

Engineering Technology and Industry Council
Oregon University System

Request for Proposals
for
Pre-College Programs

PROJECT GOAL

The project seeks to broaden the participation of pre-college youth in all fields of science, mathematics, engineering and technology education by supporting demonstration projects that will lead to change. The outcomes of the projects will lead to understanding, for example, how to

- maintain the interest of girls, minorities, or economically disadvantaged students in science past middle school;
- bring more pre-college youth into elective high school mathematics and advanced placement science courses; and
- increase enrollments in undergraduate studies in engineering, technology, and computer sciences.

Projects will build on research findings and employ methods to develop pre-college youth programs and services in order to produce outcomes.

Projects might:

- Design informal and formal educational experiences that intervene and reverse traditional patterns of low participation of groups traditionally underrepresented in technical professions; encourage their interest, enthusiastic participation and election of continued study in math and science; increase confidence; and give them positive images of math and science learning and careers.
- Design seminars, workshops, online courses, tutorials or other curriculum approaches to teaching pre-college youth and parents about issues and interventions that are available in computer science and engineering.

PROJECT SUMMARY

The projects are directed to critical transition points that facilitate or hinder the successful participation of pre-college youth in science, mathematics, engineering and technology education. Projects are focused on developing or testing an innovative approach. The approach should build on current research and models of how social, learning and teaching factors facilitate the interest, motivation and achievement of youth in science, mathematics, engineering and technology.

PROPOSAL FORMAT

Each proposal should cover the following areas:

1. Organizational information

- Statement of organizational history/experience in providing science, mathematics, engineering and technology training programs to pre-college youth.

2. Project information

- Project goals, outcome objectives, and timeline for proposed activities.
- Target populations should be described, especially if the project design is premised on special needs and interests based on educational level, ethnicity, rural/urban environment.
- An indication of anticipated outcome measures.
- The basis or context or need for the proposed activity.
- Plans for recruiting and selecting participants.
- Qualifications of key team members and suitability for their role in the project.
- A dissemination plan to deliver outcomes to professional peers and the education community.
- Commitment and collaboration: Evidence of commitment from the submitting entity may be reflected in programmatic participation, release time of project staff, reduced indirect costs, provision of special services or resources, direct fiscal contributions or cost sharing.

3. Evaluation and assessment

- Projects are expected to include an evaluation and assessment plan. This plan should include formative evaluations to guide project development and summative evaluations to document impact.
- The plans should identify indicators or outcome measures that will be used to determine whether the project was effective in meeting its objectives.
- The proposal should describe resources devoted to evaluation including allocations in the budget.

4. Budget Information

- Project budget and narrative.
- Cost-sharing / leverage: Describe the extent that other resources will be used to magnify the effect of the proposed project grant.
- Overhead costs may not exceed 20% of program total costs.

5. Attachments

- Documentation of current tax exempt status.
- Resumes of key staff who will be working on the project.
- Letters of commitment.

ADDITIONAL INFORMATION

1. Deadline for submitting proposal: October 20, 2001
2. Submit proposals to: OCECS Industry Affairs, CAPITAL Center, Suite 1027, 18640 NW Walker Rd., Beaverton, OR 97006
2. Award Information
 - Estimated number of awards: 2 to 8
 - Anticipated funding amount: up to \$100,000/award.
 - Award duration: 18 months starting January 15, 2002.
8. Contact for more information: Bruce Schafer, schaferb@capital.ous.edu, 503-725-2915.