Cultural differences and e-learning

E-learning is increasingly becoming important in today's global world. There are a variety of reasons why e-learning is important. Some of these reasons are pragmatic – e-learning helps ease congestion of crowded classrooms, while providing a means for those who might not have access to higher education, such as the disabled or people who live far from a university, the opportunity to gain a proper education. E-learning also encourages collaboration, along with a way for instructors to reinforce concepts that are taught in the lecture hall. The pitfalls of e-learning center around the culture of the learner, as different cultures have different norms and values, and these affect how the learner uses and receives e-learning. Therefore one must be cognizant of these cultural differences when designing an e-learning program. observe and use e-learning. Introduction With the advent of the Internet, distance education is rapidly becoming an excellent way for students become educated. In the traditional sense, it allows for one to one interaction between the teacher and student but also has the facilities for rich collaborative learning through an on-line environment. E-learning has a number of advantages, as it helps students become competitive in a market increasingly dominated by global, multi-national companies that use on-line learning to teach concepts, as well as helps students become globally astute and enhances their social skills. However, there are a number of aspects of individuals about which designers of e-learning software, as well as instructors, should be aware. One of these is the culture of the learner. Culture is a way that individuals mediate their world, and it is has profound implications for e-learning and learning in general. Some cultures are low context, which means that the written word is paramount, and the non-verbal part of communication is deemphasized. With high-context, this is just

the opposite. Therefore, high-context cultures might have problems with e-learning, as non-verbal cues are not available. Other ways that cultures differ from one another include the fact that some cultures are collectivist, which means that the collective is more important than the individual, while other cultures are individualistic, which means the opposite. The implications of this is that those in a collectivist culture tend to shy away from displaying knowledge, for fear of being seen as bragging, as well as shy away from situations where they are unsure, for fear of losing face. The individuals in an individualistic culture, on the other hand, do not have a problem with displaying knowledge or looking like a fool. While these are certainly stereotypes, these cultural tendencies have implications for e-learning, as those in a collectivistic culture will be less likely to participate in on-line discussions than those in an individualistic culture. Yet another broad characteristic of cultures is that some cultures are vertical, while others are horizontal. In a vertical culture, knowledge is expected to be transmitted from those high in the hierarchy down to those lower in the hierarchy. In a horizontal culture, knowledge flows between those higher and lower in the hierarchy freely. This has implications for e-learning as those in a vertical culture will be more reliant upon the instructor to lead discussions, while those in horizontal cultures will be more likely to let information flow freely between everybody. This paper will investigate these cultural characteristics and explore why they are important when considering the design and development of e-learning systems, as well as reflecting on the important implications and their impact for instructors who are in an intercultural environment. . How culture affects e-learning One's culture affects how one adapts to e-learning. There is some indication that one's cognitive learning

style is different for individuals across different cultures (Graff et al., 2004, p. 1). Because e-learning is a global event, the need to be sensitive to one's culture is high (Seufert, year). This is particularly true in situations where the learners come from different cultures and backgrounds, and the instructors are also multinational (Seufert). Previous research indicates that organizational learning and knowledge creation are profoundly influenced by cultural differences, as are cognitive strategies and methods of learning and knowledge (Ardchivilli et al., 2006, p. 94). For an example of how culture affects e-learning, one can look to the Chinese. In the Chinese culture, competitiveness is high, so, even though e-learning encourages cooperative learning, it is difficult for Chinese students to take advantage of the cooperative learning ethic (McConnell & Zhao, 2006, p. 518). Moreover, Chinese students tend to rely upon teachers to teach them everything, and, since e-learning encourages self-study, it is more difficult for some Chinese students to adapt (McConnell & Zhao, 2006, p. 518). E-learning is also dependent upon the infrastructure of the country where the e-learning is taking place. So, in China, the technological infrastructure is spotty, and is dependent upon social and political contexts, which makes access to the e-learning environment poorly supported, so e-learning is problematic in these situations (McConnell & Zhao, 2006, p. 519). For all of these reasons, e-learning might be problematic for a student in China than in other parts of the world. Among the different cultural differences are preferences for either semantic or symbolic learning and cognition, and a preference for different forms of visual and verbal information presentation and learning content (Ardchivilli et al., 2006, p. 95). Returning to the dichotomy of individualistic verses collectivistic cultures, in which the cultures that are individualistic

have individuals who see themselves as independent of others, while the collectivistic cultures have individuals who see themselves as interdependent of a larger whole, each of these broad cultures have different ways of processing information and constructing knowledge. For the members of the individualistic culture, such as the United States, information is processed independent of its context, and information in written or codified form is emphasized. On the other hand, or members of the collectivistic cultures, such as China, Brazil and Russia, see information in context and look for contextual clues, and put less emphasis on information in writing (Ardchivilli et al., 2006, p. 97). Because the collectivist cultures look to context, it is more difficult for these learners to process information that is out of context, and face to face communication and phone calls are the preferred method of obtaining information. This is because non-verbal cues such as silence and body language are important for these collectivitistic, high-context cultures (Wurtz, 2005, p. 1). On the other hand, the individualistic cultures do not see context as important, and the written word is emphasized, which means that face to face communication and personal communication is less important (Ardchivilli et al., 2006, p. 97). This would have obvious implications for e-learning, as the collectivist cultures might have more problems with e-learning, due to its impersonal nature, while the individualistic cultures would have less problems with e-learning, as they emphasize the written word over context. Another characteristic of high context verses low context cultures is their respective perception of time. Wurtz (2005), quoting Edward Hall (1976), states that low-context cultures, such as the United States, see time as important, while high-context cultures, such as Brazil, Russia and China do not see time as

important, and believe that everything will happen in due time (Wurtz, 2005, p. 8). This has implications for e-learning, as the perception of time impacts how a learner regards message speed. With the low-context cultures, the message should be fast, which means that low-context cultures will have a preference for headlines, prose and TV commercials; in a high-context culture, slow messages, which take time to decode, such as poetry, books, and TV documentaries, are preferred (Wurtz, 2005, p. 8). Therefore, fast messages sent to slow message cultures will miss the mark, and e-learning must take this into account. Moreover, there is a difference between collectivistic and individualistic cultures with regard to whether the culture is an in-group culture or an out-group culture. The collectivistic cultures, tend to make distinctions between in-groups and out-groups, which means that they are willing to share with members of their in-group, for their in-group is where they derive their sense of " identity, protection and loyalty" and their communal traditions that go back hundreds of years (Ardchivilli et al., 2006, p. 97). Because of the strong in-group orientation of collectivist cultures, sharing with the out-group is difficult, which has obvious implications for e-learning, as e-learning can rely upon sharing with members who may or may not be a part of one's in-group. This is complicated by the fact that collectivistic cultures with strong in-group orientations may have negative feelings towards those in the out-group (Ardchivilli et al., 2006, p. 97). Moreover, individualistic cultures, such as the United States, have members who do not want to share even with the in-group, which has further implications for e-learning (Wurtz, 2005, p. 7). Another way that collectivistic and individualistic cultures differ is their approach to losing or gaining face (Ardchivilli et al., 2006, p. 97). Members of individualistic cultures lean

towards gaining face, with means that they are likely to show to other members of the culture their depth of knowledge. In traditional classroom communities, this would mean that members of an individualistic culture would be more likely to raise their hand in response to a question. With e-learning, this would mean that members of individualistic cultures will be more likely to post information to the group, as members of individualistic cultures are more likely to use formal channels, such as on-line discussion groups, to display their knowledge. On the hand, members of a collectivist culture are more likely to use informal means of displaying knowledge, such as asking questions to the professor outside of class or using informal discussion groups. This is both because the members of collectivist cultures do not want to come off as bragging, and because members of collectivist cultures do not want to risk losing face (Ardchivilli et al., 2006, p. 97). Collectivist cultures are typically more modest than individualistic cultures, which is why bragging is an issue. At least one study bears this out, as a large European pharmaceutical company, that is apparently a collectivistic culture, had managers who were reluctant to post information on the intranet-based knowledge database, as they did not want to give the impression of braggin (Ardchivilli et al., 2006, p. 97). Again, this has obvious implications for e-learning, as those in collectivistic cultures will be hesitant to participate in on-line discussions both because of fear of bragging and fear of losing face if they are wrong, while members of individualistic cultures will have no such qualms either way. Other cultural differences also play a role in e-learning. For instance, one's culture might be horizontal or vertical. With vertical cultures, members see themselves as different from others in social status, and these differences are welcomed and expected.

With horizontal cultures, these status differences are less pronounced. With the vertical cultures, knowledge flows from the top to the bottom; with horizontal cultures, knowledge flows both ways (Ardchivilli et al., 2006, p. 98). Another cultural difference is whether the culture sees ascription characteristics, which include wealth, age and gender as being the most important or achievement being most important. With the ascription cultures, the people who are higher up in the organization are the experts, and the on-line learners will follow their lead. Meanwhile, with achievement cultures, it would be presumed that those who have achieved the most, regardless of one's age, gender or wealth, would be the paramount authority in the on-line learning community. Likewise, with vertical cultures, those higher up are expected to disseminate information to those down below, whereas with horizontal cultures, the on-line knowledge is expected to flow both ways. Putting these concepts together, previous research has bore out the different hypotheses regarding how one's culture affects on-line learning. One previous study found that Asian Americans ask fewer questions from teachers or students, were more hesitant about being watched while they worked on computers and were less likely to use trial and error methods for their work processes, than non-Asian students (Kim & Bonk, 2002, p. 5). Moreover, Asian students preferred using e-mail to other on-line communication methods, such as message boards. These characteristics all suggest that Asian students come from a collectivistic culture, which would explain why they are hesitant to share information on message boards, for they neither want to be seen as bragging, or want to risk losing face, as well as explain why they do not use trial and error and why they do not ask questions. Also, bearing out the studies about Chinese students above, Asian

students are reliant upon their tutors and teachers in the on-line interactive communities, whereas Westerners are peer-oriented learners who encourage interaction between students (Kim & Bonk, 2002, p. 6). This suggests that Asian countries are vertical countries who are ascription oriented, as knowledge is expected to flow from on high to down below, while the Western countries in the study would be considered horizontal countries, as knowledge flows evenly between those higher up on hierarchies and those lower in the hierarchy. Other studies have shown other cultural differences. For instance, a previous study showed that American students were more expressive on-line than either Danish or Finnish students, which suggests that these Scandinavian students are less expressive than the American students (Kim & Bonk, 2002, p. 7).(reference?). Another previous study introduces an interesting discrepancy - Japanese students participate little in traditional classrooms, which involve face-to-face communication, yet participate much more in on-line communities (Kim & Bonk, 2002, p. 6). This would suggest that the Japanese is an individualistic culture, therefore its members do not have a need or face-to-face communication, and do much better in on-line communities. Yet, the fact that the Japanese in these studies do not participate in face-to-face communication would denote a modesty and need to save face. This is characteristic of a collectivistic culture. Therefore, the Japanese have aspects of both collectivism and individualism when it comes to on-line verses traditional interaction. Of course, the above analysis presumes a stereotype, which is the basis for criticism of the theories that group countries together by cultural characteristics. For instance, even within a collectivist country, there are members who are individualistic, and vice-versa (Blanchard & Frasson, 2005). Another criticism

is that the cultural analysis theories are outdated, and do not take into account the global nature of culture, which presumes that cultures are fluid and amorphous (Wurtz, 2005, p. 4). However, Blanchard & Frasson state that these cultural theories are useful, as they indicate a cultural tendency, not necessarily that every member of the given culture will behave in the same way (Blanchard & Frasson, 2005). Likewise, Wurtz (2005) believes that these cultural theories are useful because prevailing norms are still present throughout cultures, therefore the parameters of the cultural theories should not be abandoned (Wurtz, 2005, p. 4). Because of the sensitivity to culture that is necessary for e-learning to be successful, e-learning systems must adapt to different cultures. What works in one culture, and is appropriate for that culture, would not be appropriate for another culture. Designers of learning software must therefore take culture into consideration (Seufert, 2002). An area that is particularly sensitive to cultural mediation is that of business e-learning. As indicated before, multinational businesses are increasingly using e-learning as a part of their repertoire. Ignorance of cultural differences can lead to accidentally offensive behaviour that " can raise false alarms, sow mistrust and quickly kill off alliance that might otherwise have flourished" (Rogerson-Revell, 2003, p. 156). The design of e-learning software must take into account the different knowledge sharing strategies, and must be " adoptable to styles and preferences of employees in multinational, globally-dispersed corporations" (Ardchivilli et al., 2006, p. 95). The software must also take into account barriers to knowledge sharing that are culture-specific, as well as taking into account the difference perceptions the learner might have towards information seeking, knowledge representation and sharing (Ardchivilli et al., 2006, p. 95). Blanchard et al.

(2005), e-learning designs should take into account cultural intelligence, which means that the system must adapt to cultural specificities. Included in this is understanding, which means that the system should " translate a learner's behaviour/feeling/result depending on the learner's cultural specificities" and adaptation, which means that the system should have different interfaces and/or learning strategies that are culturally specific (Blanchard et al., 2005). Such e-learning designs should take into account whether the user is individualistic or collectivistic, for instance, or whether the user, because of his culture, relies more upon supervision and hierarchy than other cultures might. Moreover, e-learning designs should also take into account dual representation of cultural rules. As Blanchard et. al 2005have surmised, culture has two different meanings. One meaning is that culture is dynamic, and a way to process the production of meanings. The second definition of culture is that it is static, and is a stable set of shared meanings and meaningful symbols (Blanchard et al., 2005). Blanchard et al., believe that e-learning systems should take advantage of both of these cultural meanings by using both static culture data, such as a static rule that pride is considered a positive emotion for western countries; and dynamic data, which are rules that " are dynamically obtained by analysis of the use of the system, such as French learners in the system prefer to work collaboratively" (Blanchard et al., 2005). Conclusion E-learning is a great tool, but one that should be handled with care. There are many cultural differences that exist between learners, and these cultural differences must be taken into account when designing an e-learning software program or when implementing one. Some cultures do best with face-to-face learning, as they are high-context cultures. For them, the e-learning process should be adapted. Perhaps the

use of Skype or webcams could be developed so that these learners can see the non-verbal cues that they seek. Other cultures are collectivistic, which has implications for how they communicate and whether they are willing to share knowledge. These individuals tend to be more shy in disseminating information than those in a individualistic culture. Therefore, instructors must be especially cognizant of these learners, and encourage them by tailoring lessons to them. These same cultures tend to share information within their own group, as opposed to sharing information with those not in their group. This also must be taken into consideration when developing lesson plans. And, certain cultures expect information to flow from the top of the hierarchy down, while other cultures expect information to flow freely between those higher and lower in the hierarchy. With the vertical cultures, teachers must take into account that they are to be relied upon to disseminate information and encourage discussion, so this is another implication that has importance on how e-learning is forged. In short, cultural differences are prevalent, so instructors and software designers must be sensitive to this and act accordingly. http://www. elearnspace. org/Articles/connectivism. htm