

Core Planning Team for new partnerships

The Oregon Title IIB MSP Planning Team for

Algebra in Context

2008-2011

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B. Abstract

This partnership will address the achievement gap for low SES students in passing Algebra I. *Algebra in Context* seeks to achieve its performance and research objectives by applying reform-based teaching practices in mathematics in three distinct contexts that will impact the entire freshman class for each of three years. The project will target eight teachers from the School of IDEAS, one of the family of three innovative small schools at North Eugene High School, in mathematics, science, and career technical education. They will deliver coordinated instruction in algebraic thinking to approximately 300 freshmen students over three years in a non-tracked mathematics program in algebra. Through a professional development partnership with Oregon State University's departments of Mathematics and Science & Mathematics Education, both in the College of Science, teachers and faculty will jointly plan and deliver 4 days of workshops and a 10-day summer institute each of three years. Program design will leverage the significant innovations already underway at IDEAS to meet the needs of low SES and Hispanic students. The outcome will be a coordinated program that presents a set of skills in algebraic reasoning through four short courses in CTE and one year-long science course both coordinated with Algebra I.

An experienced evaluator from the College of Education will guide data collection and the research design leading to a better understanding how to teaching algebraic reasoning in context. Project costs have been held to an 8% overhead which excludes all participant support. Project PI's and the evaluator are all active researchers and will disseminate the activities and results of this project statewide and at national conferences (see Table 6, in Appendix).