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Internationalizing The Information Systems Curriculum: A Case Study

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ABSTRACT (REQUIRED)

The importance of internationalizing tertiary education is well recognized worldwide as exemplified by the volume of published literature in the area. There is, however, comparatively less research as to how different disciplines are internationalizing their curricula at program levels. This paper presents a case study of information systems curriculum internationalization using the case of an Australian University. By doing so, the paper aims to provide some insights on why, what and how information systems schools and departments internationalize their curriculum with respect to the dynamic global information systems market, globalization of international business, and the competitive information systems education market.

Keywords (Required)

INTRODUCTION

Information and communication technologies (ICTs) continue to undergo rapid changes. To cope with these changes, ICT professionals have to constantly upgrade their knowledge and skills (Davis et al, 1997; Challa et al, 2005). To prepare future ICT professionals, information systems (IS) schools and departments need to regularly monitor changes and developments in the ICT market and revise and develop their IS curricula accordingly. Such continuous curriculum maintenance contributes to the relevancy, attractiveness, usefulness, and practicality of IS education (Gupta and Wachter, 1998; Challa et al, 2005; Wilkes et al, 2006; Kung et al, 2006). One of the major aspects in updating and revising IS curricula is to internationalize it. The ever increasing globalization of international business, the continuous expansion of international education markets, and the need for mobility of IS professionals globally (both physically and virtually) make IS curricula internationalization an ever pressing issue (Giddens, 1999; Burbules and Torres, 2000; Gorgone and Gray, 2002).

The notion of internationalizing the curricula has been entrenched in most institutions of higher education for more than two decades. Broadly speaking, internationalizing the curriculum refers to the process of integrating an international dimension into all aspects of a university- scholarship, research, teaching and learning, internal administration and external relations (Back et al, 1996; Edwards and Edwards, 2001; McTaggart, 2003; Huang, 2007). A much narrower understanding of curriculum internationalization refers to enriching teaching contents in higher education programs to reflect the practice and understanding of other countries (Rizvi and Walsh, 1998). In between these extremes, internationalization can take various shapes and forms. Bell (2004), recognizing the conceptual ambiguity and the manifoldness of internationalization, opined that “*internationalizing the curriculum is a construct, not a clearly defined set of ideal or best practices*”.

A widely used conceptualization of an international curricula, however, is “*an international orientation in content, aimed at preparing students for performing professionally and socially in an international and multicultural context and designed for domestic students as well as foreign students*” (OECD 1994: 9 cited in Rizvi and Walsh, 1998). McTaggart (2003) reinforced this view and argued that as curriculum covers both the content (knowledge, skills, values, and understandings) and process of teaching and learning (both inside and outside the classroom), internationalizing it by necessity should address not only pedagogical issues but also the entire educational environment.

While there has been much research in the literature regarding internationalizing education and the curricula at institutional levels (Rizvi and Walsh, 1998; McTaggart, 2003; Bell, 2004), there is comparatively less research as to how different disciplines are internationalizing their curricula at program levels. To address this issue, this paper presents a case study of IS curriculum internationalization at an Australian University. By doing so, the paper aims to provide some insights on how IS schools and departments worldwide can internationalize their curriculum and respond to the pressures of changes in the IS and ICTs landscape and globalization of international business (Robertson, 1992; Pratt and Poole, 2000).

The paper is organized as follows. The next section provides an analytical framework and reviews the relevant literature to develop an understanding of curriculum internationalization. A case study of an Australian IS School is then presented as regards internationalizing its Bachelor of Business IS program. The paper concludes by reflecting on the case findings and highlighting some issues for future consideration.

ANALYTICAL FRAMEWORK

We approach curriculum internationalisation within the wider context of curriculum change and draw from a relevant organisation change literature for an analytical framework. Particularly, we find Pettigrew's (1990) contextualist and processual theory of organisation change relevant for our purposes. The contextualist framework focuses on the context (why), process (how) and content (what) of change. It helps to understand not only what is changing but also the drivers and processes that initiate and cause changes respectively.

The context issues of internationalizing IS curriculum focus on the motivation and drivers of updating and developing IS curriculum. These could be either internal or external or both to a university or school. Process refers to the temporal order and sequence of events that led to a change. It focuses on how to initiate, undertake and implement change. Content refers to the subject of change and the recipient of the discrete set of actions. We use this framework but also extend it to cover outcome issues, i.e., indicators of whether or not a change occurred. These four dimensions are interconnected and should be considered through time (Pettigrew, 1990).

Why Internationalize a Curriculum?

There are numerous factors that motivate curriculum internationalization (Biggs, 2003; Jackson, 2003; Bell, 2004; Gough, 2006). In general, three generic drivers of internationalization can be identified- *institutional, economic, and pedagogical*.

The first driver of internationalization is *institutional*. The force of globalization and the increasing mobility of IS workforce either physically or through remote and outsourcing arrangements, have placed new demands on universities to produce globally employable graduates (Jackson, 2003; Gough, 2006). In an increasingly globalized world, IS graduates, in addition to specific IS knowledge, attitude, skills, and practices, are expected to have an appreciation of diversity and multi-cultural and global understanding. To effectively equip IS graduates with such demanding skills and knowledge, an IS curriculum that incorporates an international context is not only desirable but also a necessity.

The *second* driver, which is also related to institutional driver, is the *economic* driver. The change in the landscape of the higher education environment has opened up the higher education market to intense competition and to the ideals of "marketisation" and "entrepreneurialism" (Biggs, 2003; Bell, 2004). Over the last a few years, "home" demands for IS programs have been declining and some IS schools have lost a significant proportion of their students. A common strategy that most IS schools follow to cope with this trend is to increase the scope and diversity of their international operations.

Closely related to the first two is the *pedagogical* driver. The increasing number of international students and staff, in addition to generating economic and skill benefits, bring additional gains to home students in terms of cultural diversity (Rizvi and Walsh, 1998). On the other hand though, it also brings challenges to lecturers and students respectively. Lecturers often lack enough international experience and resources to cater for the needs of a highly diversified student population (Ryan and Hellmundt, 2003; Hofstede, 1986). The objectives of IS courses often assume homogeneity of learners and course contents, cases and illustrative examples do not reflect different perspectives (Watkins, 2000). These problems, coalescing with large class sizes, inhibit academic staff from tailoring courses to suit to the needs of diverse groups of learners. On their part, international students face culture shock when changing countries and universities (Carroll, 2002; Hofstede, 1986; Watkins, 2000). They also face a mismatch between IS experiences, approaches and academic traditions used in their previous learning and those they encounter when they study in a foreign university (Hofstede, 1986; Vogt, 2002).

What and How to Internationalize a Curriculum?

The governing rationale behind internationalization can dictate what is internationalized and how to internationalize it. While institutional and pedagogical drivers can lead to changes in the curriculum and assessment practices in the home environment, the economic driver might not necessarily result in such changes and can be achieved through alternative models. There are at least five, not necessarily mutually exclusive, forms of internationalization- *importing*, *licensing*, *internationalizing through content*, *operating an offshore campus* and *study abroad programs* (Edwards and Edwards, 2001; Caruana and Hanstock, 2003; Huang, 2007).

- **Importing** involves international students attending “home” institution onshore. The approach is also referred to as “*ethos approach, or internationalization by osmosis*” (Caruana and Hanstock, 2003). Under this arrangement, while in most cases international students join existing programs and courses, in some cases, they enroll in special programs designed exclusively for foreign students (Huang, 2006).
- **Licensing (exporting)**—is a market arrangement where foreign institutions are contracted out to deliver specific programs and courses on behalf of home universities. While the home institution is normally responsible for curriculum, student selection, program content, student administration and degree conferring, the offshore partner is responsible for providing facilities and ensuring the agreed number of students. Delivery is a joint responsibility and often involves staff from home institution traveling to deliver content in partner institutions.
- **Internationalizing through content** –refers to curricula with international subjects, perspectives and dimensions offered to both local and international students (Caruana and Hanstock, 2003; Huang , 2006). One potential shortcoming of this approach is that it narrowly defines curricula as content, a definition that most writers (see Gough, 2006; McTaggart, 2003; Caruana and Hanstock, 2003; Huang , 2006) disagree with.
- **Operating offshore campus** – Internationalization of education can also take a form of either wholly or partly owning campuses in foreign markets.
- **Study abroad programs (International mobility)** – these are student (including staff) exchange programs designed to accelerate students’ learning and understanding. The duration might vary from a couple of weeks to several months to a year. Huang (2007:535) identifies two types of such programs. “the first type represents programs concerning languages, history or culture of the host country, which explicitly address cross-cultural communication issues....The second type covers professional programs that are regionally or internationally recognized for their high academic quality in the host countries [such as Chinese Medicine]”.

Outcome of Internationalization

Although there are institutional (such as legitimacy and fitness) and economic outcomes of internationalization, the pedagogic outcome underlying internationalization is to facilitate the development of well-rounded learners (Stronkhorst, 2005, Jackson 2003). This outcome is best captured in Gough (2006) where she opined that internationalization of curriculum is achieved when programs make “students cognisant, where appropriate, of the implications of global changes and changes in their chosen field”. This is consistent with Caruana and Hanstock’s (2003) competency or graduate attributes features. Caruana and Hanstock (2003) identified key student outcomes from internationalizing the curriculum. Some of these include

- Display ability to think globally and consider issues from a variety of perspectives;
- Demonstrate awareness of their culture and its perspectives and other cultures and their perspectives;
- Value diversity of language and culture; and
- Appreciate and demonstrate the capacity to apply international standards and practices within the discipline or professional area.

Other authors (Patrick, 1997; Stronkhorst, 2005; McTaggart, 2003; Patrick and Fraser, 2005) also agree with these outcomes. However, they differ in terms of the emphasis each places on international professional competency (Patrick and Fraser, 2005), cultural diversity and multicultural personality (McTaggart, 2003), international employability (Patrick 1997), and foreign language competency (Stronkhorst, 2005).

THE PRACTICE OF INTERNATIONALISING THE IS CURRICULUM

Internationalizing curriculum in higher education in Australia has been attracting increasing attention across universities and government departments. Almost every Australian university recognizes the need to transform and adjust its teaching and learning curriculum to reflect the goals of internationalization (Rizvei and Walsh, 1998). For example, a national survey conducted in 1995 showed that 37 out of 38 Australian universities had included a policy of internationalization in their corporate plans. Australia, following the USA and the UK, is the third largest earner of revenues from international students (Edwards and Edwards, 2001). In most Australian universities, international students constitute more than 20% of the student population (Ryan and Hellmundt, 2003); in Monash University for example, this figure is 31% and in RMIT University 34%. Some university programs generate 70-80% of their revenues from international students. Within Australia, the State of Victoria is the largest provider of international education with export earnings over AUD\$1.5 billion a year and with over 15,000 new jobs created because of international students living and spending in the State¹.

Curriculum internationalization does not merely involve the generation of international university alliances or the development of international research cooperation programs (Gough, 2006). These items are important elements but they fall short of the requirements for an internationalized curriculum outline. Without each of us fundamentally reappraising our cultural values and orientations, our self-image and our constructions of otherness, there is the danger that internationalization can become just another form of neo-colonialism, akin to the spread of Western media empires or the proselytisation of American management values and models.

To examine the internationalization aspect of the Bachelor of Business IS program at an Australian University, an analysis of the structure of the program curriculum is conducted here. To pave the way for the analysis, the following sub-sections first introduce the setting for the case study and provide a brief description of the structure of the Bachelor of the Business IS program of the case University in Australia.

The Setting

The case Australian University has more than 21,000 international students (onshore, offshore and in an international campus) and the percentage of international students has increased from 27% in 2002 to 34% in 2006. It also has an offshore campus in Asia and has strategic partnerships in Singapore and other five locations as shown in Table 1.

Country	Number of partner institutions	Number of degree programs			
		Bachelor	Masters	Other	Total
Singapore	6	12	5	2	19
China	4	3	1	3	7
Hong Kong	5	9	3		12
Japan	2	2			2
Malaysia	4	5	3	1	9
Sri Lanka	1	1			1
Vietnam	Own campus	6	2	2	11
Total	23	38	14	8	61

Table 1: A summary of offshore programs and partners

The Australian university has recognized internationalization of the curriculum as a priority since 1994. Two main documents capture the University's current and continuing commitment to internationalizing the curriculum. The University's Vision 2010, which envisions the university as a global university that (a) offers "students and staff a global passport to learning and work", (b) provides "opportunities for its students to have an international experience as part of their study program, and for its staff to engage with international peers and networks", and (c) forms "strategic partnerships across national borders to support the University's provision of world class and globally relevant education."

¹ See <http://invest.vic.gov.au/News/News+Archive/Education+Victoria.htm>

The notion of internationalization in the “*Designing the Future*” document is broader. It explicitly captures the implications of institutional and economic drivers and targets the University as whole, its staff and learners. The document outlines some of the processes such as international experience as part of the study program and strategic international partnership through which internationalization can be achieved.

The second document where the University’s understanding of internationalization is reflected is its *Teaching and Learning Strategy* (2003-2006) and the *Learning and Teaching Strategy 2007-2010*. The 2003-2006 document recognizes the diverse Australian and international context as a basis for providing “*real-world and problem based curriculum enriched by an interdisciplinary framework*”. It further aims to provide “*education for citizenship that includes an international perspective; an appreciation of global sustainability issues (environmental, social and financial) and relevant programs and internationally recognized qualifications*”. On the other hand, the 2007-2010 strategy explicitly considers internationalization as the University’s key strategy to deliver its vision of becoming a global university and providing a global passport.

The IS School which is the focus of this case study is one of the University schools offering undergraduate, postgraduate and research degrees. The school has been exerting explicit efforts to internationalise the curriculum of all of its programs. This is expressed in numerous symbolic and practical ways. First, in the school’s annual plan and strategy, internationalisation is recognised as a strategic issue, on par with teaching and learning, research and administration. Second, there is a school wide international and marketing committee. This committee meets monthly to discuss issues affecting the international marketing of the school’s programs and the progress of international students already enrolled in the programs. Third, the school offers study abroad and student exchange programs. Fourth, the school has a strategic partner in Singapore and offers two of its programs (one undergraduate and one postgraduate) offshore. Fifth, the academic members at the School are culturally diverse and are comprised from twenty-two different countries. Fifth, in one of the Masters programs, a new course – *Globalisation and Business IT* has been introduced as a core course. All these discussed above demonstrate characteristics of an internationalised curriculum and the School is well in its way in its efforts to internationalise the curriculum of its various programs.

The BBIS Program

The Bachelor of Business IS (BBIS) program is designed to meet the growing needs of industry for a new type of information technology professionals. In particular, the program aims to produce graduates who possess a sound business background combined with the ability to develop and manage business information systems in a wide range of business, government and non-government settings in an international context. The program is accredited by the Australian Computer Society (ACS) and is consistent with the general requirements for the IS curriculum worldwide. The program consists of three main components:

- **General Business** core studies in the fields of accountancy, business law, economics, marketing and management.
- **Information Systems** core studies in the fields of business systems; information and networking technologies; systems analysis and design; application development; systems implementation and project management; and information systems strategy.
- **Elective Studies** in which students take one approved course from the Specialist Business Computing electives, as well as choosing four courses from a range of approved courses.

The program is not offered in any of the offshore locations listed under Table 1 above but preparations are underway to offer it in the University’s international campus. The student population in the program is very much diverse. About half of the student population in the program is local. The other half come from various countries including China, India, USA, UK, Singapore, Malaysia, Hong Kong, Taiwan, to name a few.

Internationalizing the BBIS Curriculum

The diversity of student population, the increasing globalization of international business, and the increasing mobility of IS professionals worldwide motivate the IS School of the case university to pursue and develop an internationalized IS curriculum for its BBIS program. Incorporating an international experience into the BBIS curriculum aims to give students the competitive edge needed in today’s global economy (Edwards and Edwards, 2001). Student outcomes envisaged out of internationalizing the BBIS curriculum include (a) enhancing job opportunities and professional networks; (b) developing interpersonal skills by living and studying in another culture; (c) experiencing different teaching styles and ways of learning; and (d) gaining an international perspective on studies and professional knowledge.

In addition to what the University and the school have done to internationalize education as discussed above, the School has taken active measures to internationalize its BBIS program. An analysis of the current IS curriculum for the BBIS program shows that several distinct approaches have been used to internationalize the program including *content internationalization*, *international mobility*, *work placement* and *student exchange*.

Content internationalization: Business IT, by necessity, is international in context and is practiced globally. To achieve this objective, the School has taken various measures in order to contribute to the global IT workforce. First, the curriculum is designed following both the ACS and *International Model Information Systems curricula* (Davis et al, 1997; Georgone et al, 2002; Challa et al, 2005). Amongst the forty-three academic staff there are twenty-two nationalities. Some of these staff have been teaching in major universities in the UK, South Africa, China, USA, Thailand and Singapore. Staffs in the School use their industry and academic international background experiences as case studies in many contexts. Their diverse cultural backgrounds build empathy and understanding in teaching and learning on the delivery of the BBIS program. In addition, since 1999, staff from the school involved in the BBIS has been teaching at Linkoping University in Sweden for a semester and vice versa. Other staff members have been involved in teaching and academic visits to the USA, Korea, and the UK, at institutions such as Bentley College, Boston, Leeds Metropolitan University, and KAIST (Korean Advanced Institute of Technology). Over the years, the School has hosted a number of international Professors from the USA, Sweden, Korea, UK, Japan, Holland and China.

International mobility: All BBIS students can opt to complete two courses during the Australian summer or winter vacation in a foreign university. The school facilitates and organises these study tours and most destinations include England, China, France, Germany, Italy, USA, Canada and Vietnam. Students can also study overseas for up to one year making use of the exchange programs that the School and the university have with other universities worldwide. A limited number of exchange scholarships are also available each year. The School has been the recipient of a number of government sponsored and Cheung Kong grants over the years thus funding students to engage in an international experience. To date, the School has received \$122,500 in international grants for student exchange. The Study Tours, which include formal courses and cultural and industry visits in overseas organizations and countries, offer students the opportunity to widen their perspectives and their global understanding.

International work placement: Employers are increasingly demanding graduates with the experience and capability to add value to an organization. To help students gain this real world experience, BBIS students have an opportunity to integrate work with their learning activities under the Work Integrated Learning (WIL) program. The WIL program enables students to further develop theory acquired through coursework in a practical environment or application, resulting in a greater understanding of the subject matter. There are many forms of WIL, including Co-operative Education, the Professional Skills Program, industrial or workplace experience, industry speakers and projects and simulations. Students can opt to take international work placements, as part of their co-operative education year and/or might have the opportunity to complete their WIL program in an Australian business with international scope or linkage.

Student exchanges: In addition to full time international students, student exchanges have been strongly encouraged in the School both inbound and outbound. Each year the School hosts a number of exchange and study abroad students from France, Norway, Denmark, Canada, UK, Sweden, Mexico, China, USA, Germany, Brazil etc. Through these exchange programs the BBIS students can appreciate the cultural diversity of various countries and understand the requirements and expectations of organizations in various countries for the IS graduates. This is no doubt of critical importance to the BBIS students for developing their international career potential in today's global IS professional market.

DISCUSSION AND REFLECTION

The practice of internationalizing the curricula in this Australian University appears to focus more on responding to the institutional and economic drivers of internationalization and less to pedagogical drivers. In terms of process, the chosen Australian University seems to be gradually moving from importing mode to exporting and owning campus modes. For example, in 2002 the composition of onshore, offshore and Vietnam international students was 51%, 48% and 1% respectively. In 2006, these figures have changed to 42%, 50% and 8% respectively. This change can be interpreted as one indication of the predominance of the economic rationale in internationalizing the curriculum at the University. There appears to be less clarity at the University level as regards to the approach to internationalizing through content in particular and internationalizing through the pedagogy in general. Although staffs draw from their own international experiences, there is no effort to formalize the process and share the knowledge and experience school-wide generally. Beginning late 2007 though, the school has introduced teaching and learning seminars which might be a useful platform to facilitate such knowledge sharing.

One of the major challenges of designing and internationalizing the IS curricula is to achieve the right balance between fundamental knowledge of the IS field and the technical skills necessary to obtain an entry level job as an IS professional (Gendron and Jarmoszko, 2003; Challa et al, 2005; Kung et al, 2006; Lee and Lee, 2006). There are a number of worldwide organizations who provide general guidelines on the formation and development of IS curriculum. ABET in America, for example, after integrating with the Computer Science Accreditation Board (CSAB), accredits IS programs. Some argue that the requirements of ABET are applicable to any well-run IS program for delivering a quality curriculum to IS students (Challa et al, 2005). Association for Information Systems (AIS), the Association for Computing Machinery (ACM), and the Association of Information Technology Professionals (AITP), also develop and publish model curriculum for IS education, the latest being version IS 2002 (Gorgone et al, 2006). In Australia, the ACS provides a more general guideline for the development of IS curriculum in Australian universities.

The BBIS program we discussed above maps well with the general ACS requirement. It is also consistent with the general requirements for the IS curriculum as defined by the professional organizations above. This gives the curriculum as a whole an international dimension. Table 2 presents a comparison between the BBIS curriculum with the general ACS requirement (ACS, 2006) and between the BBIS curriculum and the World IS curriculum requirement which is defined by the five presentation areas shown as in Table 2 (Gorgone et al, 2002).

Presentation Areas	The BBIS Courses	ACS Knowledge Group
IS Fundamentals	Business Computing Computing Foundations Hardware, operating system and e-commerce	Interpersonal Communications Ethics Social Implications Professional Practice Project Management Quality Assurance
Information Systems Theory and Practice	Information System Foundations Systems Analysis and Design 1	Data Structures and Algorithms Program Design and Implementation
Information Technology	Network and Operating System Application Development 2 Networks and Telecommunications	Software Engineering and Methodologies Security Conceptual Modeling
Information Systems Development	Application Development 2 Introduction to Database Bases BIS Capstone Course	Systems Analysis and Design Database Management Discrete Mathematics
Information System Deployment and Management/process	Professional Practice for Information Systems	Data Communications and Networks Systems Software Computer Organization and Architecture

Table 2: A Comparison of the BBIS Curriculum with ACS's and World IS curriculum's Requirements

One of the challenges that academics face as they implement the internationalized IS curricula and achieve the student outcomes identified earlier is the availability of resources in an international context. This is in particular true with respect to a lack of textbooks and resources that provide examples and perspectives outside the typical North American and European worldviews. There is no exception in the IS domain about this. No doubt that there is a huge challenge for academics in the IS area to develop textbooks and other resources for teaching and learning in a truly international context.

International students bring diverse culture and experience to the class room. Strategies that are devised to take advantage of this and use their experiences as resources for learning can offer a win-win formula for both home and international students. For home students, this provides cultural awareness and diversity. International students can also benefit, as the approach can provide them a platform to construct their own learning. One characteristic of effective learning is a process that provides learners an opportunity to draw upon previous learning and draw parallels between their experiences and new concepts. Ryan and Hellmudt's (2003) findings indicate that international students' learn better when given the opportunity to draw from their prior experiences.

Assessment is another issue. In most courses, the essay is a widely used form of assessment. Most of the international students do not have essay writing experience. Different cultures influence the notion of ownership of knowledge and the power relation between a teacher and learner (Hofstede, 1986; Watkins 2000; Carroll, 2002). Students accustomed to teacher-centered approaches and that come from collectivist cultures and cultures that tolerate high power distance might find it hard to question the teacher's or the text's perspectives. As a result, they struggle to build the essential skills of essays such as critical writing and own insight and originality. The introduction of voluntary mock essays together with quality feedback can provide an effective scaffold to build these skills. In our experience, students find this practice a safe environment to develop their skill and learn assessment requirements. Inevitably, such practice puts additional workload and pressure on lecturers.

Based on the experience of the case program, we can summarize the key lessons that might help similar endeavors in other IS schools in table 3. Of course, since these lessons are drawn from a single case, they are more indicative than generalizable.

Items	Comment
Context	Economic drivers are predominant at the university level. At school and program level there are traces of pedagogical drivers as can be seen in the approaches followed in internationalizing the curriculum.
Process	At the university level, all processes of internationalization, i.e., importing, exporting, content, offshore campus, ad mobility. At program level content (through work integrated learning and use of international staff experiences) and mobility (through study abroad and student exchange programs) are the main processes of internationalization.
Content	Markets (expanding the market base for home programs and operating in international markets); programs (aligning program to international and local professional organizations' guidelines) and courses (increasing course contents' attention to cultural and global issues).
Outcome	New courses that address globalization and IT, increased number of international students and exchanges (both inbound and outbound).
Lessons	<ul style="list-style-type: none"> • Define the key dimensions of internationalizing the curricula and achieve institutional consensus. For example, OECD's typology of internationalized curricula addresses three basic dimensions – international students, vocational area, and academic mobility and can help to cover all the three drivers of internationalization. • Recognize internationalization as a strategic issue, on par with teaching and learning, research and administration. • Align internationalization drivers with approaches. • Create a formal platform where internationalization issues are discussed and lessons and experiences exchanged. At program and course levels especially, facilitate best practices on how to internationalize the curricula through content and pedagogy. • Monitor and evaluate not only short term outcomes but also long term impacts on student performance. The pedagogic outcome underlying internationalization is to facilitate the development of well-rounded learners and enable them to achieve specific graduate attributes. So this should be

Table 3: Lessons of internationalizing the IS curricula

CONCLUSION

Some universities took intentional and directed actions to internationalize their curriculum. In other cases, internationalization is an emergent perspective, one that has gradually taken shape and form due to the sheer force of serendipity (for example due to increasing number of international students). The practice of internationalizing the curricula in the Australian University studied appears to focus more on responding to the global and economic drivers of internationalization and less on pedagogical drivers. The latter seems to be left to the discretion and attention of teaching staff. However, as indicated earlier, most teaching staff have limited experience to deal with pedagogical issues that emerge either in the course of internationalizing the curricula or due to internationalization of education.

Internationalizing curricula should be seen as a social practice and sufficient time and resource need to be allocated. Curriculum covers both the content (knowledge, skills, values, and understandings) and the process of teaching and learning (both inside and outside the classroom), internationalizing it therefore should address not only pedagogical issues but also the entire educational environment. There is a need to align the drivers of internationalization with the approaches of internationalization and with the overall strategic direction of a university or program. For example, internationalizing approaches that heavily rely on academic staff making frequent travels to offshore locations might be out of synch with university strategies of improving research performance.

Reflecting on the BBIS program and effort to internationalize it, it appears that the economic rationale of internationalization drive the process. Both the school's strategy and the international and marketing committee outline how the school can maintain international student numbers and increase its involvement in the international market. Future extensions of the study can investigate the challenges and critical success factors of internationalizing the IS curricula and evaluating its outcome from various stakeholders' perspective.

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