Transnational Education Programs: Student Reflections on a Fully-online versus a Hybrid Model

Iwona Miliszewska

Victoria University, School of Computer Science and Mathematics, POBox 14428, Melbourne Vic 8001, Australia
Iwona.Miliszewska@vu.edu.au

Abstract. With rapid expansion of the transnational education market, more and more universities join the ranks of transnational education providers, or expand their transnational education offerings. Many of those providers regard online provision of their programs as an economic alternative to face-to-face teaching. Do the transnational students support this view? This paper discusses student responses to the fully-online provision of education programs in several important transnational markets: Hong Kong, Malaysia, Singapore, and Vietnam. The paper reports on a study of the perceptions of transnational students in those locales of the importance of the hybrid learning environment with an emphasis on face-to-face interaction in their courses, and discusses the importance of cultural sensitivities on those perceptions. The paper concludes by considering the future of the hybrid education model in the transnational context.

Keywords: Face-to-face interaction, online learning, transnational education.

1 Introduction

In recent years a particular stream of distance education called 'transnational education' has become widespread [1,2,3]. While there may be many definitions of transnational education, the one used in this paper describes that type of education, often referred to as offshore education, *in which the learners are located in a country different from the one where the awarding institution is based* [4].

It is estimated that the demand for transnational higher education in Asian countries (excluding China) will reach nearly 500,000 students by 2020 [5]. This presents both a challenge and an opportunity for those universities, and in particular Australian universities, who are key transnational providers in the region. The Australian Department of Education, Science and Training estimates that, already *approximately one in every four international students in the Australian education and training system is enrolled offshore* [6] (p. 7).

Competition for students in the transnational education arena is intense. For Australia, one of the main providers of transnational education in South East Asia [1,3], satisfying the needs of highest demand disciplines in the region – computing and business – is of vital importance. With the growing number of transnational

education offerings, students will be able to choose more widely and will increasingly demand high quality programs. According to [7], this power of consumer choice will drive universities to acknowledge and respond to student needs; it will also force universities to increasingly consider the effectiveness of their educational offerings in terms of their value to students. As [8] concluded:

If universities are to attain a 'goodness of fit' between the needs of their offshore students and the resources of the university, student expectations about quality need to be taken into consideration. [8] (p. 236)

One aspect of this *goodness of fit* that needs to be considered is the delivery mechanism of transnational programs. While advances in technology, and the Internet in particular, have created new ways of delivering education, and fully-online provision of transnational programs has been viewed by many providers as an economic alternative to face-to-face teaching [9], others believe that fully-online learning cannot be regarded as a suitable alternative in transnational settings [10]. The tension between traditional classroom learning and e-learning underpins this discussion. The high cost of the delivery of transnational programs has tended to skew the discussion in terms of the benefits of fully-online learning, but most of this debate has proceeded without the input of the students themselves. What is the transnational students' view on the matter? What kind of delivery mechanism do they want and/or prefer? The views of South Asian students are of vital importance to Australian providers, as this region is the main and fastest growing market for Australian transnational education. This paper discusses the issue of fully-online provision of transnational programs, and reports on the results of a study that sought the views of such programs from current transnational students in Hong Kong, Malaysia, Singapore and Vietnam.

2 Online Delivery: Constraints and Concerns

Fully-online provision of transnational programs raises many concerns regarding the learning experience, particularly about the extent of feedback and guidance that can be provided to students [11]. [12] agrees that fully-online provision of offshore programs is generally perceived to be less effective than options including a face-to-face component and emphasises the strong recognition of the value of (Australian) academics meeting and interacting with the offshore students population; such regular teaching input by these academics significantly enriches the transnational program [12,13].

Another aspect of transnational education that online delivery might find difficult to support is localisation of teaching. As [14] pointed out, the curriculum of a transnational program is usually standardised across several campuses, which may be located in different countries. While the curriculum is sometimes tailored to local conditions, the modifications are usually minimal; they may only involve assignment questions for example. In such circumstances, teachers, through face-to-face interaction, can play an important role contextualising and interpreting the content of study materials: *the relationship between students and face-to-face teachers is crucial in making foreign materials relevant to students* [14] (p. 33).

Technology, too, may be yet another constraining factor. Although some advanced technologies, such as streaming media technologies, are very capable of supporting voice and video and afford the possibility to emulate face-to-face interaction, they are out of reach for many transnational learners. For example, videoconferencing for learning over the Internet requires more bandwidth that is usually available to a regular Internet subscriber [16]. It should also be noted that even universal access to computers by offshore students, for example in China, is not a safe assumption and for many Chinese learners their offline education could be supplemented, but not replaced, by ever-advancing online technologies [17]. In China, the limited equipment and infrastructure for transnational online education in many institutions is only one factor that reduces its viability; one other important factor is *the strict legislation of central government regarding online education services provided by foreign countries* [18] (p. 203).

The availability of technology is not the only prohibitive factor; there are also aspects of curriculum and teaching that are difficult to emulate through technology. For instance, *demonstration of theoretical knowledge in Internet classes is below that of traditional classes* [19] (p. 16). Having measured online students' ability to apply programming theory, [19] concluded that the Internet did not lend itself to the deployment of subjects that involved problem solving and higher analytical reasoning, such as advanced computing subjects – the online students in their study performed significantly worse than their counterparts in a traditional classroom. They identified several factors that determined poorer performance of online learners in their study including: inadequate instructional methods, technology differences, and differences in group interaction. With respect to instructional methods, they pointed out that *instruction in the online environment is still in its infancy and faculty, as instructors and course designers, have not yet developed the most effective methods for delivering some type of content in this context* [19] (p. 17). They went on to say that application of theory in particular, might be effectively illustrated in the classroom through the choice of suitable examples or through answers to students' questions; technology could not easily emulate this kind of interaction. Moreover, *simple repetition can be effective in a classroom, but it is difficult to implement online* [19] (p. 17). The authors also suggested that group interaction in a classroom setting could be an important contributor to the learning process. However, this kind of interaction is difficult to emulate in the online environment even through thoughtful use of online forums, chat sessions, and email; *the cohesiveness and satisfaction of class discovery is not duplicated online* [19] (p. 17).

3 Importance of Face-to-Face Communication

Related to the importance of direct group interaction is the community aspect of face-to-face contact [20]. [20] found that dialogue not only allows students to assess their learning, but also to develop a sense of community with other students; this sense of community can alleviate the problem of isolation often reported by distance students. [21] agree and state that *students need dialogue with their teachers and with other students in order to consolidate and check on their own learning* (p. 278). Moreover,

they list the inability to offer dialogue in the way that conventional face-to-face education does as one of three most significant weaknesses of distance education; the inflexibility of content and study method, and the isolation and individualisation of the student are cited as the remaining two weaknesses.

[22] reported on a two-year study by Thomson Learning. Launched in 1999, the study compared the results of three sets of adult learners: the first – the *blended* group – were taught to use Microsoft Excel with a mix of online and face-to-face instruction; the second group took an online course; the third group – the control group – received no training. The study report concluded that the blended group performed tasks 30% more accurately than the online-only group. The blended group and online group both performed better than the control group with no training in accuracy, by 159% and 99% respectively. In addition, the blended group performed tasks 41% faster than the online group.

A recent meta-study aimed at identifying factors that affect the effectiveness of distance education has led to some important data-driven conclusions including the importance of face-to-face communication, live human instructors, and the right mixture of human involvement and technology [23]; the study suggested that programs combining face-to-face component and technology mediated distance component resulted in the most positive outcomes.

4 The Hybrid Model

Given the importance of face-to-face interaction, successful distance learning programs are increasingly moving towards a new model known as *hybrid* or *blended* learning. The hybrid model adds a human touch to distance learning by using facilitators or mentors and promoting various types of interactions between students, instructors, and resource centers [16,23,24,25]; its goal is to *enhance student learning by offering students a combination of face-to-face instruction and distance learning* [26]. The hybrid model combines various instructional strategies (teacher-facilitated, self-study, practicum, lab), delivery modes (online, face-to-face, print-based), paces (self-paced, group-paced), times (synchronous, asynchronous) and learning objects (print material, video, lab kits, animation, audio, simulation, case study). The various combinations of face-to-face instruction and distance learning are flexible in that they can involve the different components to different degrees: it need not be for example 50% face-to-face and 50% online. Table 1 depicts some of the possible combinations:

Table 1. Hybrid model – possible combinations of face-to-face instruction and distance learning (derived from [26]).

Instructional strategy	Lab	Teacher-facilitated	Practicum	Self-study
Delivery mode	Online	Face-to-face	Face-to-face	Online
Pace	Self-paced	Group-paced	Group-paced	Self-paced
Time	Asynchronous	Synchronous	Synchronous	Asynchronous
Learning object	Simulation	Video	Video	Audio

Some of the successful distance education programs which blend the traditional distance learning model with face-to-face teaching sessions include the programs at Purdue University West Lafayette, Indiana University, and Penn State University [16]. [24] supports the hybrid approach maintaining that media alone cannot offer students guidance and personal engagement.

[15] pointed out the importance of face-to-face interaction in transnational programs, as well as the decreasing interest in such programs if they are provided fully online. Recent Australian statistics confirm the declining interest in fully online transnational programs in South East Asia: in 2004 the number of distance online students declined by 15% on semester two, 2003, while there was a 1% growth in on-campus students [27]. Having examined various modes of transnational program delivery in Australia and elsewhere, [15] suggested that the future of transnational programs belongs to programs that include face-to-face interaction facilitated largely by an offshore partner of the educational provider; he used the term *joint delivery* to describe such programs, whereas they would now be referred to as *hybrid* programs.

Evidence internationally shows that fully on-line delivery is proving unpopular except in small niche programmes, due to the lack of face-to-face contact, an unwillingness on the part of students to pay high fees and significant start-up costs. Branch campuses are faced with problems of scale and expose the provider to considerable financial risk through capital investment offshore. Perhaps the best approach, both in terms of mode of delivery and financial risk, is seen to be "joint delivery" with local, established partners, using on-line delivery in some form (for enrolment and general information for example). [15]

5 Perspective of Transnational Students

To evaluate transnational students' attitude towards fully-online provision of the programs, a study was conducted among students in eight transnational computing programs offered in Hong Kong, Malaysia, Singapore and Vietnam by Australian universities. The study was conducted in 2007; four-hundred- and-sixty-nine students participated. Table 2 presents a breakdown of student numbers across providing universities, locales and programs; it also includes information about the mode of study (part-time, full-time) and the mode of teaching (both Australian and local staff, or local staff only).

Table 2. Number of students participating in the study.

	Hong Kong	Malaysia	Singapore	Vietnam
University1	Program1 (131) p/t, both	Program2 (44) f/t, both		
University2		Program3 (69) f/t, local	Program4 (46) p/t, local	Program5 (33) f/t, local
University3	Program6 (44) p/t, both	Program7 (32) f/t, local		
University4			Program8 (70) p/t, both	

The choice of locales, and students in computing programs was deliberate for two reasons. First, Hong Kong and Singapore are important markets for Australian transnational programs, and are also well-developed territories where English is commonly spoken [28,29,27]; hence, students participating in the study were unlikely to oppose online education because of lack of suitable technological infrastructure or limited linguistic skills. Malaysia and Vietnam were chosen to check if limited technological infrastructure and language proficiency would have a bearing on student perceptions. Second, the intention was to seek the views of students who were technology savvy; hence, they were least likely to oppose online education because of techno-phobia alone.

The programs operating in part-time mode involve students who have previous approved tertiary qualifications. Students are normally in full-time employment, and usually study six subjects per year – two subjects per term. The full-time programs typically involve students who are high school leavers.

In the programs where teaching is shared by Australian and local academics, lecturers from Australia are responsible for the design of curriculum, detailed teaching plans, continuous and final assessment, as well as face-to-face delivery of twenty five percent of the programs; local lecturers teach the remaining part of the programs. The programs rely on the Internet for communication, e.g. subject Web sites, bulletin boards, and email. Students meet with lecturers and fellow students through face-to-face sessions, and benefit from Web based support between sessions. Programs taught exclusively by local staff still follow the curriculum detailed by the *host* university from Australia and access online resources provided by the *host* university; however, Australian lecturers do not participate in face-to-face teaching.

Data was collected through a survey and group interviews with students. The survey was administered to approximately six hundred students in the selected programs; four-hundred-and-sixty-nine completed surveys were returned. One-hundred-and-eighty-four students participated in group interviews.

5.1 Survey Responses

Responses from the survey revealed that the majority of students opposed fully-online provision of transnational programs and stressed the importance of face-to-face communication with both lecturers and fellow students. The support for possible fully-online provision of the programs ranged from a marginal 7%-14% in programs 6, 7 and 8, through a moderate one-third of participants in programs 3 and 4, and a *high* of 39% and in programs 1 and 5, and the highest rate of 56% in program 2. Students repeatedly stated the importance of face-to-face communication as the most important reason for preferring the current, hybrid, program model that is one that combined face-to-face teaching with Internet-based resources and learning objects. Respondents did, however, acknowledge the usefulness of the Internet as a means for provision of course material and communication with instructors and fellow students. A summary of survey results is presented in Table 3.

Table 3. Percentage of students in favour of online delivery of transnational computing education programs.

	Hong Kong	Malaysia	Singapore	Vietnam
University1	Program1 (39%) p/t, both	Program2 (56%) f/t, both		
University2		Program3 (35%) f/t, local	Program4 (28%) p/t, local	Program5 (39%) f/t, local
University3	Program6 (7%) p/t, both	Program7 (7%) f/t, local		
University4			Program8 (14%) p/t, both	

The results of the survey revealed that student perceptions were not necessarily determined by the locale. For example, two programs from Hong Kong, 1 and 6, both involved part-time students and were both taught by Australian and local staff, yet the support for online provision varied greatly between the programs: 7% as opposed to 39%. It should be noted, that a study of three transnational computing programs in Hong Kong conducted in 2004 revealed a more uniform lack of support for fully-online delivery: it varied from 0%, through 9%, and 13 % [30].

The survey also revealed that the quality and availability of the technological infrastructure did not seem to determine student perceptions. For example, students in two programs in Malaysia, 2 and 3, as well as students from Vietnam (program 5), were more in favour of fully-online delivery than their counterparts in the more technologically advanced Singapore. Likewise, the mode of study, part-time or full-time, or the mode of teaching (both Australian and local staff, or local staff only) did not correlate with student perceptions.

The only pattern that could be observed in relation to student preferences was the association with the Australian university offering a given transnational program. It appears that the support for fully online provision was greatest among students of programs offered by University1 (39% and 56%); the support was somewhat lower among students of University2 (35%, 28%, and 39%); and, at 7%, it was lowest in both programs (6 and 7) offered by University3.

Face-to-face communication was preferred as, according to the respondents, it offered instant feedback, afforded easier communication with fellow students and instructors, was better suited to the resolution of study problems, and gave better motivation to study. A summary of student comments is presented in Table 4.

Table 4. Student attitudes towards fully online provision of transnational computing education programs.

	% of students in favour of online delivery	Student comments
Program1	39	Although it's tempting, I think face-to-face contact with the lecturer is invaluable. Nothing beats face-to-face contact. I want to communicate with instructors. I like face to face learning. Distance learning is not always applicable learning - need interaction not just material. Motivation decreases (with online study). I think it (online learning) will not work for Hong Kong culture.
Program2	56	I would prefer to have classroom based courses. Distance learning would not be effective in degree courses; there are a lot of subjects which are better taught and explained in class. Save time, save money, save resources (petrol, paper) to protect environment. Full use of technology. (Fully-online) effective and convenient.
Program3	13	It's a way of future learning. (Online learning is) easy and reliable. I wouldn't feel and experience student-lecturer relationship and it's easier if it's only semi-online. I still prefer the traditional (hybrid) way.
Program4	28	Self-study will be flexible for working adults. Face-to-face classroom discussions are important in learning.
Program5	39	Beside the lecture or materials, communication with instructors or other students is very important. If the program is offered online only, there will be no discussions in class, after class and in a coffee shop. I don't want to sit in front of a computer all the time. It will reduce all of my communication skills. (Online learning would be) difficult for Vietnamese students.
Program6	7	Some material and course topics really need instructors. Traditional teaching methods are more effective. Direct communication with lecturers makes me pay attention to what I study. Online learning is not for me. I enrolled in an online course and withdrew after one semester. I can't learn and the schedule is too hard to follow.
Program7	7	"Actual" learning is much better: we can interact with lecturers and other students. This program needs an instructor to be beside the student to guide them. Our country connection speed is lousy.
Program8	14	Face to face communication is still the best way in learning. Fully online means less interaction and learning. Classroom interaction is important.

The students who were in favour of fully-online provision, qualified their assent with a variety of conditions including:

But web site must have full support (24x7) and be helpful for the user (S1).

I guess an online course would be great as long as support is highly considered (S2).

If video function is available but in Malaysia internet speed is still far too slow for that (S2).

If the program organised a good interactive or interesting multi-media material and online response (S6).

But if the tutors and lecturers were available anytime to contact via mails, discussion boards it shouldn't be a problem (S7).

(To ensure anonymity, participating students have been identified only by their program identifier; that is, S1 refers to a student in Program1, S2 identifies a student in Program2, and so on).

5.2 Group Interviews' Responses

The group interviews addressed this issue again to explore further the reasons behind the students' views. Students again responded in favour of the hybrid model of the programs. They regarded face-to-face communication as: more conducive to the learning process; affording better opportunity to share knowledge and ask for help; and, *easier* and more interactive:

Face-to-face communication is more effective (S1).

Face-to-face is interesting, fully online is boring (S1).

(Fully-online learning is) not recognised in this (Hong Kong) society (S1).

Without a lecturer's explanations it would be difficult to understand some material (S2).

It (online learning) would be tough for someone who learns programming language for the first time (S2).

Face-to face interaction often yields better results (S3).

It's easier to understand the subject if we meet the lecturer directly (S3).

There are some things that you can't do online (S3).

We need to meet with lecturers in face-to-face conversation (S4).

For some courses, direct communication with lecturers is necessary (S5).

It is difficult to self-learn (S6).

I'm lazy and there would be no one to ask if I had a problem (S6).

Having group discussions in person is more effective (S7).

I believe face-to-face contact with lecturers and students is very important. Education is as much about the physical relationships made as it is about the knowledge gained (S8).

Having classes forces me to allocate enough time to the program and subject (S8).

However, students welcomed the Internet as a means for providing course material and enabling communication with lecturers outside classes.

Students should be given a choice whether to attend lectures or go online. Students who cannot leave home can still access lectures (S3).

Internet is good for obtaining study material and emailing the lecturers (S6).

6 Discussion

The results of the study appear to confirm the views of [9,10,13] who opined that, although many universities view online learning as an economic alternative to face-to-face teaching, fully-online learning could not be regarded as a suitable alternative in transnational settings. [13] argued that *fully-online global delivery has failed to capture the imagination of students and teachers in the same way as it has excited senior administrators* (p. 2). They looked at the existing transnational programs in South East Asia and concluded that distance education programs with no local support had not been popular; and, they found that Australian institutions offering transnational programs in the region have learned to appreciate the importance of local presence. Students, especially in South East Asia, respect teachers and want and expect to be taught by teachers; those transnational providers that intend to *rely more heavily on online teaching and learning run the risk of eroding students' perception of quality* [13] (p. 10).

[31] attributed the low acceptance of online education in Asia, as compared to the West, to cultural differences. Since online learning is representative of highly developed technologies and Western values in education that emphasise individual development, self-management, active learning, and mutual communications, it may not appeal to students from non-Western cultures. [32] reported on the low number of applicants to the Korea National Open University, and students' lack of confidence in the quality of education from a distance. In addition, [33] indicated that although 67 public universities in China have implemented online courses, most courses were *simply an extension of conventional classroom teaching* (p. 26) with the majority of teachers not ready to change their traditional way of instruction. All of this evidence seems to indicate that hybrid learning rather than online learning is the preferred choice of Asian students. Further research is needed into the possibility of an *Asian* preferred learning style, or even to collect evidence of a learning style shared by students in a particular locale. If support eventuates, cultural considerations would need to be factored into future research and to the design, marketing, and delivery of transnational education programs.

In the meantime, the Australian government officially acknowledged the importance of face-to-face interaction in transnational teaching and incorporated a requirement for face-to-face interaction in the recently developed definition of *Australian Transnational Education* [6]. In contrast to the general definition of transnational education, this definition includes two additional requirements: one, that the transnational program be delivered and/or assessed by an accredited Australian provider; and two, that the delivery should include a face-to-face component. It further stresses that transnational education should include *a physical presence of instructors offshore, either directly by the Australian provider, or indirectly through a formal agreement with a local institution* [6] (p. 6).

7 Conclusions

Australian universities have had over two decades of experience in the provision of transnational higher education programs, particularly in South East Asia, and lessons learnt from this experience should guide decisions concerning the delivery models of those programs. The implementation and utilisation of current and emerging technologies offers many potential advantages including ready access to a vast store of the latest information, and facilitation of communication between students, and students and instructors. However, the advantages to be gained from introducing new technologies will depend on the ability and willingness of the students to use them. Therefore, an assessment of educational needs should be conducted, and potential consequences in the classroom considered, prior to the deployment of those technologies.

This paper discussed the issue of fully-online provision of transnational programs, and reported on a recent study of the perceptions of transnational computing students in Hong Kong, Malaysia, Singapore and Vietnam on fully-online provision of such programs. The study found that the majority of students opposed an online-based delivery model and, instead, preferred a hybrid delivery format; they emphasised the importance of face-to-face interaction, and regarded the Internet as a useful, but only supplementary, means of support.

It appears that despite earlier predictions that globally offered fully-online programs would dominate the transnational education market, the hybrid model – Web-supported face-to-face delivery – is likely to emerge as the principal model of transnational tertiary education programs. Further research is needed to determine the composition of the hybrid model for each transnational destination; the blueprint for each program would include the proportion of face-to-face and online delivery, as well as selection of the most suitable types of learning objects.

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