

STAFF DEVELOPMENT PROGRAM



Powerful Connections integrates a variety of models of staff development. The program is separated into three strands, with one strand per year as the focus of the professional development component. In Strand I an interdisciplinary unit is developed to include the Tsongas Industrial History Center's resource guide. During Strand II, a videotaped lesson is observed, assessed, and reflected on. The lesson is used by inservice and pre-service teachers for analysis of teaching. Finally, during Strand III, a publishable-quality action research report is completed, based on teachers' classroom research. Participating schools are evenly distributed among the three strands.

Each of the three strands incorporates workshops, observation and analysis of other teachers' lessons, written reflections, and developing new curriculum. Each strand includes a minimum time for structured and unstructured collaboration and learning experiences: Strand I, 41 hours; Strand II, 38 hours; and Strand III, 28 hours. Additional hours are often added to the minimum. Both during- and after-school time are devoted to staff development opportunities, with teachers receiving a stipend for after-school hours.

Teacher leaders, one from each school in the district, receive approximately 12 additional hours of training to conduct workshops for their colleagues within their school and in other schools in the district in partnership with program staff. Teacher leaders facilitate discussions, serve as mentors, and initiate a professional development plan for their individual schools. Teacher leaders receive a stipend for their additional work.

SUMMARY OF RESULTS

Both students and teachers benefited from Powerful Connections. Student performance in mathematics increased significantly in one year. Teachers increased their understanding and use of writing about mathematics and application of technology, especially for data gathering, statistics and probability, and functions. The emphasis on integrating mathematics with other disciplines and on teachers' classroom-research promotes collaboration among teachers and leads to increased opportunities for further professional development.

Process

- training
- observation
- lesson development
- action research
- videotape analysis
- mentoring/coaching

Intended Audience

- teacher leaders
- individual volunteer teachers



SAMPLE SITES



✓ H. J. Robinson
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DOCUMENTATION

Panasuk, R.M. & Sullivan, M.M.(1999). *Powerful Connections:Mathematics in the Middle School*. Lowell, MA: Author.

Panasuk, R.M.(1999). *The Guide to Math and Science Reform:An Online Resource for Education Community* [On-line]. Available:www.learner.org/theguide

