Student Technology Readiness And Its Impact On Cultural Competency

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ABSTRACT

The creation of an effective learning environment requires cultural competency – the ability to interact effectively with people of different cultures. Cultural competency means knowing and understanding the people that you serve. This study compares American and Chinese student's readiness and willingness to use innovative technology by assessing their technology readiness through the use of the Technology Readiness Index (Parasuraman, 2000). The findings show that Chinese students exhibit higher levels of discomfort and insecurity, and lower levels of optimism and innovativeness with regard to using new technology. Implications for cross-cultural technology-based learning environments are also provided.

Keywords: technology readiness, cultural competency, higher education technology

INTRODUCTION

Increasingly, universities are establishing partnerships and joint programs that cross national borders (Willis, 2006, 2007). This is especially true in the case of China, which now has more than 700 academic programs established in conjunction with foreign universities. Of these programs, American schools account for more than 150 (Simons, 2007). Universities are lured by the vast size of the Chinese market and the profit potential that this size affords. In fact, the Chinese Ministry of Education estimates that 124 million Chinese will reach college age by 2008. To meet this vast need, it has been estimated that China will need to establish 800 colleges within the next fifteen years (Mooney, 2006)

In spite of this vast potential, foreign universities have found significant challenges in establishing partner programs with foreign universities. Partner quality, political control, and the relatively high costs of establishing a presence in the Chinese market have all created problems for universities attempting to stake out ground. In attempting to control costs, a number of these operations make use of a combination of traditional classroom teaching and distance learning technologies such as the internet, video conferencing, and instructional management software (Mooney, 2006).

In addition to partnerships and joint programs, more and more students are electing to cross national borders to further their education. Clearly the events of 9/11 had a stifling affect on this type of activity at the beginning of the decade, but recent numbers suggest a significant turnaround. With regard to American students studying in China, approximately 11,784 did so in 2006 as compared to 4,280 in 2000 (Simons, 2007). Alternately, roughly 67,723 Chinese students studied in the U.S. higher education system in 2006 which represents an 8.2% increase over the previous year (Zhang, 2007).

Given that the world is getting smaller (figuratively speaking), both students and institutions of higher learning are increasingly crossing national boundaries to take advantage of teaching and learning opportunities seemingly unimaginable just a couple of decades ago. The result is a much more culturally diverse student population than ever before. The migration of students requires institutions to have an understanding of students' cultural and social norms. Mujtaba and Mujtaba (2004) argue that a healthy learning environment requires "cultural

competency" – a continuous learning process that enables both educators and students to function effectively in the context of cultural differences.

The purpose of this paper is to look at one of the dimensions along which American and Chinese students may differ with respect to cultural norms—that being their level of "technology readiness." The Technology Readiness Index (TRI) was introduced by Parasuraman (2000), which measures the "propensity to embrace and use new technologies for accomplishing goals in home life and at work." The TRI identifies four dimensions of technology belief that impact an individual's level of techno-readiness. This paper utilizes the TRI to assess American and Chinese students' willingness and likelihood to use new technology.

As higher education increasingly relies on technology to deliver and enhance course offerings (ECAR, 2007), an understanding of the differences between American and Chinese students' propensity to adopt and use innovative technology would seem to be imperative for cultural competency. When educators understand these differences, they should be able to establish a collaborative and effective technology-based learning environment.

TECHNOLOGY IN HIGHER EDUCATION

Gustafson (2004) argues that college students today expect to use and learn cutting-edge technology during their academic careers and believe that these learning technologies are integral to their course work. Current innovative technology used within a college classroom learning environment may include items such as course web sites, Microsoft's Power Point, discussion boards, E-mail, and web-based research (Gustafson, 2004), as well as web-based hypermedia environments, interactive animations and simulations, and interactive hypervideos (Gerjets and Hesse (2004). In the foreseeable future, new technology may include grassroots video and collaboration webs (within the next year), mobile broadband and data mashups (two to three years in the future), and collective intelligence and social operating systems (four to five years in the future) (The New Media Consortium, 2008).

In a recent study of undergraduates at ninety-nine (99) four year institutions, 98.4% of the respondents reported owning a computer with nearly three quarters of the respondents owning a laptop. Over 80% of the respondents reported favoring e-mail as the primary source of communication between them and the college/university they are attending. In addition, the majority of respondents agreed that information technology in a course improved their learning, resulted in more prompt feedback from their instructor, helped in terms of collaboration and communication with classmates, and allowed the student better control of course activities (ECAR, 2007).

The majority of respondents in the same study, however, preferred a "balance" between information technology (IT) and face to face interaction with their instructor. Respondents also reported that poor use of technology on the part of their instructor actually detracts from the learning experience and that instructors sometime overestimate student comfort with technology resources. The research also found that students rarely attribute IT related learning problems to their own limitations but rather to limitations on the part of the professor (ECAR, 2007). This finding may be supported to some extent by the assertion that the gap between student's perceptions of technology and that of faculty continues to widen (The New Media Consortium, 2008).

Technology Readiness

The extent to which individuals desire to use new technology is commonly influenced by such factors as culture (Erumban and de Jong, 2006; Singh, 2006), attitudes toward specific technologies (Bobbitt and Dabholkar, 2001; Curran et al., 2003), the level of technology anxiety exhibited by individuals (Meuter, Ostrom, Bitner, and Roundtree, 2003), and an individual's capacity and willingness to use (Walker, Lees, Hecker and Francis, 2002). Research has also shown that individuals who are "ready" to use technology are more likely to try it (Parasuraman, 2000).

Davis (1989) developed the technology acceptance model (TAM) that identifies potential drivers and inhibitors of technology acceptance. Similarly, Parasuraman (2000) proposed a "Technology Readiness Index"

(TRI), which measures the "propensity to embrace and use new technologies for accomplishing goals in home life and at work." The TRI identifies four dimensions of technology belief that impact an individual's level of techno-readiness. Two of the dimensions are contributors and two are inhibitors of technology adoption.

The contributors are: 1) Optimism – the degree to which individuals believe that technology can benefit their lives and give them more control over their life, and 2) Innovativeness – a natural desire to experiment with new technologies, as well as to be a thought leader. The inhibitors are: 1) Discomfort – a feeling of lacking both control over technology and the confidence in making the technology work, and 2) Insecurity – a need for assurance that a technology-based product, service or process will operate reliably and accurately. The four dimensions are relatively independent of each other, therefore, an individual could harbor both contributor and inhibitor feelings towards technology.

CULTURAL INFLUENCES ON INDIVIDUAL BEHAVIOR

Culture shapes how people see their world and how they function within it. Culture has been defined as "the collective programming of the mind which distinguishes the members of one group from another" (Hofstede, 1980), and as "a set of values, ideas, artifacts, and other meaningful symbols that help individuals communicate, interpret, and evaluate as members of society" (Engel et al., 1993). McCracken (1986) argued that the world of everyday experiences was shaped and constituted by the beliefs and assumptions of an individual's culture.

Cultural differences have been observed and reported in a number of studies to have a significant impact on decision-making and individual behavior (Erumban and de Jong, 2006; Leo, Bennett, and Hartel, 2005; Lin and Peng, 2005; Singh, 2006). Hofstede (1980) originally identified four dimensions of culture which influence the way people interact and behave. A fifth dimension was added later (Hofstede, 2001). The five dimensions are briefly discussed below.

1) Individualism/Collectivism – Cultures differ from one another in terms of the perceived role of the individual versus the role of the group. This dimension refers to the degree to which individuals in a society prefer to act as individuals rather than as members of a social group. People in individualistic societies (i.e., American society) are inclined to make their own choices and therefore more inclined to be innovative and adopt new ideas (Erumban et al., 2006). In contrast, members in collective societies tend to conform to the norms of the group or society and are less likely to accept new ideas. Individualists tend to be concerned primarily with separating the self from others by displaying qualities of uniqueness and not allowing others to influence them. Collectivists, however, are concerned with affiliating and maintaining a connectedness.

2) Power Distance - The power distance dimension refers to the degree to which members of society accept an uneven distribution of power. Cultures with large power distance tend to be hierarchical, while cultures with small power distance tend to value equality where knowledge and respect are perceived as sources of power. Research has shown that individuals are more innovative when they are given autonomy and empowerment (Mumford and Licuanan, 2004). Moreover, cultures with a high degree of power distance tend to be less open to new ideas because this may require decision-making on issues where little information is known (Lee and Peterson, 2000).

3) Uncertainty Avoidance – The uncertainty dimension concerns the extent to which people seek to avoid, or feel threatened by, ambiguous or risky situations. Individuals in cultures characterized by high uncertainty avoidance may be risk averse in trying new ways of doing things, and tend to emphasize continuity and stability rather than innovation and change. Individuals in high uncertainty avoidance cultures are likely to wait for others to try new technology and base their expectations on others (Singh, 2006). In cultures with low uncertainty avoidance, members may more readily embrace change, may show more initiative, and may be more accepting of different views and new ideas.

4) Masculinity/Femininity – Masculine societies place a high value on earnings, recognition, achievement, competition, and material things. Feminine societies are characterized by care giving, nurturing, co-operation, and

concern for social relationships and quality of life. Hofstede (2001) found that organizations in masculine cultures emphasized innovative activities, such as training.

5) Long-Term/Short-Term Orientation - Hofstede (2001) added a fifth cultural dimension called Confucian Dynamism (later changed to Long/Short-Term Orientation), that reflects whether a society has a long-term or a short-term orientation. This dimension, based on Confucianism, captures the distinctive cultural characteristic of East Asian cultures: diligence, patience, frugality, and long-term orientation. A society with a long-term orientation places a high value on traditional values. Cultures with a short-term orientation place less importance on tradition and are more open to new ideas (i.e., new technology).

Chinese Vs. American Culture

The U.S. and China have been shown to be culturally very different (Hofstede, 1980). The Chinese culture is characterized as a highly collective society that prefers to conform to the norms of society and appears less likely to accept new ideas/technology than an individualistic society (i.e., American society) that is inclined to make individual choices and therefore seemingly more likely to be innovative and adopt new ideas. The Chinese culture also is characterized as a high power distance society, thus not likely to be open to new ideas because of the lack of information available.

In addition, the Chinese culture is viewed as a long-term society that values patience and traditional values. Patience and traditional values do not lend themselves to the quick adoption of new technology. However, a short-term orientation and the fast pace lifestyle of the typical American does suggest a greater likelihood of adopting new technologies. The U.S. and Chinese cultures are relative similar in uncertainty avoidance and masculinity as compared to other countries throughout the world, thus no differences are distinguishable on these two cultural dimensions.

Given the cultural influences identified by Hofstede (1980, 2001), it is hypothesized that American students will exhibit significantly higher levels of "Optimism" and "Innovativeness" towards using new technology than will Chinese students. Moreover, it is also hypothesized that Chinese students will exhibit significantly higher levels of "Discomfort" and "Insecurity" towards using new technology them will American students. Chinese students were socialized in an eastern culture, which tends to be more of collective society that exhibits high levels of power distance, and long-term orientation. As compared to American students who were socialized in a western culture that emphasizes individualism, a low degree of power distance, and a short-term orientation.

Cultural Competency

Cultural competency is defined as set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals and enables that system, agency, or those professionals to work effectively in cross-cultural situations (Cross, et al., 1989). It begins with an awareness that individuals from other cultures may not share the same beliefs and practices that you do. Cultural competency allows educators to be effective in different cultural contexts.

There are five essential elements that contribute to an individual's ability to become more culturally competent. The person should (1) value diversity, (2) have the capacity for cultural self–assessment, (3) be conscious of the "dynamics" inherent when cultures interact, (4) institutionalize cultural knowledge, and (5) develop adaptations to service delivery reflecting an understanding of diversity between and within cultures (King, Sims, and Osher, n.d.). In education, cultural competency is achieved by integrating knowledge about individuals or groups of people into practices and policies utilized in a classroom environment. Cultural competency requires that educators have a defined set of values, attitudes, and behaviors that enable them to teach effectively in a multi-cultural environment.

METHODOLOGY

Questionnaire

A 41-item questionnaire was first developed in English by the principal researchers. The questionnaire was next translated into Chinese by native speakers. The questionnaire was then back-translated into English. The back-translated version of the questionnaire was then compared with the original English version by an English native speaker. The few discrepancies in the questions were resolved after discussing them with the translators.

Technology readiness was assessed through the use of the 36-item Technology Readiness Index (TRI) scale developed by Parasuraman (2000). The TRI is a Likert type scale with responses ranging from "Strongly Agree" (5) to "Strongly Disagree" (1). The TRI measures an individual's propensity to adopt and use innovative technology by assessing how "techno-ready" individuals are. In addition, the TRI helps explains how and why different individuals adopt technology. The TRI does this by looking at both forces that attract and repel individuals away from new technology.

The TRI scale has demonstrated high internal reliability. Coefficient alpha scores range from .74 to .81 (Parasuraman, 2000) across the four dimensions of the scale. The TRI scale has also demonstrated high construct validity by being able to discriminate across different levels of ownership of products/services for which one might a priori expect different levels of technology readiness to be very relevant.

Data Collection

Data were collected using two independent convenience samples. One sample consisted of 237 junior and senior Chinese students majoring in business and enrolled in a large regional university in China. The other sample included 231 junior and senior American students majoring in business at a large Midwestern regional university within the United States. Students were surveyed via a personal questionnaire in China and an online questionnaire in the United States.

Data Analysis

First, mean scores for all Chinese and American respondents were calculated for each of the four dimensions (Optimism, Innovativeness, Insecurity, and Discomfort) of the TRI scale. Next, t-tests were conducted to assess differences in mean scores for Chinese and American students across the four TRI dimensions. Finally, t-tests were conducted to assess differences in mean scores for American and Chinese students across the 36 individual items that comprise the TRI scale.

RESULTS

TRI Dimensions - (American vs. Chinese Students)

Table 1 shows the results of t-tests for assessing differences in mean scores between Chinese and American students across the four dimensions comprising the TRI. American students exhibited a significantly higher level of "Optimism" towards using new technology than did Chinese students (3.97 vs. 3.59). Therefore, American students appear to have a stronger belief than Chinese students that technology can benefit their lives, as well as give them more control over their life. The results in Table 1 also show that American students reported a significantly higher level of "Innovativeness" related to the propensity to use new technology than did Chinese students (3.52 vs. 3.04). This finding demonstrates that American students exhibit a greater desire to experiment with new technologies than do Chinese students.

Table 1
Mean Scores For Technology Readiness Dimensions
(American vs. Chinese Students)

TRI Dimension	American Students	Chinese Students	t Value	Significance
Optimism	3.97	3.59	9.495	.000
Innovativeness	3.52	3.04	8.491	.000
Discomfort	3.15	3.25	-2.127	.034
Insecurity	3.37	3.56	-3.944	.000

*Likert-type scale – ("1" = Strongly Disagree) ("5" = Strongly Agree)

Chinese students, however, reported a significantly higher level of "Discomfort" towards using new technology than did American students (3.25 vs. 3.15). Not surprisingly, Chinese students exhibited a greater feeling of lack of control over technology and the confidence in making the technology work. Chinese students also reported a significantly higher level of "Insecurity" towards using new technology than did American students (3.56 vs. 3.37). Chinese students appear to feel a greater need for assurance that a technology-based product will operate reliably and accurately as compared to American students.

Individual TRI Items – (American vs. Chinese Students)

Given that significant differences were found between American and Chinese students across all four TRI dimensions, additional t-tests were conducted on the 36 individual items comprising the TRI scale in an effort to further assess differences between American and Chinese students with respect to their propensity to embrace and use new technology. The results are presented in Table 2. American students reported significantly higher mean scores on 8 of the 10 individual items that comprise the Optimism dimension. For example, American students felt stronger than Chinese students that: 1) technology can give them more control over their daily lives (4.18 vs. 3.91), 2) products/services that use new technologies are easy to use (3.61 vs. 3.45), 3) technology could make them more efficient in their occupation (4.13 vs. 3.81), and 4) technology gives them more freedom of mobility (4.26 vs. 3.68).

American students also reported significantly higher mean scores on 5 out of 7 individual items that reflect the Innovative dimension, which assesses an individual's desire to experiment with new technologies (Note - "It seems my friends are learning more about new technologies than I am" is reverse scored). American students reported stronger agreement to statements such as: 1) they are among the first in their circle of friends to acquire new technology, 2) they usually figure out new high-tech products and services without help from others, and 3) they keep up with the latest technological developments in their area of interest.

Table 2
Mean Scores For Individual Technology Readiness Items
(American vs. Chinese Students)

TRI Dimension/Items	American Students	Chinese Students	t Value	Sign.
Optimism				
Technology gives people more control over their daily lives.	4.18	3.91	3.77	.000
Products/services that use new technologies are convenient to use.	3.61	3.45	2.11	.035
I like the idea of doing business via computers because I'm not limited to regular business hours.	4.03	3.50	6.76	.000
I prefer to use the most advanced technology available.	3.92	3.51	5.22	.000
I like computer programs that allow me to tailor things to fit my own needs.	4.24	3.71	7.62	.000
Technology makes me more efficient in my occupation.	4.13	3.81	4.47	.000
I find new technologies to be mentally stimulating.	3.64	3.66	-.25	.801
Technology gives me more freedom of mobility.	4.26	3.68	8.04	.000
Learning technology can be as rewarding as the technology itself.	3.92	3.78	1.89	.059
I feel confident that machines will follow through with what I instructed them to do.	3.79	2.92	11.61	.000

Table 2 continued

TRI Dimension/Items	American Students	Chinese Students	t Value	Sign.
Innovativeness				
Other people come to me for advice on new technologies.	3.25	3.21	.33	.709
It seems my friends are learning more about the newest technologies than I am.	2.45	3.35	-10.10	.000
In general, I am among the first in my circle of friends to acquire new technology when it appears.	3.05	2.57	5.35	.000
I can usually figure out new high-tech products and services without help from others.	3.68	3.26	4.45	.000
I keep up with the latest technological developments in my areas of interest.	3.84	3.16	8.61	.000
I enjoy the challenge of figuring out high-tech gadgets.	3.62	3.60	.22	.827
I find I have fewer problems than other people in making technology work for me.	3.65	2.87	9.41	.000
Discomfort				
Technical support lines are not helpful because they don't explain things in terms I understand.	2.91	2.87	.51	.612
Sometimes, I think that technology systems are not designed for use by ordinary people.	3.01	2.92	1.00	.316
There is no such thing as a manual for a high-tech product or service that's written in plain language.	3.12	3.15	-.28	.780
When I get technical support from a provider of a high-tech product or service, I sometimes feel as if I am taken advantage of by someone who knows more than I do.	2.87	3.35	-5.20	.000
If I buy a high-tech product or service, I prefer to have the basic model over one with a lot of extra features.	2.71	2.76	-.59	.553
It is embarrassing when I have trouble with a high-tech gadget while people are watching.	3.10	2.99	1.19	.236
There should be caution in replacing important people-tasks with with technology because new technology can break down or get disconnected.	3.65	3.80	-1.95	.052
Many new technologies have health or safety risks that are not discovered until after people have used them.	3.06	3.70	-7.69	.000
New technology makes it too easy for governments and companies to spy on people.	3.54	3.59	-.65	.518
Technology always seems to fail at the worst possible time.	3.49	3.33	1.81	.071
Insecurity				
The human touch is very important when doing business with a company.	4.00	4.28	-3.75	.000
When I call a business, I prefer to talk to a person rather than a machine.	4.67	3.93	9.86	.000
If I provide information to a machine or over the Internet, I can never be sure it really gets to the right place.	3.06	3.29	-2.43	.016
I do not consider it safe giving out a credit card number over a computer.	3.06	3.69	-6.47	.000
I do not consider it safe to do any kind of financial business online.	2.41	3.09	-7.39	.000
I worry that information I send over the Internet will be seen by other people.	3.08	3.33	-2.61	.009
I do not feel confident doing business with a place that can only be reached online.	3.16	3.51	-3.65	.000
Any business transaction I do electronically should be confirmed later with something in writing.	3.56	3.70	-1.46	.145
Whenever something gets automated, I need to check carefully that the machine or computer is not making mistakes.	3.37	3.22	1.72	.086

*These questions comprise the Technology Readiness Index which is copyrighted by A. Parasuraman and Rockbridge Associates, Inc., 1999. This scale may be duplicated only with permission from the authors.

Chinese students, however, reported significantly higher mean scores than American students on 2 out of 10 individual items that reflect the Discomfort dimension, which assesses an individual's feeling of lacking both control over technology and the confidence in making the technology work. Chinese students reported a stronger agreement to the following statements: 1) When I get technical support from a provider of a high-tech product or service, I sometimes feel as though I am taken advantage of by someone who knows more than I do, and 2) Many new technologies have health or safety risks that are not discovered until after people use them.

Chinese students also reported significantly higher mean scores than did American students on 7 out of 10 individual items that comprise the Insecurity dimension. This dimension measures an individual's need for assurance that a technology-based product will operate reliably and accurately. Examples of statements that Chinese students reported a stronger agreement to include: 1) the human touch is very important when doing business with a company, 2) if they provide information to a machine or over the Internet, they are unsure that it really gets to the right place, and 3) they don't feel confident doing business with a place that can only be reached online.

DISCUSSION/IMPLICATIONS

The student population at most colleges and universities today are much more culturally diverse in terms of ethnicity/nationality, learning styles, and beliefs than ever before. Educators need to recognize, understand, and appreciate these differences in order to create a culturally competent learning environment. Creating an inclusive environment where all students can function within their comfort zone should be an ultimate goal for all faculty members

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Given the increasing number of partnerships/joint programs between U.S. and Chinese institutions, coupled with the large number of Chinese students electing to further their education in the U.S., it is imperative that colleges and universities recognize potential differences between American and Chinese students that may impact the effectiveness of a classroom learning environment. As educators become familiar with these differences, the more likely are they to create a learning environment that meets the needs of all their students.

This study has assessed differences between American and Chinese students with respect to their technology readiness to use innovative technology in their personal and academic lives. The findings of this study show that Chinese students exhibit a lower propensity to embrace and use new technology than do American students. The level of learning in a classroom is governed in part by a student's native ability and prior preparation, but also by a student's attributes as a learner and the instructor's teaching style (Felder and Brent, 2005). One student attribute that seemingly could influence the extent of learning would be a student's propensity to embrace and use new technologies used in a classroom environment.

Many features of current classroom technologies appear to have the capabilities to provide a meaningful, collaborative, and effective learning environment if accepted and used properly by students. Students respond differently to specific classroom environments and instructional practices. Jonassen et al., (1994) argues that classroom technology should not be seen as a particular way to deliver instructional materials but rather as a context of learning that influences the whole instructional setting by facilitating activities and cognitive processes of students. Moreover, Shuell and Farber (2001) conclude that although the instructor's use of technology sets the stage for learning, it is the students' reaction to and use of the technology that determines whether the technology has an effect on their learning.

When attempting to develop an effective technology-based learning environment that is comprised of both American and Chinese students, the instructor should consider the varying levels of technology readiness of students in the class. Educators need to consider students' readiness and willingness to use classroom technology so that their discomfort and insecurity levels are not too great for them to learn effectively, yet at the same time force students to expand beyond their comfort zone in order to enhance their opportunities for learning.

CONCLUSION

The purpose of this study was to assess differences in American and Chinese students with respect to their level of "technology readiness." The findings of this study show that Chinese students exhibit a lower propensity to embrace and use new technology than do American students. An understanding of the differences between American and Chinese students' propensity to adopt and use innovative technology is an important step in creating cultural competency in technology-based learning environments. Educators must understand these differences in order to establish a collaborative and effective learning environment.

LIMITATIONS AND FURTHER RESEARCH

One limitation of this study relates to the sampling frame. Each sample (American and Chinese) was drawn from only one university in each country. Although there is no reason to believe that these universities were not representative of all universities in each country, this representativeness was not formally tested. Second, both samples were of only business students. How representative business students are of all university students was never formally tested. Consequently, making generalizations regarding all American and Chinese university students based on the results of this study should be done with caution.

A second possible limitation involves the use of the Technology Readiness Index (TRI) in a cross-cultural comparison. The TRI has a long track record of successful use in the western culture, but less is known about its characteristics when utilized in an eastern culture, such as China. Again, caution is recommended when making generalizations about the usefulness of the TRI in a cross-cultural context.

Future research is needed to assess the appropriateness of using the TRI scale in other cultural settings. Scale characteristics (dimensionality, internal consistency, etc.) may vary when employed in an eastern as opposed to a western culture. Another possibility for future research involves a formal examination of cultural aspects and technology readiness. More specifically, Hofstede's (1980, 2001) five dimension model of culture could be related to technology readiness. Finally, additional research is also needed to identify other aspects of a multi-culture technology-based learning environment that may impact cultural competency besides technology readiness of students. Additional skills, attitudes, and behaviors may also be found to influence an instructor's ability to interact effectively with people of different cultures.

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