Chapter IX

Assessing the Impact of Internet Testing: Lower Perceived Performance

Wm. Benjamin Martz, Jr.
University of Colorado at Colorado Springs, USA

Morgan M. Shepherd
University of Colorado at Colorado Springs, USA

Abstract

This chapter provides the results of a comparison between two sections of a graduate programming class, where one was an on-campus class and the other, a distance class. The course content, instructor, syllabus, lecture materials, notes, assessments and semester (time of year) were the same. Both groups were surveyed to test their satisfaction with the testing procedure and with their perception of certain aspects of the social environment. The results showed differences in perceived test performance. Two conjectures about possible causes underlying the difference and suggestions for possible future research end the discussion.
Introduction

Distance education is big business; over 1.6 million students enroll in distance education classes annually. The Institute of Higher Education (2000) predicts that by 2004 over 90% of all two and four-year colleges will offer some sort of online courses. By the end of 2003, the virtual education market will grow in excess of $21 billion (Svetcov, 2000). New technologies and improvements in networking capabilities are enabling distance education instructors to come closer to providing the traditional learning environment for their students. However, there are still many issues that need to be resolved and, according to recent research studies, it does not appear that these will be resolved anytime soon.

Interestingly, the research in distance education goes back to the late 20’s when the first studies were published comparing the test scores of students in a classroom to their counterparts in a correspondence course (Crump, 1928). Since then, hundreds of journal articles, studies and reports have been published with similar comparisons with TV, radio, video tapes, computer-based training, audio-conferencing, groupware, and now the Internet, representing the technology compared to the traditional classroom (Moore, 1995).

Much of the research compares the distance education approach to the traditional classroom approach, looking for areas where the results from the distance education approach equals or exceeds those from the traditional classroom approach. There are many confounds involved, making this type of research difficult. One of these confounds is the definition given to “distance education.” These definitions range from correspondence courses, to satellite classrooms where the instructor travels to lecture to a group of students meeting face-to-face, to courses that are held via e-mail, to courses that are held via two-way full motion video with other technological support. The definition debate will probably never end, as some definitions do not include the use of any technology (correspondence courses), while others require several technologies to be implemented (full motion video with chat rooms, list-servers and e-mail). For the purpose of this study, our definition of distance education involves a student body who never see each other or the instructor, who communicate via e-mail, phone or chat, and who hand in assignments via e-mail or via posting to a common work group area.

Other confounds arise due to the nature of the dependent variables that are studied and the interaction affects between them. Some of the dependent variables studied have been student performance, student satisfaction, and student retention. Within each of these three variables, socialization is thought to play a significant role. For example, Kling (2000) defines the study of complex