

Public Abstract

Student's Name: Douglas Hawley

Degree received: Ed.D.

Department/Program: Educational Leadership and Policy Analysis

Title of Thesis/Dissertation: The influence of developing a web-based course on university professor classroom instructional techniques as measured by the MTQ

Adviser's Name: Dr. Phillip Messner

Graduation Term: Winter 2005

The purpose of this study was to update the Modified Teacher Questionnaire (MTQ) used in a national survey of educators for use on the World Wide Web (Weiss, 1978) and investigate how the web-based course development process influenced full-time Computer Science (CS) and Information Systems (IS) instructors' classroom instructional methods. The 12 independent variables included demographics and experience with web-based courses. The study consisted of 17 dependent variables that described instructional techniques.

The population included all CS and IS instructors at all higher education degree granting institutions in Missouri. The entire population (N=413) was surveyed yielding a self-selected sample for a 59% rate of return.

Findings confirmed that the MTQ was a reliable instrument for collecting all instructional techniques, excluding lecture and televised instruction. A faculty member's gender, teaching within a college versus a university, teaching within a two year versus a four year institution and whether or not the faculty member was currently developing a web-based course significantly affected instructional techniques.

Several conclusions were formulated. First, this study indicated that "one to many" instructional paradigms continued to prevail at higher education institutions. Furthermore, male faculty members and faculty members who taught at universities were the most dependent on traditional teaching techniques. Second, few faculty members have a great deal of experience in web-based course design. Third, only current web-based course development, and not past development, had any significant effect on instructional techniques. This study illustrated a "return to center" affect on instructional techniques for faculty who develop web-based courses.