

Cultural Influences on Chinese Students' Asynchronous Online Learning in a Canadian University

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Abstract

This study explored six Chinese graduate students' asynchronous online learning in a large urban Canadian university. Individual interviews in Mandarin elicited their perceptions of online learning, their participation in it, and the cultural factors that influenced their experiences.

In general, the participants had a positive attitude towards online courses. They perceived that online learning had both advantages and disadvantages for their studies in Canada. The study revealed some features of their participation in online courses, particularly the factors that affected their contribution of messages and their personal experiences. The study also identified six cultural factors that affected their online learning. These findings prompted some suggestions for Western instructors in online courses.

Résumé

Cette étude explore l'apprentissage en ligne asynchrone de six étudiants diplômés chinois dans une grande université urbaine canadienne. Des entrevues individuelles en mandarin rendent leurs perceptions de l'apprentissage en ligne, leur participation à ces cours et les facteurs culturels qui ont influencé leurs expériences. En général, les participants avaient une attitude positive envers les cours en ligne. Ils considéraient que l'apprentissage en ligne avait des avantages et des inconvénients pour leurs études au Canada. L'étude a révélé certaines caractéristiques de leur participation dans les cours en ligne, particulièrement les facteurs qui affectent leur contribution en messages et leurs expériences personnelles. L'étude a aussi permis d'identifier six facteurs culturels qui affectent l'apprentissage en ligne. Ces résultats suggèrent des recommandations pour les formateurs en ligne occidentaux.

Introduction

This study explores Chinese students' asynchronous online learning and how cultural factors influence it. The study investigates Chinese graduate students at a large urban graduate school in Canada in order to discover: 1) how Chinese students perceive asynchronous online learning; 2) how Chinese students participate in asynchronous online learning; and 3) the

cultural factors that affect their participation in asynchronous online learning.

The research literature reveals that cultural differences between China and the West can affect Chinese students' learning and their success in Western universities (Flowerdew & Miller, 1995; Kirby, Woodhouse, & Ma, 1999). First, Chinese students' approaches to learning and their understanding of academic values often differ from those in the Western nations. Second, Chinese students are often not familiar with the local culture of Western countries in which they are studying. Third, the culture of academic disciplines in Western universities often differs from that in China. The learning environments, curriculum theories, teaching practices and evaluation systems infused in Western universities encourage the development of Western educational values; this is also true of the design of Western online learning systems. We can therefore hypothesize that Chinese students taking online courses in Western universities will face challenges in adapting to these new learning environments.

A small number of studies have explored Chinese students' online learning in Western universities. However, these investigations have been neither numerous nor thorough enough to provide practical insights into Chinese students' perceptions of and participation in asynchronous online learning in Western universities and into the cultural influences on that learning. This study will help to bridge this gap by exploring the dynamics of Chinese students' online learning (Mason, 2001).

Theoretical Framework

Three perspectives underlie the theoretical framework of this study: Western students' perceptions of and participation in online learning, Chinese students' online learning in Western countries, and the cultural influences on Chinese students studying in the West.

Western Students' Perceptions of and Participation in Asynchronous Online Learning

Western students are generally satisfied with their online learning experiences and have a positive attitude towards online learning (Howland & Moore, 2002; Wyatt, 2005). These positive attitudes are reflected in their perceptions of the advantages of online learning, such as increased interaction and participation (McAlpine, Lockerbie, Ramsay, & Beaman, 2002; Vonderwell, 2003), flexibility and convenience of learning (Gabriel, 2004; Song, Singleton, Hill, & Koh, 2004), more effective learning compared to face-to-face learning (Gabriel, 2004; McAlpine et al., 2002), easy access to various knowledge and support bases (Ali, Hodson-

Carlton, & Ryan, 2004; Daugherty & Funke, 1998), self-directed learning (Gabriel, 2004; Howland & Moore, 2002), multiple perspectives (Gabriel, 2004; Jin, 2005), democratic learning (Ali et al., 2004), self-confidence gained in learning (Gabriel, 2004), increased motivation for participation, improved technical skills (Daugherty & Funke, 1998) and others.

Although they enjoy its positive aspects, online learners also suffer from the various challenges of online learning, such as coursework and information overload (Gabriel, 2004; Wyatt, 2005), lack of immediate response (Jin, 2005; Vonderwell, 2003), missing visual cues (Howland & Moore, 2002; McAlpine et al., 2002), time-consuming (Howland & Moore, 2002; Gabriel, 2004), technical difficulties (Jin, 2005; Gabriel, 2004), lack of human interaction (Vonderwell, 2003; Wyatt, 2005), lack of community (Song et al., 2004; Vonderwell, 2003), difficulty in understanding instructional goals (Howland & Moore, 2002; Song et al., 2004), inability to think and prepare messages while online (Gabriel, 2004), loss of motivation to contribute (McAlpine et al., 2002) and others.

Studies about students' participation in asynchronous online learning in the West have examined necessary learning skills, peer behaviours and the quantitative data on students' participation. For example, Burge (1994) identified three types of online learning skills: operational, information-processing, and stress-management. She also identified four types of peer behaviours for online learning: participation, response, providing affective feedback, and forwarding short, focused messages. Poole (2000) investigated the number of messages her students posted and found that they each posted 73 messages every person on average in 15 weeks. Individual students in Gabriel's (2004) study posted 67 messages on average (ranging from 49 to 91) in one term.

Chinese Students' Online Learning in Western universities

Chinese Students' Perceptions of Online Learning. Ku and Lohr (2003) studied Chinese students' perceptions of their first online learning experiences in an American university. Student attitude survey data indicated that the Chinese students generally had a positive attitude towards the online course. They liked online courses because they were convenient, flexible, and self-regulated. The Chinese students thought that the advantages of online learning were "real" participation with peers, focused interactions, fewer language barriers, possibility of arranging personal meetings with group members, ability to work on their own projects and ideas, and increased intellectual interaction with their American peers (Ku & Lohr, 2003). The Chinese students in Cifuentes and Shih's (2001) study believed that online learning could provide authentic language learning and opportunities for cultural exchange.

Cinfuents and Shih's (2001) and Tu's (2001) studies both found that Chinese students perceived the limitations of online learning were the restrictions of text-based communication, the frustration of slow or missing responses from their partner, and the time consumed in learning. The Chinese students also reported difficulty in understanding the tutor's expectations because of a sense of detachment, time issues related to the different time zones (Cinfuents & Shih, 2001), difficulty in following the train of thought, and the absence of non-verbal cues (Tu, 2001). Ku and Lohr (2003) discovered that Chinese students disliked online courses because of the isolation and loneliness of online learning, unconstructive feedback provided by some peers, temporary disappearance of teammates, and a lack of language and cultural exchange.

Chinese Students' Participation in Online Learning. Research about Chinese students' participation in online learning in Western universities revealed that they were inactive and were not motivated to participate in online discussion (Shih & Cifuentes, 2003). They felt uncomfortable expressing their ideas in a public area because they did not know the readers of their messages and were afraid of losing face or voicing opinions that they thought would be less valuable (Shih & Cifuentes, 2003; Tu, 2001). The Chinese students in Tu's (2001) study thought that reading and writing messages were an exhaustive process. In addition, Ku and Lohr (2003) reported that Chinese students felt uneasy when the course content was nonlinear and the quality of feedback by their peers was uncertain. They liked to work in small groups, but did not like to work on group projects. They felt confident and assertive in circumstances where they could reflect thoroughly before they posted their messages.

Cultural Issues of Chinese Students' Online Learning in the West. Cifuentes and Shih conducted two studies (Cifuentes & Shih, 2001; Shih & Cifuentes, 2003), using Chinese university students in Taiwan paired with pre-service students in the U.S. so the Americans could tutor the Chinese students to improve their English writing skills. They identified some intercultural issues and phenomena in one-on-one email exchanges: the need for visual images, bewilderment of the Taiwanese students, excessive expressions of gratitude by Taiwanese students, disparate expectations, direct versus indirect writing, misinterpretations, and Chinese students' consideration of their online tutors as knowledgeable authorities, whereas many of the American students refused to take on this role and preferred to correspond in the role as a friend.

In addition, Tu (2001) also identified a few cultural factors that could affect Chinese students' perceptions of CMC, such as: the text color used by the instructor, social relationships with the instructor and peers, face-saving and selective image, anxiety over unexpected chatting invitations

(especially from the instructor), and paralinguistic techniques such as emoticons and acronyms.

From the review of these few studies of Chinese students' online learning in Western universities, we can find that, although there are a few studies about Chinese students' perceptions of online learning in Western universities, research about Chinese students' participation in online learning and the cultural factors that affect their online learning in the West is still lacking. Additionally, in the two studies conducted by Cifuentes and Shih, one-on-one email exchange was the main communication method and the discussion forums in the second study were not fully used by Chinese students. Thus, these two studies could not investigate the Chinese students' participation in online group discussions. Also, the Chinese students participated in online learning from their home university in Taiwan, and the numbers of Chinese and American students were equal. Therefore, Western cultural influences were less obvious than Chinese cultural influences. As a result, these studies failed to identify cultural factors that might affect Chinese students' participation in online learning where Western culture dominates.

Cultural Influences on Chinese Students in Western Universities

Chinese students' online learning is greatly influenced by their cultural experiences in education, which in China often differ from those assumed by Western academic culture and conventions (Kirby, et al., 1999). Chinese students' experiences of teaching and learning in the Chinese system influence their studies in Western universities through three aspects of culture: approaches to teaching and learning, local culture, and disciplinary culture.

Influences of Chinese approaches to learning and teaching. Chinese teaching philosophy demands that students respect and obey their teachers (Liu, 1986). The relationship between students and teachers is strongly hierarchical: teachers have absolute authority and students are not encouraged to question or challenge a teacher's knowledge (Biggs & Watkins, 1999; Chan, 1999; Salili, 2001). Chinese students are often considered reluctant to present opinions or ask questions, even when invited to, because they generally play a passive, compliant role in class (Flowerdew & Miller, 1995). Giving lectures is the dominant teaching method in Chinese classes (Chan, 1999), which are marked by one-way communication from teacher to students; students interact and participate less in Chinese classes than in Western ones (Chan, 1999; Flowerdew & Miller, 1995).

Chinese students are thought to be lacking in critical and creative thinking (Flowerdew & Miller, 1995), which are highly valued in Western

educational systems. For Chinese, knowledge is something that should be conserved and reproduced rather than needing to be developed and rethought as Westerners believe (Ballard & Clanchy, 1991). Hence, Chinese students prefer to uncritically accept and memorize the "standard" textbook content, and often replicate the instructor's lecture or the facts in a textbook instead of presenting their own thoughts in assignments and examinations (Flowerdew & Miller, 1995; Watkins & Biggs, 2001). Nevertheless, Biggs and Watkins (1999) argued that Chinese students were not deficient in critical thinking at all but preferred to respond closely to the instructor's question. As a result, their responses may not go beyond the instructor's expectations and thus sound uncritical, even when they differ from the textbook.

Chinese students have a higher motivation for achievement than many other ethnic groups. Studies in the United States (Chen, Stevenson, Hayward, & Burgess, 1995) and Great Britain (Salili, 1996; Woodrow & Sham, 2001) suggested that Chinese students had a stronger achievement motivation than African-American, Hispanic, and Anglo-Saxon students. Chinese students studying in Australia were more fearful of failure than were Australian students (Smith & Smith, 1999).

Influences of Western Local Culture. By local culture, we refer to the assumptions governing interactions and daily life with others that members of the host society have internalized and no longer consciously think about. In contrast, these assumptions are alien to foreign students (Flowerdew & Miller, 1995). Local culture may include such aspects of daily life as social activities and events, TV programs and movies, sports, religious events, holidays, and all forms of personal interaction, including interactions within the teaching and learning environment. Local culture manifests its importance when it is referenced to explain certain concepts (Flowerdew & Miller, 1995).

Flowerdew and Miller (1995) found that Chinese students in a Hong Kong university misunderstood the illustrative examples provided by Western lecturers because they did not know the examples or could not recognize their English names, even though they knew the Chinese names or phonology. This also holds true for Chinese students studying overseas. Chinese students studying in the U.S. often think they do not have the same interests as their American colleagues; thus, the two groups have difficulty understanding each other (Feng, 1991). Chinese students studying social sciences in America need a better understanding of American culture, values, and social systems than those studying natural sciences and engineering (Feng, 1991). Further, Chinese students may understand only the literal but not the figurative meaning of an English idiom (Ladd & Ruby, 1999) and may not understand the humor of Western society (Feng, 1991; Flowerdew & Miller, 1995).

Influences of Disciplinary Culture. Chinese students may not know “the theories, concepts, norms, terms, and so on of a particular academic discipline” (Flowerdew & Miller, 1995, p. 366) that they are studying in Western schools. Becher (1981, 1987) declared that the forms of language and the central terminologies of various disciplines differed between Chinese and English. International students sometimes have been perceived as poor academic writers because their rhetorical styles and patterns of argument were inconsistent with the instructor's expectations (Kaplan, 1966, 1972). González, Chen and Sanchez (2001) found that Chinese students tended to adopt an indirect or circular pattern of expression which is not favored in Western rhetoric; thus, Chinese students' writing often lacks unity and coherence when viewed in Western terms. The authors further discovered that some metaphors used in Chinese students' writing were hard for American readers to understand, because a Chinese metaphor “is not readily used as a cultural convention among English speakers” (p. 644). In addition, the development of some disciplines differs among cultures (Flowerdew & Miller, 1995). For example, the research objectives, research methods, and philosophical rationales underpinning certain disciplines in China differ from those in Western countries.

Research Methods

This study aims to generate a theory about Chinese students' (individuals) perceptions, interaction, actions, and engagement in the process of asynchronous online learning (a phenomenon) that relate to the particular context of a Western university (a particular situation). Therefore, we took a grounded theory approach to our research (Chentiz & Swanson, 1986; Creswell, 1998). When we analyzed the data, we had no particular theory in our mind about Chinese students' online learning in the West; instead, we tried to inductively construct a theory about it. All the themes we found emerged from the data analysis through thorough, repeated, line-by-line reading of the interview transcripts (Bogdan & Biklen, 1992).

Six women Chinese graduate students, studying in three different programs at the Education department of a large urban graduate school in Canada, participated in the research. All six participants were from Mainland China and Mandarin was their mother language. Each had acquired a Bachelor's or Master's degree. Five of them had worked as English teachers in China. They had not previously studied in any Western institute for more than one year and had no online learning experience before they started their studies at their current graduate school. This last criterion was important, because English as Second

Language students may change their learning styles as they gain exposure to the Western culture and educational system (Reid, 1987; Smith & Smith, 1999). The six participants took online courses to attain credits for their on-campus programs at either Master's or Doctoral level. However, no more specific information will be provided in this paper, because it could be used to identify each participant easily. Table 1 displays information about the six participants' educational backgrounds and the status of their studies when the research was conducted.

We collected data through individual, face-to-face interviews, each about 30 minutes. We primarily used 10 pre-set, open-ended interview questions in order to ensure that the respondents would produce the target data (see appendix for interview questions). However, the questions asked during the interviews were not restricted to the pre-set questions. We asked participants supplementary follow-up questions in order to clarify or elicit details (Strauss & Corbin, 1998). Because their English could have restricted their answering freely (Lin, 2002), we interviewed the participants in Mandarin to ensure accurate expression and deep reflection. All interviews were tape-recorded, transcribed verbatim and analyzed by the first author with the support of the second author.

For this study, we defined perceptions as students' awareness and understanding of the advantages and disadvantages of asynchronous online learning. We also defined participation as activities or learning strategies that students carried out in their online learning, specifically composition of online discussion messages, engagement in online group work, and preferences for online assignments.

Table 1
Participants' Educational Backgrounds and Status of Studies

<i>Participants</i>	<i>Elle</i>	<i>Lydia</i>	<i>Min</i>	<i>Nina</i>	<i>Pearl</i>	<i>Sofia</i>
Last degree earned in China	Bach.	Mast.	Mast.	Mast.	Bach.	Bach.
Subject studied in China	Engl.	Engl.	Engl.	Engl.	Engl.	Engl.
First term took online course	2	1	1	3	3	1
Total online course(s) taken before interview	1	2	1	1	5	1
Online course(s) taking when interviewed	0	1	1	0	0	0

Findings

Three major themes emerged from the interviews with participants: the Chinese students' perceptions of asynchronous online learning, their participation in asynchronous online learning, and the cultural factors that affected their online learning.

Chinese Students' Perceptions of Asynchronous Online Learning

The Chinese students had a positive attitude towards asynchronous online learning. They declared that they liked online courses, although not everyone's experience was positive. One participant said "I gradually began to like [on-line learning]. I did not like it at the beginning. I felt very odd at the beginning." They enjoyed taking asynchronous online courses because these courses had some advantages for their studies in Canada.

Fewer language barriers. The Chinese students believed that they faced fewer language barriers when taking asynchronous online courses than when taking face-to-face courses:

I think that face-to-face courses are not as profitable as on-line courses for me in the short term. [On-line courses are] advantageous to learn knowledge and to communicate [with others]. At least, on-line courses can help me overcome the psychological pressure that my language abilities are not as good as the native speakers'. (Elle)

Two major reasons contribute to this belief. First, asynchronous, delayed communication gives the students more time to read, understand, and write a response. Second, the text-based online discussion required only English reading and writing skills; listening and speaking skills are more difficult to master. However, some of the participants found online communication very formal and lacking in visual cues, thus demanding higher English writing proficiency to compensate for this lack.

More participation than in face-to-face courses. The participants believed that they joined in online class discussions more than in face-to-face setting for two reasons: First, they had more time to think and more chances to express their ideas; and second, the online situation allowed them to modify their personal characteristics and mitigated the effects of their traditional approaches to learning. Traditionally, Chinese students are reserved and very careful about "saving face"; the avoidance of face-to-face meetings in asynchronous online learning allowed them to feel that they could write without inhibition about anything.

Multiple perspectives. Some participants believed that online discussion and group work could provide multiple perspectives on learning topics,

which would help them learn effectively or could enrich their learning experience. One participant stated "reading notes is just like listening to others' speech. I heard different voices, different perspectives of viewing the same thing". (Lydia)

More effective learning than in face-to-face situations. The participants thought that they could learn more and reflect more deeply on course content in asynchronous online learning than in face-to-face learning. They reported that fewer language barriers, the presence of multiple perspectives, writing- and reading-based communication, less interference from distractions, constantly available transcripts of the communication, time-delayed communication, and the ability to use time more effectively all led to the belief that they had learned more effectively in asynchronous online courses.

In addition to these four major advantages, the participants also believed that a flexible learning schedule and place-independence were the advantages of asynchronous online learning. One participant even claimed that it was easier to get good grades in asynchronous online courses because all the learner's efforts were clearly displayed to the instructor:

I think that it is easier to get a good grade in online learning than in the classroom. This is because if you have spent enough time and if you have worked hard, your efforts are displayed there. It is easier for the teacher to observe what you have been doing. The instructor can see all the efforts you have made. (Min)

However, the participants also believed that asynchronous online learning had disadvantages, which made them uneasy about taking online courses or even prevented them from taking these courses.

Online courses consume more time than face-to-face courses. Four of the six participants believed that online courses consumed more time than face-to-face courses; one even thought that the time spent on online courses was at least twice as much as the time spent on face-to-face courses. The time spent on online courses varied, depending on the specific situation for each online course. Familiarity with the course content, the number of students participating in the online course, and whether peers were active in an online course affected the time they spent.

Lack of immediate communication. The participants agreed that the communication in asynchronous online learning is not as immediate as in face-to-face learning. The lack of an immediate response from the instructor made them feel less direct connection with the instructor and inhibited clarifying uncertainties quickly. Thus, they felt that it was difficult to take online courses.

Missing non-verbal clues in communication. The participants believed that online communication was very restrictive, being only text-based. One could not use body gestures or other non-verbal means for communication. They felt that this single channel was not conducive to communicating and expressing their ideas. Depending exclusively on written language made one participant feel a stronger demand for English writing abilities than in face-to-face learning. The participants also declared that the online learning environment might lose some non-verbal clues that sometimes were constructive for illustrating a point. They experienced difficulties when conducting group work because of this lack of face-to-face communication. One student developed a strategy to use visual communication such as a webcam to overcome this inadequacy.

Further, online learning could not help Chinese students improve their oral English communication proficiency, because it lacked personal contact. The time-flexibility feature sometimes allowed them to procrastinate about participating in discussion so long that they lost the thread of their ideas.

Chinese Students' Participation in Asynchronous Online Learning

Writing and contributing of discussion messages. The number of messages the Chinese students contributed varied, depending on how active each asynchronous online course was. The participants generally posted four or five messages each week (range from one to more than ten). They obtained their ideas for what to write from four main sources: course reading materials, messages from other course participants, related materials from other courses or resources, and personal experiences.

Factors that affected contributing of messages. First, interest in the discussion topics or the reading materials affected the number of messages the participants posted. Second, their messaging depended on whether other students responded. Third, unfamiliarity with the disciplinary culture, including the subject matter and the Canadian educational system, affected their posting of messages. Each participant's personal life also affected contribution. If they could not finish reading the course materials or if the materials were hard to understand, then they might post fewer notes. One participant stated that she would post more messages when she was moderating the course discussion or when other students participated actively.

Preference for contributing new messages. Four of the Chinese students preferred starting new discussion threads rather than building on other participants' messages. They considered new messages as their own reflections on the learning. They also had more topics available to write about if they started a new thread, especially if they started it early in a

week. They built on other students' messages only if they were interested in the topic, if they disagreed with the other person's opinions, if there were many people building on the thread, or if they had thought thoroughly about others' opinions:

I like to write new notes. New posts are my own reflections. ... I seldom post add-on notes. I may add on some notes only when a topic is discussed by more and more people, or when I really do not agree with the opinion in a note. I generally post very few add-on notes. (Nina)

Learned more through writing messages. Many of the participants declared that they learned more by writing messages than by reading messages. They believed that only writing messages could bring about real understanding of a topic. They thought that writing required careful thought and reading, and often involved a search for additional learning materials. They considered writing notes as real participation in the course:

I learned more by writing [notes]. I think, before you write, you certainly need to think carefully, and then search for more materials thoroughly, and then you are able to write. Therefore, I think, through this searching and thinking, the note is completely my own stuff. I really learned. When reading others' notes, I sometimes just read casually, sometimes just forgot or neglected [those notes]. Reading [notes] cannot yield meaningful thinking like writing [notes]. (Sofia)

Two of the participants declared that they learned equally in both ways. They stated that reading messages provided multiple perspectives and produced new ideas, whereas writing messages demanded profound reflection:

I think it is half and half. ... Reading others' notes is just like listening to others speaking. What I heard is another voice, another perspective to view the same thing. If I write on my own, I need to understand; ... I need to think; thus, I can really have some ideas. Writing my own notes can give me deeper insights. (Lydia)

Involvement in online group work. Opinions about online group work varied. Some participants enjoyed online group work, even though there were some awkward situations. They claimed that group projects helped them observe things from multiple perspectives, learn by indirect experience and learn Canadian culture. Some others stated that it was hard to say whether they enjoyed group work or not. They believed that the group members' qualifications affected the final result of group work. One participant asserted unhesitatingly that she did not like group work, despite having had no asynchronous online group-work experience; she

assumed that it was challenging to reach a consensus in online group-work situations.

The participants preferred to work with native English-speaking students in online group work, because they could practice their English skills and could better attain multiple perspectives. Some others asserted that native English speakers were more knowledgeable and had better comprehension of the course content and could thus help to resolve problems raised by language barriers.

Preference about online assignments. Some of the students preferred to do a single big assignment at the end of a term, whereas others preferred to do several small assignments during the term in addition to a final assignment. The latter group believed that small assignments could help learners track their on-going learning outcomes. They felt that this was very important for online learning, which lacked means to verify their learning progress in comparison to a face-to-face learning. They also stated that the final assignment could reflect their mastery of the overall course content. Those who favoured a single big assignment thought that this provided more control over choosing their topic and that writing several small assignments consumed too much time.

Cultural Factors Affecting Chinese students' Asynchronous Online Learning

Unfamiliarity with the disciplinary culture. The participants' unfamiliarity with the disciplinary cultures of education in Canada most obviously affected their participation in asynchronous online learning. Educational theory and practice have developed differently in China than in Canada. Thus, Chinese students studying in the field of education in Canada may not understand the K-12 and provincial educational systems that are familiar to Canadian students. In addition, lack of knowledge about the field of education in Canada and unfamiliarity with its specialized vocabulary affected the Chinese students' participation in asynchronous online learning. The participants believed that, because of their unfamiliarity with the disciplinary culture, they participated less in online discussions, posted fewer messages in online courses, comprehended course content less well, spent more time on learning, or even conflicted with others during online discussions.

Ignorance of Western social life. Chinese students studying in Western universities, whether they are studying online or face-to-face, all encounter problems caused by their not understanding or even misunderstanding Western social life. The participants' ignorance of Canadian social life influenced their engagement in asynchronous online learning in two ways. First, in the field of education one cannot avoid talking about local social life. Because of their deficiency in the facts of Canadian social life, the Chinese students misconstrued some discussion

messages, did not know when it was appropriate to “cut in” during a discussion, and could not understand metaphors drawn from local social life. Consequently, they believed that they wrote fewer messages to the discussion board than they would have if they had understood Canadian culture better. The second effect of the participants' ignorance of Western social life was indirect. Sometimes, online discussions involving topics or events of Canadian social life did not prevent the Chinese students from acquiring disciplinary knowledge but still affected their perceptions of social presence, making them feel detached from their learning community.

The participants apparently had not developed effective strategies to solve the problems triggered by their ignorance of Canadian social life. They believed that it took time to learn Canadian social life fully. They thought that, in online courses, it was inappropriate to ask their peers to explain anything not directly related to the subject matter.

Chinese cultural personality. The participants' cultural personality had interesting effects on their asynchronous online learning. On the one hand, the participants' typically conservative, modest, face-saving Chinese personality reduced their participation in online discussions. Several hesitated to ask questions and some even gave up on a discussion or contributed fewer messages when their opinions conflicted with those of other participants. On the other hand, because online learning involved no face-to-face meetings, some of the participants modified their personality characteristics and behaved differently online. They became more active and “talked more” (posted more messages) in online courses than in face-to-face courses. This personality modification also affected the participants' actions in conflicts that arose during discussions. Most of them declared that they might insist on and argue for their own opinions in online learning more than they would have in face-to-face learning.

Attitudes towards presenting opinions in public. The participants' feelings about “nonsense notes” in online contributions reflect Chinese students' reluctance to present opinions. Half of the participants stated that Chinese students, unlike some native English-speaking students, would not contribute messages without any purpose or concrete content. They themselves contributed no messages that did not directly aid the development of opinions; they only wrote messages that were absolutely aimed at the discussion topics. They thought that this approach increased the time they spent on the online courses and reduced their number of messages.

High achievement motivation. The Chinese students' high level of achievement motivation and strong desire to excel increased their participation in online courses. They spent plenty of time writing assignments as they strove for perfection. Some of them took grammar

and spelling errors in their messages very seriously, believing that the instructors might consider them careless students.

Instructor's authoritative image. Chinese students consider instructors as knowledge authorities more seriously than their Western counterparts do. Therefore, one participant thought that the Chinese students would be less involved than Canadians in discussions that diverged from the instructor's opinion. Some participants believed that the authoritative image of instructor might limit the range of their thinking and prevent them from writing messages that refuted the instructor. However, one of them also felt that they might present more contradictory opinions online, since the online environment reduced the instructor's apparent authority:

As you cannot see each other, some issues can be spoken about without any inhibition. Say anything you want to say. This is advantageous for the development of opinion. Otherwise, in a face-to-face situation, sometimes, when the teacher says something, you may feel embarrassed to refute the teacher. The Westerners do not have this problem; Chinese have this problem. ... Online, you can speak without any inhibition, no matter who he is; you can disagree with him. ... In a face-to-face situation, it is not easy to do so. (Pearl)

The authoritative image of the instructor also led one participant to believe that instructors who made grammar and spelling errors in discussion messages were not serious about their teaching.

Discussion

Like the students in many other studies (e.g., Ku & Lohr, 2003, Wyatt, 2005), the Chinese student participants in this study had a positive attitude towards asynchronous online learning. Most of their perceptions of its strengths and weaknesses were similar to those of other students. Like the Chinese students in Ku and Lohr's (2003) study, some of the participants perceived fewer language barriers in asynchronous online learning. However, unlike the participants in other studies, one of our participants reported she could attain better grades in asynchronous online courses than in face-to-face courses. A reduction of language barriers may enhance Chinese students' understanding of discussion topics, encourage them to express their own thoughts better and stimulate them to participate more in online courses. As a result, they may attain better grades.

The Chinese students in this study contributed an average of four to five messages per person per week to online discussions, a little fewer than the six to ten messages reported in Harasim's (1989) study of Western students, but similar to the numbers in Poole's (2000) and Gabriel's (2004) studies of Western students. However, the numbers in our

study are self-reported rather than actual quantitative statistics, and we did not obtain comparable statistics for non-Chinese students in the same courses. One should therefore be careful about concluding that Chinese students normally post as many messages as non-Chinese students on average.

This study also reveals many features of Chinese students' participation in asynchronous online learning, such as the sources from which they obtained their ideas of what to contribute, various factors that affected their contribution of messages, their preferences to start new discussion topics, their understanding of the roles of writing messages and reading notes in online learning, and their opinions about online group work and assignments.

The major cultural factors influencing the Chinese students' participation in asynchronous online learning included unfamiliarity with the disciplinary culture, ignorance of Western social life, the Chinese cultural personality, attitudes towards presenting opinions in public, high levels of achievement motivation, and their image of the instructor as authoritative. In other words, the cultural factors that affect Chinese students' face-to-face learning in Western universities also influence their online learning in Western universities. To relieve students' publishing nervousness, Davie (1989) intended to spell words incorrectly in his first few messages. However, the present study suggests that instructors should use this strategy carefully, because some Chinese students may think that the instructors are not serious about their teaching tasks if they do not write well. The present study also supports Cahn's (1985) claim that the instructor appears less authoritative in computer-mediated learning.

This research has several limitations. The sample size was small and all six participants were women. All came from a single university. In addition, all six had similar professional backgrounds: each had studied English Literature in China and was studying education in Canada. Thus, they do not represent the wider range of Chinese graduate students who are studying various disciplines in the West. As a consequence, special care should be taken when generalizing the conclusions to other similar situations.

Recommendations

Our study prompted seven suggestions for online instructors of Chinese students in Western universities. Readers will find some of them very similar to recommendation by other researchers, such as Salmon (2000) and Wilson (2001).

1. Be aware that Chinese students may behave differently than North

American students. They may post fewer messages in online discussions, because they are not accustomed to discussion-based learning and hesitate to contradict their peers and instructors in a public forum. Instructors should tell them that the quantity of their messages is also important in their evaluation. Encourage them to contribute as many thoughts as they have to the discussion board. If applicable, specify a minimum number of messages that all students must contribute each week.

2. Encourage Chinese students to contribute and share their opinions, questions, and learning experiences with the whole online class without considering “face-saving”. Tell them that communicating with the whole class will not only help them gain knowledge but also help others improve their studies.
3. As soon as possible, contact any Chinese student in the class who has not participated during the first week, tell them that their participation is not enough and explain why. Understand that these students often avoid contributing because they do not understand that such contributions are essential or feel uncomfortable participating, not because they do not want to contribute. This contact should be confidential; be prepared to help the students overcome any obstacles to participation.
4. Remind the Chinese students that some of their accustomed learning approaches may not be appropriate in Western universities, and that the evaluation methods and required learning activities differ from those used in China. They may find online learning easier in some respects, but also need to know that it is difficult in other respects.
5. Teach the Chinese students to try to think beyond the course materials and divergently (i.e., to disagree with instructors) and to connect the learning materials with their personal experiences.
6. If the course is going to touch upon topics about local social life or local disciplinary knowledge, such as the K-12 school system and provincial educational policy, provide additional resources as references for the Chinese students.
7. Be aware that Chinese students cannot understand some terms, particularly slang and metaphors, used in the course materials and discussions. This is not because of a lack of language ability but rather because of ignorance of local cultural norms.

Conclusion

This study indicates that the key cultural factors that affected Chinese students' online learning in Western countries are the same as those that

affected their studies in face-to-face learning environment in Western countries. Thus, we believe that it is appropriate to transfer the knowledge already gained about face-to-face to online learning situations. Further, this study also indicates that the perceptions and participation of Chinese online students in Western universities are very similar to those of Western students in many aspects. However, it may not be appropriate to assume the same results in the situation that Chinese students learn online in China, because online courses in China are taught using approaches different from those in the West.

This study will help both Chinese students and Western online instructors become aware of the reasons for Chinese students' success or disillusionment in online courses. Such awareness should help both the students and their instructors understand and improve their online practices in order to ensure successful online learning. Though they apply only to the specific situation we examined, our findings may be useful in other similar situations where online educators must cross cultural divisions. We suggest additional studies to confirm how broadly applicable our findings are and how well our recommended solutions can mitigate the reported problems.

Finally, we believe that our research method can be used to study how other cultures approach online learning by exploring learners' pre- and post-online course attitudes and knowledge. Other researchers will need to consider the voices of these learners when similarly investigating the online experiences of students from different cultures.

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Appendix

Interview Questions

1. What are the cultural factors that affect your participation in online learning?
2. What are the effects of Chinese students' learning styles on online learning?
3. What are the factors that make you find it difficult to take online courses? What are the factors that make you feel comfortable about taking online courses? (Do not include computer skills.)
4. What are the effects of your ability in English on your online learning? Do you think that your ability in English is the biggest barrier to taking online courses?
5. How often do you post in your online course? What factors make you write more posts, and what factors make you write fewer posts?
6. Could you describe your experiences of doing group projects in your online courses? Do you like to work with Chinese students or non-Chinese students when doing group projects? Why?
7. How do you figure out what to write in your notes?
8. Do you like to respond to others' notes or to write new notes? Why?
9. What makes you learn more, writing notes or reading notes? Why do you think so?
10. What do you do when you disagree with the opinions of another student in an online course?

