Internationalization:
Three Generations of Crossborder Higher Education

by
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Higher education internationalization has fundamentally transformed
the world of education and has dramatically changed itself

Internationalization is one of the major forces impacting and shaping higher education as it changes to meet the challenges of the 21st century. Overall, the picture of internationalization that is emerging is one of complexity, diversity and differentiation. One aspect of it which is particularly important and controversial is crossborder education.

Academic mobility has moved from people (students, faculty, scholars) to programme (twinning, franchise, virtual) and provider (branch campus) mobility, and now to the development of education hubs. Crossborder education has gradually shifted from a development cooperation framework, to a partnership model, and now to a commercial and competitiveness model. This for-profit approach includes student mobility as the generous scholarship schemes for students from developing countries from the 1960s and 1970s have now turned into the big business of international student recruitment. There is no question that the international dimension of higher education is becoming increasingly important, and at the same time more complex.

Lecture delivered at the India International Centre on 15 February 2012 by Jane Knight.
The purpose of this paper is to explore the rationales, scope and scale of the three generations of crossborder education. The first part examines how the multi-faceted phenomenon of crossborder education relates to internationalization in general. It provides a definition and differentiates crossborder education from borderless, transnational and offshore education. The three generations of crossborder education are analyzed in the second part so as to provide a basic understanding of programme and provider mobility, and the recent positioning of countries as education hubs. Attention is given to examining the rationales and perspectives of different stakeholders—students, foreign institutions and host country institutions. The relevance for India is addressed with particular reference to the thorny issue of international branch campuses. The last section of the paper identifies and discusses some of the emerging issues, challenges and unintended consequences related to crossborder higher education.

**Definition**

Crossborder education refers to the ‘movement of people, knowledge, programmes, providers, policies, ideas, curricula, projects, research and services across national or regional jurisdictional borders’ (Knight, 2007a). Crossborder education is often mistakenly confused with the term internationalization. It is important to understand that crossborder education is only one part of the complex process of internationalization. As Figure 1 illustrates, there are two interdependent pillars of internationalization—at home or campus-based and abroad/crossborder education. This paper focuses on crossborder education while acknowledging the strong connection with and implications for campus-based internationalization.

**Figure 1: Two Pillars of Internationalization: At Home and Crossborder Education**
As crossborder education is often used interchangeably with transnational, borderless and offshore education, it is enlightening to explore these terms and to juxtapose the concepts of borderless education and crossborder education. Borderless education acknowledges the disappearance of all types of borders—time, disciplinary, geographic—while the latter actually emphasizes the existence of borders, especially geographic and jurisdictional. Both approaches reflect the reality of today. In this period of distance and e-learning education, geographic boundaries seem to be of little consequence. Yet, we can detect the growing importance of borders when the focus turns to regulatory responsibility, especially related to quality assurance, funding and accreditation. Offshore education is self-explanatory but is not often used by landlocked countries. For non-native English speakers, it is often difficult to discern the difference between transnational and international education. Crossborder education is the preferred term and is used in this paper.

Three Generations of Crossborder Education

Any study of higher education shows that academic mobility has been taking place for a very long time. Scholars and knowledge have been moving around the world for centuries. But, late in the 20th century, the movement of programmes and higher education institutions across borders became more popular and numerous. No longer were there isolated incidences of foreign programmes and providers resident in a small number of countries; the numbers started to grow exponentially. By 2005, some countries began to develop a critical mass of foreign providers, programmes, students, and the third generation in the form of education hubs, cities, zones. The purpose of Table 1 is to summarize the highlights of each of the three generations. Worth noting is that these generations are not mutually exclusive. In the following sections, each generation is examined in depth so as to understand the differences and similarities among them and to raise some of the issues and challenges associated with each category.

By 2005, some countries began to develop a critical mass of foreign providers, programmes, students, and the third generation in the form of education hubs, cities, zones.
Table 1: Three Generations of Crossborder Education

<table>
<thead>
<tr>
<th>Crossborder Education</th>
<th>Primary Focus</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Generation</strong></td>
<td><strong>Student/People Mobility</strong>&lt;br&gt;Movement of students to foreign country for education purposes</td>
<td>Full degree or for short-term study, research, field work, internship, exchange programmes</td>
</tr>
<tr>
<td><strong>Second Generation</strong></td>
<td><strong>Programme and Provider Mobility</strong>&lt;br&gt;Movement of programmes or institutions/companies across jurisdictional borders for delivery of education</td>
<td>Programme Mobility&lt;br&gt;Twinning&lt;br&gt;Franchised&lt;br&gt;Articulated/Validated&lt;br&gt;Joint/Double Award&lt;br&gt;Online/Distance&lt;br&gt;Provider Mobility&lt;br&gt;Branch Campus&lt;br&gt;Virtual University&lt;br&gt;Merger/Acquisition&lt;br&gt;Independent Institutions</td>
</tr>
<tr>
<td><strong>Third Generation</strong></td>
<td><strong>Education Hubs</strong>&lt;br&gt;Countries attract foreign students, researchers, workers, programmes, providers, R&amp;D companies for education, training, knowledge production, innovation purposes</td>
<td><strong>Student Hub</strong>&lt;br&gt;Students, programme providers move to foreign country for education purposes&lt;br&gt;<strong>Talent Hub</strong>&lt;br&gt;Students, workers move to foreign country for education and training and employment purposes&lt;br&gt;<strong>Knowledge/Innovation Hub</strong>&lt;br&gt;Education researchers, scholars, HEIs, R&amp;D centres move to foreign country to produce knowledge and innovation</td>
</tr>
</tbody>
</table>

Author, 2012.

The First Generation: People Mobility

Student and scholar mobility has been occurring for as long as universities have been in existence. In fact, the concept of universe in the term ‘university’ is proof of the global dimension. The startling change in student mobility is that the numbers have multiplied exponentially in the last fifty years. For example, international students in foreign countries expanded from 238,000 in the 1960s (Chen and Barnett, 2000) to
3.3 million in 2008 (OECD, 2010). Of course, the numbers of students, the modes of mobility (full degree abroad, exchange, internships, semester/year abroad), the destination countries and the driving rationales have changed dramatically. It is estimated that 7.8 million students will be enrolled in foreign countries for their tertiary education by 2025 (Boehm et al., 2002). These statistics indicate that student mobility will continue to expand but new forms of crossborder education are needed to meet this demand. The greatest movement of students will in fact be in Asia. The region hosts the largest number of students interested in international education and is becoming very attractive for students from the region and beyond. Table 2 provides the major destination countries in Asia. In spite of this regionalization trend, it is clear that India is not a favoured destination country as of now.

### Table 2: Top Destination Countries in Asia

<table>
<thead>
<tr>
<th>Country</th>
<th>Rank in Top 12 Countries</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>3</td>
<td>325,935</td>
</tr>
<tr>
<td>China</td>
<td>6</td>
<td>195,503</td>
</tr>
<tr>
<td>Japan</td>
<td>8</td>
<td>113,996</td>
</tr>
<tr>
<td>New Zealand</td>
<td>9</td>
<td>39,942</td>
</tr>
<tr>
<td>Singapore</td>
<td>10</td>
<td>86,000</td>
</tr>
<tr>
<td>Malaysia</td>
<td>11</td>
<td>66,000</td>
</tr>
<tr>
<td>South Korea</td>
<td>12</td>
<td>49,270</td>
</tr>
<tr>
<td>India</td>
<td>---</td>
<td>21,778</td>
</tr>
</tbody>
</table>


### The Second Generation: Programme and Provider Mobility

In the second generation of crossborder education, programmes and providers are mobile, not the student. In the early 1990s the movement of programmes and providers across borders began to increase substantially and impacted the number of students who could access foreign higher education programmes and qualifications without leaving home. As Table 3 illustrates, there are different rationales driving the movement of academic programmes and higher education providers across borders. It is informative to examine the perspectives and expectations of the students, the foreign institution providing the education (i.e., sending country HEI), and the host country. There are stark differences in why and how crossborder education is
used by different countries and regions around the world. This demonstrates that one model of crossborder does not fit all countries. The local context, culture and national priorities dictate the crossborder education approach.

Table 3: Stakeholder Perspectives on Programme and Provider Mobility

<table>
<thead>
<tr>
<th>Rationales and Impact</th>
<th>Enrolled Students in Receiving (Host) Country</th>
<th>Institution/Provider in Sending Country</th>
<th>Institution/Provider in Receiving Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Access/Supply in Home Country</td>
<td>Ability to gain foreign qualification without leaving home. Can continue to meet family and work commitments</td>
<td>Attracted to unmet need for higher education and training and/or invitation to establish presence in foreign country</td>
<td>Competition, collaboration or co-existence with foreign providers</td>
</tr>
<tr>
<td>Cost/Income</td>
<td>Less expensive to take foreign programme at home as no travel or accommodation costs. But tuition fees of quality foreign providers may be much higher than local HEIs</td>
<td>Strong imperative to generate a profit for crossborder operations as well as increased profile</td>
<td>Varied rationales and impacts depending on whether local institution/provider is competing or cooperating with foreign providers. Can include development of new talent, revenue generation or increased regional profile</td>
</tr>
<tr>
<td>Selection of Courses and Programmes</td>
<td>Increased access to courses/programmes in high demand by labour market</td>
<td>Tendency to offer high demand courses which require little infrastructure or investment unless infrastructure is provided by host country</td>
<td>Need to offer broad selection of courses which may not have high enrolments and/or have major lab or equipment requirements</td>
</tr>
<tr>
<td>Language/ Cultural and Safety Aspects</td>
<td>Can have access to courses in foreign and/or indigenous language. Remain in familiar cultural and linguistic environment.</td>
<td>Language of instruction and relevance of curriculum to host country important issues. If foreign language used, additional academic and linguistic support may be needed.</td>
<td>Provide courses and programmes according to local cultural and linguistic norms and practices but consistent with admission requirements and quality standards of home institution.</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Quality</td>
<td>Can be exposed to higher or lower quality course provision. Dependent on delivery mode, quality may be at risk. Assurance of relevant and high quality courses may require significant investment.</td>
<td>Presence of foreign providers may be a catalyst for innovation and improvement of quality in courses, management and governance.</td>
<td>Presence of foreign providers may be a catalyst for innovation and improvement of quality in courses, management and governance.</td>
</tr>
<tr>
<td>Recognition of Qualification</td>
<td>Foreign qualification has to be recognized for academic and employment purposes. May be difficult for academic award and for institution to be recognized in foreign country.</td>
<td>Recognized home providers have an advantage. Foreign providers may wish to collaborate for award-granting powers.</td>
<td>Recognized home providers have an advantage. Foreign providers may wish to collaborate for award-granting powers.</td>
</tr>
<tr>
<td>Reputation and Profile</td>
<td>Due to massive marketing campaigns international profile is often mistakenly equated with quality of provider/programme. Profile and visibility are key factors for high enrolments and strategic alliances.</td>
<td>Home (domestic) providers are challenged to distinguish between foreign providers with high/low profile and high/low quality.</td>
<td>Home (domestic) providers are challenged to distinguish between foreign providers with high/low profile and high/low quality.</td>
</tr>
</tbody>
</table>

Author, 2012 (updated).

To understand the phenomenon of programme and provider mobility, it is helpful to examine each mode of movement and the associated issues.
Programme Mobility

Crossborder mobility of programmes can be described as ‘the movement of individual education/training courses and programmes across jurisdictional borders through face to face, distance or a combination of these modes.’ Credits towards a qualification can be awarded by the sending foreign country provider or by an affiliated domestic partner or jointly. Franchising, twinning, double/joint degrees and various articulation models are the more popular methods of crossborder programme mobility (Knight, 2007a). A short description of each follows:

**Franchise:** An arrangement whereby a provider in the source country A authorizes a provider in country B to deliver their course/programme/service in country B. The qualification is awarded by provider in country A. Arrangements for teaching, management, assessment, profit-sharing, awarding of credit/qualification are customized for each franchise arrangement and must comply with national regulations (if they exist) in country B.

**Twinning:** A situation where a provider in source country A collaborates with a provider located in country B to develop an articulation system that allows students to take course credits in country B and/or source country A. Only one qualification is awarded by the provider in source country A. Arrangements for twinning programmes and awarding of degree usually comply with national regulations of the provider in the source country A.

**Double/Joint Degree:** An arrangement where providers in different countries collaborate to offer a programme for which a student receives a qualification from each provider, or a joint award from the collaborating partners. Arrangements for programme provision and criteria for awarding the qualifications are customized for each collaborative initiative in accordance with national regulations in each country.

**Articulation:** Various types of articulation arrangements between providers situated in different countries permit students to gain credit for courses/programmes offered by all of the collaborating providers. This allows students to gain credit for work done with a provider other than the provider awarding the qualification.
**Validation**: Validation arrangements between providers in different countries allow provider B in the receiving country to award the qualification of provider A in the source country. In some cases, the source country provider may not offer these courses or awards themselves which may raise questions about quality.

**Virtual/Distance**: Arrangements where providers deliver courses/programmes to students in different countries through distance and online modes. These arrangements may include some face-to-face support for students through domestic study or support centres.

It is clear that a critical factor in programme mobility is ‘who’ awards the course credits or ultimate credentials. As the movement of programmes proliferates, there will undoubtedly be further changes to national, regional and even international regulatory frameworks. The question of ‘who grants the credits/awards’ will be augmented by ‘who recognizes the provider’ and whether or not the programme has been ‘accredited or quality assured’ by a bona fide body, either domestically or internationally. Of central importance is whether the qualification is recognized for employment or further study in the receiving country and in other countries as well. The perceived legitimacy and recognition of the qualification at home and abroad are fundamental issues yet to be resolved.

The last decade has seen the introduction of twinning and franchise programmes. These types of programmes are popular in India, especially with UK universities. The benefits of these arrangements to students, host institutions as well as the foreign providers are many and varied. However, issues related to quality of teaching, relevance of course content, admission requirements, testing and evaluation, and qualifications of teaching staff must be addressed. Double/joint/combined degree programmes differ from twinning and franchise programmes in that the course curriculum is jointly designed and delivered by the partner institutions. This means that the foreign curriculum is not imported: instead it is jointly developed.

A joint degree programme awards one joint qualification upon completion of the collaborative programme requirements established by the partner institutions. The duration of the programme is normally not extended and thus students have the advantage of completing a joint programme in the same time period as an individual programme from one of the institutions. They normally involve student mobility or
The risk of not being able to legally award a joint qualification is leading to the dubious practice of awarding two individual degrees for the same work load or course credits of one programme. India hosts double degree programmes with foreign providers and needs to assess the integrity of providing two degrees for the same student work load. In addition, several modes for programme mobility involve affiliations and partnerships and thus the issue of ownership of intellectual property rights to course design and materials is relevant. What are the legal roles and responsibilities of the participating partners in terms of academic, staffing, recruitment, evaluation, financial and administrative matters? While the movement of programmes across borders has been taking place for years, it is clear that the new types of providers, partnerships, awards and delivery modes are challenging national and international higher education policies.

**Provider Mobility**

Crossborder mobility of providers can be described as ‘the physical or virtual movement of an education provider (institution, organization, company) across a jurisdictional border to offer education/training programmes and/or services to students and other clients’ (Knight, 2007a). The difference between programme and provider mobility is one of scope and scale in terms of programmes/services offered and the local presence (and investment) by the foreign provider. Credits and qualifications are awarded by the foreign provider (through foreign, local or self-accreditation methods) or by an affiliated domestic partner. Different forms of crossborder provider mobility are as follows:

**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 is awarded by provider in country A.
**Independent Institution:** Foreign provider A (a traditional university, a commercial company or alliance/network) establishes in country B a stand-alone higher education institution to offer courses/programmes and awards. There is usually no ‘home’ institution in country A.

**Acquisition/Merger:** Foreign provider A purchases a part of or 100 per cent of local higher education institution in country B.

**Study Centre/Teaching Site:** Foreign provider A establishes study centres in country B for students taking their courses/programmes. Study centres can be independent or in collaboration with local providers in country B.

**Affiliation/Networks:** Different types of ‘public and private’, ‘traditional and new’, ‘local and foreign’ providers collaborate through innovative types of partnerships to establish networks/institutions for the delivery of courses and programmes in local and foreign countries through distance or face-to-face modes.

**Virtual University:** Provider that delivers credit courses and degree programmes to students in different countries through distance education using predominantly the Internet technology mode, generally without face-to-face support services for students.

The virtual and physical movement of providers to other countries raises many of the same registration, quality assurance and recognition issues that programme mobility does, but there are additional factors to consider if local/foreign partnerships are involved. Setting up a physical presence requires that attention is paid to national regulations regarding status of the entity, total or joint ownership with local bodies, tax laws, for-profit or non-profit status, repatriation of earned income, boards of directors, staffing, granting of qualifications, selection of academic programmes and courses and so on. In spite of these issues, the growth in the number of international branch campuses has been dramatic in the last decade. In 2002, there were 24 registered branch campuses around the world and by 2011 there were 200 (OBHE, 2012). It is revealing to see the distribution and growth of these new initiatives by region. Table 4 shows that by 2011, Asia was home to 69 of the 200 branch campuses around the world. This represents the largest number in a single
In 2002, there were 24 registered branch campuses around the world and by 2011 there were 200. It is revealing to see the distribution and growth of these new initiatives by region and the forecast for increased growth suggests that there will be an additional 31 by 2013, bringing the total to 100.

**Table 4: Distribution of International Branch Campus by Region**

<table>
<thead>
<tr>
<th>Region</th>
<th>2009</th>
<th>2011</th>
<th>Planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle East</td>
<td>55</td>
<td>55</td>
<td>1</td>
</tr>
<tr>
<td>Asia</td>
<td>44</td>
<td>69</td>
<td>31</td>
</tr>
<tr>
<td>Europe</td>
<td>32</td>
<td>48</td>
<td>3</td>
</tr>
<tr>
<td>Latin America</td>
<td>18</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>North America</td>
<td>8</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Africa</td>
<td>5</td>
<td>18</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>162</td>
<td>200</td>
<td>37</td>
</tr>
</tbody>
</table>

*OBHE, 2011.*

Interestingly enough, India is not a major player in terms of hosting international branch campuses. As of 2012, they are formally not legal in India. Legislation to permit their establishment has been stalled in Parliament for more than two years. Allowing foreign universities to establish a formal presence through a branch campus in India is a hot topic of controversy and debate. However, it is interesting and slightly ironic to note that India is the fifth largest source of branch campuses around the world as illustrated in Table 5. Many question this double edged policy and furthermore, ask what quality assurance mechanisms are in place in India regarding the export of these 17 branch campuses.

**Table 5: Top Five Source Countries of Branch Campuses**

<table>
<thead>
<tr>
<th>Source Countries</th>
<th>2009</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>78</td>
<td>78</td>
</tr>
<tr>
<td>Australia</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>UK</td>
<td>13</td>
<td>25</td>
</tr>
<tr>
<td>France</td>
<td>11</td>
<td>27</td>
</tr>
<tr>
<td>India</td>
<td>11</td>
<td>17</td>
</tr>
</tbody>
</table>

*OBHE, 2012.*

Worth asking is where in the world the Indian branch campuses are located. All 17 are located in Asia and primarily in countries where there is a large Indian expatriate
The United Arab Emirates is home to ten India-branch campuses, Mauritius hosts four, and there is one each in Malaysia, Nepal and Singapore. According to the OBHE report (2012), two more are planned to open in 2012—one in Australia which is worthy of more research, and another in Sri Lanka. In spite of the lack of legislation to permit the establishment of new branch campuses in India, there are five already operational: three from the UK and one each from Australia and Canada (ibid.). For the size of India, five is a small number but the interest is increasing. One questions whether the delay in passing a law to formally allow foreign branch campuses in India is based on substantive or political reasons. Pundits indicate that it is a combination of both, and as of 2012, no immediate resolution to the stalemate is in sight.

**Third Generation: Education Hubs**

Education hubs are the latest development and constitute the third wave of crossborder education initiatives. Education hubs build on and can include first and second generation crossborder activities, but they represent a wider and more strategic configuration of actors and activities. An education hub is a concerted and planned effort by a country (or zone, city) to build a critical mass of education/knowledge actors and strengthen its efforts to exert more influence in the new marketplace of education. The concept of a national education hub rests on the assumption that it is a country’s plan and effort to position itself within the region and beyond as a reputed centre for higher education and research. Therefore, an education hub is not an individual branch campus, or a science and technology park, or a large number of international students. It is more than that. The proposed working definition is generic enough to apply to all levels of education hubs (city, zone, country), even though this paper only focuses on country level hubs: ‘an education hub is a planned effort to build a critical mass of local and international actors strategically engaged in crossborder education, training, knowledge production and innovation initiatives’ (Knight, 2011a).

As of 2012, there are six countries around the world which are seriously trying to position themselves as education hubs and two

In spite of the lack of legislation to permit the establishment of new branch campuses in India, there are five already operational: three from the UK and one each from Australia and Canada.
of them are located in the Gulf region (United Arab Emirates and Qatar), three in Asia (Hong Kong, Malaysia and Singapore), and one in Africa (Botswana). There are others who may be using the term ‘hub’ as a branding label, or are in early stages of development. Bahrain and Sri Lanka can be described as emerging hubs as there is no clarity on the plans or investment to date. There is no single model or one size fits all approach for establishing an education hub. Each country has its own set of drivers, approaches and expectations. It is worth noting that to date, all education hub countries are relatively small and share an interest in shifting from a natural resources or manufacturing economy to one that places more emphasis on knowledge and service industries (Knight, 2011a). India is not considered to be a country level education hub, but there is interest in establishing specific cities as education or knowledge hubs. These initiatives differ but all encourage closer relationships between higher education institutions and private industries to allow for fuller participation in the production of new knowledge, and for ensuring that graduates are equipped with relevant skills and knowledge.

The diversity of rationales, actors and activities characterizing education hubs is clear. Some countries see hubs as a means to build a critical mass of foreign students and providers to generate income as well as to modernize and internationalize their domestic higher education; others want to be a hub in order to train foreign and local students and employees as part of a skilled labour force; while other countries focus on attracting foreign students, institutions and companies to build a vibrant research, knowledge and innovation sector to lead them into the knowledge economy.

In order to capture these differences and allow for a more nuanced understanding and exploration of education hubs, a typology of three categories of hubs is suggested (Knight, 2011b): student hub, talent hub, and knowledge/innovation hub. The typology is based on the rationales and nature of the activities, not on the location, level or scope of hubs. The typology will become more robust when hard information on strategic plans, laws, policies, enrolment data and outputs are available, but at this early stage of hub development this information does not exist for some countries.

*The Student Hub* is the most focused and prevalent type of education hub. The key activity is the education and training of local, expatriate and international students.
In addition to recruiting students it also focuses on attracting foreign higher education institutions to offer franchised and twinning programmes or establish branch campuses in order to increase access for all types of students. The primary objectives for student hubs are to:

• generate revenue from international student fees,
• provide increased access to higher education for students,
• modernize and internationalize domestic higher education institutions, and
• build profile and increase competitiveness within the regional higher education sector and beyond.

The Talent Hub focuses on student education and training but differs from the student hub because the overarching goal is to develop a skilled work force. Thus, foreign students are encouraged to remain in the host country for employment purposes. International higher education institutions as well as private training/education companies are encouraged to offer academic programmes and professional development opportunities aimed at international and national students as well as local employees. The overall goal is human resource development. The driving key objectives are to:

• educate and train students to be skilled labour/knowledge workers for knowledge and service led economy,

• establish geo-political status in the region and beyond.

The education/training institutions and companies are often, but not necessarily, co-located in a zone in order to share facilities and promote collaboration amongst themselves and with industry. In order to develop a critical mass there can be more than one co-location site in a country.

The Knowledge/Innovation Hub broadens its mandate beyond education and training to include the production and distribution of knowledge and innovation. Foreign actors including universities, research institutes, companies with major research and development activities are attracted through favourable business incentives to establish a base in the country and to collaborate with local partners to develop applied research, knowledge and innovation. The primary objectives are to:
• help build a knowledge and service based economy,
• educate and train skilled labour for knowledge/innovation,
• attract foreign direct investment, and
• increase regional or global economic competitiveness and soft power.

Collaboration among the key players—foreign and local education institutions, industries, research centres, and companies—is a key factor to building a knowledge and innovation hub.

Education hubs are full of lofty expectations and fraught with potential challenges. There are a myriad of issues that require further reflection and examination by researchers, policy makers, and the hub sponsors. Issues vary by the type of hub but include regulatory, policy and operational questions related to a diversity of topics including registration and quality assurance of education and training providers; recognition of qualifications for further study and employment in different countries; university-industry partnerships; intellectual property rights for new knowledge and innovation; employment and immigration policy incentives to attract foreign education providers and companies; relevance of teaching/training methods in light of cultural diversity; and compliance with regional and international trade laws.

There are macro and more theoretical issues to be explored including higher education as an economic and soft power actor; the centrality of commercial competitiveness in education hubs; implications from the intercultural, interdisciplinary, and cross-sectoral nature of education hubs: the role of education hubs in regional building; impact of brain gain through a hub; the relationship between local and foreign actors; and the sustainability of education hubs. These are but a few examples of the issues related to establishing an education hub to further a country’s engagement and competitiveness in the knowledge economy.

**Emerging Issues, Challenges and Unintended Consequences**

**Student Access:** Does crossborder education help countries satisfy the growing demand for higher and continuing education? Many would answer yes, and that increased access for students is a driving motivation for all forms of crossborder education. But there remains the critical issue of equity of access and whether it will
be available only to those who can afford it or have the language skills (primarily English). No precise data exists on the rate of participation of students in crossborder programmes at the national or international levels. Only a handful of countries around the world collect reliable data on enrolments in crossborder education programmes, although this situation is improving. Thus, there is inconclusive evidence as to whether crossborder education is a successful way to increase access to higher education for the general cohort of students wanting higher education.

**Quality Assurance of Crossborder Education:** In the last decade, increased importance has been given to quality assurance at the institutional and national levels. More National Quality Assurance and Accreditation Agencies have been created in the last decade in Asia. In addition, regional quality networks such as Asia-Pacific Quality Network (APQN) have also been established.

The primary task of national quality assurance agencies has been quality recognition and assurance of domestic higher education provision by public and/or private higher education institutions. However, the increase in crossborder education by foreign institutions has introduced a new challenge (and gap) in the field of quality assurance. Historically, National Quality Assurance Agencies have generally not focused their efforts on assessing the quality of imported and exported programmes. The question now facing the sector is how to deal with the increase in crossborder education by traditional higher education institutions and the new private commercial providers who are not normally part of nationally-based quality assurance schemes (Knight, 2010).

**Recognition of Qualifications:** Increased academic mobility raises the issue of credential recognition to a more prominent place in international education policy. The credibility of higher education programmes and qualifications is extremely important for students, their employers, the public at large, and of course for the academic community itself. It is critical that the qualifications awarded by crossborder providers are legitimate and will be recognized for employment or further studies both at home and abroad. To establish a credential review and assessment agency is a challenge facing many countries of the world.

**The General Agreement in Trade in Services (GATS) and Higher Education:** GATS has been a wake-up call for higher education leaders around the world. Higher
education has traditionally been seen as a ‘public good’ and ‘social responsibility’. But with the advent of new international trade agreements, higher education has also become a tradable commodity or more precisely, in terms of GATS, an internationally tradable service. GATS is often seen as the catalyst for the increased growth in commercial higher education between countries. Many educators would argue that GATS is responsible for these new developments. But, others would contend that the opposite is true by pointing out that one of the consequences of increased private for-profit education at national and international levels has actually led to education being a multi-billion dollar business and thus a profitable sector to be covered in trade agreements (Knight, 2007b). Academic mobility (students, programmes, providers) is considered by many as a huge commercial business and is expected to increase exponentially as the demand for higher and continuing education escalates. GATS has been seen by many as presenting new opportunities and benefits, and by others as introducing new risks. Thus, while international academic mobility is not new, the presence of international trade law to regulate is new and leading to interesting debates within the higher education community.

**Capacity Building:** It is clear that crossborder education can be considered a double edged sword. On the one hand, it can increase access for local students and in many cases regional students. But, by importing foreign programmes and providers, one can question the relevance of the curriculum to local context and needs. More importantly, it often does not help to develop the human capacity of the domestic higher education institutions and faculty to design and offer these programmes themselves. Critics of crossborder education believe that relying on foreign expertise to prepare and teach courses introduces issues of dependency, sometimes neo-colonization, and also sustainability.

**Education Hubs—Fad, Brand or Innovation:** Education hubs are important new developments. They represent a new generation of crossborder education activities where critical mass, co-location and connection between international/local universities, students, research institutes and private industry are key. But are they just a fad? Are they more rhetoric than reality? A common perception is that being recognized as an education hub will increase a country’s reputation, competitiveness and geo-political status within the region and beyond. Are education hubs nothing more than a branding exercise designed to increase status and a sense of soft power?
To ensure that education hubs are more than a brand and can achieve their goals and become sustainable requires substantial planning; policy preparedness; human resources, infrastructure; and financial investment. It remains to be seen whether student education hubs are sustainable given the intense competition among countries for fee-paying students; or whether talent hubs are feasible in light of immigration policies and unemployment rates for domestic workers. Finally, it is still unknown whether knowledge/innovation type education hubs can be developed successfully through university–industry collaborations. Ensuring that education hubs are sustainable and an innovative new development represents the next challenge facing countries keen to shift to a knowledge and service-based economy and gain a competitive edge and profile in the region and beyond.

**Brain Drain/Gain/Train:** While ‘brain drain and brain gain’ are well known concepts, research is showing that students are increasingly interested in taking a degree in Country A, followed by a second degree or perhaps internship in Country B, leading to employment in Country C and probably D, finally returning to their home country after eight to twelve years of international study and work experience. Hence, the emergence of the term ‘brain train’ (Knight, 2008). From a policy perspective, higher education is becoming a more important actor and is now working in closer collaboration with immigration, industry and the science and technology sectors to build an integrated strategy for attracting and retaining knowledge workers. A key issue is ensuring that the curriculum is relevant and responsive to the needs of the labour market while still recognizing the importance of respect of local culture and customs and most importantly that higher education is, and has to be, more than skills development for future careers.

It is impossible to gaze into a crystal ball to forecast the future, but if the experiences of the last decade are harbingers of the future, it is likely that the competition for the brightest of students and scholars will only increase, bringing with it benefits for some countries and higher education institutions and losses for others. Perhaps technology and social networking will bring new opportunities for brain sharing that will mitigate the overall effect of winners and losers, but the current obsession with global rankings and the economic competitiveness agenda suggests otherwise. The great brain race through student mobility is likely to be in active mode for a while.
Double Degrees: Double the Benefit or Double Counting?: The interest in these double degree programmes is increasing around the world, including India. But, so is concern about the necessary academic requirements and the validity of a double or multiple degree qualification. For many academics and policy makers, double degree programmes are welcomed as a natural extension of exchange and mobility programmes. For others, they are perceived as a troublesome development leading to double counting of academic work and the thin edge of academic fraud. There are a broad range of reactions due to several different reasons: the diversity of programme models, the uncertainty related to quality assurance and qualifications recognition, and finally, the ethics involved in deciding what academic work load or new competencies are required for the granting of joint, double, multiple or consecutive (i.e., BA and MA or MA and Ph.D.) degrees.

The value of a qualification/credential is at the root of the murkiness surrounding the ‘acceptability or legitimacy’ of double/multiple degrees. Many would argue that attributing the same courses or workload towards two or more degrees from two or more institutions devalues the validity of a qualification. Others believe that if students meet the stated learning outcomes/competencies required to obtain a qualification regardless of where or how the competencies were acquired, the credential is legitimate. This logic infers that double/multiple degrees, based on a set of core courses or competencies plus additional requirements of the collaborating institutions are academically sound and legitimate. It is argued that the process for recognizing these qualifications requires more attention—not the completion requirements per se. Both arguments have validity but the variety of models used prevents a clear resolution to the question of ‘legitimacy’ of double degrees. Doubt remains (Knight, 2011c).

Cultural Diversity or Homogenization—Cultural Tensions?: Debates on the impact of crossborder education on indigenous knowledge and cultural diversity often provoke strong positions and sentiments. Some take a positive view of the ways that modern information and communication technologies and the movement of people, ideas, and culture across national boundaries promote the fusion and hybridization of culture. Others contend that these same forces are eroding national cultural identities and leading to cultural homogenization, most often in the form of Westernization. And still others speculate that crossborder mobility of
student, providers and programmes will only increase cultural tensions within host institutions and countries.

**Concluding Remarks**

Words like diversity, innovation, complexity, confusion, risks, benefits, opportunities and challenges have been used repeatedly in this paper to describe the development and evolution of crossborder education. The mobility of students, professors, knowledge and values has been part of higher education for centuries but it has only been in the last two decades that there has been a significant growth in the mobility of programmes and providers and the establishment of education hubs.

These new developments present many new opportunities—for increased access to higher education; for strategic alliances between countries and regions; for the production and exchange of new knowledge through academic/industry partnerships; for the mobility of graduates and professionals; for human resource and institutional capacity building; for income generation; for the improvement of academic quality; and for increased mutual understanding. The list of potential benefits is long and varied. But so is the list of potential risks. Risks can include: an increase in low quality programmes and providers; a potential decrease in public funding if foreign providers are providing increased access; courses being driven by short-term needs of the labour market; non-sustainable foreign provision of higher education if profit margins are low; foreign qualifications not recognized by domestic employers or education institutions; elitism in terms of those who can afford crossborder education; overuse of English as the language of instruction; little importance being given to collaborative research; and national higher education policy objectives not being met. It is important to acknowledge the huge potential of crossborder education, but not at the expense of academic quality and integrity.

**References and Other Sources**


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