

Meeting: 1003, Atlanta, Georgia, MAA CP G1, MAA Session on Drawing on Our Students' Thinking to Improve the Mathematical Education of Teachers

1003-G1-532 **Cheng-Yao Lin*** (cylin@siu.edu), Wham 326A, Dept. of Curriculum & Instruction, Southern Illinois University at Carbondale, Carbondale, IL 62901, and **Jerry P. Becker** (jbecker@siu.edu), Wham 326A, Dept. of Curriculum & Instruction, Southern Illinois University at Carbondale, Carbondale, IL 62901. *Effects of a Computational Skills Workshop on Preservice Elementary Teachers*. Preliminary report.

The purpose of this work is to design a workshop whose primary purpose is to improve pre-service teachers computational skills. In addition, a goal is to examine whether these workshops achieve their aims and, if so, how. The work will utilize mixed-mode research methodologies. The first part will be quantitative using an experimental group and control group design. The qualitative component will consist of in-depth interviews of a sample of workshop participants that seek information on whether the goals of the workshops were realized, and if so, in what ways they were accomplished. The subjects will be undergraduate students and community college students in pre-service elementary education programs. The study will provide information on pre-service teachers proficiency in computational skills. This may help mathematics teacher educators understand the status of pre-service teachers computational skills. The study will also provide some direction to enable mathematics teacher educators to revise their curricula appropriately to enhance the preparation of pre-service teachers for classroom teaching. In general, the study will provide information pertaining to the role of computational skills in promoting effective teaching and learning of mathematics. (Received September 20, 2004)