

Towards a Better Blended Learning: Experiences of Adult Learners in Hong Kong

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Abstract. The rapid development of information and communication technology brings along many impacts to education and training. Though delivery of courses solely based on e-learning on its own is not totally satisfactory to students and course providers, distance learning and face-to-face courses benefit from the use of e-learning as a support in the teaching and learning process. Surveys of Hong Kong part-time students clearly indicated that they preferred a blended learning mode that retains some form of face-to-face teaching and utilizes e-learning at the same time. However, effective blended learning is not simply using technology as an additional communication means or organizing extra learning activities. Web-based technology should be used as communication and collaborative tools. Pedagogy has to be adjusted to incorporate e-learning as an integral part of the teaching and learning process. Through the proper design of course, better integration of assessment, learning activities and use of technology for facilitating interactions via online community, meaningful blended learning experience can be resulted.

Keywords: blended learning, hybrid learning, adult learners, distance learning, higher education

1. Introduction

The advancement in information and communication technology (ICT) brings a lot of hope to education institutes, especially those providing distance education. A wide range of e-learning tools, such as computer-mediated education software, online forum, blog and wikis, have been developed. Some institutes make use of technologies to enhance their delivery of distance education courses. Some go for new ventures in offering courses solely using the electronic platform. However, these purely e-learning courses are largely not successful in delivering learning experience to the satisfaction of the students and in achieving cost effectiveness to the satisfaction of the institutes. The potential benefits of e-learning nevertheless flourish when use together with existing models of course delivery. A comprehensive discussion on the development of blended learning and utilizing e-learning to enhance

teaching and learning effectiveness can be found in Macdonald [1] and Naidu [2]. This article reports the experiences and research findings of the authors in the past eight years.

In the following sections, the development of e-learning activities introduced into distance education courses experienced by the authors is reviewed; the trend of students' preferences on delivery modes is analyzed based on surveys conducted in various years; and the good practices of blended learning approaches are described. Thereafter, implications and experiences for designing hybrid learning courses for adult learners are discussed, followed by the conclusion section.

2. Stages of Blended Learning

Since 1990, the School of Professional and Continuing Education, The University of Hong Kong (HKU SPACE) collaborated with Charles Sturt University (CSU) in Australia their first joint course using a distance education delivery mode. Students were largely working adults and studied part-time. For each subject, the adult learners were given a set of distance learning package that consisted of a Subject Outline, a Study Guide, and a collection of required Readings. The Subject Outline stated the objectives and overview of the subject, information of the Subject Coordinator, the proposed self-learning schedule, the assessment items, the marking criteria, and the list of reference materials. About 8 sessions of face-to-face teaching/tutorial sessions of 2 to 3 hours each, depending on the subject, were organized by HKU SPACE using a local teacher to support the students. These sessions were scheduled after office hours or during the weekends to match the availability of the students.

Students could communicate with CSU Subject Coordinator through email. At that time, email was far less popular than today. Most students had not used email before they joined the course. They needed to use a modem to dial in to a computer server operated by the University Computer Centre. Many did not have computers at home and few had modems. Before 2000, less than 50% of the households in Hong Kong had one or more PCs at home. Out of these households with PC, about 73% had access to the Internet [3]. The local Course Coordinator acted as the communication bridge between students in Hong Kong and the CSU Subject Coordinator in Australia.

Since 1994, CSU started to supplement the printed learning package with a computer disk. Hyperlinks and computer animations of flowcharts and computer programs were added to increase the interactions between students and the learning materials. Students generally felt that printed materials had the advantage of physical portability. They could bring along the printed materials and read them during traveling or waiting at some places. Electronic materials simply mirroring the printed version were not welcomed. Additional features such as hyperlinks to relevant resources, computer animations, and multimedia presentations were needed to justify the development and production of electronic materials [4].

Starting from 1999, a more comprehensive online support services were offered in the form of a Subject Web Page. In addition to CSU, Monash University (Monash) in Australia also jointly offered degree programs with HKU SPACE since 2002 using a web-enhanced distance education delivery mode, supplemented by face-to-face

teaching conducted by local teachers in Hong Kong. For each subject, the set of distance learning materials were put online. In addition, Forum was set up to enhance communication between the overseas university subject teacher and students from different places. The Forum also facilitated discussions among the students themselves. Students from different places used the Forum as a platform to share their learning experiences. However, in 2002 connection to the Internet in Hong Kong was largely through modems. Students needed to occupy a phone line at home and suffered from annoying unexpected disconnections.

Recently more Hong Kong people had access to Internet at home. In 2003 the percentage of households that had PCs at home increased to 67.5% (more than 30% increase in three years) and out of these households 88.8% had access to the Internet. Effectively, the percentage of households that had access to Internet at home increased from 36.5% to 60%. An increase of 64% of households in Hong Kong had Internet access at home in the three years from 2000 to 2003. The survey in 2006 revealed that 71.7% of households had PCs at home and 93.6% of them had access to Internet. The percentage of households that had both PCs and Internet access rose to 67%. The latest survey in 2007 revealed that 74.2% of households had PCs at home and 94.5% of them had access to Internet [5]. There is an increase of 93% of households in Hong Kong had Internet access at home in the seven years from 2000 to 2007. The advancement in information and communication technologies supported the development of blended learning. Yet, to the students, there were learning elements of face-to-face sessions that could not be totally replaced by online learning.

3. Student Surveys on Preferred Learning Modes

In order to understand learners' preferences of various learning modes, surveys of students studied in the blended learning programs described above were conducted from 2000 to 2005.

3.1 Student Survey 2000

The first questionnaire survey was carried out in 2000 [6, 7] with two groups of students. One group of 24 students studied a graduate diploma in library program and the other group of 21 students studied a Master of Information Technology program. Both courses utilized a blended learning mode that some subjects were taught face-to-face and some subjects were based on distance learning but with some supporting face-to-face tutorials. These students studied part-time while working full-time. They were asked to select the teaching mode they preferred most from the following options, assuming they were given a choice:

- face-to-face teaching for all the subjects (FtF);
- some face-to-face taught subjects and some distance learning subjects with supporting tutorials (BL1);
- distance learning with face-to-face tutorials (BL2);
- pure distance learning mode (DL).

The survey findings revealed that almost all students rejected the pure distance learning mode. Yet, not too many of them preferred a purely face-to-face teaching mode, probably due to the fact that they were working full-time. The majority wanted to have the benefits of both worlds, having face-to-face sessions and distance learning at the same time. A summary of the findings is given in Table 1. IT students did not necessarily favored distance learning supported by technology when compared with the library students.

Table 1. The Most Preferred Teaching Mode – Students’ Perspective in 2000

Learning Mode	IT Students n=21	Library Students n=24	Combined n=45
FtF	9%	21%	16%
BL1	67%	50%	58%
BL2	24%	25%	24%
DL	0%	4%	2%

3.2 Student Surveys 2002-2003

Similar surveys on the learning experiences of part-time postgraduate students taking distance learning courses with blended learning were conducted in 2002 and 2003. In February 2002, a survey on the distance learning experience of the two Master’s IT degree programs jointly offered by HKU SPACE and Australian Universities was conducted. 58 successfully completed questionnaires were received for the February 2002 survey [8]. During December 2002 and January 2003, students from a diploma course, an undergraduate program and five postgraduate programs that were jointly operated by HKU SPACE and universities from Australia and the United Kingdom were invited to participate in the 2002-2003 survey. In this survey, the full-time face-to-face study was refined to include both part-time and full-time study [9]. In early 2003, 130 returns were received. The results of all the surveys, which conducted between 2000 and 2003, on the most preferred learning mode are summarized in Table 2.

Table 2. The Most Preferred Teaching Mode – Students’ Perspective in 2000 - 2003

Learning Mode	2000 n=45	Feb 2002 n=58	2002-03 n=130
FtF (part-time)	16%	11%	15%
FtF (full-time)	N/A	N/A	16%
BL1	58%	54%	52%
BL2	24%	35%	15%
DL	2%	0%	2%

3.3 Student Survey 2005

The latest survey was conducted in late 2005 with an extended scale [10]. More programs and recent graduates as well as active students from four undergraduate programs and four postgraduate programs were included. 274 successfully completed questionnaires were received out of 1,357 distributions. The response rate was about 20%. As e-learning was much more developed and became so pervasive, the preferred teaching modes were redefined and the survey results on the most preferred learning modes are shown in Table 3.

Table 3. The Most Preferred Teaching Mode – Students’ Perspective in 2005

Learning Mode	2005 n=274
FtF supplemented with e-Learning	42%
BL1	22%
BL2	27%
Total online learning with some FtF support	6%
Total online learning with no FtF	3%

The demographic details of the 2005 survey respondents were similar to the survey respondents of 2002 and 2003. Most of the 2005 survey respondents were male (76%). Majority of them (83.8%) were aged between 21 and 40 (32% age 20–30, 51.7% age 31–40, 15% age 41-50, 1.5% age above 50). 43.2% of them obtained a Bachelor degree and 35.9% had a Master Degree. Regarding the working experience, 21.2% of the respondents worked for five years or less, 32.6% worked for six to ten years, and 46.2% worked for more than ten years. Most of them (81.3%) had broadband access to Internet both at home and at office. The respondents in general were experienced online and distance learners. Among the respondents, 9.9% had experienced in complete online learning, 52% had experienced in web-enhanced distance learning and 16.8% experienced face-to-face teaching supplemented by online support. Only 21.2% of the 2005 survey respondents (as compared to 39% of the 2002-2003 survey respondents) did not have any e-Learning experience. In brief, most of the 2005 survey respondents were male aged between 21 and 40 who had a Bachelor degree or higher degree. These working adults had high accessibility to Internet, and were experienced in various online learning modes. There was no significant correlation found between the preference of learning mode and the demographic factors of the 2005 survey respondents (including age, working experience and previous online learning experience).

The findings of the 2005 survey about the preferred learning mode are similar to the previous survey results of 2000, 2002, and 2003. Blended learning modes were highly preferred by Hong Kong’s adult learners. The results of the 2000-2005 surveys indicated that blended learning modes with more face-to-face elements were more welcomed by the respondents. Web-enhanced distance learning with no face-to-face element was not preferred by student respondents from 2000 to 2005 as only 2% to 3% of them preferred such learning mode. The results of these surveys confirmed the predominant acceptance of the mixed delivery modes over pure

distance learning and online learning. This further indicated that Hong Kong adult learners perceived face-to-face sessions as highly valuable.

3.4 Adoption of Blended Learning Strategies

The findings of these surveys lead the authors to think what blended learning strategies can better integrate e-learning tools with face-to-face sessions to achieve higher teaching and learning effectiveness, especially for the part-time adult learners. The main features of the blended learning strategy that we have been adopting so far are as follows:

- Distance learning package available online and in printed form;
- Face-to-face sessions at regular intervals throughout the semester;
- Deploying asynchronous online environment (email, forum, subject webpage) for communication, discussion and access to resources.

The number of face-to-face sessions ranges from 6 to 10 for a semester-long subject. Each session lasts for 2 to 3 hours. The actual arrangement depends on the nature of the subject and the level of the program. For example, more sessions are organized for a bachelor degree program than a postgraduate program. Longer hours per session are organized for a subject involving practical components. During the face-to-face sessions, the local teacher can choose to do one or more of the following activities:

- teach the more challenging topics of the subject;
- discuss questions raised by students;
- discuss the assessment items.

These face-to-face sessions also serve as checkpoints to keep students' paces of learning progress and allow for peer-sharing and mutual support.

The key questions are how to integrate face-to-face sessions and e-learning to achieve the greatest synergy. For the good practice in blended learning, Macdonald [1] stated that "if there is currently a recipe for a blended strategy, it is a broth of pedagogy, heavily peppered with pragmatism". In the next section, we describe the practices of a blended learning approach of an education program and compare it with the approach advocated by Albon and Trinidad [11].

4. Good Practices of Blended Learning Approaches

4.1 Integration of Online Learning and Face-to-face Teaching

In 2005-2006, the delivery approach of a postgraduate subject in an Education Diploma program for part-time adult learners in Hong Kong was examined. The subject was taken by a group of twenty students. In the subject, an e-learning platform was used to support the following functions online:

- Announcement – releasing of announcements related to the subject or program;

- Resources – presentation slides, handouts, and other reference materials;
- Forum – discussion forum for students to post views and questions as well as responses to other students' submitted views and questions.

For this postgraduate subject, students were divided into three groups. Students received a set of pre-class reading materials for the next weekly class meeting. Each group was assigned to work on an activity as stated in the materials. Every member of the group was required to post his/her views or proposed solutions in the Forum before the next class. On top of their own postings, students were encouraged to post responses or follow up questions to items posted by their classmates, either of the same group or the other two groups. Each activity provided a scenario for the students to analyze, they were then asked to prepare their responses to some questions. Typical questions, for example, read something like:

What do you think about these views? Which one do you like more?

How do these teachers see motivation differently? Or can you integrate these different approaches to motivate the class to learn?

During the class meetings, members of each group would get together to discuss their postings and any follow up postings. They formulated some concluding findings and presented these findings to the whole class. A summary report of the findings was then posted to the Forum. As part of the assessment, the timely submission of the postings in the Forum and the presentations in class meetings contributed up to 20% of the final score. In addition, each student was required to compile the set of their own postings in the Forum together with their responses to other students' postings as part of the final assignment for submission to the teacher at the end of the teaching term.

The number of postings of each lesson for this subject ranged from 30 to 50. The average number of postings per lesson was 36.8. The average number of postings per lesson per student was 1.84. These figures were regarded as indicators of active engagement by the students. Students learnt more effectively in this subject in several ways due to the design of the blended learning. In each class meeting, students were required to follow up on what they had prepared by studying the reading materials and the postings on the Forum. Without such pre-class learning, they would not be able to work on the in-class activity effectively. By design student learning was built upon the integration of the face-to-face session and the use of the online forum outside class. The grouping of students helped not only achieving collaborative learning but also exerting positive group pressure for each group member to submit online forum posting on time. Otherwise, other members could not read and prepare for the in-class discussion.

The weekly postings not only counted as part of the final score but also formed an essential part of the final assignment submission. The importance of using the online forum was appropriately reflected in its weighting in the assessment. This example illustrated how the use of internet-based technology was integrated into the learning process and continuous assessment, as well as how adult learners were motivated to participate in online forum discussion.

4.2 Mediated Learner Approach (MLA)

A similar model can be found in the Mediated Learner Approach (MLA) developed by Albon and Trinidad [11]. They believed technology could be used to act as vehicles for driving the model in which communication and collaboration among the learner, peers and the lecturers could be facilitated. Mediated learning occurred through the building of a learning community. In addition to the technology component, another key component was assessment which was learner-focused and performance-based. In the MLA, learning was driven by assessment which was “part of the learning process”, and learning was about “developing competency in applying knowledge” [11, p. 53], not just simply knowing the content.

It was believed that assessment tasks were essential and drove the learning as they “emphasise planning, writing, and revising ideas mediated through the learning community, and encourage deep meaningful learning” [11, p.56]. It was through the embracement of the multiple views of learners and the learning community that meaningful and deep learning could be achieved in this MLA approach.

The MLA approach was illustrated in a first year unit offered in an Australian University about ‘Teaching, Learning and Assessment’ to show how “the assessment drives the learning, and the technology drives the model, creating a simultaneous and harmonious building of a learning community” [11, p.56]. Students were grouped into groups of four to develop a website, and all groups were encouraged to act as communities of learners. The assessment components consisted of the tasks of developing a website which included Journal of Andragogy, chapter summary, quiz, teacher interview, video, journal articles, internet articles/sites, links to other unit topics, and critique of peer websites. Technology, such as the bulletin board, e-mail, online journals and databases, was used to facilitate the communication and collaboration so that mediated learning among the learners, peers, and lecturers was possible in the MLA approach. Positive feedbacks were received from the students to embrace the MLA. This MLA approach demonstrated how the integration of technology, assessment, and pedagogy such as the social constructivist theory which combining with mediation could create a powerful teaching and learning approach.

The postgraduate subject case and the MLA approach show that several key elements are needed for good blended learning, which include:

- 1) Proper design and integration of the online and in-class activities;
- 2) Integrate usage of technology throughout the whole learning process;
- 3) Proper design and integration of assessment into the learning process and activities.

5. Discussion

After reviewing the survey results during 2000 to 2005 and the good practices of blended learning approaches, some implications on the design of hybrid learning courses for adult learners are identified. To support more meaningful learning for adult learners, several aspects need to be considered in order to set up a blended

learning program, including (1) Course design and learning activities; (2) Role of web-based technology; and (3) Use of assessment.

(1) Course design and learning activities

- All online learning activities, for examples, use of newsgroup discussion and constructive wikis, should be designed to closely link with face-to-face class activities (such as presentation or in-class discussion) and become an integral part of the overall assessment.
- The requirements for individual learning and collaboration among peers, as well as the purposes of the online activities and class activities should be stated and communicated clearly.
- The value of participation in the online learning community and the importance of process of knowledge construction should be elaborated clearly to the students.

The clarification of requirements and purposes as well as motivating learners comply with the characteristics advocated by Knowles about learning environments involving adult learners as learners need to know and be informed of why something is important to learn [12].

(2) Role of Web-based technology

- Web-based technology should be used as communication tools and collaborative tools to facilitate interactions among the human actors (for examples the student, peer learners and the teachers) throughout the whole learning process for co-construction of knowledge. As mentioned in Albon and Trinidad [11, p. 50], interactive technologies should act as “important instruments in learning as today’s students are learning with technology, as opposed to learning about technology”.
- Simple use of technology coupled with good integration of assessment can yield better learning outcomes.

(3) Use of assessment to motivate active participation

- Proper integration of activities and assessment throughout the learning process is essential. As adult learners are always constrained by life commitments such as career and family responsibilities, if posting on newsgroup forum is entirely voluntary and not counted as formal assessment items contributing to scores of the final grades, only very limited online participation will occur. Whereas, if the learning activities are blended neatly with assessment components and the learners are clearly informed about the goals and objectives of the activities, adult learners will perceive the value of the activities and be motivated to participate. The priority of these activities will then be raised.
- Besides of using individual assessment educators are encouraged to consider more use of group works to encourage the adult learners to work and learn collaboratively. Not only can the learners learn from each other when they build up a community, they can also exert positive group pressure and provide mutual social support in keeping their learning spirits.

We believe that more meaningful blended learning experiences can be resulted through proper course design, which emphasizes on student-centered learning, and proper integration of learning activities, assessment and web-based technology.

6. Conclusion

Learning at a distance from the campus was not a new thing. With the development of ICT, e-learning has firmly established its importance in education and training courses, no matter these courses are conducted in conventional face-to-face mode or through distance learning. In our studies, we find that throughout the last decade most students in Hong Kong studying part-time postgraduate and undergraduate IT programs indicated their preferences in retaining some form of face-to-face teaching while at the same time utilizing the advantages of e-learning. A pure form of delivery mode, whether it is face-to-face teaching or distance learning, is not appealing to the adult learners in Hong Kong.

Cheng [13] commented that regarding students in Asian culture, it was uncertain whether they preferred to study at home and communicate electronically with their teachers.

“Students in Asian culture are also not used to expressing themselves and exchanging views. They are more used to listening, keeping analyses in their minds, and express themselves only when it is very necessary. As such it remains to be seen whether the extension of the physical classroom to the cyberspace would further discourage or encourage interaction among students.” [13, p.204]

Through the 2000-2005 surveys and the review of good practices of blended learning approaches, it is concluded that Hong Kong students take a pragmatic approach towards e-learning. They can be active learners in the cyberspace if a proper pedagogy is adopted. To make blended learning more effective, it is more than simply introducing the technology component in the teaching and learning process. The right teaching approach and assessment strategies have to be employed. For example, it is evidenced that participation in online forum discussion becomes more active and fruitful when such activity is designed as an integral part of class teaching and contributing to the assessment.

As mentioned by Macdonald [1, p.54], different parts of a blended strategy were inter-related and there was much to learn about the ways to integrate e-learning with face-to-face support. And as suggested by Albon and Trinidad [11, p.51], educators in any disciplines should “ask themselves a fundamental question: how does learning occur? The answer informs the learning process and strategy selection irrespective of whether the environments are paper-based, face-to-face, online, or a mixture of delivery modes”. With the high accessibility rate to Internet at home nowadays, it is time for Hong Kong teachers to explore how they can deploy online tools together with their class teaching as well as encourage learning and interactions in the online environments. It is through the proper design of course, better integration of assessment, learning activities and use of technology for facilitating interactions via online community that meaningful blended learning experience can be resulted.

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