Taking Synchronous Online Courses in the United States: The Perceptions from Asian Students

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Abstract

Online learning has become a new paradigm in education, but very few research-based studies have addressed the multicultural aspects of online learning. Using interviews and observations, this study examines the perceptions of Asian students while taking synchronous online courses in the United States. The specific questions explored in this study are: (1) How do Asian students shift their learning styles from physical classrooms to synchronous online learning environments? (2) What are Asian students' opinions of synchronous online courses? (3) How do Asian students interact in synchronous online learning environments? (4) How do the instructional dimensions of synchronous online courses accommodate the needs of Asian students?
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Introduction

Many institutions of higher education in the United States have entered the distance learning arena because it makes economic sense, and also provides more educational opportunities. An important premise under this new instructional approach is that these educational opportunities should be responsive to the needs of students and the world in which they work and live (Palloff & Pratt, 1999). As a result, the instructional design of online environments should be informed by the needs and special characteristics of the learners. International students are one of the groups that need special attention because they are from different cultures. How to accommodate cultural considerations in online learning environments has become an increasingly important issue to explore, especially as online courses extend their markets around the globe. This study focuses on international students from Asia already studying in the USA with the goal of analyzing their perspectives of taking synchronous online courses in the United States. The synchronous (real time) online course uses a web-based tool which includes both audio and textual communications. These students are in the ironic position of traveling halfway around the world for higher education and then finding themselves enrolled in synchronous online courses. The findings of the research are expected to contribute to the literature about multicultural considerations in synchronous online learning environments as well as to provide suggestions for enhancing the design and implementation of online courses in general.

Toward multicultural considerations

The computer and networked technologies have opened the way for educators to reach the learners "beyond brick and mortar" campuses (McIsaac, 2002). Potential learners are not just from local areas, they could be from other countries around the world. Harasim (2000) has proclaimed that online learning is no longer peripheral or supplementary; it has become an integral part of mainstream society. A new paradigm in learning is just about to emerge.

Following this trend, research in distance education has reflected the rapid growth in the field. However, the literature has indicated little published research on the cultural aspects of online learning and teaching, and there have been few research-based studies (Gunawardena, Wilson, & Nolla, 2003). Matsumoto (1996) described culture as "the set of attitudes, values, beliefs, and behaviors shared by a group of people, but different for each individual, communicated from one generation to the next" (p.16). It is hard to notice how culture influences people without seeing actual artifacts. Artifacts such as foods and advertisements are shaped by culture, but this process is usually activated unconsciously when people think and interact with the external world. Henderson (1996) has reminded us that instructional design is a product of culture, and it cannot and does not exist outside of a consideration of culture. McLoughlin (1999) also stated the need to ensure the coverage of every culture is important in the beginning of adopting an instructional design model. While accommodating cultural differences sounds good in theory, a dilemma happens when there is a conflict between the cultures under consideration. These are the challenges mentioned by Reeves and Reeves (1997) when the core pedagogical values in one culture are culturally inappropriate in another. This dilemma not only causes uncomfortable feelings among learners, but sometimes it will cause serious misunderstandings. McLoughlin (1999) warned that even seemingly innocent design features in the learning environment may nevertheless cause cultural misunderstanding. For example, the color of text in an

online learning environment is critical to Chinese students (Tu, 2001). Chinese interpret red text as a warning, but the instructor or instructional designer may use red just to emphasize the content.

Ku and Lohr (2003) in their case study regarding Chinese students' attitude in online learning experience suggest that teachers should attempt to increase students' self-confidence and motivation in the early stage of the course, design small group activities for giving feedback, maintain a self-directed design of the learning environment, provide varies opportunities for writing and reading, and if possible, encourage face to face interactions among group members and the instructor. Based on their teaching experience, some researchers have also concluded that social and cultural understandings need to be explicitly and honestly discussed in a class (Chen, Mashhadi, Ang, & Harkrider, 1999). In addition, the cultural factors in learning environments need to be negotiated carefully because students from different cultural background usually have different relationships among teachers and students as well as different ways to comment on the work of others (Schallert, Reed, & D-Team, 2003). International students are often unwilling to address the teacher or other students in the class because they are unfamiliar with the ways of holding public discussions in the class. Schallert et al. (2003) also mentioned that teachers need to encourage international students to keep writing in an online class and to lower their internal editor when composing their messages. The instructors need to provide some guides for students to appropriately communicate online such as how to use common paralanguage (Tu, 2001).

Additionally, these online learning experiences are also influenced by the perceptions they hold. Research has shown that not only the online environment itself, but also the perceptions of students will influence their interaction in an online learning environment (Tu, 2001). Different social contexts nurture various perceptions that hold in students' mind. Tu also provided an observation that Chinese students maintain tradition reactions during online learning interactions. For example, "saving face" remains just as important in an online course environment as it does in a physical classroom. In an ongoing longitudinal study, Pan, Tsai, Tsai, Tao, and Cornell (2003) have tried to analyze the elements embedded in Confucian pedagogy and Western pedagogy, and then seek if there is symbiosis or asymbiosis for these different pedagogies. From their draft report, some preliminary results can be applied to online environment course design. For example, one principle they espouse is "encourage Asian students to not work together in the same project groups, thus provide the Asian students with direct opportunities and challenges in using English." (p. 324).

Other than cultural considerations, Asian students also face language barriers in their learning. However, research (Schallert et al., 2003) found that despite the constraints on international students' input in both oral and written discussion, computer-mediated discussion offered increased opportunities for international students to contribute ideas in the class. To what extent Asian students improve their learning experience in online classes is unknown, but it is clear that the online learning environment does have impact on their learning. In addition, most of the studies which have been done so far were focused on asynchronous online learning environments. What would be the differences if the online environments are synchronous rather than asynchronous for Asian students? Do the advantages or disadvantages of Asian students in online learning environments remain the same in both synchronous and asynchronous? More studies are needed to address this issue.

Research Questions

In order to better understand cultural factors in synchronous online learning environments, this study adopts qualitative methods to examine how the synchronous online learning environment and individual cultural differences interact together, and more specifically how Asian students adapt from learning in traditional face-to-face classrooms to learning in synchronous online learning environments. The synchronous online learning environment in this study is a two-way (audio and instant message) communication web-based environment. Students can hear the instructor's lecture, speak to the group, type instant messages and view the PowerPoint slides through the web-based tool. Except for the first class, the course is conducting completely online synchronously. Four specific questions are explored in this study:

- How do Asian students shift their learning styles from physical classrooms to synchronous online learning environments?
- What are Asian students' opinions of synchronous online courses?
- How do Asian students interact in synchronous online learning environments?
- How do the instructional dimensions of synchronous online courses accommodate the needs of Asian students?

Methodology

Participants

Eight participants are expected in this study. However, because the course is only offered in the spring semester, I have only been able to find three participants to join in this study so far. All of these participants participated in a face to face interview, and one of them also took part in the participant observation. The participants are international students who are from Korea, Singapore, and Taiwan, and they are or have been enrolled in the graduate-level synchronous online course on which this study is focused. Data collection and analysis is continuing at this time. These participants so far are all Masters students and they are required to take this course in order to complete their Masters degree. The time they have been in the United States ranges from less than one year to almost two years. Additionally, for one of them, this is the first time taking an online course in the United States. Other demographic factors like gender or age are not considered in this study. However, this study will attempt to have equal number of the participants in both genders and nationality.

Data collection

This study uses semi-structured interviews and participant observations to generate data. Three different audio recoded semi-structured interviews were conducted during March and April, 2004, and another four will be conducted during the spring semester, 2005. The interviews are face-to-face and followed the interview protocol. Each interview is around one hour long. In addition, a one hour long participant observation was conducted during the spring semester, 2004, and another two are expected to be conducted during spring semester 2005. In the observation, I was virtually and physically staying with the participants to observe their interactions both in the online classroom and outside the online classroom during a one-hour period in the class. I recorded the observations in the field notes, and a short informal interview is being conducted to clarify the findings in the observations.

Data analysis

This study adopts part of Carspecken's (1996) reconstructive method to analyze the interview transcriptions and observation field notes. The first step is to employ low-level coding to make out both frequently mentioned concepts and unusual ones. In this study, we use one of the interviews to generate the primary codes. The process is to go through the whole transcription and list examples which can support these primary codes. Then, using these emerging codes as the pre-determined codes in other interviews, those interviews are analyzed to find more examples. Meanwhile, if there are any special events or frequently mentioned concepts in other interviews that did not appear already; new codes will be added with the examples. In addition, some statements related to self identification, such as "I am a person who likes to try different experiences" are also listed in the document.

After the primary codes with supported examples are marked out from these transcriptions, the internal consistency check is performed. This process is to make sure that the examples really support the codes, and to determine whether any new codes or sub-codes should be distinguished from the original primary codes. For the participant observation, similar processes are employed into the data analysis. Specifically, the goal is to make out the patterns of online interaction and strategies the participant used during the online course. The results found in the observations are incorporated into the findings in the interviews.

Using this coding scheme, the results of the interviews and observations are being used to reveal the themes and patterns in the participants' perspectives of their experiences in the synchronous online learning environment.

Findings

Several primary codes and categories are emerging from the data. By integrating these categories and comparing the codes constantly, the data are synthesized into several main themes. The findings below are organized by these themes and interview excerpts are provided to support the findings.

Opinions of synchronous online courses

Synchronous online learning is useful because the participants do learn things from it and the environment is actually better than they originally expected. Originally, the participants thought that synchronous online courses might be just require listening to lecture and exchanging ideas in a simple way, like one participant says:

"*Originally I think that maybe just describe something and o.k. I can get some information and hear some some listen to somebody's thinking, just that.*"

However, after experiencing this synchronous online course, they found it is better than their original expectation. As one participant says:

"*And this environment I think is .um.. Also better than I expected. The sound quality and the   instant message, I think that's good enough for learning than I expected.*"

Although the participants think synchronous online learning is a useful way of learning, they still think students need to meet face to face. One participant, after mentioned several benefits of synchronous online courses still pointed out the concern that "*Basically, the students need to come face to face.*" More critically, one participant addressed that synchronous online course cannot substitute traditional course. As he says:

"*I think it a good way of thinking, but it can...I don't think it can substitute traditional course.*"

He further addresses the point that the use of synchronous online technology should depend upon the course contents. As he says:

"*We cannot apply online course to all courses. It should be depended on the property of the material.*"

In addition, another participant pointed out that the online learning environment is not absolutely a learner-centered design. It will depend on the instructor's pedagogy. As he says,

"*...rather it (synchronous online course) is teacher-centered or student-centered actually depends on the lecturer himself...I think it's not so much about the medium, It's more on the methodology   the teacher adopts.*"

Learning experiences in synchronous online courses

The participants feel the learning experience in the synchronous online course is enjoyable and convenient, because they do not need to come to the physical campus and can be more relaxed during the class. As one participant says:

"*Learning experience, in a way for me, it is quite an enjoyable one…The class is conducted online and it's pretty convenient for me …*"

Although the participants feel more relaxed physically, this does not mean that they pay less attention during the class. One participant addressed his point:

"*We can be very casual, because you are not sitting in a face to face class. So, we can be very   causal, and very at easy. Yeah, having our snack at the same time. Ok. All right, that's one thing, you can be very relaxed. Relaxed doesn't mean not pay attentions, but at least physically you can   be very relaxed and listening*"

Another thing which is convenient for the participants is that the participants can review the previous course through the archives in the web site. The participants can listen to the course one more time if they need. As the participant describes:

"*But..um..it is useful..um..it was useful for me to review the..review the content on the website.*"

Besides, the participants feel nervous when they need to speak out their ideas online, because they are afraid of making language mistakes and other classmates might not understand them. As they describe:

"*Speak...I...will be a little nervous. Yeah, because you know many potential students, classmates   are listening to you. Yeah, so I am afraid that I was saying something wrong or   umm…grammar…grammatically incorrect.*"

"*I found sometimes I still stumbled a lot when I need to present my ideas...You will be thinking if I speak in a correct way, so that the rest of the class knows what I am talking about.*"

In addition to the feeling of taking synchronous course, the participants think they lack the interactions with other students except for the students in their own sub-group. There are not much inter-group interactions, and as a result, the whole class lacks the sense of learning community. As they describe:

"*...actually we don't have many interactions with rest of group members except within our own   group*"

"*There was no chance to communicate with them (other students)...we use to   communicate within the team.*"

"*Not enough to build a learning community.*"

Challenges in synchronous online courses

A big challenge mentioned across the participants is the communication issue. The synchronous online communication lacks the facial expression, and this makes it harder for the participants to understand what their classmates are saying. This relates to the language barrier issue, but seeing people would help them to understand different accents or guess what their classmates are saying. As one of the participants describes:

"*…it's always easier for us to meet face to face because meeting face to face at least you are able to get expression, and another person you are able to tell sometimes even though you are not be   able to understand the words, but you are able to tell how he or he is expressing at that moment.*"

In terms of communication, synchronous online learning makes it difficult for students to illustrate their ideas or do a live demonstration. Especially when the participants cannot articulate their ideas clearly by speaking, being able to draw a graphic would help to express their thinking. This challenge as one participant says:

> *"Online is pretty difficult to so call draw your idea for the three of us, but if we meet face to face we are able to draw down our ideas as you draw things out. To draw a diagram and so on so far."*

In addition, in the synchronous online course asking questions is not as easy as in the traditional face-to-face course. The instructor might not see your messages, or you have to wait for a while. One participant describes:

> *"... online class when you need to carry out a doubt, you have to take turns. You have to give cue…and it's just a long cue at a time to just ask a question. So, at least at face to face you have eye contacts, and easier to get attentions of the lecturer"*

Besides, there are fewer opportunities for informal interactions in synchronous online courses, and thus it is harder for classmates to become friends in synchronous online courses. One participant mentioned this in the interview:

> *"Because many informal interactions are sitting in traditional class…, so there is much less chances for us, students to interact informally (in online class)."*

Another challenge found both in the interview and participant observation is that the participants cannot listen to the lecture and type or read instant messages at the same time. As one participant describes:

> *"I...will have to concentrate to what Dr. XXX said, so I listen to him. If I umm...if I pay attention to the message below here, I cannot read and listen. You will be confused."*

Learning barriers in synchronous online courses

Language is biggest problem for the participants. It affects not only their understanding of others, but also their expression of ideas. For example, there are communication problems. As one participant describes his experience:

> *"There are times when I need to ask certain questions I found that there are times when my lecturer might not surly understand or misunderstand what I am speaking. So there are certain times I need to rephrase few times."*

Other common issue mentioned by the participants is that other students sometimes speak too fast for them to catch what they said. In addition, as noted above in the paper, sometime the participants cannot understand what other students say because of their accents. This problem was mentioned by a participant:

> *"Some students they speak so fast that I cannot fully understand, so I have to guess. I don't like the feeling to guess everything."*

In addition, due to the language barrier, the participants tend to be more reserved in the class, and the consequence is that they seem to be not really participated in the class. As one participant describes:

> *"I think yes the biggest constraint will be the language, because if you are not at easy with that language that being used so what happen was that you tend to be more reserved, and then you cannot do discuss more. So, what happened is that then you will seem to be as not really participated in that class."*

Ways to improve synchronous online learning experience

The participants would like to establish some regular face-to-face meetings during the course, so that they can know each other better and clarify some communication problems during those meetings. As one participant describes:

> *"At the midpoint, the lecturer might consider to gather all of us to meet face to face. Maybe just in the midpoint we probably as a group hang out. Those strategies we can communicate better. Just to take feedback of what difficulties everyone has in communicating in online, so that we can all come out with something."*

In addition, some asynchronous techniques could be adopted so that topics can be followed up and the participants would have more time to write and think about their responses. For example, adopting an online forum might be a good way to do that. As one participant says:

> *"I always have the idea that a forum can actually help. Do encourage participants in the online class to post their ideas, because in a forum. Questions and doubts can always be followed up. Everyone can come in holds a view on a certain idea, and at anytime."*

With respect to what the instructor can do, the participants think maybe there should be more inter-group activities so that they can experience more interactions with other classmates. As one participant describes:

> *"I think the teacher could have the groups in the class interact more with each other, because I think although I have difficulty, I don't know much about other groups. We are basically very much in our group."*

Other potential way to improve the participants' learning in synchronous online learning is to incorporate more multimedia elements, such as movies. The participants also mention the possibility to have a video conference in the class. As the participant describes:

"*If it can incorporate more multimedia..um...materials, such as movies or such as what I just said. Like video conference. It will provide more information other than just the white board.*"

Cultural factors and other considerations in taking synchronous online courses

Very few findings have been explicitly identified as cultural factors in this study. One thing mentioned by one participant is that he seems to be more reserved compared to his American classmates. As he describes:

"*I only see it's only appropriate for me to ask question when it's very quiet, No one else is asking question ... I think coming from Asian background, somehow, just more reserved. In that sense very different from USA counterparts.*"

Another participant also mentioned that it is nearly impossible for him to understand the conversation when the content is related to American culture, even if he knows every word being used in the conversation. He provides an example:

"*Some American idiom stories and I totally have no ideas what he is talking about. Even I understand the terms being used, I still don't understand the whole story. Additionally, when they say some jokes I cannot understand neither, even I know what the words mean.*"

Since the language barrier is obviously a big concern while taking a synchronous online course, I also asked a hypothetical question to find out what factors would influence their decision making about whether to take a synchronous online course if English comprehension was not a problem for them. The results show that the participants think this will depend on the location, cost, course contents, and their personal schedule. If they lived far away from the campus, they might consider taking online course. If the online course were cheaper than face to face course, they might consider taking the online course. If the course contents were difficult and need more thinking such as statistic course, they might consider taking it face to face. In addition, the decision will depend on their personal schedule. If the time for the synchronous online course does not fit their schedule, they would not take it.

Conclusion

Although it is still ongoing, this study suggests that there are not many differences in terms of the way the participants learn and prepare for class between traditional face to face courses and synchronous online courses. The participants still need to spend the same amount of effort to work on the assignments, as well as attend the course discussion online at the specific time block. One difference is that the participants are more physically relaxed in the synchronous online course. One disadvantage for these Asian participants in the synchronous online course is that they cannot listen to the lecture and read the instant messages at the same time. They have to concentrate on one or the other of them.

In this study, several patterns regarding the participants' views and learning experiences emerged. Each pattern represents a concern of the participants and also provides the answers to our research questions regarding Asian students' communication in the synchronous online course as well as their opinions of it. These findings can be summarized as follows:

- Synchronous online courses are useful, but they cannot substitute for face to face courses
- Synchronous online courses lack the sense of learning community, and lack the informal interactions with classmates
- Asian students are nervous of speaking out in the synchronous online course because they are afraid of making grammatical mistakes
- Language barriers are the biggest challenge for Asian students in synchronous online courses
- Asking questions and expressing ideas is more difficult in synchronous online courses

In addition, several ways have been identified to improve Asian students' learning experience in the synchronous online course:

- Establish some regular face to face meetings for synchronous online courses
- Speak slower in synchronous online courses (both the instructor and students)
- Incorporate some asynchronous techniques to enhance learning in synchronous online courses
- Design some inter-group activities to encourage interactions in synchronous online courses
- Summarize course discussions at the end of class

Future studies

This study has provided a clearer picture of taking synchronous online courses in the United States from the perspectives of Asian students. Some potential topics for further research have emerged from this study. They are:

- Identify the asynchronous online techniques which can help Asian students to express their ideas, as well as how to incorporate these components into synchronous online courses.
- How to manage two way communications in synchronous online courses?
- How to design group and inter-group activities to help Asian students get involved in course discussions?
- How to balance online and face to face components in a course to help Asian students learn better?

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