

HABITS OF PRACTICE: A QUALITATIVE CASE STUDY OF A MIDDLE-SCHOOL MATHEMATICS TEACHER

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Many leading mathematicians, researchers and teacher educators of mathematics education characterize the current state of K-12 mathematics education in the United States as bleak. In response, researchers have focused primarily on understanding student learning; specifically, by identifying the knowledge and the habits of learning students need to possess in order to be successful in mathematics. While this discourse is critical, it is equally significant that researchers persist in understanding and representing the process of teaching mathematics.

In response to the current status of mathematics education, the members of the National Mathematics Advisory Panel (2008) have addressed teaching and teacher education in mathematics. They concluded that, "...little is known from existing high quality research about what effective teachers do to generate greater gains in student learning (p. xxi)." To complement the existing literature on mathematics teaching, this inquiry seeks to tell a story of one teacher – who is committed to teaching middle school mathematics for understanding - and a story about her students. In particular, the primary aim of this study is to represent and understand the teacher's 'habits of practice' while teaching mathematics. To achieve this end, I conducted a 9-month qualitative case study of a 7th grade pre-algebra class consisting of gifted and high-achieving students and led by an experienced teacher of 16 years.

There were three major findings of inquiry. The first finding of inquiry is a description of the teacher's context of practice. The second finding of inquiry is an analytical framework representing the habits of practice as displayed by the teacher during her instruction. The framework identified three major domains of habits of practice: (a) habits of discourse; (b) habits of classroom management; and (c) habits of moving through the curriculum. The final finding of inquiry is a description of an emergent habit of discourse (i.e., seeking student consensus) and the resultant mathematical and pedagogical outcomes once the habit of seeking student consensus was enacted by the teacher.