increasing demand for higher education, and an increasing limit on state capacity" (p. 4). One of the results of this is an increased pressure on higher education institutes to find more income sources, including from international students.

Regional alliances have been formed, creating both competition and corporation in higher education internationally (Welch, 2011). Other, more specific consequences of massification, also linked to finances, include: the erosion of faculty salaries, the employment of unqualified or less-qualified staff, high student-faculty ratios, and a decay in the conditions of service, teaching, and learning (Welch, 2011).

While many authors and organizations highlight massification in terms of negative consequences, others such as SEAMEO have spoken of massification in more welcoming light. In "Higher Education in South-East Asia: An Overview," UNESCO Bangkok and SEAMEO describe that "Massification of higher education' reflects the global trend of improving higher education opportunities for all, and transforming higher education systems from being elitist to ensuring mass participation across different social, income and geographical groups. These massification programs seek to serve student/professional groups who may not have the educational opportunities to undertake initial or further study and professional development at higher levels" (UNESCO Bangkok and SEAMEO, 2006, p. 3).

By 2035, at least three Southeast Asian countries – Indonesia, Malaysia, and Vietnam – are expected to enrol some of the world's largest number of university students. By 2035, these three countries will rank among the World's Top 20, in terms of the number of university student enrolment (Calderon, 2012). Governments, international organizations, academics, and the media have studied the massification

of Southeast Asian higher education closely, with a large portion of their studies booming during the beginning of this millennium, and continuing in depth today.

Sector diversification and differentiation

Bruce Johnstone and Pamela N. Marcucci (2010) define sector diversification as “a shift from a preponderance of higher educational institutions being (or at least aspiring to be) research universities toward a cadre of short-cycle, less-expensive, less-selective, more vocationally oriented, and more hierarchically managed institutions, whose faculty are oriented to teaching rather than to research” (p. 39). Molly Lee further explains that “the diversification of higher education is observed in the diversification of funding sources and the differentiation of higher education institutions” (2015, p. 21). Specifically for Asia, Lee, drawing from Shin Jung Cheol and Ulrich Teichler’s *The Future of the Post-Massified University at the Crossroads* (2014), elaborates, “The restructuring of higher education in the region is aimed at finding innovative ways of financing higher education which include the privatization of higher education, the corporatization of public universities, the implementation of student fees, and the formation of strategic partnerships between the public and private sectors in the provision of higher education,” (2015, p. 21).

In the Singapore case, the gross enrolment ratio (GER) at public universities had long been kept at around 25%, thus pre-empting the levels of massification as in countries like South Korea or Taiwan where the GER currently stands at between 60 to 70%, and where issues of graduate unemployment and under-employment have emerged in the past few years. There was also resistance in Singapore towards moves in countries like the United Kingdom in 1992, where the landmark Further and Higher Education Act 1992 converted 35 polytechnics to universities. Enrolment in Singapore is now headed towards 40% by 2020, as a matter of government policy, with the opening of two new universities in Singapore³. Private HEIs in Singapore have played a demand-absorbing role for polytechnic students wishing to “upgrade” to a first degree.

Increasing in ways that at times seem uncontrollable or uncontrolled, the number of higher education students in Southeast Asia has posed questions including how to coordinate a (national) system to diversify and differentiate sectors, how to integrate the private sector in a way that does not undermine the quality of education, and how much autonomy universities should have when government funding is limited when some universities themselves might not be ready to be self-reliant.

A number of countries are concerned about massification at the national level. Those at the high-income level – Brunei and Singapore – are primarily concerned with moulding “well-rounded” graduates with life-long learning skills. Brunei and Singapore, where higher education is heavily regulated by the state, has long-term plans that link the number of graduates of a certain field to workers it anticipates it will need in the future. Countries at the middle-income level – such as Indonesia,

³ SIM University (UniSIM) and Singapore Institute of Technology (SIT) differ from institutions like Nanyang Technological University of Singapore Management University in that UniSIM is Singapore’s only private university catering to adult workers and SIT caters to polytechnic graduates wishing to pursue bachelor’s degrees.

Malaysia, and Thailand – express concerns about life-long learning skills as well, but their concerns are at times more rudimentary, asking how to provide quality education in all, or at least more, institutions. These countries are mostly at the stage of talking about mechanisms to regulate sector diversification and differentiation, but their plans are still not articulated as firmly – or updated as recently – as Brunei's Wawasan 2035 or Singapore's "SkillsFuture" programme. Rather, the government documents and studies of international organizations of middle-income countries often refer to the need to improve higher-order skills development, more generally (ADB, 2014).

In countries at the low-income level or in those that are at the lower margin of the middle-income level, questions related to massification are even more focused on quality control. Government documents, such as those in Indonesia and Thailand, and international organization reports often concentrate on quality assurance mechanisms in these countries. At times, the "quality" discussed often pertains to quality of basic infrastructure, such as internet access, ICT, and dormitory availability for female students. On other occasions, the "quality" referred to in the documents means the proper licensing of institutions.

Privatization

Molly N. N. Lee (2015) regards privatization as "part and parcel of the neo-liberalism ideology which is prevalent in many countries in the Asia Pacific region" (p. 111). Bruce Johnstone (n.d.) defines privatization broadly as "a process or tendency of colleges and universities (both public and private) taking on characteristics of, or operational norms associated with, private enterprises," adding that "privatization connotes a greater orientation to the student as a consumer, including the concept of the college education as a 'product'; attention to image, competitor institutions and 'market niches'; pricing and the enhancement of net earned revenue' and aggressive marketing," and that "Privatization also suggests the adoption of management practices associated with private business, such as contracting out, or "outsourcing" (that is, turning to private firms to perform non-academic services such as printing, food services, bookstore operations, or general building maintenance), aggressive labor relations and minimization of payroll expenditures, decisive decision-making and "top down" management, widespread use of audits and accountability measures, and an insistence that each unit (department or academic program) contribute to profitability, or at least to the organization's particular metric of 'success.'"

As Jandhyala B. G. Tilak notes, many factors have led to a role for the private sector, but they can be summed up into two categories: excess demand and differentiated demand for higher education (Tilak, 2003). There are at least three ways that higher education institutions privatize: through corporatization of public universities, through public-private partnerships, and through the implementation of student fees (Teichler & Shin, *The Future of the Post-Massified University at the Crossroads: Restructuring Systems and Functions*, 2014). N.V. Varghese (2015) suggests that "Private higher education appears mainly in two forms: (a) measures to privatize public institutions, and (b) promotions of PHEIs," (p. 20). Globally, private higher education has created an impact in the choices and the experiences of a range of students, no matter their socioeconomic status, and certainly, privatization

has affected the formation and the administration of higher education institutions themselves (Patrinos, Barrera-Osorio, & Guáqueta, 2009). As Harry Patrinos, Felipe Barrera-Osorio and Juliana Guáqueta (2009) note, many governments contract with the private sector for the provision of education services, including teacher training, management and curriculum designs.

Across the world, privatization is often seen as a threat, particularly to the university's role in contributing to the public good, for students are viewed as "consumers" (Chao, 2013). Questions have arisen regarding the role the amount of privatization that is appropriate: Where is the balance of public and private responsibility for higher education provision, financing, relevance and governance? One of the most debated impacts of privatization thus far has been the increased reliance on tuition fees, particularly from international students, and ventures that might not benefit students, but that cost them a significant amount of money and time (Chao, 2013).

The Philippines is perhaps the sole country in Southeast Asia with a historically large private sector in higher education. Highly diversified religious institutions and public institutions coexist, as a result of the colonial history of the Philippines under Spanish, American and Filipino rule. In the late 1990s, over 85% of students in the tertiary sector were enrolled in private, including religious, institutions. The Philippines is arguably the first Southeast Asian nation to experience the massification of higher education. Over the course of the 1990s, the number of universities in the country increased from just over 700 to over one thousand (Smolicz, 1999).

In Malaysia, for instance, entire degrees from private higher education institutions can be a source of concern. Data shows that graduates from these institutions are more likely than their counterparts from public higher education institutions to be unemployed, and ratings shows that private universities often get lower ratings than public ones, whether nationally or internationally (Tan, 2015). Sometimes, private institutions are not worth the money or time of governments either. In 2013, Malaysia's government had responded to the growth of private institutions with a moratorium, banning the establishment of more private institutions until 2015. The 414 private institutions that existed then were "a lot," and the fact that some of them had fewer than 500 students made them "unsustainable" in the eyes of Higher Education Minister Datuk Seri Mohamed Khaled Nordin. Student tuition fees alone would not be able to sustain the institutions, which would then have to rely on government grants for funding (Kulrasagaran, 2013).

That is not to say privatization is always viewed negatively. Governments often positively view privatization as a way to appease increasing demand for higher education and to promote industry-relevant curricula (Chao, 2013). The government of Brunei, for instance, is placing greater emphasis on partnerships with the private sector, particularly for TVET and for ICT. The Indonesian government, too, is encouraging more Indonesian universities to collaborate with the private sector in generating research and technology that are applicable in real-world situations. For Indonesia, collaborative research with the private sector is particularly appealing because many Indonesian universities do not have full-time researchers, but rather, they rely on lecturers who divide their time between research and teaching, and

therefore the quality of research coming out of Indonesian universities, when research is produced without collaboration, is not very high (Nurdiani, 2014).

Other benefits of privatization include: competition (assumed to be healthy) in the education industry, contracts (in private-public partnerships) that can be more flexible than government arrangements, an increased level of risk-sharing between the public and private sectors (Patrinos, Barrera-Osorio, & Guáqueta, 2009), diversification of revenue sources, stabilization of institutional income, and management efficiency (IHEP, 2009).

One of the primary questions related to privatization is the enormous cost of private education in Southeast Asia. The literature discovered does not necessarily refer to expensive foreign branch campuses. In fact, discussions of privatization issues in document government, international organization studies, and the media often refer to home-grown institutions that charge high prices for majors that are in high-demand by students, but that might not necessarily lead to their acquisition of skills desired by potential employers. Private institutions are viewed as a crucial complement to public institutions in all Southeast Asian countries because of the growing demand for higher education, but concerns are arising as to how they should be regulated for quality, cost, and efficiency. These are concerns that exist particularly for Myanmar, Laos, Cambodia, Thailand, and Vietnam (ADB, 2012).

Another concern posed by private institutions is the role of the academic profession on their campuses. The ADB has noted that across Asia, private HEIs underperform in research”, as professors at private HEIs often serve more so as lecturers and teachers, instead of as researchers, and many of them do not hold PhDs and have never produced any publication (ADB, 2012).

Autonomy and corporatization

In 1997, the *Recommendation concerning the Status of Higher-Education Teaching Personnel*, adopted by UNESCO defined institutional autonomy as “that degree of self-governance necessary for effective decision-making by institutions of higher education regarding their academic work, standards, management and related activities consistent with systems of public accountability, especially in respect of funding provided by the state, and respect for academic freedom and human rights.” In a later report, *Governance reforms in higher education: A study of institutional autonomy in Asian countries*, UNESCO (2014) writes that “Institutional autonomy implied the freedom for an institution to run its own affairs without the direct control or influence of the government. Instead, the influence exercised by the government may be based on legislative measures” (pp. 22-3).

The relationship between universities and the state inherently revolves around the issues of autonomy and accountability (Lee, forthcoming). The state and universities are constantly engaged in redefining their mutual relationship, with the state demanding more accountability on the one hand and universities insisting on more autonomy on the other (Neave and van Vught, 1991). An emerging trend in the reforms of university governance in the Southeast Asian region is an increase in institutional autonomy in return for more public accountability. An important distinction between academic freedom and institutional autonomy should be made. The term “autonomy” means “the power to govern without outside controls”, while the

term “accountability” means “the requirement to demonstrate responsible actions to some external constituenc(y)ies” (Berdahl 1990, p. 171).

Corporatization, which is one key approach towards achieving greater autonomy to higher education institutions, means that universities operate like business organisations, where they are allowed to engage in market-related activities and to generate and retain their own revenues, and to be governed by a board of directors or trustees who are at least nominally independent from the government (Lee, forthcoming).

More specifically to Southeast Asia, at the 2008 conference of The Association of Southeast Asian Institutions of Higher Learning, Charas Sunwawela (2008) briefly described institutional autonomy for Thai universities as: “Outside the Civil Service System. Financial support from Government’s budget for basic works, but granted freedom on financial, academic and personnel management.”

The issue of university corporatization can be a highly political one. The Indonesian government’s moves towards the corporatization of public higher education institutions, since the end of the Suharto era in 1998, has met with much resistance, resulting a tug-of-war between proponents and opponents of such legislation. Protests have been led mainly by students, who fear that it would engender the privatization of the whole university sector and, subsequently, lead to tuition fee hikes. Some also alleged that the gradual move towards the corporatization of public universities had led to an increase in corruption among the management. An unpredictable situation has therefore arisen from the numerous changes in the legal status of universities over the years, which has been highly disruptive to the performance and management of Indonesian universities.

The academic profession

Akira Arimoto (2014) suggests that there should be a supplemental explanation to the term “academic profession,” which could generally be defined as “a general term for those professors, associate professors, lecturers, assistant professors, and research associates who serve in universities and institutes, are major contributors to academic disciplines, engage in academic work, and provide leadership in cultural activities” (p. 2). The “academic profession,” according to Arimoto (2014), “has features that embrace extended education, scholarship, academic freedom, professional ethics, social authority, and high academic productivity,” (p. 2). Ester Höhle and Ulrich Teichler (2012) describe three traits of the academic profession: “First, the *process of learning and maturation* until being considered a full-fledged member of the academic profession is *very long*” (p.1); “Second, academic careers are *highly selective*” (p.2); and “Third, the academic profession enjoys a higher degree of freedom in determining its work tasks than other professions do” (p.2) (*italics in original text*).

Globally, the academic profession faces several issues, relating to academic freedom, governance of higher education institutions, faculty compensation, politics and civility, conflicts of interest, hiring and promotions, and faculty workload (AAUP, n.d.) (Altbach, Centers and peripheries in the academic profession: The Special challenges of developing countries, 2003) (Altbach, The Academic Profession: The Professoriate in Crisis, 1997) (Arimoto, 2014). UNESCO Bangkok and SEAMEO

(2006) describe both the positive and the negative changes of the academic profession in Southeast Asia. Those positive changes include increases in the state education budget, which allow institutions to generate revenue that help to improve infrastructure, and increased income of some academic professions. Whereas the negative changes include an overwhelming teaching load and the subsequent lack of time that academics can devote to research.

Philip Altbach (2003) observes that although the outlook for improvement of the academic profession in developing countries is dim, there are changes that would help to increase morale, productivity, and the quality of higher education institutions. Altbach (2003) suggests several areas that could be improved, including adequate salaries, upgraded university facilities, particularly “so that the most-well-qualified professors are able to pursue research and offer excellence in teaching” (p. 19), involvement of academics in administration, de-politicization of the academic profession, guaranteed academic freedom, and adequate training of the academic profession. Currently, professors’ salaries in Southeast Asia can be very low. Taking into account PPP, the monthly entry-level professorial salary in Malaysia, for instance, is US\$2,824, and the monthly average, for all professors, is US\$4,628, at public higher education institutions (Altbach, Reisberg, Yudkevich, Androushchak, & Pancheco, 2012).

The performance of the academic profession depends also on governmental policies. For instance, rules and regulations governing hiring and promotion procedures, funding for research, and faculty workload, affect the academics’ performance (Altbach, *The Academic Profession: The Professoriate in Crisis*, 1997). In Thailand, for instance, academics have become keener to do research, acknowledging that there are greater rewards for professors who publish. In some universities, such as Khon Kaen University, a system has been set up to calculate how much professors should earn, based on publications, amount of citations, and the impact of the publication (Lao, 2015). In Indonesia, too, there is encouragement for faculty research. The Ministry of National Education awards grants ranging between US\$15,000 and US\$20,000 for Indonesian professors at local universities to conduct joint research with faculty from foreign universities (U.S.-Indonesia Joint Council on Higher Education Partnership, 2013).

Internationalization

Defining “internationalization” is a complex process (Hawawini, 2011). One of the most widely cited definitions of the term is: the process of integrating an international/intercultural dimension into the teaching, research and service functions of the institutions” (Knight, 1994, Knight & de Wit, 1997), but this definition has been criticized as being too emphatic of an institution’s ability to introduce an international aspect into the extant structure and operations, without capturing “the essence of a process whose ultimate goal should be to *integrate the institution into the emerging global knowledge and learning network* rather than *integrate an international dimension into the existing institutional setting*” (Hawawini, 2011, p. 5) (italics in original text). Gabriel Hawawini (2011) proposes a new definition: “The internationalization of higher education institutions is the process of integrating the institution and its key stakeholders – its students, faculty, and staff – into a

globalizing world” (Hawawini, 2011, p. 5). Another often cited definition, Ulrich Teichler’s suggests that internationalization “can best be defined as the totality of substantial changes in the context and inner life of higher education relative to an increasing frequency of border-crossing activities amidst a persistence of national system, even though some signs of ‘de-nationalization’ might be observed” (Teichler, *The changing debate on internationalisation of higher education*, 2004, p. 23).

It is understood that globally, the number of student enrolments will increase 150% between the years 2000 and 2025, mostly in the “the developing world”, and that this number includes an increase of international students – “those studying outside their home nations for a sustained period” – from 2 to 7 million students (Hudzik, 2011). The extent of internationalization globally has gone so far, taking up various forms, including massive open online courses (MOOCs), student exchanges, and collaborative research projects, that Marc Tadaki (2013) has declared, “Internationalization has become a mantra in higher education.”

Student exchanges are also playing an increasingly important role in the planning of ASEAN higher education. Following the Fourth ASEAN Summit in 1992, the ASEAN University Network (AUN) was developed in 1995, in order to “strengthen the existing network of co-operation among leading universities in ASEAN” by “promoting co-operation and solidarity among ASEAN scholars and academicians, developing academic and professional human resource, and promoting information dissemination among ASEAN academic community” (NUS, n.d.). Among its primary activities are student exchanges, involving thirty universities in the region (AUN Member Universities, n.d.). SEAMEO RIHED and the governments of Malaysia, Indonesia, and Thailand, have also enlarged another student mobility program known as “M-I-T,” launched in 2009, into “ASEAN International Mobility for Students (AIMS) Programme” (SEAMEO RIHED, n.d.). Currently, students in this program are able to study under one of seven undergraduate programs - Hospitality and Tourism, Agriculture, Language and Culture, International Business, and Food Science and Technology, Engineering, and Economics – at thirteen universities in Brunei, Indonesia, Malaysia, Thailand, Vietnam, and also Japan. Students in AIMS must enrol for one semester for nine credits or three subjects, and can transfer credits from the host institution to their home institution. The Ministry of Education of each country financially supports its own students for AIMS (KMUTT, 2014).

As students participate in exchanges, professors and researchers in higher education institutions are also working more collaboratively within the region. This is not only because universities rely on one another for infrastructure and knowledge, but also because of the desire to strengthen international collaboration. In Indonesia, for instance, research papers with international co-authors are seen as more legitimate. Moreover, research collaboration in ASEAN is often not bilateral, but rather trilateral, among two ASEAN countries and a third partner, usually Japan or a western country. Not all Southeast Asian nations are able to build adequate infrastructure for research. Thailand, for instance, is hoping to build 75 international research networks, working with Japanese, Korean, and western researchers. Currently, it is also working with Laos, Vietnam, and Myanmar. The expectations are, of course, not the same for all Southeast Asian countries. Poorer countries, namely

Laos, Cambodia, and Myanmar, are still not expected to form regional and international research clusters to the same degree (Sharma, 2012).

Internationalization is a question at both the regional level and at the global level for Southeast Asian higher education (Mok & Yu, 2014). For Cambodia, Laos, and Myanmar, internationalization is often invoked as a way to lift up the quality of staff, professors, and research (British Council, 2013) (IIE, 2015) (UNESCO Bangkok, 2014) (Mathuros, 2013). Since the number of trained staff and PhD-holding professors in these countries are low, international partnerships are seen as ways to allow knowledge from the outside to filter in for staff and professors. Studies by the Asian Development Bank (ADB) also touch on issues of brain drain in these countries, where low faculty salaries do not bring back students who have left to pursue graduate degrees abroad (ADB, 2012).

For middle-income and high-income countries, internationalization policies and discussions are evoked more so in relationship to students. Specifically, government documents – from Thailand, Brunei, Malaysia, and Indonesia – talk about raising graduate skills to “international standards”. The governments of these countries view regional exchanges of students as a way to further trade and learn skills that the region needs, particularly in technology readiness and innovation (Lohani, 2013). Government and organizational documents have discussed the identity of an “ASEAN university” and the “ASEAN student experience,” though the meaning of the ASEAN identity has not been discussed in detail (Chipperfield, Galvan, & Broadhead, 2014).

Singapore seems an outlier in internationalization goals. Ahead of other Southeast Asian countries (Lohani, 2013; Sharma, 2012), Singapore is now focused on how to be a global leader in education. While its Southeast Asian peers are working to reach international, or arguably even regional, standards, Singapore is already sharpening its skills on how to create partnerships with highly respected foreign institutions (as can be seen, for instance, through increasing joint degree programs, such as the National University of Singapore’s and Nanyang Technological University’s programs with Carnegie Mellon University, New York University, Waseda University and King’s College London, as well as establishments founded through international collaborations, such as the Singapore University of Technology and Design, developed with the Massachusetts Institute of Technology). Although some of those partnerships have closed down, Singapore continues to pursue its internationalization agenda. (Malaysia’s government has also openly declared its welcome of foreign campus branches, but their growth in Malaysia is notably slower, with foreign universities that are arguably less prestigious (Dewi, 2012).⁴) It is expected that Singapore will contribute to research within the Southeast Asian research clusters. In 2012, the Director of the Science and Technology Postgraduate Education and Research Development Office in Thailand said, “Singapore is in the premier league, while we [Thailand and Malaysia] are first

⁴ Some of Malaysia’s universities, such as International Islamic University, are trying to attract students through Islam. International Islamic University invites students from the world over to apply to its programmes, which operate in English and Arabic and target Muslim populations, regardless of nationality. The university differentiates itself based on its Islamic philosophy and is “international” in the sense that it desires to appeal to the global Muslim population.

division. They will have to cooperate with us in the spirit of ASEAN or they will be isolated," (cited in Sharma, 2012).

Despite their differences, the Southeast Asian countries' policies agree on this: internationalization will allow better development of technology and research. International collaboration, with public *and* private sectors, will allow students to develop skills that are at the heart of the knowledge-based economy. Internationally collaborative research will allow many countries with lesser infrastructure to be more capable of innovating for production and growth (ADB, 2012).

Research capacity

Worldwide, there have been multiple initiatives to spur research capacity through policy (Fowler, et al., 2009) (Jones, 2014) (Woldegiorgis, Jonck, Goujon, 2015). The governments of some Southeast Asian countries are more successful than others in promoting research capacity in their countries. Singapore, for instance, is often regarded as the premier country in the region for research in higher education institutions. As the EU-Asia Higher Education Platform (EAHEP) (2010) notes, "The ambitious target of attracting 150,000 additional international students to Singapore by 2015 has become a particular threat to the traditional undergraduate recruitment market of Anglophone countries as domestic provision increases. Singapore also has fairly liberal immigration requirements and has made it easier for foreign talent to remain" (in actuality, the number of foreign student enrolment has been decreasing, and there were approximately 84,000 international students in 2012 Singapore, a number representing a decrease from approximately 100,000 international students in 2008) (Davie, 2012). Although some of the international partnerships for research, such as Tisch Asia and Chicago School of Business, discontinued after a short lifespan, Singapore continues to put emphasis on research capacity through programs with INSEAD (EAHEP, 2010) and Yale-NUS. As such, Singapore has attracted the establishment of multiple R&D centres, including those of corporate entities such as Nestle, Panasonic and Mitsubishi, as well as academically oriented centres, such as Fusionopolis and Biopolis.

Malaysia is also very active in building its research capacity. Through twinning programs, such as the Danish-Malaysia collaboration, 'Multipurpose Forestation in a Changing Society' (2003-2006), Malaysian institutes have been able to increase research capacity (Tham, 2012). However, like most other Southeast Asian countries, Malaysia would still benefit from an increase in government expenditure on R&D. The statistics from Malaysia Science and Technology Information Centre (MASTIC) (2015) reveal that, though government expenditure on R&D has been steadily increasing since 2000, the latest record of R&D spending, from 2012, still was only 1.13% of GDP (Singapore's expenditure on R&D between 2016 and 2020 is expected to be SG\$19 billion, or almost 1% of its GDP (NRF, 2016)). Increased expenditure would not only allow improved infrastructure, but it would also attract more capable researchers from all over the world (Tham, 2012).

Thailand experiences similar budgetary issues as Malaysia. The Thai government policies and budgets also allocate only a small amount for R&D (Lao, 2015). According to Daniel Schiller and Ingo Liefner (2007), only 0.22% of the government's total expenditure went to support R&D in 2003. The Thai government

also favours applied research over basic research, allocating them 85.8% and 14.2%, respectively (Lao, 2015).

Within the region, there are Soviet-modelled institutions as in Vietnam, where research institutes had long been separated from universities that focused on teaching, while a unique model has evolved in Singapore involving the establishment of specialist research centres and where universities have become more research intensive (Gopinathan and Lee, 2011). Institutions such as Fusionopolis and Biopolis suggest that there are alternative models to research, where staff are not “burdened” by teaching and administrative duties.

Foreign branch campuses

The American Council on Education (2009) defines a foreign branch campus as one that “(a) rents or owns educational facilities in a country outside of the home institution; (b) offers degree courses in more than one field of study and is where students take most of their courses and finish their degree; (c) provides degrees that bear the parent institution’s name alone or jointly with a partner institution; (d) primarily provides face-to-face instruction; (e) has permanent administrative staff,” (cited in Yi, 2011). The Observatory on Borderless Higher Education (OBHE) provides a less stringent definition, explaining a foreign branch campus as an “off-shore operation of a higher education institution which is operated by the institution or through a joint-venture in which the institution is a partner and is in the name of the foreign institution. Upon successful completion of the study programme, students are awarded a degree from the foreign institution” (OBHE, 2006). Jane Knight (2006) offers the following definition: “Branch campus: Provider in Country A establishes a satellite campus in Country B to deliver courses and programmes to students in Country B (may also include Country A students taking a semester/courses abroad). The qualification awarded is from provider in Country A.” The various definitions may differ in their nuances, but they agree on this: that a branch campus grants a degree bearing the name of the parent institution (Yi, 2011).

Many Southeast Asian countries see a host of foreign branch campuses. Malaysia has eight foreign branch universities, mainly from the UK and from Australia (Tan, 2015) (OBHE, 2012). Thailand, too, has drawn a notable amount of interest from foreign campuses. Stamford University originally from Singapore and Malaysia and Webster University from the United States are two prominent international campuses, but there are also plans for more campuses from universities such as Al-Azhar University in Egypt and Jinan University in China (Lao, 2015). Vietnam is also expecting a new, internationally prominent university in 2016, to be known as Fulbright University Vietnam. The university will be “the country’s first independent, non-profit, U.S.-affiliated university,” funded largely by the U.S. State Department, with classes taught by faculty affiliated with the Harvard Kennedy School (Klein & Shroeder, 2015).

Not all foreign branches thrive in Asia. Many plans for foreign branch campuses have failed, including a plan from the University of Central Lancashire for a Thailand campus and several foreign branch campuses in Singapore (Morgan, 2013).

The role of technology

As ADB (2009) notes, “ICT is both a sector in its own right and cross-sectoral” (p. 6). Educational Testing Services (ETS) and its charter institutions define ICT proficiency as: “the ability to use digital technology, communication tools, and /or networks appropriately to solve information problems in order to function in an information society. This includes the ability to use technology as a tool to research, organize, evaluate, and communicate information and the possession of a fundamental understanding of the ethical/legal issues surrounding the access and use of information” (ETS, 2003, p. 11).

ADB (2009) notes that ICT is playing an increasingly important role in its activities. Economic growth is linked to the ability of the workforce to work with technology and to be information literate. Education itself depends on ICT to bridge the knowledge gap by improving quality of education, increasing the quantity of quality educational opportunities, reaching underserved populations in remote areas, and enhancing student-centered learning (ADB, 2009). Questions that the ADB is asking include how to use ICT to strengthen education and how to use education to promote the growth of ICT in the Asia-Pacific region (ADB, 2009). As UNESCO notes in its report, *ICT for Higher Education* (2011), however, ICT is not limited to teaching and learning, but it is also used for administration and management purposes – student registration, grades, course schedules and staffing evaluation sometimes depend on an ICT-enabled environment as well.

Current uses of ICT, when used for teaching and learning, are often to develop teaching-training programs, and further work can be done to connect more students with ICT (ADB, 2009). ADB (2009) advocates the use of ICT not only in universities, but also in TVET institutions, for a skilled, ICT-capable workforce. As previously mentioned, ICT is often brought up in some government policies. It is a particularly prominent topic for Brunei, whose Ministry of Education has laid out in a 2012-2017 Strategic Plan (2012) that ICT shall support students, teachers and educational administrators in teaching and learning in a learner-centric environment. Since 2005, there has been an ongoing UNESCO King Hamad Bin Isa Al-Khalifa Prize for the Use of Information and Communication Technologies (ICTs) in Education rewarding innovations in teaching and learning that uses ICT to improve educational outcomes (WFCP, 2015).

In Myanmar, too, the Ministry of Education aims to revise teacher-training programs to include ICT developments, establish e-learning centres, computer training centres, and more. Myanmar’s ICT initiatives began to in 2000, when the Ministry of Education established more ICT facilities (Ministry of Education, Government of the Union of Myanmar, 2004). The Yangon University of Distance Education (YUDE) and the Mandalay University of Distance Education (MUDE) are the two providers of distance education, offering services primarily in the form of video lectures. They aim to serve students who seek education at a minimum cost from their homes (MUDE, n.d.; Tint, n.d.). At times, ICT development, particularly in developing countries, relies on assistance from international partners. The National University of Laos, for instance, receives aid from Japan International Cooperation Agency (JICA) to implement a project called “Human Resource Development in the IT Service Industry” (Phonamat & Flor, 2010).

According to the ADB (2009), national ICT policies should aim to develop a country's ICT sector "while establishing an 'ICT-enabled environment' that allows cross-sectoral ICT adoption" (p. 6). The following are further factors inhibiting the potential of ICT: lack of support from management, unclear division of function and power, uncoordinated planning and implementation, shortage of trained staff, resistance from staff and reluctance to be re-trained, and insufficient funds for developing, purchasing, and implementing ICT (UNESCO, 2011).

Within Southeast Asia, Singapore and Malaysia are perhaps at the forefront of internationalization through MOOCs. In November 2015, Singapore's National Institute of Education (NIE) International announced a course to be offered on the MOOC platform Coursera, likely on management and school leadership, and in the previous year, the National University of Singapore and Nanyang Technological University had just done the same (Teng, 2015). Earlier, in 2013, Malaysia launched its first MOOC through Taylor University, a leading private university, on the OpenLearning platform. Within 20 days of the announcement of the online course, over 500 students from 75 countries registered (Al-Atabi, n.d.). These courses aim to attract students worldwide (Teng, 2015). Tadaki (2013) and others often question the "value" of internationalization projects, which may be costly, but not necessarily productive (Brandenburg & de Wit, 2012). As Muhstak Al-Atabi's study suggests, the enrolment of some MOOCs can be relatively low, compared with the enrolment of MOOCs generated at more internationally prominent universities, that the effort of creating and operating the MOOC may not be worth the results.

Conclusion

This literature review studied massification, privatization, and internationalization in higher education in Southeast Asia through their six sub-themes: research capacity, autonomy and corporatization, foreign branch campuses, sector diversification and differentiation, the academic profession, and the use of technology. The review showed several major movements, actions and plans, and suggests commonalities in what the countries are trying to achieve. The increased attention to university autonomy, the emphasis on international competitive and internationalization through partnerships and improved research, and the use of technology are but a few of the common areas.

As they share similar goals, the Southeast Asian countries also face similar challenges in the trajectory of their higher education institutions. Singapore is arguably the most successful in its plans, while other countries, such as Thailand and Vietnam, must answer questions of how to translate visions into actions, and the poorest countries, such as Laos and Cambodia, still struggle to provide even basic infrastructure for higher education. The countries also share the common question of how the massification of higher education can happen without the compromise of quality education.

All of the countries studied seem to agree on the fact that one of the main, if not already *the* main, purposes of higher education is to create human resources that will lead the nations to sustainable economic prosperity. Urgent policy responses are needed to bring the various institutions into consensus regarding the path forward, particularly since higher education and economic development are now often thought

of in conjunction, and multiple governmental bodies must engage in the same conversations and be in the same understanding with one another. Without appropriate policies, actions may be scattered and the momentum needed to take higher education forward in a structured manner would still be missing.

Note

The views and opinions expressed in this paper are those of the author(s) and do not necessarily reflect those of The HEAD Foundation.

References

- AAUP. (n.d.). *Issues in Higher Education*. Retrieved from American Association of University Professors: <http://www.aaup.org/issues-higher-education>
- ADB. (2009). *Good practice in information and communication technology for education*. Mandaluyong City: Asian Development Bank.
- ADB. (2011). *Higher Education Across Asia: An Overview of Issues and Strategies*. Mandaluyong City, Philippines: Asian Development Bank.
- ADB. (2012). *Counting the cost: Financing Asian higher education for inclusive growth*. Mandaluyong City: ADB. Retrieved from <http://www.adb.org/sites/default/files/publication/29679/counting-cost.pdf>
- ADB. (2012). *Counting the Cost: Financing Asian Higher Education for Inclusive Growth*. Philippines: Asian Development Bank.
- ADB. (2012). *Improving transitions: From School to university to workplace*. Mandaluyong City: ADB. Retrieved from <http://www.adb.org/sites/default/files/publication/29968/improving-transitions-school-university-workplace.pdf>
- ADB. (2012). *Private higher education across Asia: Expanding access, searching for quality*. Mandaluyong City: ADB.
- ADB. (2014). *Innovative Asia: Advancing the knowledge-based economy*. Mandaluyong City: ADB.
- Al-Atabi, M. (n.d.). *Entrepreneurship: The First MOOC in Malaysia*. Retrieved from MIT Office of Digital Learning: <http://linc.mit.edu/linc2013/proceedings/Session3/Session3Al-Atabi.pdf>
- Alfa Puentes. (n.d.). *Homepage*. Retrieved from Alfa Puentes: <http://alfapuentes.org/>
- Altbach, P., Reisberg, L., Yudkevich, M., Androushchak, G., & Panheco, I. F. (Eds.). (2012). *Paying the professoriate: A Global comparison of compensation and contracts*. New York: Routledge.
- Altbach, P. (1997). *The Academic Profession: The Professoriate in Crisis*. (P. Altbach, & M. J. Finkelstein, Eds.) New York: Garland.
- Altbach, P. (2003). Centers and peripheries in the academic profession: The Special challenges of developing countries. In *The Decline of the guru: The Academic profession in developing and middle-income countries* (pp. 1-22). New York: Palgrave Macmillan.
- American Institute for Research. (2010). *Revenues: Where Does the Money Come From?* Washington: American Institute.
- American Institute of Research. (2012). *Not your Mother's College Affordability Crisis*. 2012: American Institute of Research .

Defining Higher Education Issues and Challenges in Southeast Asia/ASEAN within the International Context

- Arimoto, A. (2014). Introduction: The Changing Academic Profession in Japan: Its Past and Present. In A. Arimoto, W. K. Cummings, F. Huang, & J. Shin (Eds.), *The Changing Academic Profession in Japan* (pp. 1-26). Springer.
- Aring, M. (2015). *ASEAN Economic Community 2015: Enhancing competitiveness and employability through skill development*. Thailand: ILO. Retrieved from http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/documents/publication/wcms_344796.pdf
- AUN Member Universities. (n.d.). Retrieved from ASEAN University Network: <http://www.aunsec.org/aunmemberuniversities.php>
- Bollag, B. (2007). *The Chronicle of Higher Education*. Retrieved 3 28, 2014, from <http://www.nyu.edu/classes/jepsen/chronicle2007-08-07.pdf>
- Bowen, W. G. (2012). *The 'Cost Disease' in Higher Education: Is Technology the Answer*. Stanford University.
- Brandenburg, U., & de Wit, H. (2012, April 2). *Higher education is losing sight of what internationalisation is all about*. Retrieved from The Guardian: <http://www.theguardian.com/higher-education-network/blog/2012/apr/02/internationalisation-labeling-learning-outcomes>
- Bray, M. (2002). *The Cost and Financing of Education: Trends and Policy Implications*. Manila: Asian Development Bank.
- British Council. (2013). *Empowering higher education: A Vision for Myanmar's universities*. Retrieved from http://www.britishcouncil.org/sites/default/files/report_empowering_higher_education_dialogue.pdf
- British Council. (2015). *ASEAN research output, growth and impact*. Retrieved from http://www.britishcouncil.org/sites/default/files/5.4_research_performance_seasia.pdf
- British Library. (2010). *2020 Vision Project, Trends in Research and Higher Education*. London: British Library.
- Butcher, N., & Hoosen, S. (2012). *Exploring the Business Case for Open Educational Resources*. British Columbia: The Commonwealth of Learning.
- Calderon, A. (2012, September 2). *Massification continues to transform higher education*. Retrieved from University World News: <http://www.universityworldnews.com/article.php?story=20120831155341147>
- Canadian Centre for Policy Alternatives. (2013). *Degrees of Uncertainty, Navigating the Changing Terrain of University Finance*. Ottawa: Canadian Centre for Policy Alternatives.
- Chao, R. Y. (2013, September 21). *Is there a limit to higher education's privatisation?* Retrieved from University World News: <http://www.universityworldnews.com/article.php?story=201309171610270>
- Chipperfield, C., Galvan, S., & Broadhead, I. (2014). *Locally Engaged Globally Facing*. British Council. Retrieved from http://www.britishcouncil.org/sites/default/files/final_ged_myanmar_2014_report.pdf
- COHA. (2012, January 12). *Higher Education in Latin America 2011: The Burden of the Youth*. Retrieved from Council on Hemispheric Affairs:

Defining Higher Education Issues and Challenges in Southeast Asia/ASEAN within the International Context

- <http://www.coha.org/higher-education-in-latin-america-2011the-burden-of-the-youth/>
- Davie, S. (2012, October 10). *Foreign student numbers drop sharply after climbing steadily*. Retrieved from AsiaOne News:
<http://news.asiaone.com/News/Latest+News/Edvantage/Story/A1Story20121009-376559.html>
- Deloitte. (2011). *Making the Grade 2011*. Canada: Deloitte.
- Dewi, M. (2012, October 28). *Slow but steady growth in foreign branch campuses*. Retrieved from University World News:
http://www.britishcouncil.org/sites/default/files/final_ged_myanmar_2014_report.pdf
- Doughtery, K. (2004). *Financing Higher Education in the United States: Structure, Trends and Issues*. 1-31. Beijing.
- Douglas, J. A., & Keeling, R. (2008). *The Big Curve: Trends in University Fees and Financing in the EU and US*. Berkeley: Centre for Studies in Higher Education.
- EAHEP. (2010). *Developing Asian education hubs*. Retrieved from EU-Asia Higher Education Platform: <http://www.eahep.org/asiahigher-education/background/127-developing-asian-education-hubs.html>
- Education Testing Services. (2003). *Succeeding in the 21st century: What higher education institutions must do to address the gap in information and communications technology proficiencies*. Washington, DC. Retrieved from https://www.ets.org/Media/Tests/Information_and_Communication_Technology_Literacy/ICTwhitepaperfinal.pdf
- Ehrenberg, R. G. (2000). *Tuition Rising : Why College Costs So Much*. Tuition rising : why college costs so much: Harvard University Press.
- Ernst and Young. (2012). *University of Future, A thousand Year Old Industry on the Cusp of Profound Change*. Australia: Ernst and Young .
- European Universities Association. (2011). *Financially Sustainable Universities II*. Belgium: EUA Publications.
- European University Association. (2008). *Financially Sustainable Universities, Towards Full Costing in European Universities*. Brussels: EUA Publications.
- Fowler, Z., Baird, A., Baron, S., Davies, S. M., Proctor, R., & Salisbury, J. (2009). *Building research capacity in education: Evidence from recent initiatives in England, Scotland and Wales*.
- González, C. (2013). *Higher Education: A Canary in a Privatisation Coalmine*. Retrieved November 18, 2013, from <http://www.universityworldnews.com/article.php?story=20131105161210333>
- Grant Thornton. (2011). *The Financial Health of the Higher Education Sector*. London: Grant Thornton.
- Hawawini, G. (2011). *The Internationalization of higher education institutions: A Critical review and a radical proposal*. Retrieved from <https://www.insead.edu/facultyresearch/research/doc.cfm?did=48726>
- Höhle, E., & Teichler, U. (n.d.). *The Academic profession in the light of comparative surveys*. Retrieved from <http://www.uni->

Defining Higher Education Issues and Challenges in Southeast Asia/ASEAN within the International Context

- kassel.de/wz1/pdf/Hoehle%20and%20Teichler_The%20Academic%20Profession%20in%20the%20Light%20of%20Comparative%20Surveys.pdf
- Hudzik, J. K. (2011). *Executive Summary: Comprehensive internationalization: From concept to action*. Washington, DC: NAFSA, The Association of International Educators. Retrieved from http://www.nafsa.org/_/File/_/cizn2011_execsummary.pdf
- (n.d.). *ICT for higher education: Case studies from the Asia Pacific*. IHEP. (2009). *Privatization in higher education: Cross-country analysis of trends, policies, problems, and solutions*. Washington DC: IHEP. Retrieved from http://www.ihep.org/sites/default/files/uploads/docs/pubs/issue_brief_privatization_in_higher_education-cross_country_analysis_of_trends_policies_problems_and_solutions.pdf
- IIE. (2015). *IIE Myanmar higher education initiative*. Retrieved from IIE: <http://www.iie.org/Programs/Myanmar-Higher-Education-Initiative/International-Relations-Course>
- Institute for Higher Education Policy. (2007). *The Global State of Higher Education and the Rise of Private Finance*. Washington: Global Centre on Private Financing of Higher Education.
- Johnston, D., & Marcucci, P. N. (2007). *Worldwide Trend in Higher Education Finance: Cost-Sharing, Student Loan, and the Support of Academic Research*. UNESCO.
- Johnstone, B. (n.d.). *Privatization in and of higher education in the US*. Retrieved from Graduate School of Education, SUNY-Buffalo: <http://gse.buffalo.edu/fas/johnston/privatization.html>
- Johnstone, B. (2006). *Financing Higher Education: Cost-Sharing in International perspective*. Rotterdam: Sense Publishers.
- Jones, G. A. (2014). Building and strengthening policy research capacity: Key issues in Canadian higher education. *Studies in Higher Education*, 1332-1342.
- Klein, M. A., & Shroeder, L. F. (2015, August 13). *Harvard Works with Feds To Establish University in Vietnam*. Retrieved from The Harvard Crimson: <http://www.thecrimson.com/article/2015/8/13/harvard-state-fulbright-vietnam/>
- KMUTT. (2014, October 14). *The ASEAN International Mobility for Students Programme*. Retrieved from King Mongkut's University of Technology Thonburi: <http://global.kmutt.ac.th/the-asean-international-mobility-for-students-programme>
- Knight, J. (2007). Cross border higher education: Issues and implications for quality assurance and accreditation. *Higher Education in the World 2007 - Accreditation for Quality Assurance*, 134-146.
- Knight, J. (2009). Challenges and Lessons from East and South Africa. In J. Knight (Ed.), *Financing Access and Equity in Higher Education* (pp. 19-39). Rotterdam: Sense Publishers.
- Kogan, M., & Teichler, U. (2007). *Key challenges to the academic profession*. Paris and Kassel: UNESCO.
- Kolowich, S. (2013). *Coursera Takes a Nuanced View of MOOCs Dropout Rate*. Retrieved 3 28, 2014, from <http://chronicle.com/blogs/wiredcampus/coursera-takes-a-nuanced-view-of-mooc-dropout-rates/43341>

- KPMG. (2010). *Strategic Financial Analysis for Higher Education, Identifying, Measuring and Reporting financial risks*. KPMG.
- Kulrasagaran, P. (2013, April 22). *Two-year moratorium on new private tertiary institutions*. Retrieved from The Star Online:
http://www.thestar.com.my/News/Nation/2013/01/30/Twoyear-moratorium-on-new-private-tertiary-institutions_1/
- Lao, R. (2015). *A Critical Study of Thailand's Higher Education Reforms*. New York: Routledge.
- Lee, M. (2015). Higher education in the Asia-Pacific. *Asia Education Futures: Workshop Reports No. 1*, pp. 19-26.
- Lee, M. N. (2015). Higher education in Malaysia: National strategies and innovative practices. In J. C. Shin, F. Huang, & G. A. Postiglione (Eds.), *Mass higher education development in East Asia: Strategy, quality, and challenges*. Springer.
- Lohani, B. N. (2013, April 30). *Building Knowledge Economies in Asean Requires Education, Innovation*. Retrieved from Asian Development Bank:
<http://www.adb.org/news/op-ed/building-knowledge-economies-asean-requires-education-innovation-bindu-n-lohani>
- Marcucci, P. N., & Johnstone, D. B. (2010). *Financing Higher Education Worldwide: Who Pays? Who Should Pay?* Baltimore: Johns Hopkins University.
- Marcucci, P., Johnstone, B. D., & Ngolovoi, M. (2006). Higher Educational Cost-Sharing, Dual-Track Tuition Fees, and Higher Educational Access: The East African Experience. Dijon: Peabody Journal of Education.
- Martin, R. (2009). *The Revenue-to-Cost Spiral*. Raleigh: The John William Pope Center for Higher Education Policy.
- MASTIC. (2015, March 9). *National Research and Development (R&D) Survey*. Retrieved from Malaysia Science and Technology Information Centre:
<http://www.mastic.gov.my/en/web/guest/statistik-kajian-rnd-kebangsaan>
- Mathuros, F. (2013, June 7). *Myanmar to focus on education and skills training for its young workforce*. Retrieved from World Economic Forum:
<http://www.weforum.org/news/myanmar-focus-education-and-skills-training-its-young-workforce>
- Miller, C. (2012). *The Past and Future of Higher Education Finance*. American Action Forum.
- Ministry of Education, Brunei Darussalam. (2012). *Ministry of Education 2012-2017 Strategic Plan*. Strategic Management Unit, Ministry of Education, Brunei Darussalam. Retrieved from Ministry of Education of the Government of Brunei: <http://www.moe.gov.bn/Shared%20Documents/strategicplan.pdf>
- Ministry of Education, Government of the Union of Myanmar. (2004). *Development of education in Myanmar*. Retrieved from UNESCO:
http://www.ibe.unesco.org/National_Reports/ICE_2004/myanmar_ocr.pdf
- Mok, K., & Yu, K. (Eds.). (2014). *Internationalization of higher education in East Asia: Trends of student mobility and impact on education governance*. London: Routledge.
- Morgan, J. (2013, November 21). *Uclan 'exposure' as Thai campus is dropped*. Retrieved from Times Higher Education:

Defining Higher Education Issues and Challenges in Southeast Asia/ASEAN within the International Context

- <https://www.timeshighereducation.com/news/uclan-exposure-as-thai-campus-is-dropped/2009178.article>
- MUDE. (n.d.). *About Us*. Retrieved from Mandalay University of Distance Education: <http://www.mude.edu.mm/about/>
- Murakami, Y., & Blom, A. (2008). *Accessibility and Affordability of Tertiary Education*. Washington: The World Bank.
- Nganga, G. (2010, October 17). *East Africa: Moves to harmonise higher education*. Retrieved from University World News: <http://www.universityworldnews.com/article.php?story=20101015201714445>
- NRF. (2016, February 24). *R&D development*. Retrieved from National Research Foundation: <http://www.nrf.gov.sg/research/overview>
- Nurdiani, R. (2014, November 14). *Budget, administration issues cloud new HE ministry*. Retrieved from University World News: <http://www.universityworldnews.com/article.php?story=20141113125812557>
- NUS. (n.d.). *ASEAN University Network (AUN)*. Retrieved from National University of Singapore: <http://www.nus.edu.sg/global/engagement02.html>
- OBHE. (2012, March). *International branch campuses: Even more developments*. Retrieved from The Observatory on Borderless Higher Education: http://www.obhe.ac.uk/newsletters/borderless_report_march_2012/international_branch_campuses_even_more_developments
- OECD. (2011). *Issue Brief: Public Research Funding*. Retrieved December 6, 2013, from <http://www.oecd.org/innovation/policyplatform/48136600.pdf>
- OECD. (2013). *Education At a Glance*. Paris: OECD.
- OECD. (2013a). *Health Spending Continues to Stagnate, says OECD*. Retrieved December 4, 2013a, from <http://www.oecd.org/els/health-systems/health-spending-continues-to-stagnate-says-oecd.htm>
- Patrinos, H. A., Barrera-Osorio, F., & Guáqueta, J. (2009). *The Role and impact of public-private partnerships in education*. Washington DC: World Bank.
- Phonamat, T., & Flor, A. G. (2010). Status and prospects of the ICT service industry in Lao PDR: Implications to higher education. In J. Mongkhonvanit (Ed.), *Industrial cluster and higher education*. Xlibris Corporation.
- Richard, W., & Gläser, J. (t.b.p. 2014). The Impact of institutional Reforms on the Nature of Universities as Organisation. In *Organisational Transformation and Scientific Change: The Impact of Institutional Restructuring*.
- Robertson, S., & Olds, K. (2014, April 13). *Towards harmonization of higher education in Southeast Asia*. Retrieved from Inside Higher Ed: <https://www.insidehighered.com/blogs/globalhighered/towards-harmonization-higher-education-southeast-asia>
- Rumble, G. (2001). The Cost and Costing of Networked Learning. *The Journal of Asynchronous Learning Networks*, 5(2), 75-96.
- Salmi, J. (2013). *Defining a Sustainable Financing Strategy for Tertiary Education in Developing Countries*. AusAID.
- Schiller, D., & Liefner, I. (2004). Higher education funding reform and university–industry links in developing countries: The case of Thailand. *Higher Education*, 543-556.

- SEAMEO RIHED. (2011, March 24). Policies towards ASEAN community 2015 [PowerPoint slides]. Nha Trang, Vietnam.
- SEAMEO RIHED. (n.d.). *Student Mobility (AIMS)*. Retrieved from SEAMEO RIHED: <http://www.rihed.seameo.org/programmes/aims/>
- Sharma, Y. (2012, October 7). *Research collaboration a growth-driver for Asian economies*. Retrieved from University World News: <http://www.universityworldnews.com/article.php?story=20121004142106879>
- Singapore Ministry of Education. (n.d.). *Higher Education Division*. Retrieved from Ministry of Education: <http://www.moe.gov.sg/about/org-structure/hed/>
- Sirat, M., Azman, N., & Abu Bakar, A. (2014, April 13). Towards harmonization of higher education in Southeast Asia: Malaysia's perspective. Retrieved from <https://www.insidehighered.com/blogs/globalhighered/towards-harmonization-higher-education-southeast-asia>
- Smart, J. (1999). *Higher Education: Handbook of Theory and Research, Volume XIV*. New York: Agathon Press.
- Smolicz, J. (1999). Privatization in higher education: Emerging commonalities and diverse educational perspectives in the Philippines, Australia, Poland and Iran. *Development and Society*, 28(2), 205-28. Retrieved from <http://s-space.snu.ac.kr/bitstream/10371/86603/1/3J.J.%20Smolicz.pdf>
- Sunwawela, C. (2008, December 12). University Autonomy: Thailand Country Report [PowerPoint slides]. Penang.
- Tadaki, M. (June, 1 2013). *How are we doing higher education internationalisation?* Retrieved from University World News: <http://www.universityworldnews.com/article.php?story=2013052818005080>
- Tan, E. (2015, April 17). *Private universities and branch campuses 'technically insolvent'*. Retrieved from University World News: <http://www.universityworldnews.com/article.php?story=20150415055241381>
- Teichler, U. (2004). The changing debate on internationalisation of higher education. *Higher Education*, 48(1), 5-26. Retrieved from http://ihea6.um.ac.ir/uploading/ihea6.um.ac.ir/images/The_Changing_Debate_on_Internationalisation_of_Higher_Education.pdf
- Teichler, U., & Shin, J. (Eds.). (2014). *The Future of the Post-Massified University at the Crossroads: Restructuring Systems and Functions*. New York: Springer.
- Teng, A. (2015, November 12). *NIE to offer courses on open online platform*. Retrieved from Straits Times: <http://www.straitstimes.com/singapore/education/nie-to-offer-courses-on-open-online-platform>
- Tessler, L. (2013, March 5). *Can Latin American higher education go global without using English?* Retrieved from The Guardian: <http://www.theguardian.com/higher-education-network/blog/2013/mar/05/internationalisation-latin-america-university-host>
- Tham, S. (2012). *Internationalizing higher education in Malaysia*. Singapore: Institute of Southeast Asian Studies.
- The Associations of Universities and Colleges of Canada. (2008). *Trends in Higher Education*. Ottawa: The Associations of Universities and Colleges of Canada.

Defining Higher Education Issues and Challenges in Southeast Asia/ASEAN within the International Context

- The Guardian. (2013). *Tighter Rules for Student Visas Could Cost UK £2.4bn in a Decade – Study*. Retrieved 3 26, 2014, from <http://www.theguardian.com/uk/2013/jun/05/visa-restrictions-overseas-students-costing-uk>
- The Inter-University Council for East Africa. (2013, October 20). *The Need to establish a regional system of accreditation of higher education institutions and programs in East Africa*. Retrieved from The Inter-University Council for East Africa: Publications: http://www.iucea.org/index.php?option=com_phocadownload&view=category&id=3:publications&Itemid=613
- The World Bank. (2011). *The Road to Academic Excellence, the Making of World-Class Universities*. Washington: The World Bank.
- Tilak, J. (2003). Privatization of higher education. In 557-574, *Education, Society, and Development: National and International Perspectives*. New Delhi: APH Publishing.
- Times Higher Education. (2014). *Germany's Great Tuition Fees U-turn*. Retrieved 3 28, 2014, from <http://www.timeshighereducation.co.uk/features/germanys-great-tuition-fees-u-turn/2011168.article>
- Tint, H. (n.d.). *Rector Message*. Retrieved from Yangon University of Distance Education: <http://www.yude.edu.mm/public/mod/page/view.php?id=5>
- U.S.-Indonesia Joint Council on Higher Education Partnership. (2013, April 16). *Grant for International Research Partnerships and Publications*. Retrieved from U.S.-Indonesia Joint Council on Higher Education Partnership: <http://www.usindonesiainjointcouncil.org/20130416grant-for-international-research-partnerships-and-publications/>
- UNESCO. (1997). Recommendation concerning the status of higher-education teaching personnel. Retrieved from http://www.unesco.org/education/docs/recom_e.html
- UNESCO. (2004). *UNESCO Forum Occasional Paper Series*. Paris. Retrieved from <http://unesdoc.unesco.org/images/0014/001467/146736e.pdf>
- UNESCO. (2011). *ICT in higher education: Case studies from Asia and the Pacific*. Bangkok: UNESCO Bangkok.
- UNESCO. (2014). *Governance reforms in higher education: A Study of institutional autonomy in Asian countries*. Paris: International Institute for Educational Planning.
- UNESCO. (2014). *Transferable Skills in Technical and Vocational Education and Training (TVET): Policy Implications*. United Nations Educational, Scientific and Cultural Organization and UNESCO Bangkok. Retrieved from UNESCO Bangkok: http://www.unescobkk.org/fileadmin/user_upload/epr/TVET/AP8_Transferable_Skills_22_Aug.pdf
- UNESCO Bangkok. (2014, June 6). *Myanmar contributes to the future of Asian higher education*. Retrieved from UNESCO Bangkok: <http://www.unescobkk.org/education/news/article/myanmar-contributes-to-the-future-of-asian-higher-education/>

Defining Higher Education Issues and Challenges in Southeast Asia/ASEAN within the International Context

- UNESCO Bangkok and SEAMEO. (2006). *Higher education in Southeast Asia*. Bangkok: UNESCO Asia and Pacific Regional Bureau for Education.
- UNESCO Bangkok, UNICEF EAPRO and UNICEF ROSA . (2012). *Asia-Pacific End of Decade Notes on Education for All*. Retrieved from UNICEF: <http://www.unicef.org/rosa/217145e.pdf>
- UNESCO. (n.d.). *Education System Profiles*. Retrieved from UNESCO: <http://www.unescobkk.org/education/resources/resources/education-system-profiles/lao-pdr/higher-tvet/>
- Vallely, T., & Wilkinson, B. (2008, November). *Vietnamese higher education: Crisis and response*. Retrieved from Harvard Kennedy School: <http://www.hks.harvard.edu/innovations/asia/Documents/HigherEducationOverview112008.pdf>
- Varghese, N. (2015). *Private Higher Education in Asia*. Singapore: The HEAD Foundation.
- Vossensteyn, H. (2004). Fiscal Stress: Worldwide Trends in Higher Education Finance. *NAFFSA Journal of Student Financial Aid*, 34(1), 39-55.
- Welch, A. (2011). *Higher Education in Southeast Asia: Blurring Borders, Changing Balance*. New York: Routledge.
- WFCP. (2015, June 29). *Call for nominations: 2015 UNESCO King Hamad Bin Isa Al-Khalifa Prize*. Retrieved from World Federation of Colleges and Polytechnics: <http://wfcop.org/2015/06/call-for-nominations-2015-unesco-king-hamad-bin-isa-al-khalifa-prize/>
- Woldegiorgis, E. T., Jonck, P., & Goujon, A. (2015). Regional higher education reform initiatives in Africa: A Comparative analysis with the Bologna Process. *International Journal of Higher Education*, 241-253.
- World Bank. (2005). *Higher Education in Latin America: The International Dimension*. Washington DC: World Bank.
- World Bank. (2012). *School enrollment, tertiary (% gross)*. Retrieved December 5, 2013, from <http://data.worldbank.org/indicator/SE.TER.ENRR>
- Yi, C. (2011). Branch campuses in Asia and the Pacific. *Comparative & International Higher Education*, 3, 8-10.