

# Placing Culture at the Forefront

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## **Introduction**

Culture is inherent in human life. It affects all aspects, especially language and education. Culture and learning are interwoven and inseparable (McLoughlin, 1999, p.232). It can be very subtle and sometimes culture is not even recognized as part of a person's life. It is apparent, however that instructional design for Web-based learning systems cannot, and does not, exist outside of a consideration of cultural influences (Wild, 1999, p.197 ).

Educational, computer and Internet technologies are increasing rapidly in today's society. With the ability to reach broader and more diverse audiences of learners, the issue of cultural differences and their effects on instructional technology and design are becoming more and more important. In order to capitalize on this potential, instructional designers must be able to design for emerging audiences. We don't really know for sure what the audiences of the future will look like, but we need to be able to adapt to whatever cultural demands and opportunities they present.

Instructors typically take into account the learner's background in order to plan appropriate instruction. Planning and designing for instructional resources are no different. Issues must be identified and addressed so that they may be incorporated into the materials designed, and culture is one of the most important, and often overlooked issues. Culture is a significant factor in determining effectiveness of learning material created in the WWW and intended for use by culturally diverse students (Wild & Henderson, 1997, p.180).

This paper examines some definitions of culture and how culture in turn affects instructional design. Specific cultural issues in designing instructional materials are discussed and guidelines are also examined in order to guide the design of culturally sensitive materials.

## **Definitions**

Definitions of culture vary depending on whether the viewpoint of the author is anthropological or sociological in nature. Each viewpoint has its own perspective. According to Chen, Mashhadi, Ang and Harkrider (1999), anthropologists refer to the behavioral customs, the manners and the interests of society, while sociologists view culture as socially determined ways of thinking and acting that people acquire as a member of society (p. 219).

Culture can be defined as the way of life of a group of people. A people's culture is demonstrated through its values, beliefs and education. Culture thus shapes and is shaped by language, ethnicity, religion, class, power, history, geography, gender, lifestyle, values, beliefs, traditions and ways of thinking and doing (Scheel and Branch, as cited in Henderson, 1996, p.86 ). Henderson (1996) also suggested that culture is the manifestation of the patterns of thinking and behavior that result through a group's adaptation to its changing environment (p. 86).

Bentley, Tinney and Chia (2004) added the aspect of oral and written language to their definition of culture. Culture is seen as an accumulated pattern of values, beliefs, and behaviors which is shared by an identifiable group of people with a common history and verbal and non-verbal symbol system (p. 62).

Seufert (n.d.) and Collis (1999) cited Watson, Ho and Raman's definition of culture, as the beliefs, value systems, norms, mores, and structural elements of a given organization or tribe, or society (¶6 and p. 201). People can belong to more than one cultural group as people adapt to environments and as such take on a new slightly different version than the culture of their birth. In all areas of human activity, the behavior of people is affected by the values and attitudes that they hold and the societal norms that surround them (Henderson & Wild, 1997, p. 183).

Since shared values and beliefs are a common thread throughout the various definitions and are woven throughout instruction, the definition of culture used in this paper will be the shared beliefs and values of a group of people. Most specifically these shared beliefs and values will be examined within the context of designing instructional materials.

### **Effects of Culture on Instructional Design**

Education is affected by culture and therefore the role of culture is clearly relevant to the design of instruction. Culture should be part of all of phases of design. Thomas, Mitchell & Joseph (2002) argued that culture is so much a part of the construction of knowledge that it must underpin not only the analysis phase but all the phases (p. 41). They further proposed that the cultural elements of intention, interaction and introspection need to be added as another dimension in the ADDIE (analysis, design, development, implementation, evaluation) model.

Instructional designers can unintentionally perpetuate their own cultures. Education's function is centered around cultural reproduction the reproduction of existing socio-economic and political relationships and structures- and educational technology becomes instrumental to the successful completion of this task (Lauzon, 1999, p. 266).

To successfully overcome the issue of unintentional cultural overtones, the instructional designer must be aware of the hidden cultural impact on design and take it into consideration when designing instructional materials. Software systems are developed in a certain cultural environment based on norms, values, and beliefs which influence the design of the systems (Seufert, n.d.). A course may be designed with the belief that most

students prefer a flexible, loosely structured style, when many of the students may be more comfortable with a rigid, highly structured style. The issue of cultural influence on instructional design has not improved significantly over time. Chen et al. (1999) argues that even though five years separated the design of two systems, the overall influence of the instructional designers on the learning system was a major factor outside the availability of the technological tools (p222).

Culture in and of itself affects how the instructional material, educational technology or Internet is used. The way a user of educational technology has been brought up will affect their use of that technology. If one comes from a strict, authoritative society, one may be less likely to explore and take risks. On the other hand, one who has been schooled in a more open setting may feel more inclined to take risks. Students accustomed to traditional methods may find it hard to adapt to active and innovative learning techniques (Joo, 1999, p. 247) .

One of the functions of education is to reproduce the culture in which it is based and one of the instruments of education is educational technology and instructional design (Lauzon, 1999). Lauzon explained that it must be understood that educational technology is community of practice and that this community of practice is embedded in the larger community of practice called education. Education, as social practice, is influenced and shaped by social, political and economic forces (Lauzon, 1999, p. 267).

Henderson (1996) stated that instructional design can highlight or devalue factors and therefore mold the culture. She explained Instructional design is socially and culturally determined. Instructional design, no matter its paradigm, is therefore about the maintenance and creation of cultural identity. But whose cultural identity (p.89)?

If the learners are not part of the majority culture that is shaping the education system, then they are at a disadvantage. They are missing important tools to utilize the educational technology effectively.

Instructional design is influenced by culture on two scales, one local (micro) and the other global (macro) or international. Locally the design is intended for a particular audience. On the global front, consideration needs to be made regarding design issues so that cross cultural participation is possible for all students (McLoughlin & Oliver, 2000).

On a micro level, the make-up and organization of the learning environment needs to be taken into consideration. For example, culture affects the design of rules and regulations within a classroom setting. Teachers and designers must invoke ways of participation, interaction and sharing power that are in keeping with the student's culture (McLoughlin, 1999).

Globally, McLoughlin (1999) stated that culture and technology use interact and can result in harmony or tension (p.233). Discord arises when the underlying values of one culture are disagreeable or not appropriate for another culture. These values must be identified,

and then addressed by any instructional design project that is targeted for a global audience.

Culture can affect the way we accept and use technology. Learners from different cultures vary in their communication and group behaviors. These behaviors in turn affect how the learner uses various learning systems online. Bentley, Tinney and Chia (2004) describe high-context cultures and low-context cultures. High-context cultures have strong people bonds, whereas low-context cultures have fragile people bonds. High-context cultures utilize implicit messages and low-context cultures use explicit messages. Software systems are developed in a certain cultural environment based on norms, values, beliefs which influence the design of the systems. Whereas in one culture the educational product is very successful, for another culture the system is not appropriate (Seufert, n.d., p. 3).

Culture affects not only what is learned, but also the way one learns. Woodrow as (cited in Selinger 2004) suggested that cultural values and beliefs not only provide the basis of interactions, but also affect how one perceives learning. Learning may be construed differently by various cultures. Students from some cultures view learning as something that is very narrow and not open to interpretation, whereas students from another culture look upon learning as being broad and open to question. Selinger (2004) suggests that approaches need to be modified to take into account learners from different cultural backgrounds.

Bentley, Tinney and Chia (2004) proposed that a student's cultural background, values and beliefs affect the student's perception of learning. Education is value laden and how learners perceive Good' instruction is based on what they think and value. What makes one group of learners happy is just as likely not to meet the needs of another group of learners (p.64). They also suggested that the way one views an object may differ depending on their world view and the culturally dominant thinking pattern.

Instructional designers are not immune to the effects of culture. Just as learners are affected by their culture, instructional designers are affected by theirs. Henderson (1996) argued that

instructional design and instructional designers do not exist in a vacuum; nor are they culturally neutral. As part of their social and cultural fabric, they influence and are influenced by particular world views; their class, gender, culture, values, and ideologies; selected learning theories; and particular instructional paradigms (p.85).

Awareness of the influence of culture and its incorporation into design will aid in keeping cultural biases to a minimum.

Once the intangible aspect of culture is considered in the design of a product, it becomes part of that cultural object and therefore a product of the paradigms of the instructional designer. These paradigms are affected by the instructional designer's world view, values, gender, beliefs and the designer's preferred design paradigm ( Henderson , 1996). Van

den Branden and Lambert (1999) reiterate that designers need to be aware of their own particular cultural traditions and instructional biases.

### **Specific Cultural Issues**

The broad effects of culture within instructional design need to be examined in more detail. While the cultural issues examined in this paper are certainly not comprehensive, a broad overall range is considered. Learning, teaching, designing and political styles are all segments of instructional design in which culture becomes an issue.

Different cultures view the role of the instructor different ways. While some cultures expect the instructor's sole responsibility to be to impart knowledge and not be questioned, others want the instructor to be a facilitator and be open to questions and challenges. McLoughlin & Oliver (2000) explained that the expectation that students will question knowledge or the teacher is not a universally accepted form of interaction (p.2). One difficulty in designing for global learning is the different views of the roles of the instructor (Selinger, 2004). Being aware of these differing views may help instructional designers create programs that are more compatible with the learners.

Hofstede (1986) compares collectivist and individualist societies and the interactions between teacher/student and student/student. There are numerous comparisons, but some of the differences are especially important to instructional design. Individuals in collectivist societies will only speak up in small groups, while ones in individualist societies will speak up in large groups. Another difference is that teachers in a collectivist society are expected to give preferential treatment while the expectation in an individualist society of teachers is that they are to be impartial

Just as important as the role of the instructor in the design of culturally sensitive courses, is the role of different student learning styles in the design of course. Students have diverse learning styles and these will affect how a student learns in a course. Students accustomed to traditional methods may find it hard to adapt to active and innovative learning techniques (Joo, 1999, p. 247).

As mentioned previously, culture reinforces itself through education. Gunawardena, Wilson and Nolla (as cited in Bentley, Tinney & Chia 2004) stated that adult learners have developed definite ideas about what kind of learners they are and what is an acceptable, comfortable way to learn from their culture's perspective (p.63).

Selinger (2004) offered a comparison of Asian and Australian learning styles. Some characteristics of Asian learners are: rote learners, non-critical of information, want to learn everything, willing to accept one interpretation and take few initiatives. In comparison Australian learners are: evaluative in their learning, think critically, selectively learn critical concepts, encouraged to test interpretations and independent learning is rewarded. In order to encourage success, these cultural factors must be considered in the design of instructional materials. A cultural difference is also noted in Bentley, Tinney and Chia (2004) when they compare high context cultures to low context

cultures. High context cultures prefer implicit messages as opposed to low context cultures which prefer explicit messages. Other high/low context differences include reactions, movement between groups and commitment.

Hofstede (1986) also compares students in collectivist societies and individualist societies. Students in collectivist societies are expected to learn how to do and students in individualist societies are expected to learn how to learn. These expectations will affect how students interact with the course materials and therefore the design of the course.

Designers need to be aware of carelessly implementing cultural issues into material. Henderson (1996) warns designers of soft multiculturalism, which is including cultural elements on the surface only. Exotic cultural aspects should not be included in materials unless it is included in the proper context and not used in isolation. Tokenism should also be avoided in materials. This would include clips of music, art or language of a minority culture just for the sake of including that culture. These minorities will not benefit from materials designed for the majority culture. Instructional design of IMM materials needs to empower, extend, and enrich the students' culturally specific knowledge and ways of thinking and achieve a nexus between these and the demands of the required academic culture (Henderson, 1996, p.93).

Cultures have varying degrees of acceptance of new technologies. Hofstede (1986) and Selinger (2004) referred to uncertainty avoidance. Some cultures have a high uncertainty avoidance and therefore prefer limited choices, implicit navigation schemes and simplicity. Low uncertainty avoidance cultures prefer many choices, encouragement of risk and focus on understanding the concept, not just remembering it. Factors in the area of human-computer interaction are the acceptance of trial and error in the usage of computers, the preference for precision versus browsing and differences in support services (Collis, 1999). Other dimensions that should be taken into consideration when designing materials are: group size, pedagogic, philosophy, language, teacher/student responsibilities and institutional expectations (Collis, 1999).

The use of computers is not always culturally neutral. Girls and people from low income minority groups do not always have equal access and when they use computers, it is likely for drill and practice work (Henderson, 1996). With its flaming text, the Internet promotes verbal aggression. Appadurai and Hannerz (as cited in Henderson 1996) saw electronic dialogue software as promoting a global culture that is already information rich. Developing cultures have a distinct disadvantage when trying to break into this already information rich society.

There is some disagreement in the literature regarding the area of cultural neutrality. Some authors, Bentley, Tinney and Chia (2004) suggested that designers create material that is culturally neutral, while others stated that products should not be made that are culturally neutral Thomas, Mitchell and Joseph (2002). Bentley, Tinney and Chia (2004) suggest that designers should create materials that are culturally neutral when they know that there will native and non-native speakers using the material. In opposition to this Thomas, Mitchell and Joseph (2002) point out that Too often the intention is not to make

a product that is culturally sensitive or culturally appropriate but culturally neutral. This is often done in an attempt to avoid cultural bias but also occurs as an unhappy consequence of cultural neglect or arrogance (p. 42). They suggest that designer should design material that is culturally sensitive and based on the fact that the issue of culture is inescapable. Once again, the needs of the learners should dictate how cultural influences are included in a design.

Culture also plays a role in the visual design and layout of instructional materials. Language, symbols and layout can all affect how a learner interprets and uses instructional materials. Culture cannot be systematically programmed into materials. Culturally appropriate materials must take into account layout of the graphical interface, images, symbols, colour and sound in order to fully acknowledge cultural influences (Chen, 1999). Wild and Henderson (1997) remarked that those (cultural) influences impact on the interpretation of such materials by learners (p. 183). For example, most design in the Western world is based on reading from left to right, and even navigation bars are typically located on the left side of a visual display.. Societies that read from right to left may be at a disadvantage when confronted by Western design.

Symbols and icons that the Western culture take for granted are not always understood or embraced in other cultures. Placing a question mark in a program to mean help, will not aid a student in a culture that does not use question marks.. Arrows meaning next or go to the next page , are not universal ( Henderson , 1996) and may not be beneficial to all learners.

Many other specific instances are mentioned in Sakurai's (2002) article. She listed several items that should be avoided in a global setting. The thumbs up sign can have a positive connotation in one culture, but in another culture it can have a very negative one. Red is a colour that can mean danger in Western societies, but has other meanings in other countries. Red can mean good luck or it may be associated with communism. Other symbols that can have negative connotations in other countries are piggy banks, pointing fingers, alcohol and military images. (Sakurai, 2002).

Government and politics also play a part in culture and design. Due to the increasing power of global learning and interaction, many countries fear losing control over education and instruction. This may be a problem in countries where education is strictly governed (Joo, 1999).

Johari ((2002) discussed instructional technology in Iran and the issue of control versus the need to integrate educational technology. The advantages of technology which could advance their language and promote their history is balanced with the disadvantage of threatening their Islamic-based culture and becoming corrupted by Western culture. It comes as a double edged sword, desirable western technology and undesirable western culture (p. 141).

Instructional designers need to be aware of the global instruction in the promotion of the majority culture. Knowledge of this will benefit the designer in overcoming this obstacle

in advancing multiple cultures. The World Information Order is fundamentally self-reinforcing: the greater the exposures of a particular culture, the more incentives there are for people belonging to marginal cultures to learn about it (Joo, 1999, p. 248).

### **Guidelines for the Inclusion of Culture in Instructional Design**

Several authors have presented guidelines that may assist designers in creating instructional materials that are culturally sensitive and appropriate. The guidelines will be presented by author as each author takes a slightly different view and collating the various guidelines would fragment the author's overall views on guiding instructional design.

Henderson (1996) discusses three instructional design paradigms. They include culturally unidimensional or exclusionary, inclusive and inverted. In the first paradigm, culturally unidimensional, minority cultures are not included at all. The second one, inclusive, attempts to include the minority cultures, but only on the surface of the design. It is the third paradigm, inverted, that makes a significant attempt to include minority cultures. The inverted curriculum involves planning and designing a program from the perspective of the minority, not the perspective of the majority.

A major weakness in these paradigms is avoidance of the cognitive, epistemological and philosophical aspects of cultural educational contexts (Henderson, 1996 p. 94). Rather Henderson (1996) proposed a multiple culture model. The main function of the multiple culture model is to design learning materials that have equity of outcomes for all (Henderson, 1996).

Three instructional guidelines are offered by Henderson (1996) in order to achieve a multiple culture model. The first guideline is that instructional designers should include specific objectives of both the mainstream and the minority culture. Secondly, as academic culture is embedded in society's dominant culture, aspects and values of the macro culture, including systemic issues to do with power, control, and disadvantage, need to be included (Henderson, 1996 p. 94). Third, the design must take into account the minority's culture, values and beliefs that goes beyond tokenism. (Henderson, 1996). The multiple culture model integrates the sharing of cultures.

Flexibility, variety, simplicity and reflection are Seufert's (n.d.) main underlying guidelines of designing culturally related on line learning environments. Seufert (n.d.) suggested that designers plan for flexibility by being flexible themselves, and offering technological, methodical and resource tool sets to aid learners. For simplicity, designers should plan for minimal technology as many do not have access to high end technology and also offer print material to offset the lack of technological resources. As well, the designers should keep it simple for the instructors because they have little time to create course materials. Finally, in Seufert's (n.d.) reflection or awareness guideline, it is recommended that designers should be aware of cultural differences and not guess at them. They should set rules for netiquette and they should be aware of rhythms within the culture such as work weeks and holidays (Seufert, n.d.).

In a paper on designing courses for the Internet, Collis (1999) suggested ten design guidelines that have merit. The ten guidelines are as follows:

- Plan for flexibility.
- Design for a variety of roles for instructors and learners. The variety could include activities from both constructivist and instructivist approaches and group versus individual learning to name some examples.
- Use books and print for primary study materials. Students may not have access to go on-line very often.
- Keep the course site as empty as possible so that the students and instructor can place their own work there and also manage activities.
- Design course so that there is a variety of combinations of supplementary media and resources.
- Design for minimal technical levels.
- Reduce text fixed on the screen to a minimum and design so that everyone enters into the communication.
- Offer a flexible assortment of tools so that different ways of communicating can be used.
- Design for organizational flexibility. Course could be offered at various times and be of differing lengths.
- Keep in mind and be realistic about what instructors can and will do. Often instructors will do things at the last minute. (Collis, 1999, p. 208-209).

Bentley, Tinney and Chia (2004) made recommendations based on Hofstede's (1986) solutions to bridging the gap between cross-cultural learning contexts, which are a) to teach teachers how to teach and b) to teach the learner how to learn (p.316).

There are six recommendations for American instructional designers. They are:

- Describe very clearly the educational values embedded in the course.
- Offer optional scaffolding elements to help learners.
- Consider the level and knowledge of English required for the course.
- Avoid slang and locally used words and phrases.

- Make topics available ahead of time so that students have the extra time needed to fully understand the topic.
- Materials should place little emphasis on personal achievement, promote group work, be written in impersonal style and emphasize tradition and history. (Bentley, Tinney & Chia, 2004).

Recommendations for students are as follows:

- Be less dependent of syllabus.
- Try to be open to new ways of teaching, new ways of learning and be open minded.
- Try to figure things out for themselves.
- Join study groups.
- Get help with English as a second language.
- Talk to the instructor about accommodations.

These student recommendations prepare students for courses that may not fit culturally within their mindset. Designing instructional materials that make students aware of the cultural differences is one way of helping students cope with cultural diversity in materials.

The design model ADDIE was updated with a cultural dimension by Thomas, Mitchell and Joseph (2002). Through time ADDIE has evolved from a linear system, starting with analysis and ending with evaluation to a circular model where designers are continuously analyzing, designing, developing, implementing and evaluating. They propose that another dimension, culture, be included in the ADDIE model. This dimension would include three parameters: intention, interaction and introspection. Using these dimensions as guide in planning will aid designers in adding cultural component to their designs.

The intention to include culture should be included in every phase. In every phase of the ADDIE process, we must question our intention to carry our analysis, design, development, implementation and evaluation in a manner that is culturally sensitive and grounded in the notion the culture is inescapable (Thomas, Mitchell & Joseph, 2004, p. 43). Instructional designers must interact with the learners so that they can understand who they are designing for. When one fully understands the learner, then the product will become more appropriate for the learner. Introspection is also critical to instructional design. Designers must examine their own values and beliefs to ensure that they are not unintentionally included in their design. (Thomas, Mitchell & Joseph, 2004).

McLoughlin and Oliver (2000) offered design guidelines for attending to cultural inclusivity in Web design. Table 1 summarizes the cultural issue and offers instructional design considerations for each issue.

Table 1: Guidelines for flexible, culturally responsive Web design. (McLoughlin & Oliver, 2000, ¶ 34).

<b>Cognitive/ cultural issue</b>	<b>Instructional design consideration</b>
Awareness of learner needs and preferences	Instruction and learning tasks must support differences in learning style and communication.
Communication and social interaction	Multiple channels and forums for communication between learners and tutors should be provided.
Authentic task design	Learning activities build on diversity and provide bridges to the students' culture and community.
Multiple perspectives and access to resources	Enable learners to create resources and to add culturally relevant sources of information. Emphasise learner input.
Scaffolding and support	Students need scaffolding or support structures to ensure that they develop skills and confidence. Include peer scaffolding in task design.
Flexibility in goals, modes of assessment and learning outcomes	Ensure flexibility and inclusivity by offering choice, multiple modes of delivery and assessment. Students should be able to choose their own pathways through the content and negotiate tasks for assessment.
Tutor roles	Create multiple roles for online tutors and mentors at various stages of the course to ensure provision of feedback and support.
Collaboration and co-construction	Create motivating tasks where learners can share ideas and work on projects, drawing on cultural resources.
Clear communication of aims, objectives and requirements	Plan for maximum clarity and ease of use, while designing for choice. Avoid assumptions about cultural stereotypes and expectations.
Self direction and integration of skills	Plan activities so that technology use and information access and become part of students' repertoire of study skills and lifelong learning strategies.

While these design guidelines appear to simply be best practices, the concept of flexibility appears to be one word that is common throughout the various guidelines researched in this paper. Other key concepts are keeping courseware simple, providing for a variety of learning experiences and acknowledging the learner's culture as well the instructional designer's culture.

## Conclusion

In conclusion, all instructional material is intertwined with culture. Sometimes it is loud and purposeful, but at other times it is silent and unobtrusive. Culture affects designers as well as learners as a part of culture is passing values and beliefs from generation to generation. Culture affects the use of technology as well as interactions with technology. Methods of learning and teaching are also affected.

More specifically many issues arise from the influence of culture. These are especially apparent when more than one culture is using the same instructional materials or courses. Instructional designers must be aware of these issues and incorporate them in order to design culturally sensitive materials.

How can these cultural issues be embraced so that educational technology and instructional design can be used in culturally sensitive, responsive and appropriate ways? Several authors have given guidelines that can be used to make culturally sensitive material. The key points are to be flexible, know the learner, and the self and constantly be alert to the issue of culture in designing materials.

## References

Bentley, J.P.H., Tinney, M.V., & Chia, B.H. (2004). *Intercultural internet-based learning: Know your audience and what they value*. Association for Educational Communications and Technology. Chicago, IL. (ERIC Document Reproduction Service No. ED485118).

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.

Collis, B. (1999). Designing for differences: cultural issues in the design of WWW-based course-support sites. *British Journal of Educational Technology*, 30 (3), 201-215.

Henderson, L. (1996). Instructional design of interactive multimedia: A cultural critique. *Educational Technology Research and Development*, 44 (4), 85-104. (ERIC Document Reproduction Service EJ362295).

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

Johari, A. (2002). Meeting the cultural challenges of instructional technology in Iran. *Educational Media International*, 39 (2), 133-143.

Joo, J. (1999). Cultural issues of the Internet in classrooms. *British Journal of Educational Technology*, 30 (3), 245-250.

Lauzon, A.C. (1999). Situating cognition and crossing borders: Resisting the hegemony of mediated education. *British Journal of Educational Technology*, 30 (3) 261-276.

McLoughlin, C. (1999). Culturally responsive technology use: developing an online community of learners. *British Journal of Educational Technology*, 30 (3), 231-243.

McLoughlin, C., & Oliver, R. (2000). Designing learning environments for cultural inclusivity: A case study of indigenous online learning at tertiary level. *Australian Journal of Educational Technology*, 16 (1), 58-72. Retrieved January 29, 2006, from <http://www.ascilit.org.au/ajet/ajet16/mcloughlin.html>.

Sakurai, J.M. (2002). *Foreign faux pas: Culture-the final barrier to going global*. E-Learning 3(7) 26. Retrieved February 3, 2006, from [http://web1.infotrac.galegroup.com.cyber.usask.ca/itw/infomark/565/969/75527210w1/purl=rc1\\_ITOF\\_0\\_A89235318&dyn=3!xrn\\_1\\_0\\_A89235318?sw\\_aep=usaskmain](http://web1.infotrac.galegroup.com.cyber.usask.ca/itw/infomark/565/969/75527210w1/purl=rc1_ITOF_0_A89235318&dyn=3!xrn_1_0_A89235318?sw_aep=usaskmain).

Selinger, M. (2004). Cultural and pedagogical implications of a global e-learning programme. *Cambridge Journal of Education* , 34(2) 223-239.

Seufert, S. (n.d.). *Cultural Perspectives* Retrieved December 5, 2005 from <http://www.scil.ch/seufert/docs/cultural-perspectives.pdf>.

Thomas, M., Mitchell, M. & Joseph, R. (2002). The third dimension of ADDIE: A cultural embrace. *Tech Trends*, 46 (2) 40-45. (ERIC Document Reproduction Service No. EJ654212).

Van den Branden, J. & Lambert, J. (1999). Cultural issues related to transnational open and distance learning in universities: A European problem? *British Journal of Educational Technology*, 30 (3), 251-260.

Wild, M. (1999). Editorial: Accommodating issues of culture and diversity in the application of new technologies. *British Journal of Educational Technology*, 30 (2), 195-199.

Wild, M. & Henderson, L. (1997). Contextualizing learning in the World Wide Web: accounting for the impact of culture. *Education and Information Technologies* 2 , 179-192.