

1011-97-210      **Ekaterina Lioutikova\*** (elioutikova@sjc.edu), Saint Joseph College, Department of Mathematical Sciences, 1678 Asylum Avenue, West Hartford, CT 06117. *Integrating children's thinking in a mathematics content course for future elementary teachers*. Preliminary report.

According to recommendations stated in the Mathematical Education of Teachers and other national reports, prospective teachers need to develop a deep conceptual understanding of the mathematics they will teach. In addition, it is important for future elementary teachers to build connections between their own mathematical knowledge and the mathematics curriculum of elementary school. This talk will describe a new mathematical content course for pre-service elementary teachers developed with the above goals in mind. Topics, materials and activities for this course have been selected to emphasize mathematical reasoning and sense-making, clarify and overcome common misconceptions, and provide opportunities to hold conversations about mathematical ideas. To help build mathematical connections, students analyze the mathematical thinking of children through case studies written by practicing elementary teachers. Based on data collected via pre-tests and post-tests, we will discuss the effect of the course on students' beliefs about mathematics as well as their pedagogical content knowledge. This work is supported by a PMET (Preparing Mathematicians to Educate Teachers) mini-grant. (Received August 27, 2005)