CHARACTERISTICS OF DIFFERENT LEARNING ENVIRONMENTS IN GEOMETRY CLASSROOMS

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Abstract: As part of a four-year NSF funded project, a group of researchers at Texas State worked with schools in the San Antonio area to investigate the effects of using a Dynamic Geometry (DG) approach to teach high school geometry. The DG approach to teaching uses software to allow students to construct mathematical ideas by exploring geometric problems via continuous real-time transformation (i.e. dragging). The research study followed a mixed methods, multi-site randomized cluster design. The teachers selected were randomly assigned to two groups – the DG Group and the Business as Usual Group. Each group was given professional development and the DG group was asked to take their students to the computer lab each week. In this talk, we will present an overview of the project and focus on results from task-based interviews of a small sample of the teachers.



Professor Jiang received his Ph.D. from the University of Georgia in 1993. His research focuses on the use of technology and modeling in the classroom. He is the PI on the NSF-Funded Dynamic Geometry in the Classrooms Project. Professor White received his Ph.D. from Michigan State University in 1999 in Statistics. Ms. Webre is a doctoral student at Texas State and her research interests involve Help Seeking Behavior of beginning college students.