Archived Information

Portland (OR) Public Schools

Improving Teacher Knowledge

€ National Science Foundation Urban Systemic grant: Project Director

<u>Purpose</u>: Develop collegial learning communities in K-12 schools to improve math and science instruction, provide additional support to struggling students, partner with community and business to increase student achievement

Results: Increased achievement district wide, including among minority and poor students

<u>Plan</u>: Complete second and third year of project, with increased number of schools and students € Math facilitator workshops

<u>Purpose:</u> Develop leadership within schools to support discussion and collaboration to improve math instruction

<u>Result</u>: Increased implementation of standards based curriculum and improved student achievement. <u>Plan</u>: Continue

€ Web-based professional development

<u>Purpose</u>: Develop web based streaming videos, newsletters and discussion forums for engaging and supporting elementary, middle, and high school teachers (http://teachers.pps.k12.or.us/math/) Result: Increased teacher knowledge and communication

Plan: Develop more extensively

€ Algebra workshops

<u>Purpose</u>: Develop algebra as a K-12 subject to problem solve, describe patterns, discover relationships, and understand the language and structure of mathematics

<u>Results</u>: Increased teacher content knowledge, improved understanding of elementary and middle school mathematics, improved strategies for teaching students currently unsuccessful in high school <u>Plan</u>: continue to offer to teachers

€ Every Day Counts workshops

<u>Purpose</u>: Use calendar math to incrementally deepen critical grade level concepts K-6, connect common language to formal mathematical symbols, use visual and physical objects to teach basic facts, and make connections between topics.

<u>Results</u>: Successful implementation of supplemental calendar program in Oregon, Washington, Texas, Georgia, Florida, New York and many other states.

Plan: Continue workshops

€ Summer Success, curriculum and workshops

<u>Purpose:</u> Middle school summer school curriculum, integrating major concepts in algebra, geometry, statistics, measurement, and number for students not experiencing success in regular middle school program. Materials include discussion, models, games, practice, and homework. Workshops focus on developing number sense and algebraic reasoning.

Results: No achievement data yet, significant use in a number of school districts

Public Engagement

€ Parent web page: <u>http://teachers.pps.k12.or.us/mathfamily/</u>

Purpose: Inform parents about what is taught in classrooms and suggestions for helping students. <u>Results</u>: Parent engagement, parent evening informational meetings, parent classes, increased involvement in student's math programs, lack of "math wars."

Plan: Continue publication and forums

€ Parent math classes

Purpose: Three part classes for parents on how to help students with math <u>Results</u>: Parent engagement, increased student interest and participation <u>Plan</u>: Continue