

1023-R5-1814 **Kathryn T Ernie*** (kathryn.t.ernie@uwrf.edu), Kathryn Ernie, Dept of Math, 207 NH, UWRF, 410 South 3rd Street, River Falls, WI 54022. *Choices, Representations, and Strategies Used in Posing and Solving Problems by Elementary Education Students in the First Math Content Course*. Preliminary report.

The focus of this study is to identify strategies, models, and representations used in problem solving and problem development by pre-service elementary/middle school teachers during their first content mathematics course. Data collection includes the analysis of written tasks on problem solving along with a case study of nine students' processing of problems using think aloud interviews. Initial assessment indicates that students have difficulty translating between representations, for example, between geometric representations of problems to algebraic forms, as well as explaining how these representations relate to one other. The use of focused written reflections to improve this process will be discussed. (Received September 26, 2006)