Preparing Elementary Teachers to Teach Geometry: A 12-Month Program.

This session will describe a 12-month institute developed to prepare elementary teachers to teach geometry and problem solving. The goals of the institute were to (a) improve teachers’ geometry and problem solving abilities; (b) provide teachers with the content knowledge, the instructional strategies, and resources and concrete manipulatives to teach geometry and problem solving to students in the elementary grades; and (c) provide teachers with instructional strategies to help meet the needs of underrepresented students. Special emphasis was given to the use of manipulatives and experiential learning, cooperative learning strategies, and the teaching of underrepresented populations. Participants earned six hours of graduate credit for the two courses.

This presentation will focus on the results of the following research questions: 1. Do participating teachers demonstrate increase knowledge of geometry and teaching strategies targeted by this Institute? 2. Is there evidence to indicate that participating teachers are successfully using the strategies and knowledge targeted by this workshop? 3. Did participants show sensitivity to and awareness of the needs of underrepresented students and take proactive course of action to meet the needs of these students? (Received July 21, 2005)