

Engagement

Likes	60
Dislikes	0
Comments	11
Shares	2
Favorites added	11
Favorites removed	3

First 365 days (May 27, 2012–May 26, 2013)**Performance**

Views	4,794
Estimated minutes watched	13,515
Subscribers	73

Engagement

Likes	23
Dislikes	0
Comments	21
Shares	1
Favorites added	5
Favorites removed	0

Cross-cultural Blended Teaching and Learning: Fostering Critical Thinking and Collaborative Learning

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Preamble

The general consensus in twenty-first century is that cross-cultural communication and awareness are of significance for students competing in such a globalised society. Under this climate, HKBU is also committed to the doctrine of whole-person education, with a growing tendency to enhance global perspectives and promote a wide range of cultural knowledge. Meanwhile, the advent of online technologies has provided tremendous opportunity for learning and cross-cultural communication. The pedagogical advantages of online asynchronous communication have been well documented. Moreover, blended learning that brings together the benefits of both online and face-to-face learning has been recognised as more conducive for learning. This project adopted the web-based technologies to connect students in HKBU with those in universities in the United States and Taiwan, engaging them in online discussion and reflection.

Abstract

In this project, we collaborated with Georgia State University in the United States and National University of Tainan in Taiwan in designing and conducting blended courses that connected HKBU students with students from other regions. The students were put in culturally diverse groups and had online discussions on course-related topics. The collaboration has spanned a whole academic year and involved more than 180 students in the cross-cultural communication. The results show that the

cross-cultural blended learning experience contributed to the development of critical thinking and cross-cultural understanding.

Keywords

Blended learning, Cross-cultural collaboration, Online discussion

INTRODUCTION

In a globalised society, cross-cultural communication and awareness have been recognised as a vital part of twenty-first-century competencies. Under this climate, the whole-person education doctrine held at Hong Kong Baptist University (HKBU) also highlights an international outlook and a broad range of cultural knowledge. With the advent of online technologies, they have been increasingly used to supplement classroom teaching and learning. The pedagogical benefits of online asynchronous communication have been widely documented. Prior studies have denoted that online discussion could enhance student critical thinking, collaboration and knowledge construction (e.g., Chang, Chen, & Hsu, 2011; Lee, 2012).

Blended learning is believed to be more conducive for learning as it brings together the strength of both online and face-to-face learning (Garrison & Vaughan, 2008). The web-based technologies also helped connect students from different countries and make cross-cultural communication more affordable and accessible. It is reported that a culturally diverse group can generate multiple perspectives and deepen reflective thinking and cross-cultural understanding (Shadiev, Hwang, & Huang, 2015).

In this project, the web-based technologies have been used to connect HKBU students with students at universities in the United States and Taiwan and engage them in online discussions and reflective dialogue. Central to the design of the blended courses is a belief that students can enjoy the pedagogical benefits of both modes of learning by participating in online discussions as an extension of face-to-face lectures. By placing cross-cultural experiences as the heart of the blended course, the project intends to enhance cross-cultural experiences and critical thinking skills on the part of students. It is expected that a culturally diverse peer group will bring forth multiple perspectives, which will contribute to the development of critical thinking skills, cultural sensitivity and a global outlook. Furthermore, the teachers (instructors) involved in the project are also expected to gain experience of and insights into designing and facilitating blended learning among culturally diverse groups.

In particular, the purpose of the project is to enable students to:

1. acquire an increased awareness and insights into cultural values and educational systems;
2. develop critical thinking skills in a diverse cultural environment; and
3. gain confidence and skills of using online technologies for communication and collaboration.

Meanwhile, this project also provided valuable opportunity for the instructors involved to:

1. develop instructional models and strategies for blended learning and cross-cultural collaboration.
2. develop instruments for analysing and diagnosing students' knowledge construction through online discussion.
3. glean insights and experience with designing and implementing cross-cultural online collaboration.

PROJECT DESIGN

The project spanned over two academic semesters from 2013 to 2014. Table 7-1 summarises the basic information of the two cycles and courses involved. Specifically, the collaboration with Georgia State University (GSU) involved Educational Psychology courses, while the collaboration with National University of Tainan (NUTN) involved courses on ICT for education. For each cycle, the instructors of courses from two universities collaborated closely in designing and implementing the online cross-cultural discussions.

Collaboration with GSU

The collaboration with GSU involved students from educational psychology courses from both countries discussing case studies online during the fall semester of 2013. Online discussions were designed to engage students in critical discourse related to cases and prompt reflection on different approaches to situations that may arise in the classroom. The online platform adopted for cross-cultural discussions was hosted on the e-learning system of GSU. The discussions took place when corresponding learning theories were being addressed in both the US and Hong Kong courses. Students were divided into eight groups and each group had 8–10 students, four or five from the United States and the others from Hong Kong. After reading the cases, the students conducted a critical analysis of the cases “through the eyes of an educational psychologist” and posted in the forum. The instructors encouraged the students to use personal experience, share related resources and use theories and readings to justify

TABLE 7-1 Summary of Two Courses Involved in the Project.

No.	Semester	Course	Collaborating University	Participating Students
1	2013 Fall	Educational Psychology	Georgia State University	35 HKBU students and 30 American students
2	2014 Spring	ICT for education	National University of Tainan	59 HKBU students and 16 Taiwan students

their position in the analysis. The students then had to make at least three follow-up postings responding to others' case study analysis in a one-week time period.

Collaboration with NUTN

The collaboration with National University of Tainan took place in the Spring semester of 2014. It involved education majors at similar year levels at HKBU and NUTN who attended similar courses about using technologies for teaching and learning. Two instructors and 59 Hong Kong students from Year 1 and Year 2 participated in the project. For the Taiwan students, there were 16 Year 2 students in the same class. Two Hong Kong instructors and one Taiwan instructor worked closely in the instructional design of cross-cultural discussion. They used Skype to have several rounds of discussion on various issues such as discussion goals, technological tools, grouping and logistic issues. The instructional design was greatly informed by related literature concerning online discussion and community (e.g., Kreijns, Kirschner, & Jochems, 2003; Preece, 2000).

Moodle, the course management system used at HKBU was selected as the platform for online discussion related to course subjects. The Taiwan students learned Moodle as part of the course, and thus they were fairly familiar with the platform also. First, the students from both universities were regrouped into three groups to ensure the balance and similar composition of each group. The new group each consisted of 25 students with about 20 students from Hong Kong and 5 students from Taiwan. Second, the instructors discussed and decided on three topics for discussion. Resonant to the recommendation of Yang, Kinshuk, Yu, Chen, and Huang (2014) for having cultural-oriented discussion first, the first discussion topic was to introduce education systems in Hong Kong and Taiwan. The second topic was closely related to the course content "technology for teaching and learning" and the third topic was "the role of apps for learning."

Additionally, related literature about discussion facilitation and online participation (e.g., Mazzolini & Maddison, 2003; Williams et al., 2001) was drawn upon to motivate online discussion and facilitate online participation. To encourage more interactive online discussion, the tips for online discussion and writing as conversing were shared with the students. To ensure the quality of online discussion, a small part of the grade was assigned for online participation. The instructors required students to post at least twice every week including one new post and one response to other's posts. Moreover, one instructor and one research assistant monitored and facilitated online discussion by responding, raising questions, prompting for further reflection, and summarising the main points.

Additionally, a decision was made at a very early stage that an informal platform would be employed to enhance the sociability of the online group. This informal platform aimed to provide a casual channel for students to communicate and discuss any topics of interest, which would contribute to the development of social interaction and relationships. Facebook was selected due to its popularity among students

in both Taiwan and Hong Kong. The Facebook group was set as a closed group, thus all group members could only join by invitation. Unlike the online discussion forum, the participation in the Facebook group was optional, so the students of both universities could choose to join the Facebook group.

PROJECT OUTCOMES AND EVALUATION

Collaboration with GSU

The four case studies provided for discussion included two concerning classroom scenarios in the United States and the other two about classroom scenarios in Hong Kong. The title of the four case studies and corresponding learning theories were as follows:

1. Studying French (information processing)
2. The Marble Jar (behaviourism)
3. The Unmotivated Student (motivation)
4. Learning the Ropes (social cognitive theory)

Altogether, US students made 647 postings and Hong Kong students made 562. A range of topics related to their role as teacher were discussed by the students from both cultures, including awareness of cultural similarities and differences, competition/collaboration, interest/curiosity about other cultures, classroom management, importance of teacher/parent collaboration, and the desire to become better educators.

As to students' perception of the project, all students recognised that their online discussion experiences had positive effects. They indicated that discussing case studies with students from a different culture were a positive experience and they reported they learned a great deal about culture differences and their role in education.

Students were curious about each other's culture. Therefore, they had many inquiries regarding teaching techniques, perceptions on education, personal experiences and so on. They asked questions about the use of punishment, the mindset of students, recess, classroom size and other issues. US students expressed this through statements such as, "*it's very interesting to hear about the use of punishment in the Chinese Society*" and "*I am unaware if recess time is given in Hong Kong, it is barely allowed here as it is.*" Hong Kong students also remarked: "*I found it interesting to know more about the mindset of American children. Therefore, I would like to ask if there is misbehaviour in class, what should teachers (instructors) do instead of just simply telling them the right thing to do? So I am also very curious about the educational system in America.*"

Collaboration with NUTN

As previously mentioned, three discussion folders, each for a different topic on ICT and education, were created on Moodle. For each discussion topic, general guiding questions were posted in each discussion group. The instructors encouraged the students to respond to the issues, initiate new threads under the theme and respond to each other. Each discussion topic lasted one to two weeks. The students' activities

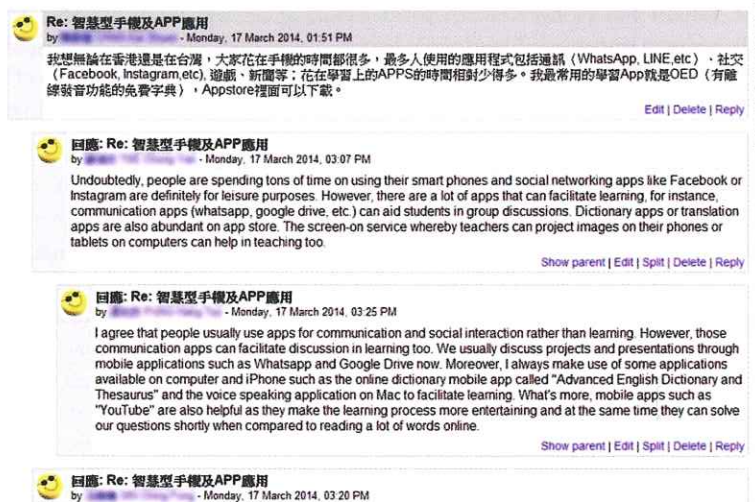


FIGURE 7-1 Example Post from a Discussion Forum.

on forums, including number of views and posts, were extracted from system logs. In total, the students from both universities posted 301 messages on the Moodle forums. Figure 7-1 demonstrates a discussion thread from one of the forums.

On the sociability side, various research-derived strategies for preparing and motivating students were carried out. To kick-start the project, the instructors on both sides scheduled a time for synchronous online video conferencing via Skype allowing the students from both universities to meet each other and briefly introduce themselves. Face-to-face communication online like this has been shown to help motivate students in cross-cultural collaborative settings (Kim & Bonk, 2002).

Many scholars (e.g., Liu, 2007; Shadie, Hwang, & Huang, 2015; Wang, 2011) indicated that self-introduction was an important first step for building close rapport in an online learning environment. On the Facebook group, which aims to foster social-oriented communication, the instructors suggested students use *Lino*¹ to post links of their self-introduction pages in the Facebook group. It was hoped that the informal atmosphere on Facebook might attract the students into commenting on each other's introductions.

Students' views regarding the cross-cultural online discussions were collected through questionnaire, interview and reflective paper. We intended to hear students' voices more, especially their feedback and suggestions for improvement. In order to understand their perceptions of online discussion and the motivating and inhibiting factors for their online participation, the students were invited to finish an online

questionnaire at the end of the semester. Several open-ended questions were asked seeking to elicit students' views on the values of cross-cultural communication and the factors that influenced their online engagement. Forty-one students completed the online questionnaires and 38 responses were valid for analysis. According to our records, 58 per cent (22) were from HK and 42 per cent (16) from the Taiwan class.

After collecting the questionnaire data, instructors selected several students and invited them to participate in individual interviews to share their perspectives and experiences in online social-networking groups and forums. The criteria for selection took into account several factors including the levels of online participation, gender and group membership. Eleven students (7 Hong Kong students and 4 Taiwan students) participated in the individual interviews that probed deeper into students' experiences and perceptions of cross-cultural online discussion. All students were also prompted to reflect on the online discussion experiences at the end of the semester as part of individual assignment. The guiding questions for reflection were:

1. What have you got from the cross-cultural online discussion?
2. What are the challenges of the cross-cultural online discussion?
3. Can you suggest how to address these challenges?

The students in general showed positive views of the forum in enhancing cross-cultural communication. On a 5-point scale from strongly disagree (1) to strongly agree (5), the students recognised the values of online discussion for exchanging ideas ($M = 4.18$, $SD = 0.512$), improving communication and cross-cultural understanding ($M = 4.05$, $SD = 0.655$), and enhancing the ability of multi-angle thinking ($M = 3.97$, $SD = 4.92$). Regarding the benefits of asynchronous online discussion, most of the students (90%) strongly agreed or agreed that they learned new knowledge from other students' posts ($M = 4.13$, $SD = 0.665$). Most of the participants (95 per cent) strongly agreed or agreed that they could organise and present their ideas on online discussing platform better ($M = 4.18$, $SD = 0.512$).

The students who were interviewed also mentioned a lot about their excitement of knowing more about people and education at both places. The students used the phrases "golden opportunity" and "extend their horizon" to depict the experience. They also appreciated the technology that "bounds us together" as one commented: "I strongly feel the power of Information and Communication Technology." One Taiwan student remarked that the sharing experience was closely related to the course subject – "ICT for education" giving a vivid instance of how technology and learning could be integrated. Another student commented: "The students from Hong Kong were very active and their posts were thought-provoking. They also attached the related websites for my reference." "Originally, I expected each student will just post their own posts. I was very surprised to see many students responded to my post." The other Taiwan students also appreciated the opportunity to communicate with Hong Kong students in English, thus helping improve language ability.

¹Lino is an online web sticky note service. (<http://linoit.com/>)

ENHANCEMENT ON TEACHING AND LEARNING

On the whole, the project met the proposed objectives. The involved students reported they gained an increased awareness of cultural differences, values and educational philosophies and systems. Through online discussions with students from different cultural backgrounds on course-related topics, the students also developed critical thinking skills and reflection on various issues related to education. They also gained first-hand experience in communicating with students from other regions through web-based platforms, which contributed to their confidence and skills in online communication and collaboration. Within a globalised society, the ability to communicate and collaborate with people from other cultures and countries is becoming increasingly important.

This project provides evidence of the effectiveness of asynchronous cross-national online discussions in developing students' globalised perspective and cross-cultural understanding and communication. The students involved in the project expressed positive perceptions of the experiences and noted they had learned a great deal from the experience. Generally speaking, the students on both sides cherished this valuable experience of discussing course-related topics with students from another region. This cross-cultural project was a new experience for instructors and students on both sides. It was evident that students' feedback expressed the feeling of novelty. They believed that the online discussion on Moodle was conducive for exchanging ideas and developing the awareness and appreciation of a different culture. From the teachers' (instructors) perspective, one of the most valuable outcomes from the project is that it allowed the students to gain the first-hand experience of communicating, through online technologies, with people in a foreign land. It is heartening to see the general appreciation of the affordances of digital technologies for connecting, interaction and learning on the part of participating students.

Admittedly, a study abroad allows for a valuable opportunity and exposure to different cultures. However, only a limited number of students have such an opportunity. Integrating asynchronous cross-national online discussions into the curriculum offers a good supplement or alternative to study abroad. It provides an affordable and accessible opportunity that allows more students to have direct communication with students from a different culture allowing them to engage in reflective discussion together. Through this project, the instructors involved have gleaned valuable experience and insights into designing and facilitating online discussion among culturally diverse groups.

LIMITATIONS AND DIFFICULTIES

In spite of the general positive views of the cross-cultural sharing experience, there are some issues and challenges noted. First, the instruction languages used in the Taiwan universities was Chinese, while HKBU used English as the medium of instruction. On Moodle forum, Hong Kong students could write in either English or Chinese.

Some students from Taiwan felt overwhelmed by the English posts, but others saw it as a good opportunity to practice their English. From the Hong Kong side, one student shared her observation that *"Taiwan students are not eager to respond to some posts that were written in English."*

Another salient problem noted by many students was the time limit, as one remarked: *"there was insufficient time to have sharing and interacting."* Due to the different academic timetables, the collaboration with NUTN had only 5 weeks overlapping time for online discussion. The need for "knowing each more better" was also acknowledged by many students. Several suggestions were made for this end such as creating more opportunity for *"individual or one-to-one chatting and small group interaction," "arranging some private Skype chat"* with students on the other side.

Third, the participants from both sides were not balanced. The students from Hong Kong outnumbered their Taiwan counterparts by a large margin. This, to a certain degree, may have put Taiwan students under a lot of pressure to read and respond in online forums. Furthermore, each discussion group has 25 students, which may be too big to promote a lively discussion. We would recommend a smaller group with around 15 students in each, with a more balanced composition of cultural backgrounds.

Lastly, we also encountered technical difficulties when allowing access to online platforms for students from other universities. There were instances that our students could not access the online platform hosted on the US side, and Taiwan students could not access the online forum hosted on our university. In this regard, we would like to suggest involving technical persons earlier in the collaboration project to sort out the technical issues. Ample time should be allowed to test the stability and accessibility of online systems to ensure their smooth operation.

CONCLUSION

For the participating instructors in the project, we have worked collaboratively with faculty members in other universities in designing and implementing online discussions. We have tried out different research-derived strategies for motivating and facilitating online discussions and collaboration. Through this, we have gained insights into the strategies for blended learning and cross-cultural collaboration. An instrument for analysing and diagnosing students' knowledge construction through online discussion has been utilised. Furthermore, we have shared our experience with practitioners and researchers from other universities through participating in international conferences.

Overall, this project has successfully achieved its proposed objectives. Through analysing students' online posts and collecting their views through questionnaires and interviews, we have gathered evidence on the values of cross-cultural online discussion on enhancing teaching and learning. We would highly recommend using online platforms to connect our students with people from other cultures and countries and to engage them in reflective dialogue centring around course-related topics. It will

not only contribute to critical thinking skills, but also enhance their cultural awareness and global outlook. Both instructors and students gained valuable experience in working with colleagues and students abroad through web-based technologies. We are still keeping the collaborative relationships with the colleagues from other universities and working on further collaboration in teaching and research.

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Flipped Classroom for Mathematics Subject Instruction

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Preamble

Flipped classroom redefined the roles between instructor and students in the context of teaching and learning. It inevitably touched upon the question of who is in control of the learning process. At the same time, it assumed a critical reconsideration of when learning actually takes place. As a strategy for implementing self-regulated academic learning cycle, the initiative of flipped classroom was adopted in mediating out-of-class learning experiences with in-class learning experiences on one hand and the foundational learning with higher order learning on the other.

Abstract

The model of self-regulated academic learning cycle includes three components: the forethought, the volitional control and the self-reflection. Applying flipped classroom initiative in implementing the model in the instruction of the course Subject Instruction, the course content was first structured in broad themes. The theoretical knowledge of each broad theme included a variation of concepts and skills with different perspectives. A repository of videos clips were thus designed and produced accordingly for the out-of-class learning experiences for students. These learning experiences were mediated with higher order in-class learning experience while each of the tasks was designed to enhance self-efficacy in learning. Both the conceptual knowledge and the practical knowledge are essential for a practical course like Subject Instruction for pre-service and in-service teachers' (instructors) training. This chapter highlights the subtle learning process and outcomes in applying the flipped classroom initiative in enhancing self-regulated learning.

Keywords

Self-regulated learning, self-efficacy, higher order thinking, flipped classroom, mathematics instruction, teacher education