

Department of Mathematics and Statistics Colloquium

Factors of Transition: Affect, Mathematical Activity, and Theoretical Lenses

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Abstract:

The secondary-tertiary transition (STT) - or the transition from school to university mathematics - has received increased attention in a variety of international contexts, but less is known about this phenomenon in the United States. In my work, I have examined the STT in both Germany and the United States, and my inquiry has focused on the experiences of pure mathematics majors (including students preparing to teach mathematics in secondary school). In this talk I will discuss examples from analyses that I and Seyda Uysal (FSU doctoral student) have conducted, in which we have networked two different perspectives to examine the STT. For the first, we use Di Martino and Zan's (2010) three-dimensional model, in which they reify the role of various emotional and affective factors of the STT experience with a focus on students' emotional disposition towards mathematics, vision of mathematics, and perceived competence in mathematics. The second, the Anthropological Theory of the Didactic (e.g., Chevallard, Bosch, & Kim, 2015), enables us to study students' experiences through the notion of a mathematical praxeology as a tool to describe and analyze the mathematical activity in a given context (e.g., classrooms, institutions, communities of practice).

Speaker Bio:

Dr. Kathy Clark is an Associate Professor in School of Teacher Education at Florida State University. She has two primary research interests: history of mathematics in mathematics education and the transition from school to university mathematics. Her current research efforts include the TRIUMPHS (Transforming Instruction in Undergraduate Mathematics via Primary Historical Sources).

Monday, October 14 at 3:50 pm in Roop 103

Refreshments at 3:30 pm

