The Effect of Instructional Strategies on Preservice Elementary Teachers Math Anxiety and Achievement.

This study addressed how different instructional strategies affected preservice elementary teachers’ levels of math anxiety and their achievement in a math content course. The instructional strategies used were traditional teaching methods and inquiry-based learning (IBL). Participants completed the Mathematics Anxiety Rating Scale–Short Version (MARS-S) and completed a 20-item content knowledge assessment pre- and post-intervention. Participants’ journal entries throughout the semester contained self-reported measures of math anxiety and understanding of course content as well as descriptions of their experiences in the course. Significant results showed that as the semester progressed, the math anxiety of IBL participants decreased, whereas the math anxiety of traditional participants increased. Differences between the groups in terms of their level of achievement were not significant even though within both groups, participants experienced significant learning gains. Statistical tests revealed that the IBL participants had significantly more positive opinions on their classroom experiences and preferences in mathematics classrooms. (Received September 25, 2017)