

Effects of Culture on Distance Learning in Higher Education in the Light of Digital Divide and Multicultural: Curriculum and Design Strategies

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Abstract— This paper examines the challenges faced by students who do not belong to the majority culture served by their school. Two related topics will be discussed in the study. The first topic is the situational and dispositional challenges that confront many minority and cross border students in distance education. The second topic is a discussion of the multicultural communication and educational strategies that promote social equity and social justice. The main titles will be situational challenges (digital divide, personal costs, and computer mediated communication), dispositional challenges (field dependent cognitive style, collectivism etc.) and multicultural education. As a result of this paper, as education is still largely a cultural process embedded in diverse national, ethnic, religious, linguistic settings, there are risks that cross border provision does not acknowledge and respect cultural sensitivities.

Keywords— *design in distance education; distance learning; digital divide; multicultural education; computer mediated communication*

I. INTRODUCTION

Advances in information technology and the massification of higher education have combined to create a culturally diverse national student population. Additionally, new programs are being designed and delivered to satisfy local needs worldwide, and new certifications are being conferred. Educational providers and students are moving across borders as the world enters an era of global distance education. Effective cross culture and cross border communications are essential elements of effective teaching and learning in this global environment.

Furthermore, individual access to and skills in the use of technology are moderated by factors such as socioeconomic status, gender, ethnicity, and culture.

Advances in information technology of higher education have combined to create a culturally diverse national student population. As an artifact of globalization, new programs are being designed and delivered to satisfy local needs worldwide, and new certifications are being conferred. Absolutely, educational providers and students are moving across borders as the world enters an era of global distance education. Effective cross-culture and cross-border communications are

essential elements of effective teaching and learning in this global environment.

For culturally responsive teaching to be effective, there must be a partnership in the classroom. Students must take ultimate responsibility for their learning, but teachers must also accept responsibility for the effectiveness of the delivery of the curriculum to a diverse audience. Schools must provide culturally responsive, fair, and equitably distributed learning environments so that all students have equal chances to achieve academic success. The following sections identify potential situational and dispositional challenges that can adversely influence minority student achievement

II. DIGITAL DIVIDE

The term digital divide can take on several meanings, but at the most basic level, it refers to the division between those who can easily access the Internet and those who cannot. Racial and ethnic differences in education and income contribute substantially to the gap in Internet access rates. Individuals on the wrong side of the digital divide are often denied the option to participate effectively in new high-tech jobs, in technology-enhanced education, and in using technology to access knowledge.

III. DISPOSITIONAL CHALLENGES

Many minority students are also faced with culturally related dispositional challenges. According to Cross (1992), dispositional challenges are those related to the characteristics, attitudes, and self-perceptions of the adult learner. The three potential dispositional challenges described in this chapter are the field dependent cognitive style, high-context communication preference, and inclination toward collectivism of many minority cultures in the United States.

A. Field Dependent Cognitive Style

Field dependence theory (Witkin & Goodenough, 1981) and its notion of field independent and field dependent cognitive styles have been used to describe two different learning orientations. Using an analogy, field dependent adults focus on the forest, while field independent learners focus on the trees within the forest. However, the terms field dependent and field independent reflect a tendency, in varying degrees of

strength, toward one end of a continuum (field dependent) or the other. Research suggests that field independent learners are more typically White males, while field dependent learners are often female, African-American, Hispanic, or Native American students who need to connect their new learning with previous experience or other familiar information (Anderson, 1988).

B. High-Context Communication Preference

Knowing the identity of the individual with whom one is interacting can be crucial to know how to communicate. Edward T. Hall explains that the way in which individuals communicate within the same setting can vary along cultural lines. These setting-based variations on cultural communication behavior form the foundation of Hall's theory of high- and low-context cultures.

According to Ibarra (2001), low-context cultures make little use of nonverbal signals, value direct communication with explicit verbal messages, and depersonalize disagreements. High-context cultures rely extensively on nonverbal signals; see communication as an art form in which indirect, implicit, and informal verbal messages are valued; and personalize disagreements. Low-context cultures use language with great precision and economy. In contrast, high-context cultures use language more loosely, since words have relatively less value. Ibarra (2001) claims that minority cultures tend to be characterized by high-context communication, while the predominant U.S. culture is one of low-context. Because the language of communication is English, low-context communication is presumed, thus perhaps disadvantaging those whose cultural background relies on high-context communication (Morse, 2003).

C. Collectivism

Hofstede's (2004) model of national culture also applies to a multicultural classroom environment. One of the most important behavioral distinctions observed among various cultures is the difference between collectivism and individualism (Triandis, Chen, & Chan, 1998). Individualism-collectivism represents two subjects along a continuum. In particular, many cross-cultural psychologists (e.g., Phinney, 1996) maintain that collectivist values continue to influence African-American, Asian-American, Hispanic-American, and Native American cultures, although variations do occur in each culture based largely on the amount of acculturation of individuals into the dominant White culture.

IV. MULTICULTURAL EDUCATION

When eight experts on higher education policy were asked to comment on accountability in higher education by The Chronicle of Higher Education (2004), none of them spoke about the need for indicators of equitable educational outcomes for racial and ethnic minorities. Unlike the primary school environment and the no Child Left Behind Act that mandates closure of the achievement gap by race and ethnicity, there is no similar emphasis on achieving academic equity in higher education.

V. DESIGN STRATEGIES

Because computer-mediated asynchronous communication is textual and not visual, it is a relatively low-context communication medium, as noted above. Lastly, in a multicultural classroom in which there is a representation of both low- and high-context cultures, the impact of a low-context learning environment can be reduced by enriching existing course content with high-context features such as graphics, audio and video clips, podcasting, and synchronous two-way audio and video. Vendors, such as Wimba, offer a variety of supporting audio, video, instant messaging, collaboration, and content display tools that enable instructors to add important elements of interaction that cannot be provided in an exclusively text-based course.

Another design tool is class broadcast Web blogs where students write about their learning, their perspectives on the subject, and the learning process itself. Blogs are more useful than traditional journals because the instructor and fellow students can read one another's entries and, thus, gain more understanding about beliefs, perspectives, culture, problems, and successes, all of which contribute to students' sense of community.

However, because these media fall outside many normal institutional offerings, the instructor must take into account availability, levels of support, cross-platform compatibility, minimal student computer configurations, plus the technical ability of the students. This is particularly important for minority students, many of whom are unequipped to manage the digital learning environment because of relatively low computer knowledge, skills, and experiences, which can adversely impact their academic achievement. Therefore, instructors and designers who believe nonmainstream technologies may further enhance the effectiveness of online programs and courses

VI. CURRICULUM AND INSTRUCTION STRATEGIES

According to transformative learning theory (Mezirow, 1991), changing perspectives is related to several conditions and processes that must be met:

An activating event that exposes the limitations of a student's current perspective, such as providing students with conflicting viewpoints or a disorienting dilemma

Opportunities for the student to identify and discuss the underlying assumptions in the student's current perspective

Critical self-reflection as the student considers where these underlying assumptions came from and how they influence or limit understanding

Critical discourse with other students and the instructor as the learning community examines alternative ideas and perspectives. Opportunities to apply and evaluate new perspectives.

VII. CONCLUSION

White students enter colleges and universities without much experience relating to persons of color, especially in a setting of "relative equality". Many broaden their perspectives about race relations during their time as students. These

changes are generally tied to the frequency of contact with minority students and their willingness to grow at a personal level. Consequently, it is important that online program directors and instructors facilitate a positive interaction among members of a learning community at the beginning of a program. Allport (1954) identifies four key conditions for such a meeting: equal-group status within the situation, common goals, intergroup cooperation, and institutional support. Additional conditions were later added, the most important of which are voluntary interaction and intimate (i.e., socioemotional) contact. Moreover, research shows that, when effectively implemented, these conditions do lead to a positive attitude change that is target-specific (e.g., Hewstone & Brown, 1986), although evidence is weaker regarding an attitude change toward the individual's group. In particular, Hewstone and Brown (1986) argue that a general contact is likely to be perceived on the interpersonal level and therefore not have any impact on the intergroup level unless individual participants are seen as representatives of their group. Ibarra attributes many of the challenges to ethnic minority student success in higher education to academic culture, where the tone is largely set by an upper/middle-class White, non-Hispanic culture.

The difference is that today we must rethink and reframe the operative paradigm to address the real problem, which is academic organizational cultures that prefer to confront, not collaborate. And in no way are the pipeline programs born in the 1960s capable of dealing with the growing problem of high-context, field sensitive students who are abandoning graduate schools, which are dominated by low-context, field independent professors.

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