Chapter 4.1
Human Computer Interaction and the Best Mix of Face-to-Face and E-Interactions in Educational Settings

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ABSTRACT

Recent trends and rapid improvement in technology such as computer-mediated communication (CMC) and increasing bandwidth in the Internet are facilitating increased electronic interactions (i.e., e-interactions otherwise known as or commonly referred to as the human computer interaction (HCI)). CMC technology systems are a common occurrence in educational institutions as administrators attempt to encourage technology usage and instructors race to learn and implement CMC use in their classrooms and students demand greater flexibility and control in how they learn. Notwithstanding is the need to decide which forms of HCI technology to use, how to use them, and what benefits can accrue from such usage. The discussion here explores each of these issues, but more specifically will focus on addressing the case for blending e-interactions with the traditional face-to-face (FTF) communication medium while addressing the appropriateness of such combination.

INTRODUCTION

Human computer interaction (HCI) occurs through a host of information communication technologies (ICT), specifically computer-mediated systems (e.g., e-mail, computer conferencing, video-conferencing) that facilitate electronic interaction among people. A multitude of organizations involved in the knowledge management industry are finding ways to incorporate computer-mediated communication (CMC) technologies into their day-to-day operations as coordination tools and learning curriculum dissemination tools. HCI has also found explosive growth in educational settings such as traditional and non

traditional universities to extend current instructional content delivery and to tap into distance educational settings. The idea of CMC systems for the instructional delivery tool to provide both uniform and customized training is called electronic learning, which is otherwise referred to as e-learning. Contemporary research has discussed at length the potential benefits of CMC systems in general and within distance education in particular (Barnard, 1997; McIsaac & Gunawardena, 1996; Yakimovicz & Murphy, 1995), but research on joint use of the CMC system and face-to-face (FTF) communication in regular classrooms is scarce (Olaniran, 2004). This chapter will address how using a combined CMC and (FTF) interaction could benefit courses in communication and other social sciences.

Teachers are challenged to incorporate information communication technology (ICT) into their curriculum to enhance learning and to prepare students for future careers (Althaus, 1997; Craig, 2001-2002; Snoeyink & Ertmer, 2001-2002; Witmer, 1998). ICT offers opportunities for facilitating discussion and presenting forums for varieties of opinions (McComb, 1994; Olaniran, 2001; Olaniran, Savage, & Sorenson, 1996, Witmer, 1998). HCI technology, specifically, CMC, offers the opportunity for active and experiential learning and its benefits in group activities have been acknowledged (Craig, 2001-2002; Gasker & Cascio, 2001; Olaniran, 1994; Olaniran, et al., 1996).

In spite of the identified advantages, incorporating ICT especially CMC into classrooms remains challenging. Some challenges facing instructors regarding implementation of CMC in classrooms and courses include selection and usage long after adoption decisions are made. In addition to technology issues, instructors need to focus on pedagogical issues surrounding course structure, and course management.

COMPUTER MEDIATED COMMUNICATION AND LEARNING FACILITATION

The rampant effect of information communication technology (ICT) is constantly being felt in contemporary organizations, interpersonal interactions, and academic settings. ICTs are instrumental in facilitating human computer interaction, which underlies the computer mediated communication (CMC) in organizations, classrooms, groups, and interpersonal contexts. As a matter of fact, the issue facing most institutions today (academic and non academic organizations) is not whether to use CMC systems but rather how to use them effectively.

There is a significant volume of literature on CMC systems and distance education (e.g., Abrahamson, 1998; Twigg, 1997, Wegrif, 1998), however, not all usages of CMC in learning environment are exclusively distance education. Some research in CMC technologies concentrates on the social effects of communication technologies (e.g., Hiltz & Turoff, 1978; Sproull & Kiesler, 1986). No doubt, the demand for distance education contributes to the proliferation of ICT as a way to provide education and training. However, there is a need to look at how CMC and other technologies facilitate learning and to identify other key variables that must be accounted for in order for effective learning to occur. This chapter seeks to provide a practical guide to educators and learners for enhancing learning through communication technology.

The globalization trends in contemporary organizations are putting priority on uniform and customized training to the extent that institutions are looking at e-learning to meet their curriculum needs. As a result, varieties of online universities like the University of Phoenix and Westwood College Online are developing in order to meet the needs of non traditional students (e.g., corporate travelers and expatriates). Furthermore, several universities are throwing their support behind