Instructional Strategies Used By Developmental Mathematics Instructors In Missouri Public Community Colleges To Promote Active Learning: An Analysis Of The Cognitive Complexity

Vickie Lynn Spain

Dr. Barbara J. Dougherty, Dissertation Supervisor

Abstract

This study sought to identify the instructional strategies used by developmental mathematics instructors in Missouri’s public 2-year colleges to engage students in the learning process, determine the cognitive complexity of the instructional strategies, and determine the support needed by these instructors to engage students in the learning process.

A sequential mixed method design was employed in which quantitative and qualitative data was collected. Initial participants in this study included developmental mathematics instructors from all 13 of Missouri’s 2-year public community colleges. Quantitative analysis was completed on the demographic data and on the rating and implementation of recommended instructional strategies. Qualitative analysis was completed on the instructor descriptions of strategies for engaging students in the learning process from the survey. Additionally, three participants were chosen from the survey for case study analysis in which three observations, post-observation interviews, and artifact collections were used to obtain more extensive qualitative data analysis.