

An Empirical Comparison of College Students' Computer Self-Efficacy and Their Actual Computer Skills

ABSTRACT

Computer self-efficacy (CSE) is defined as a person's perception of his or her ability to use computers to accomplish a task. Previous research has emphasized the importance of understanding the relationship between computer self-efficacy and personal characteristics such as sex, education, computer knowledge, previous computer and software usage, fear and anxiety, outcome expectation, and actual computer usage. The purpose of this research is to compare and contrast the college students' computer self-efficacy with their actual computer skills, and to investigate the impact of personal variables such as sex, instructor, college affiliation, and student classification on this comparison.

The research was conducted at a mid-size, 4-year, liberal arts, public university located in Central Virginia over a 3-year span, starting from the fall of 2008 to the spring of 2011. Participants were students enrolled in a 100-level, computer applications class, which focused on the use of Microsoft Office (Word, Excel, Access, and PowerPoint) and a Web design software package. The data needed for this study were collected in three ways: via a survey questionnaire administered during the first week of class; the utilization of a hands-on software assessment program throughout the semester; and the calculation of the final course grade after the final exam. The collected data were tabulated, summarized, and analyzed using SPSS.

More than 700 students were enrolled in the course over the 3-year period. Of the 693 students who participated in the study, 54.7% were male, 45.3% were female, 67.4% belonged to the College of Business and Economics, 31% from the College of Arts and Sciences, and a very small portion of 1.6% came from the College of Education and Human Services. Since this is a 100-level course, nearly two-thirds of the participants were freshmen, with the remaining one-third consisted of students in their second-year and beyond.

Preliminary research findings suggest some significant relationships between students' computer self-efficacy and their actual Microsoft Word, Excel, and PowerPoint skills as well as their final course grade. With the exception of college affiliation, variables such as sex, instructor, and classification play a varying role in influencing the differences between students' computer self-efficacy and their actual computer skills. More findings will be presented at the conference.