Research and Practice in Technology Enhanced Learning Vol. 1, No. 3 (2006) 221–237
© World Scientific Publishing Company & Asia-Pacific Society for Computers in Education

# CHINESE LEARNERS AND ONLINE DISCUSSIONS: NEW OPPORTUNITIES FOR MULTICULTURAL CLASSROOMS

#### PHILIPPA GERBIC

School of Education, Auckland University of Technology, New Zealand philippa.gerbic@aut.ac.nz

The widespread participation of international and new migrant Chinese students in Western universities has raised fresh issues regarding how these students adapt to new learning cultures where critical thinking and interaction are emphasized and online learning is integral to many courses. This paper reports research in a New Zealand university about the ways in which Chinese students operated in online discussions, and it examines the influence of the computer-mediated communication (CMC) medium and the curriculum on their learning. The study found that a major benefit for Chinese students was their increased participation which arose from the text-based, asynchronous and virtual characteristics of the medium; this mitigated some issues relating to language competence. Chinese students found that reading and writing messages helped them develop their thinking and understanding. The debate, with its controversy and argument was not motivational, but the assessed nature of the activity was highly influential. The research also found that, despite their lack of familiarity with online discussions, the Chinese students adapted and responded successfully to this new learning context.

*Keywords*: Chinese learners; computer-mediated communication; blended learning; online discussions; New Zealand.

### 1. Introduction

In New Zealand universities, like many other universities, classrooms have developed a multicultural character. This heterogeneity has arisen from the increasing numbers of international and exchange students, as well as other learners who arrive as part of the contemporary global migration phenomenon. For all these students, there are many challenges apart from studying in English. Often there is little correspondence between their prior learning experiences at home and their new university learning, where there is an emphasis on critical thinking and interactive learning. In addition, many of these students have never experienced online learning, including online discussions, before and such a blended approach is not part of their expectations for an oncampus course. As students adapt to this new learning environment there are issues of balance — between their own cultural values and perspectives and those of the new learning environment in which they and their families wish them to be successful (Pincas, 2001).

In New Zealand there are now university students from a wide range of Chinese cultures, the most recent being that of the People's Republic of China (PRC). This paper takes a Chinese learner perspective and reports research, earlier discussed in Gerbic (2005), which investigated the ways in which some of these students learn in online discussions in an on-campus setting. Here, the term "Chinese learner" is used to provide a unifying concept for discussion of the research findings, and it refers to students from a Chinese Confucian-heritage culture (CHC). Biggs (1996) described CHC classes as large (over 40 students) and often regarded by Western visitors as authoritarian, didactic, and examination-focused. Using the term in this way raises issues of over-generalizing and regarding all CHC learners as the same. However, I recognize that students come from different nations with varied political and social cultures and histories, and there is a more fine-grained diversity. It is problematic to investigate and interpret a culture other than one's own. I acknowledge that my interpretations and findings in this paper come from my position as a New Zealander, teaching and researching in a Western cultural paradigm, and I caution the reader accordingly. Further knowledge in this area would be well provided by those who are more intimately familiar with Chinese culture.

#### 2. Crosscultural Issues in Learning

In both distance and campus-based universities, crosscultural issues in learning are now widely recognized. Pincas (2001) noted that international students need to adapt to new communities of practice which have their own expectations and norms, and often different pedagogies. At the same time, universities have been establishing their own best practice in online learning, and "by including other cultures and linguistic backgrounds, we may have too quickly arrived at a next layer of complexity that we are not yet ready to grapple with" (Pincas, 2001, p. 34). Other issues that affect learning are the impact of learning in English, which may be based on different thinking styles, and the need for students to develop new literacies, such as "standard English literacy, computer literacy and cultural literacy" (Pincas, 2001, p. 41).

A continuous theme in the literature is the intertwined nature of culture and learning. In addition, McLouglin and Oliver (2000) pointed out that technology is not culturally neutral. Wild & Henderson (1997) observed that culture has probably operated "unknowingly" (p. 184) in the design of instructional materials and identified a mismatch between current designs, which are often derived from a dominant single culture, and new learners from other cultures who find it difficult to connect with these designs, especially those based on flexible learning. Joo (1999) has argued that Internet-based learning has tended to marginalize the culture of developing countries. This may occur through some forms of content which are insensitive to local contexts; different writing styles which may lack the appropriate degree of formality or are too direct; and the use of the English language, which reinforces certain approaches to thinking, for example, left to right, as opposed to Chinese and Arabic, which move from right to left.

Some researchers have developed learning models which specifically address multicultural issues. Henderson (1996, in Wild & Henderson, 1997) described her model which emphasized multiple cultural values and perspectives. McLouglin and Oliver (2000) reported the development of ten design principles for culturally inclusive instructional design. Chen, Mashadi, Ang and Harkrider (1999) discussed the context of Singapore where ethnic diversity has meant that multicultural approaches are essential. They described their efforts using synchronous chat and email to develop cultural pluralism, multiple perspectives, and team-based learning. Success was also attributed to trust building, responsiveness to the issues of individual students, and commitment towards a shared vision of learning. Given the widespread incidence of multicultural classes, there is a need for more research such as this which addresses these issues in practice and evaluates success.

#### 3. Chinese Learners and Learning

The literature in this area now reflects an increasing richness of perspective with diverse views from writers with both Western and CHC backgrounds. While much of the commentary has discussed the role of Confucian philosophy in Chinese learning, researchers have also identified the role of different sociopolitical contexts and the ways in which they have shaped the learning environment. Descriptions are now also available of Chinese learners within their own countries and also in their studies in the West. A selection of this literature is now discussed.

Ballard and Clanchy (1991) provided a stereotypical description of CHC students as rote learners, assessment-driven, and with little interest in critical thinking or disagreeing with the teacher. Another more complex (and more grounded) view has arisen from Bigg's (1996, 1998) work in Hong Kong. He identified the paradox of the Chinese learner (1998) whereby students from CHCs continuously outperform Western students despite being in a learning environment which appeared to be characterized by large classes, authoritarian and didactic teachers, docile students, rote learning, and close attention to examinations. He argued that Chinese learning had generally been viewed through Western paradigms and misinterpreted. Repetition is not concerned with rote learning but involves understanding and a contextual response to the critical need to pass examinations. Even though teachers are authoritarian, they are student-centered and have broadly constructivist beliefs. Working collaboratively and cue-seeking, especially with regard to assessment, is an important activity. Biggs observed that many of these behaviors are highly adaptive, and therefore provided a good base for success for Chinese learners in Western systems.

Volet and Renshaw (1996) supported Bigg's critical view of the negative Chinese learner stereotype. They argued that the stereotype did not consider the behavior as a contextual response and ignored the demands for adaptation when Chinese learners come to the West. They investigated the approaches to learning of Chinese students from Singapore (where English is spoken in school), who were studying in Australian universities, and found that these students were highly responsive to their new context and were influenced by their perceptions of courses in much the same way as Australian students. Achievement was highly motivational, and Volet and Renshaw described these students as "deep achievers" because of the significant relationship between deep and achieving strategies, which the researchers found were absent in Australian students. A broad definition of a "deep approach" is attempting to make sense of content, while the less desirable "surface approach" can be summarized as attempting to remember content without trying to understand its meaning or significance (Gibbs & Coffey, 2004). An "achieving approach" can be characterized by an emphasis on the pragmatics of maximizing success.

The influence of the sociopolitical context has been described by Robinson (1999) in her work on learning in the PRC where she found that Confucian ideas had been strong, but had been modified by Soviet Union and Communist philosophies. She described learning as highly centralized, heavily controlled, and with little teacher and learner autonomy. Individual needs were less important and the emphasis was on the needs of the market economy. As a result, content, memorization, and synthesis were emphasized in preference to thinking skills and analysis. Respect for the teacher was shown by silence and questions were regarded as rude. Jin and Cortazzi (1998) presented a different view of learning in the PRC where students were active and intent listeners in classrooms which were teacher-controlled, but where teachers used teacher-pupil dialogues to scaffold learning and extend students into new learning in a Vygotskian fashion. These two different views may indicate differences in interpretation or a teaching diversity that may occur across any country.

Smith (2001) has criticized research into Chinese learners because, while it has taken into account factors such as Confucian heritage and, in some cases, English language ability, it often has not explicitly taken into account nationality and the effects of different social environments and educational experiences. She highlighted the different contexts of the research about learners from Hong Kong and Singapore. In Hong Kong and Singapore the Chinese culture is dominant and, certainly in the case of Singapore, English is widely spoken; this can be differentiated from Malaysia where, Chinese aspects were minority in a Malay culture and, until recently, Bahasa Malaysia was the language of instruction. In her research into the approaches to learning taken by first-semester Chinese students in Australian universities, she found that there were differences between Malaysian, Hong Kong, and Singaporean Chinese students and these corresponded to their prior educational and social experiences.

### 4. Chinese Learners and Online Discussions

There has been a modest amount of discussion in the literature about the role of computer-mediated communication (CMC) in crosscultural contexts. Gunawardena,

Wilson, and Nolla (2003) identified similar benefits in a multicultural context saying that CMC "can free people from the bonds of physical appearances and enable communication at the level of ideas" (p. 760), but that it lacked contextual cues, and this made resolving differences more difficult. Pincas (2001) noted that written talk could conceal cultural differences because visual and aural cues are missing.

In a study of Chinese postgraduate students enrolled in a distance program in the United States, Tu (2001) argued that the lack of interaction in US classes by Chinese students reduced the value of their learning experiences and ascribed this to the students' CHC heritage, lack of language competence, and a preference for solitary study. He identified 17 issues which impacted on their social presence in the online discussions. These were wide-ranging and included computer literacy, cultural misinterpretations, dealing with the delays and absence of responses, thoughts getting lost, and the absence of nonverbal cues. The most significant issue for the six students in the US study was their language competency; reading and composing messages took time because of their concern about maintaining face. This resulted in low participation by these students. However, Tu (2001) did not consider aspects of the learning context; for example, the distance environment or the voluntary nature of the online discussions.

Pan, Tsai, Tao, and Cornell (2003) also noted the reluctance of their Asian students (mostly from Taiwan and PRC) to participate in online discussions. Their view was that these activities require "self efficacy, assertiveness and being at ease when speaking to one's peers" (p. 321), and these are alien ideas for Asian learners. Such learners were therefore at a disadvantage when technology was included in their courses, because operating in that environment might contradict their traditional pedagogical values and experience.

Yildez and Bichelmeyer (2003) reported findings of a comparative study into participation in face-to-face and virtual classrooms by different kinds of English language speakers, including three Taiwanese students. The international students participated more in the online discussions because they did not have to worry about facets of face-to-face discussions, such as listening, understanding, making a comment on the spot, pronunciation, and turn-taking. However, time was needed to read and comprehend the postings and to respond in English. The students were unused to peer discussions, and avoided challenging and disagreement because it was impolite. The researchers concluded that while there was an improvement in participative equality, with more interaction between the American and international students, there were still linguistic and cultural barriers.

In a recent comparative study of 24 third-year Chinese and Australian undergraduate learners in an Australian university, Smith, Coldwell, Smith, and Murphy (2005) reported that the Chinese students made fewer postings of an intellectual, as opposed to a social or organizational nature, and attributed this to language constraints. Two other possibly influential factors were identified, and these were the students' anxiety about the course requirements and their lack of confidence in the CMC environment.

Chinese learners often experience a gap between their educational experiences in their country of origin and what they encounter in Western universities. However, the success of Chinese learners worldwide has indicated that these students are adaptable and responsive to new learning contexts. Research into Chinese learners and online discussions is in an emergent phase, but there are some indications that CMC environments may enable Chinese learners to participate more in online as opposed to face-to-face discussions, despite issues about the time needed for reading and writing. Further research is needed to establish how this might occur, particularly on the impact of the text-based environment, and this paper is offered as a contribution to that endeavor.

### 5. The Research Study

This research is part of a larger case study project which investigated how undergraduate business students learned in online discussions in a blended environment (a mixture of face-to-face and online elements in an oncampus course). The project took a learner perspective and focused on:

- the influence of the CMC environment, particularly its text-based asynchronous character and its ability to support peer interaction; and
- the influence of the curriculum design, in terms of the learning activities and assessment.

In one of the cases, nine of the participants were Chinese, and this paper presents their perspectives on the way in which they learned in online discussions. Where relevant, comparisons are also made with Kiwi participants. ("Kiwi" is a term commonly used internationally and by the Chinese students to describe students of local New Zealand origin, which may or may not include Maori students.)

### 5.1. Context

The research was situated within a compulsory course in a business degree which was generally regarded as challenging by students. It required the application of principles to real-world situations and the development of reasoning skills. The course had recently been developed for flexible mode, which comprised a two-hour, face-to-face class each week and online activities. The weekly class (25 to 30 students) introduced various topics and theories, and included activities such as case studies and discussions. This was followed by online activities including readings, quizzes, case studies, and a discussion space. The course was supported by a website which included resources, web links, and course materials.

During the semester, the online discussion space was used for a debate, which ran over two weeks of the semester and the intersemester break (two weeks). It was assessed at 15% of final grade. Details can be found in Figure 1.



Fig. 1. Online discussion activity.

## 5.2. Research design

A case study approach was adopted because of its potential for examining learning in a way that is "strong in reality" (Adelman, Kemmis, & Jenkins, 1976). Student learning in online discussions in blended environments is under-researched, and case studies can provide rich description of what is occurring, illuminate the interdependencies between online discussions and face-to-face classes, and address situational complexity in depth. Data was collected from four sources in order to provide multiple points of view and extended triangulation. These data sources were transcripts of the online discussions, interviews, course and performance data, and systems data from the online platform.

Twenty-five students agreed to participate in this case study, including nine Chinese students, and it is their Chinese perspective that is presented in this paper. They are described in Table 1 and have been given English names as pseudonyms to reflect the students' practice of adopting a Western name when they came to study at the University.

All of the participants shared a CHC background and English was a second language (ESL) in which they had demonstrated a level of competence in order to gain access to the University. Six of the students came from the PRC, and three

	Country of Origin	Citizenship	Final Grade	Age	Course State (year)	Previous Online Discussion Experience	Paid Working Hours
Cath	PRC	NZ	С	35 - 40	2	occasionally	none
Fiona	PRC	other	В	20 - 24	2	occasionally	none
Fran	Vietnam	other	$\mathbf{C}$	20 - 24	3	often	11 - 20
Ivan	PRC	other	С	20 - 24	2	none	< 10
Lee	PRC	other	$\mathbf{C}$	25 - 30	3	often	21 - 30
Maya	Indonesia	NZ	В	31 - 34	2	occasionally	31 +
Mike	PRC	NZ	В	35 - 40	2	often	21 - 30
Paula	Malaysia	other	D (fail)	20 - 24	2	often	21 - 30
Toni	PRC	NZ	C	31 - 34	3	occasionally	none

Table 1. Participant descriptors.

of them were from other Asian nations. Five of the students were international students, and four of them had become New Zealand citizens. Compared with the 16 Kiwi learners, the Chinese participants were slightly older, more advanced in their courses, and they obtained more C grades and fewer A grades, with one student failing the course. None of the students had taken part in online learning before enrolling in the degree.

# 6. Results

# 6.1. Systems data

This data indicated full participation of three messages per student, with 80 to 100 postings per class. No data was available on the reading levels of the participants, but 68% of the participants' messages were read 13 to 50 times. While many students choose to disagree with the debate statement, a greater proportion (two-thirds) of the Chinese students disagreed with other students' positions.

# 6.2. Content analysis

The online messages were analyzed using a framework designed to identify deep and surface approaches to learning (Gerbic & Stacey, 2005). The postings were classified by units of meaning (Henri, 1991) against the indicators of deep and surface approaches with 94% of the units of meaning being coded to deep approaches and 6% coded to surface approaches. The most common activities by all students were maximizing understanding, evaluation and critique, asking questions, applying theory, justification, and relating to other comments. Analysis of the course documentation indicated that the nature of the activity meant that such approaches were highly desirable or the approaches were stated in the marking criteria. Surface approaches to learning were mostly categorized by repetition, uncritical acceptance of ideas, concluding with little evidence, and confused statements. None of the confused statements or unevidenced conclusions came from the Chinese students and most of the repetition (81%) and uncritical acceptance (62%) came from the Kiwi students.

### 6.3. Interviews

Students were interviewed after the content analysis of the archived discussions to facilitate in-depth exploration of the students' perceptions and learning strategies. A semistructured approach was taken and students were asked about how they learned generally, in the online discussions for the course, and how the online discussions related to their face-to-face classes. The interviews were intermittently marked by crosscultural and language issues; this resulted in uneven exploration of the issues and, in some cases, may have affected the quality of the data. The participants were very polite and somewhat reluctant to comment negatively. For many of the Chinese students, the concept of the research and their participate in this voluntary activity demonstrated their openness to new dimensions of learning and university cultures. Following transcription, the interviews were analysed using NVivo and emergent themes were identified. These themes are noted by the headings used below.

# 6.3.1. Views of learning and knowledge

Learning in New Zealand was very different for the Chinese students who were unfamiliar with activities such as group projects, critical thinking, and online learning, and only four of them liked discussions. For most of the Chinese students, the classroom and the teacher were far more important because the teacher was perceived as the authority, and the face-to-face class provided quick feedback and assistance, making the subject easier to learn.

## 6.3.2. CMC environment

Eight of the Chinese students said the online discussions helped them to learn. The most common reasons related to the text-based nature of the CMC environment and the way in which reading and writing helped them to understand the subject. The record was available for revisiting, and reading the postings motivated them to start thinking. Students could clarify their own position, develop understanding through reading and discussing the different points of view, and get feedback, including that from students from other cultures. Fiona described how reading helped her:

But after I read some other people's stuff, and I think, ooh probably that means that, or, that makes me think me widely, not concentrate on the narrow way. (Fiona)

Students also said that the need to write a posting which would stand up to their peers' scrutiny also made them think more deeply. This related firstly to their internal thinking, because the debate required them to take up a position, and this needed selection and clarification of theory and ideas, reading and comprehension, and ordering thoughts. For Maya, writing was easier than talking, and she could shape her ideas. Writing helped Mike because it made him summarize his reading and understanding and "sometimes, just the thinking is not enough." Even Toni, who expressed strong dislike of the online discussions affirmed the value of writing; "talking ... is my first reflection ... my first reaction," but writing required her to think about making her ideas meaningful and developing her points logically.

The second dimension to writing was external and related to communicating their ideas to their peers. This motivated them to review their writing, for example, through editing, to persuade others. Ivan described this:

When we're thinking, that's only need to be understood by myself, not others ... but while I was typing to let others know, I needed to, see how I could make others understand what I mean. (Ivan)

Nearly half of the Kiwi students expressed concern about other students reading their postings and there being possible misunderstanding, ridicule or offence, due to the permanent record, or the absence of visual or aural cues. However, this was only an issue for two of the Chinese students, and they expressed more communication anxiety in face-to-face situations. Instead, the online discussions gave them a chance to have discussions with their peers which they liked, and this seemed to compensate for the time involved in reading and writing the postings.

### 6.3.3. The perceived curriculum

The greatest motivation for all the students (Chinese and Kiwi) was being assessed. The Chinese students accepted this as quite normal and were less expressive about the ways in which assessment might have influenced their behavior.

The debate topic with its controversy was highly motivational for most of the Kiwi students, as was the structure of the activity with its requirements of constructing an argument, justifying and defending it in a public forum, and responding to another student's posting. However, not much support for the debate activity was expressed by the Chinese students, and only three of them expressed their liking of the controversial topic or the debate activity. Some of these students expressed concern about disagreeing; for example, Paula and Cath said it was difficult to disagree because there were many comments based on personal experience, and it would be offensive to disagree with those. Paula said that she agreed in class with another Chinese student that they would respond to each other online. Fiona and Fran said they responded, not by disagreeing, but by finding a new or interesting point and developing it further. However, surprisingly, six of the nine Chinese students made responses which disagreed with other students. This was a much greater percentage than that of the Kiwi students where six of the 15 students made responses which disagreed with another student.

## 6.3.4. Relationship to the face-to-face classes

While a quarter of the Kiwi and Chinese students had clear preferences for faceto-face discussions, the rest of the students recognized that the two media were quite different, but complementary, and could see the value of both media for their learning. Chinese student views (where they were expressed) tended to favor the CMC environment; however, the overall preferences of the Chinese students for the structure and guidance of the teacher in class discussions must also be acknowledged. The main themes to emerge were:

(1) Reading/writing and listening/talking modes. Writing was easier than speaking, reading was easier than listening, and a dictionary could always be used. There was a record, and so postings could be read again. Mike and Cath both agreed that it was easier to write than speak their ideas, and Ivan said it was easy to miss things in class.

(2) Virtual and physical presence. Virtual discussions had advantages. There was no need to worry about others' reactions, it was easier to disagree and it was ideas, not identity, that was important. For Cath:

It's easy to disagree with other people rather than face-to-face ... because you face the computer, you not face that guy Interviewer So why's that easier? ... You don't need to care about the response from the other people, right? ... if the guy is angry or no... I don't care about that. I just face the computer. (Cath)

Fran however preferred a physical presence because in the online discussion she had been mistaken for a man and that was embarrassing for her.

(3) Instant and delayed communication. The asynchronous timing of the online discussions gave Chinese (and Kiwi) students time to think, to structure their responses, consider theory, do some research, make their argument, and establish their reasons. Cath and Toni tended to think in Chinese first. Lee, an older male student, commented:

You can spend as much time as you want on that, ahh, when you respond to a certain statement, you can think this very carefully, but face-to-face you know, in terms of times, you have to respond instantly. Instantly. We only have, you know, a short time to think. I try to learn to think in English ... online discussions give you more time to know those ideas ... yes, the time is very important, for understanding. (Lee)

The extra time for thought was recognized by Ivan as improving the quality of the discussion:

When you are talking about something, it's not necessarily thoughtful ... because you have no time to do the research and think about it. (Ivan)

(4) Having a say. The online discussions were strongly supported by the Chinese students because they could join in conversations. Being able to prepare their discussion points meant that they could participate more actively and respond to their Kiwi peers, and this was motivational. This was quite different from face-to-face discussions where most Chinese students were too shy, could not express their ideas fluently, and were afraid that others would make fun of their comments.

### 7. Discussion

### 7.1. Approaches to learning

The online discussion behavior of the Chinese students was characterized by deep approaches. Entwistle and Ramsden (1983) have argued that a student's approaches to learning are a response to the learning context and not a consistent expression of the person or their personality. This study has identified some features of the blended learning context which were influential from the students' point of view, and these are discussed next. The low levels of surface approaches by the students suggest that, despite their initial ambivalence about discussions, they adapted to the course requirements, thus confirming Volet and Renshaw's (1996) findings that Chinese students are highly responsive to new learning contexts and will engage in deep approaches if they perceive that such approaches are valued in the course.

The high levels of deep approaches are a little different from Smith *et al.*'s (2005) findings that Chinese students made less intellectual (as opposed to social and organizational) contributions in their online discussions. That course was similar to this one in that the activity was assessed and the teacher did not contribute to the discussions. The researchers in that study suggested that the main constraining factor was language ability, and possibly the students' lack of comfort in the CMC environment, as well as their anxiety about the course requirements. However, these did not emerge as factors in this study.

### 7.2. Influence of the CMC environment

Some features of the CMC environment contributed positively to the Chinese students' learning and helped to ameliorate language and communication obstacles.

### 7.2.1. Text-based nature

The text-based nature of the medium meant that the students did a significant amount of reading, and this promoted further thinking as they considered others' ideas against their own. One benefit of the CMC environment lies in the ability of students to benchmark (Parry & Dunn, 2000) their understanding of the topic and what is required by looking at other students' work; this may be especially valuable to Chinese and other students who are new to the university and its learning culture with its emphasis on interaction and critical thinking. The ability to see examples in other postings may have reduced anxiety and provided examples of deep approaches.

Writing contributed to learning in two ways for the Chinese students. First, it operated as a vehicle for the internal development and clarification of ideas, second, the need for external communication of those ideas to peers in a way that was defendable and persuasive promoted further thinking. This finding illustrates Garrison and Anderson's (2003) notion of the connection between writing and thinking, and the value of online discussions in having to move from tacit understanding to explicit communication of ideas.

Garrison and Anderson (2003) pointed out that writing has an individual (private) as well as a collaborative (public) dimension, in the sense that writing is a means of determining one's own meaning and also for communicating this to others. There was widespread recognition of this public dimension, with most students paying attention to writing in such a way that would facilitate understanding, and avoid judgement, ridicule and/or offence, especially in a multiracial class. It is interesting that few Chinese students expressed a negative concern about this. Tu (2001) noted the importance of maintaining face in Chinese cultures, but it may be that for these Chinese students, who were campus-based, this is not such an issue in the CMC context because it was subsumed into a more general concern about communicating in English everyday in the course.

### 7.2.2. Peer interaction

The Chinese students liked the increased peer interaction opportunities which arose out of the special characteristics of the CMC environment. They often felt closed out of face-to-face class discussions because the pace in these situations was too fast and they lacked general confidence to join full class or even small group discussions. The text-based and asynchronous nature of the online discussions, as well as their virtual character, improved the quality of their participation because they were not distracted by face-to-face cues and had time to think and prepare their discussions points with the assistance of editing and dictionaries. Yildez and Bichelmeyer (2003) noted a similar finding with their international students. Because of these factors, Chinese students can more easily join university communities. Chester and Gwynne (1998) observed that intercultural communication was easier in CMC discussions, possibly because cultural indicators were not as obvious in a text-based medium as they would be in a visual medium.

Chester and Gwynne (1998), Yildez and Bechelmeyer (2003) and Smith et al. (2005) have all identified linguistic barriers for Chinese students in online discussions. However, this study has identified new opportunities for interaction

and language development and ways in which the text-based, asynchronous, and virtual character of the CMC environment may act as a complement to face-to-face classes to support learning for Chinese students. These benefits have to be weighed against the high time cost that many Chinese students mentioned. Such a cost may be a factor associated with the text-based environment rather than purely with ESL speakers, or simply a feature of today's crowded and time-starved lifestyles (also illustrated by many students in the case studies).

While the CMC medium supported more participation by the Chinese students, they responded because they were required to do so. A number of researchers, for example, Pena-Shaff and Nicholls (2004) have pointed out that dialogic activities do not occur naturally in the CMC medium. If the students were not required to participate, then it was likely that peer interaction would have been much less intense. Unlike face-to face discussions, this is a disadvantage of the CMC medium, which may be rectified by curriculum design.

### 7.3. Influence of the curriculum

### 7.3.1. Assessment

The most influential factor for the Chinese students was the assessed nature of the debate. The requirement to make three postings resulted in a significant body of messages to fuel the debate and communicated the importance of the online discussion to students. This supports the view in the general learning literature that students' perceptions of what is valued are closely aligned to that which is assessed (Ramsden, 2003; Garrison & Anderson, 2003). The central role of assessment in the students' prior education was a belief which was readily transportable to the new university environment and provided some stability when so many other facets of their learning were so different.

### 7.3.2. Activity and role of the teacher

The debate was highly dialogic and based on the concept of using controversy and dissonance as a learning activity. However, the Chinese students did not like this activity and expressed concerns about disagreeing with the statement, and especially with other students. This may be connected to CHC conceptions of learning which are focused around a more structured approach and harmony in learning, and it may have been difficult to feel at ease with argument and controversy. Pan, Tsai, Tao, and Cornell (2003) considered that Asian students are disadvantaged with these kinds of activities because they conflict with their Confucian values.

The teachers were absent online in the discussions because the discussions were designed as a student activity and the students were being assessed; instead, the teachers used the face-to-face classes to provide feedback. Dysthe (2000) found that the absence of the teacher created more dialogic activity, although here, the impact of assessment cannot be overlooked. The students' emphasis on the importance of learning with the teacher, and not from other students, reflects Confucian concepts; the absence of the teacher would have been a significant difference for Chinese students. The fact that a far greater percentage of Chinese students disagreed with other students may indicate their responsiveness to new environments, despite their discomfort in them.

The debate topic appeared to support multicultural perspectives because all students, Kiwi and Chinese, seemed to be able to draw on their own cultural heritages in their postings. This might be more difficult in some subjects that are technically based or less discursive. However, Chinese unease with the structure of the activity, including the absence of the teacher, indicates a tension between different cultural pedagogies. Perhaps the way forward lies in building a shared view of learning. Again, this is not entirely a cultural issue, and some Kiwi students also had difficulties adapting to more student-centered approaches. Dysthe (2000) advocated preparing students by discussing the role of dialog and interaction in learning with them, so that they would better understand the nature of online discussions.

## 8. Conclusion

There are some limitations regarding the findings of this study. It is situated in a campus-based program where there is a high demand for face-to-face English on a daily basis, so the findings may not be so relevant for distance students whose language demands are different. Due to communication issues, the data may not entirely reflect the students' perspectives and have been interpreted through Western cultural paradigms. There has also been no exploration of any differences arising from the national origins of the students, and this would be a fruitful area for further research.

In the context of this assessed online debate, there were good outcomes for Chinese learners, especially increased interaction which arose from the text-based, asynchronous, and virtual nature of the medium. The CMC environment enabled the students to overcome some obstacles which they perceived to be centered mostly on their language capability. The students' discomfort with controversy and argument raises curriculum design issues for teachers. However, many Chinese students come to study 'Western methods,' and any discomfort may be better addressed through more careful preparation of students for these activities. This approach would also be beneficial for Kiwi students as well, and research in this area would make a valuable contribution to improving practice in learning with online discussions.

This study illustrates that for Chinese students, CMC technology may have a positive role to play in multicultural settings. These findings may also be relevant for other second language learners, whether in English or other languages, and this merits investigation. The addition of further Chinese perspectives on these issues would also make a valuable contribution.

#### References

- Adelman, C., Kemmis, S., & Jenkins, D. (1976). Rethinking case study: Notes from the second Cambridge conference. *Cambridge Journal of Education*, 6(3), 139–150.
- Ballard, B., & Clancy, J. (1991). Teaching students from overseas: A brief guide for lecturers and supervisors. Melbourne: Longman Cheshire.
- Biggs, J. (1996). Western misperceptions of the Confucian-Heritage learning culture. In D. Watkins & J. Biggs (Eds.), *The Chinese learner: Cultural, psychological and contextual influences.* (pp. 45–67). Hong Kong: Comparative Education Research Centre.
- Biggs, J. (1998). Learning from the Confucian heritage: So size doesn't matter? Journal of Educational Research, 29, 723–738.
- Chen, A., Mashhadi, A., Ang, D., & Harkrider, N. (1999). Cultural issues in the design of technology enhanced learning systems. British Journal of Educational Technology, 30(3), 217–230.
- Chester, A., & Gwynne, G. (1998). Online teaching: Encouraging collaboration through anonymity. Journal of Computer Mediated Communication, 4(2). Retrieved September 9, 2006, from http://jcmc.indiana.edu/vol4/issue2/chester.html
- Dysthe, O. (2002). The learning potential of a web-mediated discussion in a university course. *Studies in Higher Education*, 27(3), 339–352.
- Entwistle, N., & Ramsden, P. (1983). Understanding student learning. Kent: Croom Helm Ltd.
- Garrison, D., & Anderson, T. (2003). E-Learning in the 21st century. A framework for research and practice. London: Routledge Falmer.
- Gerbic, P. (2005). Chinese Learners and computer mediated communication: Balancing culture, technology and pedagogy. In H. Goss (Ed.) Balance, fidelity, mobility. Maintaining the momentum? (pp. 241–251). Proceedings of the 22<sup>nd</sup> annual Australasian Society for Computers in Learning in Tertiary Education 2004 conference, Queensland University of Technology, Brisbane, 4–7 December. Retrieved September 9, 2006, from http://www.ascilite.org.au/conferences/brisbane05/blogs/proceedings/ 27\_ Gerbic.pdf
- Gerbic, P., & Stacey, E. (2005). A purposive approach to content analysis: Designing analytical frameworks. The Internet and Higher Education, 8, 45–59.
- Gibbs, G., & Coffey, M. (2004). The impact of training university teachers on their teaching skills, their approach to teaching and the approach to learning of their students. *Active Learning in Higher Education*, 5(1), 87–100.
- Gunawardena, C., Wilson, P., & Nolla, A. (2003). Culture and online education. In M. Morre & W. Anderson (Eds.), *Handbook of distance education* (pp. 753–775). Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Henri, F. (1991). Computer conferencing and content analysis. In A. Kaye (Ed.), Collaborative learning through computer conferencing, the najaden papers (pp. 117–136). Berlin: Springer-Verlag.
- Jin, L., & Cortazzi, M. (1998). Dimensions of dialogue. International Journal of Educational Research, 29, 739–761.
- Joo, J. (1999). Cultural issues of the internet classroom. British Journal of Educational Technology, 30(3), 245–250.
- McLouglin, C., & Oliver, R. (2000). Designing learning environments for cultural inclusivity: A case study of indigenous online learning at tertiary level. Australasian Journal of Educational Technology, 16(1), 58–72. Retrieved September 9, 2006, from http://www.ascilite.org.au/ajet/ajet16/mcloughlin.html

- Pan, C., Tsai, M., Tao, Y., & Cornell, R. (2003). Technology's impact: Symbiotic or asymbiotic impact on differing cultures. *Educational Media International*, 40(3–4), 319–330.
- Parry, S., & Dunn, L. (2000). Benchmarking as a meaning approach to learning in online settings. Studies in Continuing Education, 22(2), 219–234.
- Pena-Shaff, J., & Nicholls, C. (2004). Analyzing computer interactions and meaning construction in computer bulletin board discussions. *Computers and Education*, 42(3), 243–265.
- Pincas, A. (2001). Culture, cognition and communication in global education. Distance Education, 22(1), 30–51.
- Ramsden, P. (2003). Learning to teach in higher education (2nd ed.). London: Routledge Falmer.
- Robinson, B. (1999). Asian learners, western models: Some discontinuities and issues for distance education. In R. Carr, O. Jegede, W. Tat-meg & Y. Kin-sun (Eds.), *The Asian distance learner* (pp. 33–48). Hong Kong: Open University of Hong Kong.
- Singer, P. (2001). The Singer solution to world poverty. In P. Singer, Writings on an ethical life (pp. 118–124). London: Fourth Estate.
- Smith, S. (2001). Approaches to study of three Chinese national groups. British Journal of Educational Psychology, 71, 429–441.
- Smith, P., Coldwell, J., Smith, S., & Murphy, K. (2005). Learning through computer mediated communication: A comparison of Australian and Chinese heritage students. *Innovations in Education and Training International*, 42(2), 123–134.
- Tu, C.-H. (2001). How Chinese perceive social presence: An examination of interaction in online learning environment. *Education Media International*, 38(1), 45–60.
- Volet, S., & Renshaw, P. (1996). Chinese students at an Australian university: Adaptability and continuity. In D. Watkins & J. Biggs (Eds.), *Learning theories and approaches* to learning research: A cross-cultural perspective (pp. 205–220). Hong Kong: Comparative Education Research Centre.
- Wild, M., & Henderson, L. (1997). Contextualising learning in the World Wide Web: accounting for the impact of culture. *Education and Information Technologies*, 2, 179–192.
- Yildez, S., & Bichelmeyer, B. (2003). Exploring electronic forum participation and interaction by EFL speakers in two web-based graduate-level courses. *Distance Education*, 24(2), 175–193.