

East Tennessee State University
Center for Community College Leadership

Dr. Bethany Arnold
Mountain Empire Community College

A Comparative Study of Dual Enrollment Student Achievement in Various Learning Environments and Non-Dual Enrollment Student Achievement

Abstract

The purpose of this study was to examine whether variations in student achievement in college courses exist between high school students who took the courses as dual enrollment (DE) courses and academically comparable high school students (AIMS scholars) who took the courses upon matriculation to college. Additionally, the researcher explored whether differences exist in DE course grade for students by course environment (online, face-to-face at a high school, or face-to-face at a college.) The researcher used final course grades as determinants of student achievement. The study focused on DE student and AIMS scholar grades in English 111, Biology 101, Math 163, and History 101 courses that were taken between the 2009-2010 and 2013-2014 school years at a community college in Southwest Virginia. The population consisted of 429 AIMS scholars and 2,015 DE students. For this study 3,639 DE student grades and 706 AIMS student grades were used in calculations. The dependent variables in this study were final course grades; the independent variables were DE participation and course delivery environment. Welch's t tests were used to examine the variations in final grades for DE and non-DE students; ANOVA procedures were used to examine variations in final course grades for DE courses based on delivery environment.

The quantitative findings revealed that students who took English 111, Biology 101, Math 163, and History 101 as DE courses performed significantly better than academically comparable peers who had not taken the courses as DE. Additionally, findings indicated

that students who took English 111 as a DE course on a college campus performed significantly lower than students who took English 111 as a DE course either online or face-to-face at high school. Similarly, students who took Math 163 as a DE course on a college campus performed significantly lower than students who took the DE course online or face-to-face at a high school. History 101 students who took the course online performed better than students who took the same course face-to-face at a high school. There were no significant differences in student achievement in Biology 101 based on DE course environment.