

1056-N1-1927 **Dale R Oliver***, Humboldt State University, Department of Mathematics, Arcata, CA 95521.
Guiding Teachers to See Opportunities for Algebraic Reasoning in the Curriculum. Preliminary report.

In far North-West California, 30 teachers of grades 3 – 8 are participating in a professional development program designed to positively affect student learning by enhancing the teachers' knowledge of mathematics. One of the target mathematical areas of the project is algebra, with a goal of helping teachers develop a coherent view of the subject and its foundations throughout the elementary and middle school math curriculum. In addition to studying mathematics and pedagogy in a workshop setting, teachers in the program create and implement a brief curriculum project in which they engage their students in algebraic reasoning and measure the effect of that engagement. It is in through these projects, the subsequent collaboration with colleagues, and the written reflections on the projects that we see evidence of growth in teacher understanding of algebra and algebraic reasoning. This preliminary report will include an outline of the professional development model that is being used, as well as sample teacher projects and a brief analysis of results to date. (Received September 22, 2009)