

1046-R1-1003 **Heather R Mathison*** (swinney@math.montana.edu), Montana State University, 2-214 Wilson Hall, Bozeman, MT 59715. *Mathematical Inquiry in the Elementary Classroom after Teacher Participation in Professional Development.*

Twenty four middle school and upper elementary school teachers participated in a year long professional development program whose goals included improving teacher understanding of mathematical inquiry and supporting the teachers as they implemented inquiry in their classrooms. Discussion will focus on rural, fifth grade teachers who had not previously been exposed to the notion of inquiry and on the changes they made in their mathematics classrooms over the course of the school year. As a result of their participation in the program, these teachers began collaborating and creating their own lessons that were more supportive of inquiry than the lessons provided by the textbook. They modified their curriculum to cut extraneous topics and to enable students to spend more time on topics that were covered. They convinced their school board to buy new reform based math texts for the following year and began aiding teachers in lower grades with the use of inquiry. (Received September 13, 2008)