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With the expansion of global telecommunication networks and the worldwide demand for higher education, distance education has the potential to reach out internationally to enhance learning for diverse learners and increase intercultural awareness and communication. By definition, distance education is borderless (Latchem, 2005), although differences in sociocultural contexts, values and expectations of diverse educational systems and learners may prove to be its greatest challenge (Hanna, 2000). While distance education programs proclaim an international focus with international content and learners, instructional design and methods frequently carry Eurocentric Western bias. Distance educators need to be sensitive to social, cultural and educational differences, cultural assumptions embedded in courses, and "the imposition of cultural values and practices" (Latchem, 2005, p. 189).

In Chapter 3, we examine several aspects of the sociocultural context that impact distance education. We begin by exploring reasons to study the sociocultural context along with issues in international distance education. Next, we look at theoretical dimensions that explain cultural variability and discuss the elements of the sociocultural context that impact distance education. These elements include: (a) diverse educational expectations; (b) learning styles; (c) the

sociocultural environment including social presence, help-seeking behaviors, and perception of time; (d) differences in communication styles including group process and development, perception of silence, and handling conflict; (e) language and issues related to second-language speakers, and (f) interpretation of icons, symbols, and colors used in Web design.

We address these elements from our own research conducted in Mexico, Morocco, Sri Lanka, Taiwan, Mainland China, and the United States, distance education course design and teaching experiences, and supporting literature in distance education. As we discuss these elements, we provide design guidelines.

3.1. ISSUES IN INTERNATIONAL DISTANCE EDUCATION

Why is it necessary to understand the social and cultural factors that influence international distance education? Reasons that come to mind are (a) recognition that technology connects us but is not culture neutral, (b), demographics are ever changing, (c) globalization makes us interdependent, (d) education addresses global economic needs, (e) the growing peace imperative is a global initiative, (f) self-awareness of cultural perspectives and biases is key to designing learning for another, and (g) ethics influence behavior.

While new information and communication technology has its advantages and attractiveness, the problems of education are always more complex than the technology alone can solve. Solely focusing on the technology and the view of learning that it facilitates causes the designer and instructor to look at learning in only one way, ignoring alternative, other cultural views (Visser, 2005). With

technology, come the questions of who will use it and what meanings the users will assign to it (Heaton, 2001). Choice of one over another inadvertently encourages and discourages different individuals or groups from participating. The affordances of the technology are constrained by the traditional forms of expression people use. While technology brings us together, the challenges and opportunities of networking far outshine the technology itself.

Demographics change as technology and transportation connect people. Cultural migration influences the formation of new communities as people cross borders, creating third cultures. We are becoming members of a planetary community as evidenced by transnational cultures that are not wholly based in any single place (Heaton, 2001, p. 221). International distance education can cater to those individuals who are unable to reside in one single location.

One of the main criticisms of globalization is the underlying tendency to colonize and import dominant paradigms into contexts that are either unfriendly to those paradigms or that can be harmed by those solutions (Carr-Chellman, 2005). Inherent within what is often perceived as a value neutral tool—the Internet-based technologies used for online learning—are culturally biased amplifications which have their roots in the American Industrial Revolution, which according to Bowers (cited in Carr-Chellman, 2005, p. 9) are: (1) context-free forms of knowledge; (2) conduit view of language; (3) Western view of autonomous individuals; (4) Western ways of experiencing time; (5) Western value of anthropocentrism; and (6) subjectively determined moral values. Traditional American measures of quality learning such as contact hours,

physical attendance, proctored testing, number of library holdings do not work globally. Carr-Chellman (2005) argues that making a single online course that is available worldwide is efficient, but culturally and contextually bankrupt. In order to make a product truly marketable globally, it is necessary to homogenize it. "Isn't learning necessarily contextualized in our own cultures and contexts?" (p. 9-10). Globalization should not blind us to the need to help individuals and groups build on their own cultural traditions and unique strengths (Mintzberg, 2003).

Sociocultural Dimensions of Distance Education

From an economic perspective, educational systems in developing countries are judged by their ultimate contributions to the development of quality human resources and national development goals (Panda, 2005). The need for education extends beyond the individual's desire to learn to serving as an economic resource for national growth, competitiveness, poverty reduction, and quality of life (The World Bank, 2005). The developing nations look at the development of useful national skills (Day, 2005; Badat, 2005), courses that address the needs of those at the margins (Panda, 2005), address the whole person (Visser, 2005), and contribute to a peaceful globe. Since all nations can gain from incorporating the knowledge of other countries and cultures into their thinking and actions, international learning networks should be conceived as horizontal (localized), vertical (globalized), and bottom-up as well as hub-periphery (Afele, 2003).

Intercultural awareness and competence are the foundation for peace imperatives. New threats to peace include civil wars, global disease, climate change, and desperation and hopelessness that accompany poverty. Peace imperatives become possible as people are connected and the psychological and geographical distances between people close. The world will benefit by the intersection of many minds and resources across the globe; as more teachers, doctors, professionals are educated and involved in solving world problems. "Hence the need for distance education and partnerships to share knowledge and prosperity around the globe" (Latchem, 2005, p. 194).

One of the most important reasons for understanding cultural factors is the awareness it raises of our own cultural identity (Martin & Nakayama, 2004). "The reason man does not experience his true cultural self is that until he experiences another self as valid, he has little basis for validating his own self" (Hall, 1973, p. 213). A better understanding of one's own self as well as alternative approaches to learning lies in the capacity to provoke new ideas, techniques (Muirhead, 2005), strategies, and methodologies.

Developing international distance education also presents ethical challenges. Very often ethical principles are culture bound, and intercultural conflicts arise from different perspectives of ethical behavior. Understanding the sociocultural context helps us to distinguish ethical from unethical behavior given differences in cultural priorities and develop guidelines for ethical behavior within our courses.

3.2 THEORETICAL FRAMEWORKS FOR UNDERSTANDING CULTURAL DIMENSIONS

Culture is a difficult concept to define formally; many definitions define it as diverse, changing, concrete and abstract. For the purpose of this chapter, we adopt the definition of culture offered by Matsumoto (1996), who perceives culture as "the set of attitudes, values, beliefs, and behaviors shared by a group of people, but different for each individual, communicated from one generation to the next" (p. 16). As Matsumoto notes, this definition suggests that culture is an individual, psychological construct and a social construct.

As we discuss cultural differences that impact distance education, we draw on the following theoretical frameworks that explain cultural variability in behavior and communication:

1. Dimensions of cultural variability proposed by Hofstede's, (1980, 1986): individualism-collectivism (IC), power-distance, uncertainty avoidance, masculinity-femininity, and Hofstede and Bond's (1988) long-term versus short-term orientation or Confucian-Dynamism unique to some Asian cultures.

2. Dimensions of contextualization, High-Context versus Low-Context cultures and associated indirect and direct styles of communication proposed by Hall (1966, 1976).

3. Language, an important aspect of cultural identification (Rogers and Steinfatt, 1999).

4. Perception of time, categorized by Hall's (1994) as Polychronic and Monochronic time, and by Brislin and Kim (2003) as ten concepts that affect intercultural interactions: (a) event and clock time; (b) punctuality; (c) task and social time; (d) one or many activities simultaneously; (e) sequential, efficient task performance or effectiveness; (f) fast or slow pace of life; (g) perception of silence; (h) past, present, and future orientation; (i) symbolic meaning of time; and (j) cultural differences in importance of work and leisure time.

5. Miike's (2000) three assumptions about communication based on an Asian paradigm of communication theory focusing on relationality, circularity, and harmony: (a) communication takes place in "contexts" of various relationships, (b) the communicator is both active and passive in multiple contexts, and (c) mutual adaptation is centrally important as adaptation is key to harmonious communication and relationships.

6. Martin and Nakayama's (2004) dialectical approach to understanding culture and communication, which emphasizes the processual, relational, and contradictory nature of intercultural communication, evident in four components: culture, communication, context and power.

7. Religion and its influence on shaping one's worldview.

Ross & Faulkner (1998) caution about over-reliance on dimensional information for understanding culture. While dimensional information serves as a guide to approach understanding, the danger is in overgeneralizing or treating them as absolutes. For example, they advocate using Hofstede's dimensions

with culture-specific approaches that provide contextual understanding. As we examine how cultural variability plays a role in international distance education, it is important to remember that "the variation within a culture in terms of situations, individuals, and socioeconomic status may account for as much or more of the variation in intercultural interpretations of messages as does the difference between the cultures of the individuals involved" (Rogers & Steinfatt, 1999, p. 96). With this understanding of the myriad ways in which cultural variability can be observed, we next explore how culture is manifested in distance education.

3.3 SOCIOCULTURAL CONTEXT OF DISTANCE EDUCATION

Learning is a social activity. Researchers have begun to examine how social interactions and the sociocultural environment affect motivation, expectations, attitudes, communication, teaching and learning in the distance education context (Mason, 1998; McLoughlin, 1999; Pincas, 2001). Research on the link between cognitive and social processes in understanding learning (Vygotsky 1978) has provided the impetus for examining the sociocultural context of learning environments. Our research, course design, and teaching experiences lead us to identify the following elements discussed in this section as essential areas for consideration as we design for distance education and facilitate learning communities through computer networks.

3.3.1 Diverse Educational Expectations

Different cultures bring different attitudes toward education and its purpose. Consider the philosophical differences reflected in the following two statements by learners we interviewed: "I don't know what I'll do with my education; I'm basically purposing my degree to meet a personal goal I set for myself" (Joan, an American student 2003). "The purpose of my education is to learn as much as I can and share that knowledge with others, so our nation can become great" (Luming, a Taiwanese student, 2005). The American student chose to pursue education for self-benefit while the Taiwanese student's purpose focused on economic well being, and serving the nation.

"Learning like life in China is serious" (Chao, a Mainland China student, 2005) and has serious implications. Chinese and many other learners around the globe have no choice regarding the amount of invested mental effort devoted toward learning according to a personal cost/benefit analysis; for a student who does not perform excellently will be replaced by many learners waiting for acceptance in competitive higher educational systems (Jinghua, a Mainland China student, 2005). In contrast, the laughter, small talk, and self disclosure found in American classrooms are considered inappropriate and offensive. For out of hardship and adversity, comes greatness.

Traditionally teaching in Mainland China and many other countries involved the teacher standing on a raised platform lecturing and interrogating from the front of the room to large groups of 50 students. Choral responses in teacher-led recitations reflected the traditional value on the collective, the community consensus, and the uniform conduct in social interaction (Hu, 2004).

Memorization is the most reliable and desirable attribute a student can have to ensure school success, for learning is attributed to "listening to the teacher" (Hu, 2004).

Today Asia is using e-learning to explore innovative strategies to promote engagement through active and independent learning, self-assessment, digital libraries, and just-in-time learning. There is emphasis on (a) designing authentic learning tasks to facilitate learning engagement and (b) providing support and media-rich resources (Hedberg & Ping, 2005). Many online courses being offered in Mainland China, Hong Kong, Taiwan, and India offer video lectures online and on demand, so learners can continue to "see and hear" their instructors giving lectures. Eye movement, gestures, gaze, and the human voice provide the contextual information learners from high-context cultures rely upon to interpret meaning.

Turkey's culture and oral traditions have emphasized the sacredness of the text, honor the responsibility of the professor to interpret the text, and expect students to memorize the professor's words (Gursoy, 2005). In many developing countries, quality of education is not seen as a property of the system or the intelligibility of materials but as a property of the students measured by their performance on examinations. In such environments, assessment of student performance by group work presents a challenge. The paradigm of flexibility, openness, and the self-paced, independent learner is not a value-free, neutral idea. Likewise, a teacher who functions primarily as facilitator, course designer, organizer and friendly critic (Jin & Cortazzi 1998) is not a global idea. The cultural

values of individualism, secularism, and feminism are not recognized as desirable in other cultures that place higher values on religion, group efforts and well defined gender roles (McIsaac, 1993).

Most Western learners and instructors, especially American, believe that each learner (a) is a distinct individual, (b) controls his or her behavior, (c) is responsible for outcomes of behavior, (d) is oriented toward personal achievement, and (e) frequently believes group membership compromises goal achievement (Nisbett, 2003). Asian learners like Luming believe success is a group goal. Attaining group goals is tied to maintaining harmonious social relations. These differences in expectations have implications for designing the learning environment and learner support systems for distance education.

3.3.2 Learners and Learning Styles

How one learns and what one learns is culturally determined. People reared in different cultures learn to learn differently. Some do so by pattern drill, memory, and rote following behaviorist theory; some work in groups learning through interaction with others to cross the zone of proximal development (Vygotsky, 1978). In today's learning environments, whether face-to-face or distance, one will encounter diverse learners and learning styles. As Moore (2006) asks: How do we design a course and manage it to induce the different forms of understanding that lie in the culture represented by each student, to the greater benefit of the whole class?

Facilitating learning for diverse learners requires putting learner needs first rather than institutional or national needs. Generally, the primary theory of knowledge construction underlying emerging online course designs emphasizes the exchange of ideas to construct meaning. Cultures have differing, preferred ways—scripts—of transmitting culture, knowledge, and ideas. Ideas are expressed in symbols, carry expressed meaning as well as emotional and cognitive perceptions (Chen & Starosta, 1998), deeply rooted history and tradition, reflecting cultural patterns of thinking. Learning often requires contextualizing complex, abstract concepts, using analogies as a learning aid (Day, 2005). Analogies are culturally dependent.

Students who are more holistic and visual may thrive in well designed multimedia environments that present a global view, while those who have a concrete sequential orientation will prefer a linear organization of information. Chen (2000) notes that differences in thinking patterns and expression styles influence student reactions to teaching methods. In a global e-mail debate on intercultural communication, the debate format caused orientation problems for some participants as the "debate" is a product of low-context culture that requires a direct expression of one's argument by using logical reasoning. Students who come from high-context cultures in Asia and Latin America find an argumentative format uncomfortable, and this discomfort is exacerbated when the debate is facilitated through a medium devoid of non-verbal cues. Fahy and Ally (2005) in their study of online students at Athabasca University point out that when students are not permitted to participate in CMC in accordance with their

individual styles and preferences, the requirement for online interaction ironically becomes a potential learning barrier.

Based on our study using nine instruments to analyze Hispanic learning styles (Sanchez & Gunawardena, 1998), we provide the following guidelines for accommodating learning styles. In general, it is best to design alternative activities to reach the same objective and give students the option of selecting activities which best meet their preferred learning styles. We found that Hispanic adult learners show a preference for collaborative over competitive activities; reflectivity in task engagement; and a preference for an action-based, active approach to learning. For these learners, we recommend designing real world problem solving or case-based reasoning tasks in asynchronous learning environments that provide opportunities for reflection and active collaborative learning.

As we design, it is important to consider that within cultural groups, individuals differ significantly from each other, and therefore, it is equally important to identify and respond to an individual's learning style preference. While matching teaching and learning styles may yield higher achievement, providing learners with activities that require them to broaden their repertoire of learning styles more fully prepares them to function in our diverse society. There is a need to provide a delicate balance of activities that give opportunities to learn in preferred ways and activities that challenge the learner to learn in new or less preferred ways. Gibson (1998) makes a plea for understanding the distance learner in context (for example, in relation to classroom, peer group, workplace,

family, culture and society) and the impact of their learning on those who share their lives in the multiple interacting contexts that contain them. "Our challenge as educators is to consider how the context might be seen as a partner in teaching and learner support." (p. 121).

3.3.3 Social Environment

In defining sociocultural space, Rummel (1976) notes that a dyad of socially interacting individuals forms the smallest sociocultural field. This interaction comprises a cluster of values and meanings, a set of norms; within a range of mutual expectations and roles; and has all the characteristics of the most comprehensive social systems, such as a nation. Bargaining, problems of credibility, threats and transactions, joint cooperation and conflict, status-quo testing, and undercurrents of power, status, and class occur. These social interactions become complex in international distance learning environments where there are many more individuals than dyads and individuals who represent diverse cultures.

In the following section, we explore factors that contribute to sociocultural space in distance education: social presence, help-seeking behaviors, and perception of time.

3.3.3.. Social Presence

Social presence is the degree to which a person is perceived as a "real person" in mediated communication (Short, Williams, & Christie,

1976). One of our studies (Gunawardena & Zittle 1997) established that social presence is a strong predictor of learner satisfaction in a computer conference. Richardson and Swan (2003), adapting the survey we used, replicated and extended these findings. They determined that students' overall perception of social presence was a predictor of their perceived learning in 17 different online courses. Tu and McIsaac (2002) observed that three dimensions of social presence—social context, online communication, and interactivity—emerged as important elements in establishing a sense of community among online learners.

Studies are beginning to examine cultural perceptions of social presence. Tu (2001) conducted a study of how Chinese perceive social presence in an online environment. In a cross-cultural study of group process and development in online conferences in the United States (US) and Mexico, we (Gunawardena, et al., 2001) found that social presence emerged as a theme addressed by both US and Mexican focus group participants. US participants felt that social presence is important to smooth group functioning to provide a sense that the group members are real people. Social presence builds trust and leads to self-disclosure. Building relationships enhances online civility. The Mexican focus group participants, however, felt that having personal information about the participants was unimportant. For these participants, how peers contribute to the conference is more important than knowing their personal information. The differences in the way that US participants and Mexican participants perceived social presence could be attributed to cultural differences related to power

distance (Hofstede, 1980) in the two societies. The Mexican participants perceived computer-mediated communication as equalizing power and status differences in their society.

To further examine social presence from a cultural perspective, we undertook a study (Gunawardena, et al., 2006) to generate a theoretical model of social presence from the perspective of two sociocultural contexts—Morocco and Sri Lanka—by examining the communication conventions and processes employed by Internet chat users who develop online relationships with people they do not know. Employing qualitative ethnographic analysis and grounded theory building, this study explored cultural perspectives on "social presence" and properties related to the construct "social presence" in online communication. Preliminary results indicate that social presence is emerging as a central phenomenon in the communication patterns of Internet chat users. Properties associated with social presence in both cultural contexts include: self disclosure, building trust, expression of identity, conflict resolution, interpretation of silence, and the innovation of language forms to generate immediacy. Initial theoretical propositions we developed from this research follow:

- Social presence is a key factor in building online relationships.
- There is a relationship between social presence and disclosure of private life. Participants tend to expect chatters to tell them about their problems, because that makes them "real." Self disclosure enhances social presence.

- Anonymity increases the ability to self-disclose and generates a heightened sense of social presence.

- Social presence is closely linked to building trust. When trust is established, the sense of social presence increases.

- Attempts to resolve conflict depend on the strength of the relationship that has been built.

- Silence is often expressed as "no presence."

- Chatters have devised means to communicate in the native language, or short forms of the native language using a Latin keyboard, to increase social presence and the connection they feel to each other.

These findings provide insight into designing activities that generate social presence in online social spaces.

The instructor plays a critical role in facilitating social presence and the social environment. Social presence research has shown that teacher immediacy behaviors include using humor, personalizing examples, addressing students by name, questioning, praising, reinforcing, initiating discussion, sharing personal experiences, encouraging and providing timely feedback. Other than the instructor's role in creating social presence, several of the following design techniques can be used to create social presence and build the social environment based on learner characteristics and the specific context.

- Virtual Pubs or Cafes - a specific virtual space assigned for social interaction where participants can demonstrate a sense of their own social presence and where participants feel fully represented as human beings.

- Introductions – usually done at the beginning of a course where participants introduce their professional and personal identities and interests. The amount of self-disclosure that participants are comfortable with will vary depending on cultural background, and introducing each other online may be more comfortable than self-introductions.

- Creating a sense of online community – moderators or facilitators play an important role in community building activities, facilitating discussions, summarizing, and by being present online frequently.

- Timely feedback, encouraging participation, and rewarding contributions.

- Developing formats for interaction – that would enhance the presence of others in the community such as story telling, and sharing experiences.

- Encouraging the use of online conventions such as emoticons.

3.3.3.2 Help-Seeking Behaviors

Cultures differ in help-seeking behaviors. Help seeking is a learning strategy that combines cognition and social interaction (Ryan, Gheen, & Midgley, 1998) and involves the ability to use others as a resource to cope with difficulty encountered in the learning process. When learners do not seek help, performance and learning can suffer. In American classrooms that emphasize competition and normative evaluation, students are unwilling to seek help as they

fear others will perceive they lack ability (Ryan, Gheen, & Midgley, 1998). Where the socio-emotional needs of students and learning for intrinsic reasons are emphasized over performance and competition, learners are seek help.

The socio-emotional needs of students are recognized as part of the classroom design in other cultures. Chinese students communicate with their teachers outside of class for guidance with personal problems (Zhang, 2006). Teachers in China assume responsibility for educating the whole person instructionally, cognitively, affectively, and morally and are expected to care about students' behaviors and problems inside and outside the classroom. The collaborative strength of home and school, parents and teachers work harmoniously toward the mutual goal of preparing learners (Hu, 2004) for rigorous national examinations and the country's economic development. In contrast, Western teachers are expected to perform academic duties and generally are unconcerned about students' behaviors and problems outside of school. Westerns students are advised not to bring personal problems to the classroom. The warm interaction Asian learners expect outside the classroom with their instructors is not expected by Western students.

Therefore, distance education designers must be cognizant of the expectations of diverse learners related to help seeking behaviors, and make teaching and learning philosophies, procedures and practices explicit in course design, and the syllabus or course outline.

3.3.3.3 Perception of Time

Use of time, is a "silent language" that affects everyday behaviors (Hall, 1973). How people view time is a form of communication (Hall, 1973). Punctuality and sensitivity to deviations from appointed times have different levels of importance in a learning context. Where people's attitudes toward time are more approximate and lenient such as in the Middle East, Latin American, and African countries, (Polychronic time) handing in assignments "on time" will not be perceived as important as in North American clock time cultures (Monochronic time), which put a monetary value on time and treat it as a tangible commodity. Americans focus on tasks during the workday and become dismayed when others spend work time and classroom time socializing and chatting, unaware that socializing leads to supportive work relationships that can be called upon later when work needs to be accomplished quickly and well.

The analysis of past, present, and future orientations is another perspective to understand a culture's time use. Cultures do not exclusively have one orientation; however, Americans live in the present fully and want to move on toward the future. Present-oriented cultures consider the present to be the only precious moment. In contrast, past orientation honors tradition, history, and is influenced by the past. Chinese people attribute great importance to 2000 years of history and their ancestors. People evaluate daily or business plans based on the degree to which their plans fit with customs and traditions; innovations and change are discouraged. When change is necessary, it is justified by the past experience.

Time orientation impacts communication. Cognition, knowledge, beliefs, and attitudes about time combine to (a) structure a model about how time itself operates and functions and to (b) set expectations for usage of time and tradition in the classroom. Time orientation lays the groundwork that learners use to understand and act on the world around them.

3.3.4. Communication and Interaction

Culture is communication (Hall 1998); culture and communication act on each other (Chen & Starosta, 1998). In the online context, communication takes place through a computer-mediated environment, by which people create, exchange, and perceive information. Computer-Mediated Communication (CMC) can reduce patterns of discrimination by providing equality of social interaction among participants who may be anonymous in terms of gender, race and physical features. However, there is evidence that the social equality factor may not extend to participants who are not good writers but who must communicate primarily in a text-based format (Gunawardena, 1998).

In Western classrooms, autonomous learning involves understanding the complexities of an issue or concept and the learner's ability to address the complexities. Learner autonomy is promoted by feedback from instructors and other students that challenge the learner's own views and ideas by raising issues he or she might not have thought of otherwise. Critical discussions and philosophical arguments are a frequent component of many Western distance

learning courses. However, critical discussions and debates may not be appropriate across cultures for face-saving reasons.

The learned conventions of turn-taking are universal, but differ in detail from culture to culture, for example in the degree to which overlapping talk is tolerated. For the most part, the one-speaker-at-a-time structure predominates, and people adjust their turn-taking patterns as they negotiate role relationships, power relationships, or institutionalized procedures. Deviant users are called 'disruptive', 'irrational', 'undisciplined' or even 'unintelligent.' Comparative studies of non-native and native English conversational discourse have become a rich territory for exploration of how culturally specific assumptions and strategies vary in cross-cultural encounters (Driven & Putts, 1993).

In written prose, Americans are direct and indirect. Chinese culture emphasizes beauty, tradition, poems, and the polite way in social interaction. The literate Chinese person memorizes the characters, idioms, wise sayings, classics, literary allusions and memorizes the accepted patterns of expression. Words flow effortlessly, ideas blossoming into ideas in a human context that keeps social harmony and maintains hierarchy (Hu, 2004). The Chinese written language has no alphabet. Instead, it consists of thousands of different pictographic and ideographic characters. Each word consists of one to three characters. By the sixth grade, Chinese students must have mastered 3,000 characters, basically by memorization. Text-based communication between Americans and Chinese would mean understanding each other's writing style. Given the characteristics of the online environment, we as designers need to pay

attention to cultural differences in communication conventions, which may be manifested differently in this unique space for communication devoid of non-verbal cues.

3.3.4.1 Group Process and Development

To study the impact of culture on group dynamics, Chan (2005) gave the Myers-Briggs Type Indicator (MBTI) and the Chinese Personality Assessment Inventory (CPAI) to 59 tutors at the Open University of Hong Kong and their 1106 students. Only one dimension on the MBTI—extraversion—was connected with group effectiveness in the classroom. However, four dimensions from the CPAI—Renqing, Face, Harmony, and Leadership—promoted group effectiveness. Renqing refers to a "humanized obligation," carrying with it a continued expectation for mutual favor exchanges with a sentimental touch. Tutors who employed face saving strategies were considered more effective in creating harmony and balance in relationships. Tutors with a high concern for harmony subordinated personal needs and accepted group norms rather than their own norms. Tutors who were rated high on leadership were motivated, interacted well with their students, and made effective presentations. Chan's study reflects the social obligation to help others within the social group.

Employing survey and focus group data, we (Gunawardena, et al., 2001) examined differences in perception of online group process and development between participants in Mexico and the USA. Survey data indicated significant differences in perception for the Norming and Performing stages of group development as described in Tuckman's (1965) model. The groups also differed

in their perception of collectivism, low-power distance, femininity, and high-context communication. Country differences rather than age and gender differences accounted for the differences observed. Focus group participants identified several factors that influence online group process and development: (1) language, (2) power distance, (3) gender differences, (4) collectivist vs. individualist tendencies, (5) conflict, (6) social presence, (7) time frame, and (8) technical skills.

With the increasing use of collaborative learning methods and community of practice models in online course design, we need to pay attention to how groups are formed and supported through the collaborative learning process.

3.3.4.2 Silence

Silence while frustrating for American and Western Europeans is quite comfortable for Asian and Pacific Island cultures (Brislin, 2000). For Americans, silence indicates rudeness, inattention, or uncertainty. However, in other cultures, silence indicates respect (Matthewson & Thaman, 1998). Silence allows people time to collect thoughts, think carefully, listen to others, and provide opportunity for reflection, integration and consensus of many diverse perspectives into a workable solution. In our experience teaching English via Voice Over Internet Protocol, a synchronous technology to Chinese students (LaPointe & Barrett, 2005), initially, both American instructors and Chinese learners were uncomfortable in the classroom. The American instructors expected the Chinese learners to speak at will as students do in American

classrooms. American teachers were initially uncomfortable with the long, reflective pauses in the synchronous voice communication. The Chinese respect for authority conditioned learners to wait for an explicit invitation rather than make the impolite gesture of raising a question or criticizing someone else's work.

3.3.4.3 Conflict

We conducted an exploratory qualitative study with six cultural groups (Native American, Hispanic American, Anglo American, East Asian, Middle Eastern, and Indian Subcontinent) to examine how participants negotiate face in an online learning environment (Gunawardena at al., 2002). Participants were asked to respond to three scenarios, one of which dealt with how they would handle conflict online. The hypothetical scenario asked participants how they would respond when a peer misunderstood what the participant said and posted a message demeaning the participant's contribution to the academic discussion. Results indicated both cultural and individual differences. Some would have apologized for being misunderstood; others would have been angry or offended and demanded an apology; some would react in a calm, non-confrontational manner; and others would have ignored the comment. Members of all six cultures would have posted a message in reply, saying that they had been misunderstood or their posting had been misinterpreted. Then they would have given further explanations to clarify the message.

Our study conducted in Morocco and Sri Lanka discussed earlier (Gunawardena, 2006) showed that the nature of the relationship determines

reactions to insults and the resolution of conflict in chatrooms. Chatters will close the window if the relationship is weak and employ many techniques to resolve conflict if the relationship is stronger.

We can draw implications from these results for developing communication protocols for online environments. One protocol would be to encourage participants to clarify and explain their messages if they feel they have been misunderstood or misrepresented in the group discussion. Another protocol would be for online participants to direct conflicting points of view of a demeaning nature with names attached to the individual in a private e-mail, thus giving that individual an opportunity to explain his or her point of view. If the two participants then determine by this private e-mail that the discussion can be handled in a public forum, they can move it to the public forum. A third protocol would be to advise students to use high-context communication—providing the context so messages would not be misunderstood.

3. 4. LANGUAGE AND SECOND LANGUAGE SPEAKERS

Language represents a different way of thinking and speaking, and cognition is mediated by language (Gudykunst & Asante, 1989; Pincas, 2001). Language also reinforces cultural values and worldviews. The grammar of each language voice and shapes ideas, serving as a guide for people's mental activity, for analysis of impressions, and for synthesis of their mental stock in trade (Whorf, 1998). Those from oral cultures may not embrace written communication (Burniske, 2003) and the abstract discussions that permeate Western discourse.

Learners from oral traditions such as the Maori desire intimate connections with the instructor and a way to apply knowledge according to Maori customs (Anderson, 2005). Malaysia, strong in oral culture, uses storytelling while teaching history, culture, and moral values (Norhayati & Siew, 2004). Learners from visual and oral cultures expect that learning resources will be offered in media beyond mere text (Jiang, 2005) and prefer a great deal of detail and visual stimulation (Zhenhui, 2001). Chat may provide an outlet for interaction that more closely resembles spoken language (Sotillo, 2000). Learners from collectivist countries may refrain from contributing critical comments in text conferencing to avoid tension and disagreement in order to maintain interpersonal harmony (Hu, 2005). Limiting online learning to text-based expression restricts the voices and the richness that can be a part of the online class.

Using English to learn rather than one's native language puts learners at a disadvantage. Often English is a learner's third or fourth language with little opportunity to actually use English daily. Communicating in English requires Asian and Arabic speakers to enter individual letters, one stroke at a time, on a keyboard while frequently referring to online dictionaries. English-as-a-second language (ESL) learners need additional time for reading and need content provided in a variety of formats—written lectures, audio recordings, and concept maps.

Smith (2005) found that a lack of awareness to cultural differences and generalizations about others who use English as a second language may enable learners from dominant cultures to unknowingly deauthorize group members with

group coping strategies that, although well intended, limit opportunities for discussion. Groups assign minimal responsibilities to their non-native English-speaking members because they felt these learners had faced unusual challenges of adapting to the United States and completing their studies. Non-native-English speakers then feel uncomfortable and unproductive. This crystallized the recognition of difference among group members; non-native speakers were perceived as "others" and treated as a threat to the group in ways that mirror hierarchical structures within larger society, creating unsafe learning spaces (Smith, 2005).

To learn about the perceptions of Taiwanese and Mainland China English-as-a-Second Language (ESL) learners, bilingual teaching assistants, and staff regarding the *Speak2Me* program (Ladder Publishing Co., Ltd. of Taipei's web-based ESL program using an *iTalk* synchronous platform), those of us who taught English at a distance traveled to Taiwan and Mainland China to conduct face-to-face interviews over the past three years. In the preliminary results, we (LaPointe & Barrett, 2005) found that although students recognize the need to study English through materials from the target culture, when they have no prior experience with the content of the materials, they cannot participate. Students told us if neither they nor their families have prior knowledge about a topic, they find engaging in a conversation difficult. They cannot participate when the "topic is too far away." Such topics do not produce the intended level of critical thinking as much as topics that more directly affect students' lives.

Many individuals have a fear of speaking English with native speakers. Ping observed, "We Taiwanese—if we can't speak English very nice, very fluent—we want to learn English and speak, but we are afraid. We are afraid to talk with foreigners because we are afraid if I can't speak the proper words or listen to it." Students, particularly adults, seek a safe place to speak. The Internet provides that safe space through the removal of visual cues; informants have reported that they are more willing to try to speak English when they cannot see either other students who they perceive to be better English speakers or the teacher's dismay as they are speaking. They also feel safer participating from their homes.

Implications for design include creating an atmosphere that invites participation from ESL speakers. Some techniques include writing the instructor's welcome message in more than one language, translating the syllabus when possible, and developing clear communication protocols.

3.5 CULTURAL INTERPRETATION OF WEB ICONS AND IMAGES

When designing online learning, the interface designer must pay attention to how different cultures respond to the graphical interface, images, symbols, color and sound. Simple issues of layout, format, and icons become increasingly complex as the diversity of learners increase. Since icons enhance the learner's ability to use and control the capabilities available within the environment, we conducted a study in the US, Morocco, and Sri Lanka with participants in University computer labs and Internet Cafes, to examine differences in

perceptions of the meaning of icons and images (Knight et al., 2006). Fifty-three participants from Morocco, sixty-eight from Sri Lanka, and fifty-eight from the US completed a questionnaire containing 18 icons and images drawn from 26 US academic websites. Participants were asked to assign meanings to each icon or image and to select a preferred image to represent for example, group discussion online, chat, submitting an assignment, accessing a library, etc. Results showed that icons and images that rely on literal interpretations may be the most reliable in developing web materials for cross-cultural users. Images and icons, which were representational and contained little detail, were less likely to elicit unintended interpretations. Individual image preferences for online functions suggest most users preferred representations that were conceptually focused and visually simple. Icons that were photographic were least frequently selected. Differences in the interpretation of meanings and preferences for specific icons and images were related to the cultural context of the participants. For example, the calendar icon was interpreted with the highest accuracy in the US, followed by Sri Lanka and Morocco. Morocco is an oral culture, and many people remember appointments rather than write them down on a calendar; therefore, there were varying interpretations of this icon in Morocco. In Sri Lanka, one participant identified the calendar as a temporary house. It is important to note that a large number of tents were put up in the coastal areas of Sri Lanka after the Tsunami incident in 2005, when this study was conducted. The aftermath of the Tsunami may have influenced the participant in identifying the slanting shape of the open calendar as a tent.

3.6 CONCLUSION

As we explore opportunities to provide international distance education, we should pay careful attention to developing global citizens who can solve global problems without diminution of indigenous culture (Latchem, 2005, p. 195) in order to meet national educational and economic goals. Mason (1998) recommends three approaches to globalizing education: beginning in areas of curriculum which have global content so all participants have an equal status and an equal contribution to make; trans-border consortia, where each partner contributes courses to the pool to avoid the trap of the dominant provider and the dependent receiver; and focusing not on exporting courses at all, but on developing resources and international contacts to enable one's own students to become global citizens. In the hands of perceptive and creative designers, communication technologies have the potential to internationalize higher education and overcome challenges to honor the social-cultural diversity in distance education. Creativity is harnessing universality. Culture and awareness of differences among cultures are resources for the distance education instructor and designer.

REFERENCES

Afele, J. S. C. (2003). *Digital bridges: Developing countries in the knowledge economy.* Hershey, PA: Idea Group Publishing.

Anderson, B. (2005). New Zealand: Is online education a highway to the future? In A. A. Carr-Chellman (Ed.), *Global Perspectives on e-learning: Rhetoric and Realities* (pp. 163-178). Thousand Oaks, CA: Sage Publications, Inc.

Badat, S. (2005). South Africa: Distance higher education policies for access, social equity, quality, and social and economic responsiveness in a context of the diversity of provision. *Distance Education, 26* (2), 183-204.

Brislin, R. (2000). *Understanding culture's influence on behavior* (2nd ed.), Fort Worth, TX: Harcourt.

Brislin, R., & Kim, E. (2003). Cultural diversity in people's understanding and uses of time. *International Association for Applied Psychology, 52* (3), 363–382.

Burniske, R. W. (2003). East Africa meets West Africa: Fostering an online community of inquiry for educators in Ghana and Uganda. *Educational Technology Research and Development, 51* (4), 105-113.

Carr-Chellman, A. A. (2005). Introduction. In A. A. Carr-Chellman (Ed.), *Global Perspectives on E-learning: Rhetoric and Reality* (pp. 1-16). Thousand Oaks, CA: Sage Publications.

Chan, B. (2005). From West to East: The impact of culture on personality and

 group dynamics. *Cross Cultural Management, 12*(1), 31-43.

Chen, G. M. (2000). Global communication via Internet: An educational

 application. In G. M. Chen and W. J. Starosta (Eds.), *Communication and*

 Global Society (pp. 143-157). New York: Peter Lang Publishing.

Chen, G. M., & Starosta, W. J. (1998). *Foundations of intercultural*

 communication. Boston, MA: Allyn and Bacon.

Day, B. (2005). Open and distance learning enhanced through ICTs: A toy for

 Africa's elite or an essential tool for sustainable development? In Y. L.

 Visser, L. Visser, M. Simonson & R. Armirault (Eds.), *Trends and Issues in*

 Distance Education: International Perspectives (pp. 183-204).

 Greenwich, CT: Information Age Publishing.

Driven, R., & Putz, M. (1993). Intercultural-communication. *Language*

 Teaching, 26, 144-156.

Fahy, P. J. & Ally, M. (2005). Student learning style and asynchronous

 computer-mediated conferencing. *American Journal of Distance*

 Education, 19(1), pp. 5 - 22.

Gibson, C. C. (1998). The distance learner in context. In C. Campbell Gibson (ed.), *Distance Learners in Higher Education: Institutional Responses for Quality Outcomes* (pp. 113-125). Madison, WI: Atwood Publishing.

Gudykunst, W., & Asante, M. (1989). *Handbook of international and intercultural communication.* Newbury Park, CA: Sage Publications.

Gunawardena, C. N. (1998). Designing collaborative learning environments mediated by computer conferencing: Issues and challenges in the Asian socio-cultural context. *Indian Journal of Open Learning*, 7(1), 105-124.

Gunawardena, C. N., Bouachrine, F., Idrissi Alami, A., & Jayatilleke, G. (2006, April). *Cultural perspectives on social presence: A study of online chatting in Morocco and Sri Lanka*. A research paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.

Gunawardena, C. N., Nolla, A. C., Wilson, P.L., López-Islas, J. R., Ramírez-Angel, N., & Megchun-Alpízar, R. M. (2001). A cross-cultural study of group process and development in online conferences, *Distance Education,* 22(1), 85-121.

Gunawardena, C. N., Walsh, S. L., Reddinger, L., Gregory, E., Lake, Y., &
     Davies, A. (2002). Negotiating "face" in a non-face-to-face learning
     environment. In F. Sudweeks and C. Ess (Eds.), *Proceedings Cultural
     Attitudes Towards Communication and Technology* (pp. 89-106).
     Montreal, Canada: University of Montreal.

Gunawardena, C. N., & Zittle, F. (1997). Social presence as a predictor of
     satisfaction within a computer mediated conferencing environment. *The
     American Journal of Distance Education*, 11(3), 8-25.

Gursoy, H. (2005). A critical look at distance education in Turkey. In A. A. Carr-
     Chellman (Ed). *Global Perspectives on e-learning: Rhetoric and Realities*
     (pp. 35-51). Thousand Oaks, CA: Sage Publications, Inc.

Hanna, D. E. (2000). Higher Education in an Era of Digital Competition: Global
     Consequences. In D. E. Hanna (Ed.) *Higher Education in an Era of Digital
     Competition: Choices and Challenges* (pp.19-44). Madison, WI: Atwood
     Publishing.

Hall, E. T. (1966). *The hidden dimension.* Garden City, NY: Doubleday.

Hall, E. T. (1973). *The silent language*. New York, NY: Anchor Book Editions.

Hall, E. T. (1976). *Beyond culture.* New York, NY: Anchor Books.

Hall, E. T. (1994). Monochronic and polychromic time. In L. A. Samovar & R. E.

Porter (Eds.), *Intercultural Communication: A Reader* (pp.264-271).

Belmont, CA: Wadsworth.

Hall, E. T. (1998). The power of hidden differences. In M. J. Bennett (Ed.), *Basic

Concepts of Intercultural Communication: Selected Readings* (pp. 53-67).

Yarmouth, ME: Intercultural Press.

Hanna, D. E. (2000). Higher education in an era of digital competition:

Global consequences. In D. E. Hanna (Ed.), *Higher Education in an Era of

Digital Competition: Choices and Challenges*. Madison, WI: Atwood

Publishing.

Heaton, L. (2001). Preserving communication context. In C. Ess (Ed.), *Culture,

Technology, Communication: Towards an Intercultural Global Village*

(pp. 213-240). Albany, NY: State University of New York Press.

Hedberg, J. G., & Ping, L. C. (2005). Charting trends for e-learning in Asian

schools. *Distance Education,* 26(2), 199-213.

Hofstede, G. (1980). *Culture's consequences: International differences in work-

related values.* Beverly Hills, CA: Sage Publications.

Hofstede, G. (1986). Cultural differences in teaching and learning. *International Journal of Intercultural Relations, 10,* 301-320.

Hofstede, G., & Bond, M. H. (1988). Confucius and economic growth: New trends in culture's consequences. *Organizational Dynamics, 16*(4), 4-21.

Hu, G. (2005). Using peer review with Chinese ESL student writers. *Language Teaching Research, 9*(3), 321-342.

Hu, Y. (2004). The cultural significance of reading instruction in China. *The Reading Teacher, 5*(7), 632-639.

Jiang, J. Q. (2005). The gap between e-learning availability and e-learning industry development in Taiwan. In A. A. Carr-Chellman (Ed.), *Global Perspectives on E-Learning: Rhetoric and Reality* (pp. 35-51). Thousand Oaks, CA: Sage Publications.

Jin, L., & Cortazzi, M. (1998) Dimensions of dialogue: Large classes in China. *International Journal of Educational Research, 29,* 739-761.

Knight, E., Gunawardena, C., Bouachrine, F., Dassanayake, N., Gnanakumar T., & Kulasuriya, C. (2006). A cross- cultural study of icons and images used

in North American web design, In K. Morgan, C.A. Brebbia, & J.M. Spector. *The Internet Society II: Advances in Education, Commerce, & Governance* (pp. 135-145). Southampton, Great Britain: WIT Press.

LaPointe, D., & Barrett, K. (2005, May). *Language Learning in a Virtual Classroom: Synchronous Methods, Cultural Exchanges*. Paper presented at the meeting of Computer-Supported Collaborative Learning, Taipei, Taiwan.

Latchem, C. (2005). Towards borderless virtual learning in higher education. In A. A. Carr-Chellman (Ed.), *Global Perspectives on e-learning: Rhetoric and Reality* (pp. 179-198). Thousand Oaks, CA: Sage Publications.

Martin, J. N., & Nakayama, T. K. (2004). *Intercultural communication in contexts* (3rd ed.), New York, NY: McGraw-Hill.

Mason, R. (1998). *Globalising education: Trends and applications*. London, Great Britain: Routledge.

Matsumoto, D. (1996). *Culture and psychology.* Pacific Grove, CA: Brooks/Cole Publishing Company.

Matthewson, C., & Thaman, K. H. (1998). Designing the *rebbelib*: Staff

    development in a Pacific multicultural environment. In C. Latchem & F.

    Lockwood (Eds.), *Staff Development in Open and Flexible Learning*. New

    York, NY: Routledge, pp. 115-126.

McIsaac, M. S. (1993). Economic, political, and social considerations in the use

    of global computer-based distance education. In R. Muffoletto & N.

    Knupfer (Eds.), *Computers in Education: Social, Political, and Historical*

    Perspectives (pp. 219-232). Cresskill, NJ: Hampton Press, Inc.

McLoughlin, C. (1999). Culturally responsive technology use: Developing an on-

    line community of learners. *British Journal of Educational Technology, 30,*

    231-243.

Miike, Y. (2000). *Toward an Asian standpoint of communication theory: Some*

    initial assumptions. Paper presented at the Pacific and Asian

    Communication Association Convention, "Waves of Change: The Future

    of Scholarship in Communication and Culture," Honolulu: HI.

Mintzberg, H. (2003, October). Africa's Best Practices. Project Syndicate.

    Retrieved October 15, 2005, from http://www.project-

    syndicate.org/commentary/mintzberg1

Moore, M. G. (2006). Editorial: Questions of culture. *The American Journal of Distance Education*, 20(1), 1-5.

Muirhead, B. (2005). A Canadian perspective on the uncertain future of distance education. *Distance Education, 26*(2), 239-254.

Nisbett, R. E. (2003). *The Geography of thoughts: How Asians and Westerners think differently . . . and why*. New York, NY: Free Press.

Norhayati, A. M., & Siew, P. H. (2004). Malaysian Perspective: Designing Interactive Multimedia Learning Environment for Moral Values Education. *Educational Technology & Society*, 7 (4), 143-152.

Panda, S. (2005). Higher education at a distance and national development: Reflections on the Indian experience. *Distance Education, 26*(2), 205-225.

Pincas, A. (2001). Culture, cognition, and communication in global education. *Distance Education, 22(*1), 30.

Richardson, J., & Swan, K. (2003). Examining social presence in online courses in relation to students' perceived learning and satisfaction. *Journal of*

Asynchronous Learning Networks, 7(1). Retrieved October 29, 2006, from

www.aln.org/publications/jaln/v7n1/v7n1_richardson.asp

Rogers, E. M., & Steinfatt, T. M. (1999). *Intercultural communication*. Prospect

Heights, IL: Waveland Press.

Ross, R., & Faulkner, S. (1998). Hofstede's dimensions: An examination and

critical analysis. In K. S. Sitaram & M. Prosser (Eds.), *Civic Discourse:*

Multiculturalism, Cultural Diversity, and Global Communication (pp. 31-

40). Stanford, Co: Ablex Publishing CT.

Rummel, R. J. (1976). *Understanding conflict and war: Vol 2: The conflict helix.*

Beverly Hills, CA: Sage.

Ryan, A. M., Gheen, M. H., & Midgley, C. (1998). Why do some students avoid

asking for help? An examination of the interplay among students'

academic efficacy, teachers' social-emotional role, and the classroom goal

structure. *Journal of Educational Psychology, 90*(3), 528-535.

Sanchez, I., & Gunawardena, C. N. (1998). Understanding and supporting the

culturally diverse distance learner. In C. Campbell Gibson (ed.), *Distance*

Learners in Higher Education: Institutional Responses for Quality

Outcomes (pp. 47-64). Madison, WI: Atwood Publishing.

Short, J., Williams, E., & Christie, B. (1976). *The social psychology of*

telecommunications. London, Great Britain: John Wiley & Sons.

Smith, R. O. (2005). Working with difference in online collaborative groups.

Adult Education Quarterly, 55(3), 182-199.

Sotillo, S. (2000). Discourse functions and syntactic complexity in synchronous

and asynchronous communication. *Language Learning and Technology,*

4(1), 82-119.

Tu, C. H. (2001). How Chinese perceive social presence: An examination

of interaction in online learning environment. *Education Media*

International, 38(1), 45-60.

Tu, C. H., & McIsaac, M. (2002). The relationship of social presence and

interaction in online classes, *American Journal of Distance*

Education, 16(3), 131-150.

Tuckman, B. W. (1965). Developmental sequence in small groups,

Psychological Bulletin, vol. 63, no. 6, pp. 384-399.

Visser, J. (2005). The long and short of distance education: Trends and issues

from a planetary human development perspective. In Y. L. Visser, L.

Visser, M. Simonson & R. Armirault (Eds.), *Trends and Issues in Distance*

Education: International Perspectives (pp. 35-50). Greenwich, CT:

Information Age Publishing.

Vygotsky, L. S. (1978). *Mind in society: The development of higher*

psychological processes. Cambridge, MA: Harvard University Press.

Whorf, B. (1998). Science and linguistics. In M. J. Bennett (Ed.), *Basic Concepts*

of Intercultural Communication: Selected Readings (pp. 85-95). Yarmouth,

ME: Intercultural Press.

World Bank (2005). *Central America education strategy: An agenda for action*.

Washington, DC: The World Bank.

Zhang, Q. (2006). Immediacy and out-of-class communication: A cross-cultural

comparison. *International Journal of Intercultural Relations, 30*, 33-50.

Zhenhui, R. (2001). Matching teaching styles with learning styles in East Asian

contexts. *The Internet TESL Journal, 7*(7). Retrieved December 1, 2005,

from http://iteslj.org/

....