

Building Multicultural Awareness in University Students Using Synchronous Technology

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Abstract

To explore the potential for building multicultural awareness in university students using synchronous technology, faculty members from an American regional state university and a Chinese regional university collaborated to find appropriate ways to integrate synchronous technology (e.g., Adobe Connect) into a teacher education program in the American university and in an English as a Foreign Language (EFL) program in China. The paper reports the collaborative efforts during the spring 2016 semester using Adobe Connect to enrich student learning at both sites. This report includes the project overview, project implementation, its evaluation framework, and initial findings.

Keywords Synchronous technology · Multicultural awareness · EFL learning and instruction · Teacher education · International research collaboration · Design-based research

Introduction

Technology such as Adobe Connect (Adobe Systems Inc. 2014) offers desktop or wireless device users instructor-student and student-student synchronous communication through audio, video, text chat, presentation display, breakout rooms, white board collaboration, polling, and desktop/application sharing. Implementing a web-conferencing platform in an online course may improve students' perceptions of the course activities and could increase participation and motivation (Hudson et al. 2012). Synchronous communication can also have a positive impact on forming relationships within the course, dissolving barriers in online learning that tend to foster student isolation, and constructing a sense of community as a result of identity-building opportunities (Falloon 2011).

A majority of those entering the teaching profession remain white, middle-class females (National Center for Education

Statistics Aud et al. 2012). This cultural mismatch between students and their teachers, who often have limited personal experience with people of diverse cultures, can produce understandings that often impair students' classroom success. Teacher preparation programs need to challenge teacher candidates to step out of their cultural comfort zone, not only to examine their multicultural attitudes but also to expand their knowledge of varied multicultural issues in education (Gay and Kirkland 2010).

One of the identified challenges in learning English as a Foreign Language (EFL) is to identify opportunities to interact with native speakers and become immersed in the native speaking culture (Wu and Marek 2009). Considering the ease at which web-conferencing technology can bridge distant countries, Wang and his associates (Wang et al. 2013) completed a project of synchronous communications involving students residing in both the USA and in China. Their project produced an enriched learning experience, improved learning motivation and self-efficacy in learning for students on both sides. They recommended the use of synchronous technology "in bridging the gaps among learners and teachers, not only geographically but also culturally." (Wang et al. 2013, 25). This paper reports a collaborative research project between a teacher education program in an American university with an English program in a Chinese university to explore the potential application of synchronous technology to enhance students' cultural awareness and learning through uses of synchronous technology.

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Project Rationale

Three major aims facilitated this collaborative project for both instructional and research purposes. First, teacher education should provide pre-service teachers with intercultural experiences that enable students to develop an understanding and appreciation of cultures other than their own and to possess the necessary cultural knowledge and skills to function appropriately in culturally diverse societies (Helfrich and Bean 2011). Research suggests that more multicultural education in pre-service teacher education positively affects teachers' attitudes and sense of efficacy towards helping culturally and linguistically diverse students (Bodur 2012). Second, there is a strong need for EFL programs in China to find appropriate ways to integrate new technologies to enrich students' EFL learning and to increase the exposure of the students to English speaking cultures. Third, current literature offers little on how synchronous technologies such as Adobe Connect impact the ways in which students broaden their multicultural knowledge or improve language proficiency, specifically in contexts where much of the learning takes place in the classroom.

Project Sites, Participants, and Topics

The American university is a regional comprehensive state university that has six colleges offering 52 undergraduate degrees, 30 graduate degrees, one specialist program and three doctorate programs to over 12,000 undergraduate students and 1500 graduate students in the southeast USA. The Chinese university is a regional university in east China with 19 academic colleges and schools and 9 research institutes and centers. It offers 62 degree programs and has an enrollment of nearly 35,000 undergraduate and graduate students.

The project ran for 16 weeks during the Spring 2016 semester with a total of 75 participants from the American university and 59 participants from the Chinese university. The participants from the American university were undergraduate students in educational programs taking an educational technology course. The Chinese participants were second year English-major students. Table 1 summarizes the Adobe Connect sessions and topics covered in each session.

Project Goals and Implementation

The project has clear instructional goals for both sides and a clear research agenda. For the American university, the instructional goal is to build or enhance multicultural awareness in pre-service teachers. For the Chinese university, the three main instructional goals include the following: (1) to improve communication abilities (with a focus on listening

Table 1 Adobe Connect sessions and topics covered

Session	Topics covered
1 – March 9, 2016	A day in the life of a student
2 – March 23, 2016	Student technology use
3 – March 30, 2016	Education and interests
4 – April 6, 2016	Holidays and celebrations
5 – April 13, 2016	Goals and future plans
6 – April 27, 2016	Common daily phrases

comprehension and speaking), (2) to enhance knowledge of culture in English speaking countries, and (3) to enrich English learning contents through synchronous interactions with American students.

During the project, students from both the American university and the Chinese university met online in Adobe Connect for approximately two hours per session, completing the given learning tasks collaboratively. In every session, both American and Chinese students shared photographs along with their presentations. Students were given time after each presentation to ask questions. Figure 1 depicts a Chinese student presenting during a synchronous session. Figure 2 depicts an American student presenting during a synchronous session.

The project used a number of instruments to collect data including participants' demographic information, the multicultural awareness through the Multicultural Awareness Knowledge Skills Survey (MAKSS) (D'Andrea et al. 2003) and Teacher Multicultural Attitude Survey (TMAS) (Ponterotto et al. 2003) as a pre- and post-intervention measures. Student Watching Guides and interviews were used to collect data from the Chinese students. The recorded synchronous sessions and student reflections were used to collect data from both American and Chinese students.

Initial Project Findings

There are five themes that emerged from the initial project findings:

- Students discovered they are not that much different from each other. One student commented, "One thing I have learned from the Chinese students this semester was that we have more things in common than I thought. Seeing the similarities did make me think about the Chinese culture differently. It helped me realize that they are not that different." Another student mentioned, "One thing that is very similar about American and Chinese culture is our values. In every presentation, we all seemed to value family and friends and the relationships we have with others." These statements were consistent for both American and



Fig. 1 Screen capture of synchronous learning in Adobe Connect

Chinese students throughout the reflection and watching guide data collected.

- Differences are mainly in customs with holidays and food. One student remarked, “One thing that I learned from a Chinese student this semester is that the Chinese have very different holidays than the United States. The Chinese celebrate certain mythical creatures on certain days and they have holidays for mythical creatures that were evil. It was really interesting to hear about these different holidays. It definitely changed the way I think about Chinese culture. It showed me that they celebrate many different

things than we do. This helped me realize that if I have Chinese students in my class that I have to be aware of these certain holidays and make sure that I understand them fully to make the Chinese students feel comfortable.”

- The language barrier was sometimes an obstacle in understanding each other. The student reflections and watching guide data provided a snapshot of the students’ perceptions about the language barrier. An American student commented, “There was an occasional problem understanding their English, but kudos to them for speaking it

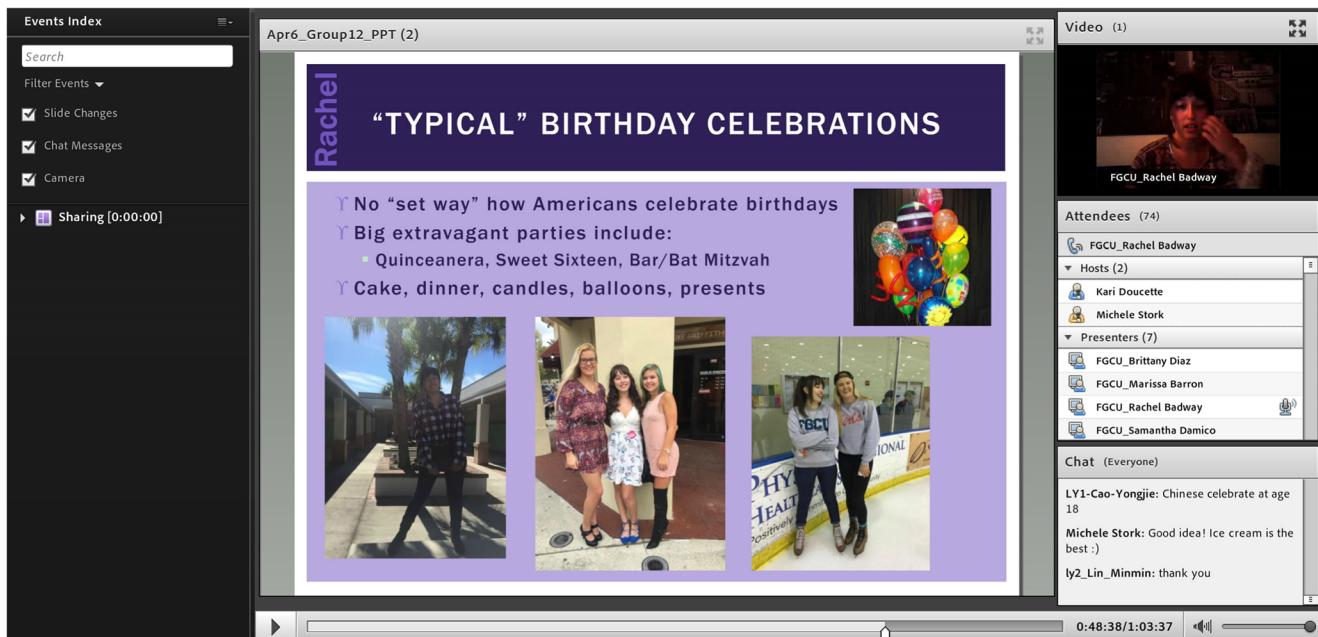


Fig. 2 Screen capture of synchronous learning in Adobe Connect

so well when it's not their first language!" Another mentioned, "I wish I could understand them better." Several Chinese students stated they did not understand American students' comments related to unfamiliar concepts, such as "I got my Associate's Degree at FSW" or "I am a brother of the Kappa Pi chapter at FGCU".

- Use of the synchronous technology platform (Adobe Connect) sometimes presented challenges for understanding each other. Comments such as "Sometimes it was difficult to hear" and "I did not enjoy when the Adobe Connect sessions crashed" were consistent throughout the student reflections.
- Using synchronous technology for multicultural awareness and increased English language proficiency was perceived as a positive experience. One student remarked, "I think this class was a great experience and requirement for students who want to become teachers. It shows us how important it is to promote diversity as well as how important technology in the classroom is." Another student commented, "I enjoyed every bit of this experience and I am very thankful that you were able to set everything up the way that you did." Another student stated, "I think that the [Adobe] Connect Sessions are the perfect example for the use of technology to bridge the gap between cultures. It can also be used to make the students feel more comfortable and welcomed."

Researchers are further analyzing data collected in this project, which will be reported in another article.

Conclusion

Synchronous technology affords opportunities for synchronous interactions and communications among students of different cultures. This affordance offers valuable experiences for students of different cultures to enhance their awareness to different cultures and enable them to better understand each other. With fast developments in information technology and its complementary infrastructures, synchronous technology

can and will certainly be more widely used for learning and instruction and for enhancing student culture awareness.

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