ELEMENTARY TEACHERS' EVOLVING INTERPRETATIONS OF THE STANDARDS FOR MATHEMATICAL PRACTICE IN THE COMMON CORE STATE STANDARDS: A MULTI-CASE STUDY (763 pp.)

Co-Directors of Dissertation: Michael Mikusa, Ph.D. Alicia Crowe, Ph.D.

The purpose of this study was to explore elementary teachers' interpretations of three of the Standards for Mathematical Practice in the Common Core State Standards. The research followed how these interpretations evolved during three types of professional learning experiences. The study also explored teachers' beliefs about the supports that would be necessary to enact these standards successfully in a classroom, school, and district.

A teacher development experiment was utilized for this qualitative study. Three teachers (two from grade five and one from grade one) were recruited from the same school district, and they participated in three individual interviews, two group discussions, and two videotaped lessons as they read and discussed the three chosen standards. Teachers' comments were analyzed via an interpretive approach reflecting hermeneutic philosophy. Each teacher was considered a case; thus, the analysis focused on each teacher's thinking as well as the similarities and differences among the teachers' interpretations. The teachers were able to respond to tentative findings of the study, and adjustments to the analyses were made when appropriate.

Findings indicated that teachers often interpret the text and intent of standards in

very unique ways. These interpretations are influenced by past personal and professional experiences, opportunities to read and discuss standards with others, expectations set forth and support provided by administrators, and observations of student learning.

Interpretations do not change quickly or without catalyst; rather, thinking evolves over extended periods of time when opportunities for professional learning and reflection are provided on a regular basis.