

**East Tennessee State University**  
**Center for Community College Leadership**

Dr. Tachaka Hollins  
Tennessee Board of Regents

## Student Participation and Grade Performance in the Tennessee College of Applied Technology Online Collaborative

### **Abstract**

The purpose of this quantitative correlation study was to determine whether a significantly statistical relationship exists between student participation and final grade performance within an online environment at Tennessee Colleges of Applied Technology (TCAT) Regents Online Degree Program (RODP). The study used data retrieved from the Desire2Learn (D2L) course management system and the Student Information System (SIS) for the 2013-2014 academic year. The stratified sample consisted of 360 individual students enrolled in either one or more of the 43 TCAT RODP course sections randomly selected from a total of 217 course sections offered during 3 semesters. The courses were offered in an online setting and are representative of the following academic programs: academic areas of Business Systems Technology (BST), Computer Aided Drafting (CAD), and Computer Information Systems (CIS). The sample included 261 students from the BST program, 42 students from the CAD program, and 57 students from the CIS program. The gender demographics sample includes 273 females and 87 male students.

The hypotheses in this study were tested through data analysis using the Spearman's rho correlations test. The findings of the study revealed that no statistically significant relationships exist between discussion activity, course login activity, and course content interaction and final grade. The findings of the study indicated statistically significant relationships among course content interaction and final grade for students enrolled in

the BST program, course login activity and final grade for students enrolled in the CAD program, and course login activity and final grade for female students.