1135-D5-3185 **Shari Samuels*** (ssamuels@lowercolumbia.edu). *The Evolution of Prospective Elementary Teachers' Competencies: Procedural Knowledge, Mathematical Knowledge for Teaching, Attitudes, and Enactment of Mathematical Practices.*

The purpose of this research was to explore the evolution of prospective elementary teachers' competencies. This was conducted as a case study of the first two of three inquiry-based mathematical content courses for elementary teachers. Both qualitative and quantitative data was collected from a cohort of students. Results showed an increase in prospective elementary teachers' mathematical knowledge for teaching scores over time, but no change in their procedural knowledge or attitude scores. Overall, students grew in their ability to problem solve and construct viable arguments in mathematics while moving through the curriculum, with a few exceptions. Three factors contributed to students' learning in the curriculum: the amount of effort made by the student, the atmosphere and attitudes of students in the class, and the nature of the content and questions asked in the curriculum. Another important consideration which arose from the data analysis was the opportunities the curriculum allowed for the practice of written versus verbal explanations, and what was formally assessed. Designers of teacher education programs using a similar curriculum should evaluate the importance of written versus verbal explanations in the goals of the course, and appropriately assess the students. (Received September 27, 2017)