

Blended Learning – A Focus Study on Asia

KwongOnn THAM¹andChoiKit THAM²

¹School of DCIT, Faculty of Science and Information Technology, University of Newcastle, Australia
Callaghan NSW 2308, Australia

²Institute for Retail Studies, Stirling Management School, Stirling University
Stirling, FK9 4LA, Scotland, UK

Abstract

Blended learning is gaining popularity in Asia. This paper examines the current stage of development of blended learning in higher education in China, Korea, Japan, and Singapore and the challenges encountered. While blended learning is well-received in western culture, it has met with varying degrees of success in Asia due in part to the different perceptions of instructors and students towards blended learning approaches. In China, for example, while blended learning was well-received, the dominance of traditional teaching methods goes against the conditions required for mainstream blended learning. A review of existing literature showed that there are a host of key issues and challenges which prevent Asian countries from harnessing the full potential of blended learning in higher education.

Keywords: *Blended Learning, Higher Education, Asian students*.

Introduction

Higher educational institutes in Asia have joined their western counterparts in adopting blended learning. An assumption underpinning this move is to integrate various online technologies and instructional strategies into the classroom, providing students with greater time flexibility and improved learning outcomes¹⁸. Blended learning also allows both instructor and student more extended and effective educational experiences than only face-to-face instruction. For faculty members, blended learning is seen as providing more opportunities for teacher-student interaction, increased student engagement in learning, added flexibility in the teaching and learning environment, and opportunities for continuous improvement². With the convergence of information and communication technologies, universities are also able to offer more varieties of blending online learning and face-to-face learning courses promising greater learning outcome.

This paper examines the current stage of development of blended learning in higher education in China, Korea and Japan, with a comparison to the city state of Singapore. The objective is to identify whether blended learning is producing the desired learning outcomes at institutes of higher learning in these countries. This paper seeks to review existing research on issues, challenges and trends in blended learning in higher education in the four Asian countries. It seeks to shed some light on the key reasons behind the successes and failures in the implementation of blended learning in these countries.

How Well is Blended Learning Doing in Asia?

This paper will examine and evaluate the implementation of blended learning in higher education in 3 major Asian countries, namely China, Japan and Korea before examining the progress of blended learning in Singapore. These four countries were ranked by the Economist Intelligence Unit (EIU) in 2008 in their e-learning readiness ^{1/} survey which covered 70 countries. Korea ranked 5th, followed by Singapore in 6th position while Japan and China ranked 23rd, and 56th, respectively.

^{1/} According to EIU, “E-readiness is a measure of the quality of a country’s information and communications technology (ICT) infrastructure and the ability of its consumers, businesses and governments to use ICT to their benefit”.

China

Numerous experiments on blended learning have been conducted by universities and colleges in China but they have not achieved the expected results⁹. Generally, blended learning was well-received, but educational institutes and staff lacked the appropriate knowledge for developing courses that would tap the full potential of blended learning.

Liu and Cheng (2008)¹⁹ examined the implementation of an e-learning project in a class at Xi'an Jiaotong University to determine the benefits, if any, of using e-learning systems. They noted that students were positive towards the CMS. However, educational administrators lacked the awareness of the benefits of CMS. Campbell (2007)¹ also noted that while recent government policies in China strongly supported student centered teaching/learning activities, including e-learning, senior educators and educational administrators have little incentive to change their teaching styles. Unless the educators themselves are convinced of the pedagogical benefits of e-learning, providing IT hardware and software and access to the internet will not do much to enhance the learning of students^{1 & 19}.

In addition, the Chinese education system is exam-driven, teacher-centered and still based on Confucian values¹. McConnell and Zhao (2006)²⁰ commented that the high teacher dependency culture in China militates against self-directed learning which is essential in a blended learning environment. They concluded that the dominance of traditional teaching methods in China is unlikely to present the conditions for mainstreaming e-Learning in the near future.

Korea

Blended learning is also widely adopted in Korea. According to a white paper published by the Ministry of Education and Korea Education and Research Information System, 2003 (KERIS), blended learning was used in about 63% of university education courses in Korea in 2002 and 67% in 2003¹⁸. By 2004, there were 17 cyber-universities in Korea.

Two surveys were conducted in 2001 and 2004 to gauge the progress of blended learning in Korean higher education. The survey findings showed that blended learning was the preferred instructional format by both cyber-university students and instructors. However, the implementation of blended learning is still hampered by a lack of interactivity with instructors, boring instructional content, lack of

course-related information, too heavy workload, inadequate cyber-instructional pedagogy, etc¹⁸. 'Tell and listen' still prevails in Korean higher education. However, some universities are now questioning the assumed superiority of face-to-face presentations and are introducing more active and interactive learning strategies¹⁷.

Japan

Japanese universities were slow in embracing e-transformation. According to Japan's National Institute of Multimedia Education (NIME)'s 2008 Annual Report of ICT in Higher Education, the overall rate of e-learning introduction among Japanese universities was 51% in 2007. However, only slightly more than 20% of the universities are conducting e-learning courses for credits. Even after adding those institutes that are planning on offering credit-based e-learning (4.4%), only a quarter of Japanese universities are offering or planning to offer e-learning courses and programs³⁰. Suzuki (2008)²⁹ concluded that the penetration of e-learning in Japan is still very low.

One reason was that e-learning was not an integral part of national strategic planning. In several Japanese universities, blended learning was merely a repackaging of the traditional didactic mode of instruction by video-recording lectures and placing them online. There were no utilization of interactive technologies such as discussion boards and chat¹⁷. Only a few use the Internet as a main delivery medium and provide online courses with face-to-face sessions as supplementary¹². According to Yasutaka Shimizu, Director of National Institute of Multimedia Education, Japan, there is a need to factor in the different Japanese learning and teaching styles, as compared to those in the West, in building a Japanese style support environment responsive to Japanese learners and lecturers²⁴.

Singapore

Singapore has a strong IT infrastructure. The city state took the top position among 34 countries covered in the 2009 survey by Waseda University International e-Government Ranking, showing network preparedness, availability of user-friendly and secure electronic services, the integration of ICT to facilitate management, etc¹⁰. With Government support, the adoption of e-learning in Singapore schools and higher institutions of learning is

pervasive. Universities in Singapore have also established e-learning portals, such as:-

- National University of Singapore's Integrated Virtual Learning Environment (IVLE) – for downloading of course materials, discussion forums, assignment repositories, video web casting, chat rooms, etc;
- Nanyang Technological University (NTU)'s EdveNTUre - enables the campus to utilize online resources for about 90% of its courses;
- Singapore Management University (SMU)'s Vista 4 – enables students to download course materials, participate in discussion forums, etc.
- U21 global (a joint venture between Universitas 21 and Thomson Learning) - offers online education to 32 million students globally²³.

NTU Experience in Blended Learning

According to Tan et al(2009)³¹, NTU has over 800 courses with an active online presence. In 2002, NTU introduced an eLecture project to humanize e-learning. Classroom lectures were video-recorded and archived for students to access anytime and anywhere. This was based on the premise that computer-based lessons which include a strong human element (eg human voices or facial expressions) tend to be more favoured by students compared to reading impersonal text on static web-pages. Also, a multi-modal approach utilizing audio, video and text modes of learning would cater to students' different learning styles.

Recently, NTU's University 2.0 was introduced to achieve a more engaged and interactive blended learning environment for the NTU's 28,000 students. University 2.0 incorporated more Web 2.0 participative tools to enable knowledge learning, sharing and application, has been well-received by students. Its aim was to provide a holistic and seamless learning environment for students and to better connect faculty and students to enhance their personal productivities³¹. Under University 2.0, a peer evaluation tool was introduced in 2007 to help student become active, self-directed learners through engaging in self- and peer-evaluation. In addition, the aNTUna (pronounced like "antenna" for wireless communication), enables students to link up with their classmates instantly, for discussion and exchange of ideas. Students were found to be

making use of these online learning options. Tan et al (2009)³¹ noted that the pedagogy of well-designed learning activities to supplement e-lectures is likely to positively influence learning outcomes and student performance.

A pilot study by Thanasingam and Soong (2007)³³ on 13 students enrolled for NTU's English Proficiency course, showed that discussion forums and streaming video are effective teaching tools. On designated tutorial dates and time, the students met online instead of face-to-face for their oral skills lesson. Students began the session by listening to the speech of one of their classmates using an online video conferencing tool, AcuLearn. At the end of the speech, students posted their individual feedback on the presenter's speech based on a given set of criteria. It was noted that students actively participated in the discussion forums and there was a high level of learning satisfaction.

Assessment of Blended Learning in Singapore

Despite the positive reports on blended learning at NTU, the full potential of blended learning is still not tapped by Singapore's higher educational institutes. Concerns were raised by various academics in Singapore that e-learning in Singapore educational institutes is merely the porting of the classroom to the Internet, to reproduce the functionality and "look and feel" of the existing classroom materials in a new operating platform. Teo et al (2006)³² noted that most content developers are more concerned with showcasing their technology-enhanced products than in enhancing the knowledge aspect of e-learning, which should be at the heart. This concern was also shared by Hedberg and Lefoe (2006)⁷ who noted that blended strategies in on-campus courses, are largely supplementary rather than key to addressing core pedagogy.

Menkhoff et al (2007)²¹ highlighted several concerns raised by students in a blended learning module at Singapore Management University:-

- Lack of two-way interaction between students and teaching staff;
- Lack of communication facilities for user interactions and discussion;
- The learning content lacked depth;
- The learning process lacked fun and competition e.g. 'game style' learning supported by animation and multimedia; and
- Absence of feedback on review questions and case study questions.

Nevertheless, a study done by Miliszewska (2007)²² on the perspectives of Singapore students showed that they preferred blended learning ie face-to-face instruction with online learning. However, they indicated that face-to-face learning is still the best form of learning as it is easier to discuss problems and obtain instant feedback from instructors. Face-to-face communication provides better motivation to study.

Reflections and Discussion

The overview on blended learning in the four Asian countries revealed several unresolved issues and challenges. Cultural challenges are obvious. Ramburuthi and McCormick (2001)²⁸ observed that Asian students prefer to work with highly organised materials and engage in self-paced programs unlike their western counterparts. Cheng (1998)³ stated that Asian students tend to keep analysis in their minds and are not comfortable with exchanging views. According to Henderson (1996)⁸, instructional design approaches need to reflect differing world views, values, ideologies, etc that act in the interest of students from different culture, class and gender. Protheroe and Turner (2003)²⁷ also stressed the importance of culturally-sensitive instruction.

Apart from the cultural dimension, there are pedagogical and instructional design challenges. It can be noted from Table 1 above, that outdated pedagogy is employed in a technology-rich environment resulting in ineffective learning outcome. The blended learning approach adopted by the four selected Asian countries revealed a lack of understanding of the true essence of blended learning as described by Verkroost et al (2008)³⁴ and Papadakis et al (2006)²⁶ as “the total mix of pedagogical methods, using a combination of different learning strategies, both with and without the use of technology”. Consequently, blended learning in these countries are nothing more than a form of support learning, with little consideration given to instructional design and strategies, students’ learning needs and learning styles.

Many researchers have argued that any shift from traditional classrooms to blended learning environments should involve a change of pedagogies⁶. Koper (2004)¹⁵ expressed the view that a user-centric and constructivistic model is needed to reflect the nature of learning and knowledge and respect the human side of learning. Such a model should be learner-centred and learner-controlled while the instructor assumes a new role a knowledge

broker, knowledge co-creator, mentor, coordinator and facilitator of the learning experience. A similar stance was adopted by Kaleta, Skibba and Joosten (2007)¹³. To transform a course from a face to face format to a hybrid format, an instructor must re-examine course goals, develop new online and face-to-face learning activities, implement assessment changes, integrate face-to-face learning activities, as well as interact with students in new ways. It is imperative to make learning content and e-learning more engaging and interactive for the digital age students³¹.

Conclusion

To-date, much research have been skewed towards cultural dimensions without addressing the pedagogical and design aspects of blended learning. According to Jukes et al (2010)¹¹, today’s students are accustomed to multi-tasking, graphics, fun, fantasy, and internet and they are incredibly bored by the traditional mode of teaching. To engage the digital generation of students, changes to instructional design and strategies for blended learning are needed. In addition, it is important to examine how different blended learning pedagogies can be introduced without creating cultural problems. For example, issues relating to the design of virtual environments which are culture-sensitive must also be addressed such as an interface that contains culturally neutral icons or one which avoids using colloquial language and cultural slang that can be misinterpreted by an audience from a diverse cultural background.

Recommendations for Future Research

This study has intentionally adopted a broad brush approach to identify challenges facing four Asian countries in their adoption of blended learning in higher education with the aim of identifying the key challenges or obstacles facing Asian higher educational institutes in the implementation of blended learning. Future research should focus on one Asian country with a more extensive analysis supported by empirical data and analysis, to enhance and deepen understandings and conclusions on blended learning. The focus would be to develop a holistic approach to examine the cultural, pedagogical and design issues/challenges together and to develop a framework that addresses all these challenges and issues coherently. Its contribution would be to formulate an effective framework for

using blended learning as a teaching mode for educational practitioners.

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