

Project SMART-Kids-at-Work

K-6 teachers/students, school administrators, business/industry personnel & university faculty



Highly stimulating math and science program for elementary students emphasizing the usefulness of school content in the workplace:

- *Teachers work closely with industry and college professionals to develop math and science related field activities.*
- *Local industries make their sites available to students & offer staff development workshops to teachers.*

Results



- *Significantly improved instructional practices in elementary science and mathematics teaching by incorporating more hands-on, inquiry teaching strategies.*
- *Significantly improved children's attitudes toward the usefulness of science & mathematics in school, the workplace, and in daily life.*
- *Increases parental and community knowledge of and support for improved science and mathematics instruction.*

The Program

The Project SMART-Kids-at-Work (Science, Mathematics Applied Resources for Teaching) program is a cooperative partnership of schools, area industries, and SUNY Oswego that stimulates teachers' and students' interest in and understanding of science and mathematics as applied in the workplace.

In the school/industry partnership program, teachers and college faculty work with business and industry to develop mathematics and science field trips related to classroom activities. The industries involved (including a paper plant, food processing plant, newspaper, grocery store, auto dealer, steam cogeneration plant, and an aluminum plant) make their sites available for field excursions by students. Staff, teachers, and industry representatives offer staff development workshops for teachers and other partners.

Professional Development

The replicating district/school partnership is expected to provide staff development sessions, either during or following the school day, to available teachers and administrators. Summer sessions are an alternative. School personnel will develop their contacts with area industries to develop partnerships. The D/D will provide assistance in organizing the partnership and in the staff development process.

Training teams are formed based on district goals and needs. The D/D can intervene in various phases as needed for:

- initiating and developing partnership relationships,
- adapting Project SMART-Kids-at-Work units and field excursions for local industries/businesses,
- developing new field excursions and units with community partners,
- training workshop leaders for project dissemination, and
- evaluating implementation outcomes.

Replicating districts will be expected to administer brief attitude surveys to teachers and students and to duplicate staff development guides and kits.

Costs & Funding Options

Consulting fees range from \$300 for awareness sessions to \$750 per day for training workshops, plus travel and lodging expenses. Possible funding sources for replication include ESEA Title II/VI.

Model curricular materials are available from Project SMART-Kids-at-Work. These materials can be adapted for use or new materials that relate to specific area industries in the replicating district/school can be developed through the training process.

Learning Standards

Mathematics, Science and Technology: 1) use mathematical analysis, scientific inquiry, and engineering design as appropriate to pose questions, seek answers, develop solutions; 3) understand mathematics and become mathematically confident by communicating and reasoning mathematically, by applying mathematics in real-world settings, and by solving problems through the integrated study of number systems, geometry, algebra, data analysis, probability, and trigonometry.

Contact

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