

1106-VD-2692 **Laura M. Singletary*** (lsingletary@leeuniversity.edu), 1120 North Ocoee Street,
Cleveland, TN. *Teachers' Beliefs about the Connected Nature of Mathematics.*

In this study, my data sources included six in-depth, semi-structured interviews and approximately two weeks of classroom observations for each secondary teacher. I used an inductive and iterative coding process to analyze the classroom data, and I developed a framework to describe the explicit kinds of mathematical connections teachers made in practice. To analyze the teachers' beliefs, I coded the data, drawing upon Green's (1971) metaphorical interpretation of the structure of a belief system and Leatham's (2006) theory of sensible systems of beliefs.

I develop my findings through a series of narrative cases as well as a comparison across the cases. The teachers in this study made various kinds of mathematical connections for and with their students. Examining teachers' beliefs about mathematics provided valuable insights into these teachers' practices, providing an understanding for some of the variation occurring among the mathematical connections the teachers made in practice. The mathematical connections each teacher made in practice were often related to the teacher's beliefs about mathematics and, in particular, the teacher's beliefs about the connected nature of mathematics. (Received September 16, 2014)