

RASEM² Teacher Outreach Program (TOP)

2001-02 Proposal Guidelines

As a multi-year program, funded primarily by the National Science Foundation, “RASEM Squared” or “RASEM²”(previously known as RASEM —Regional Alliance for Science, Engineering, and Mathematics for Students with Disabilities) provides the support by which university and college partners, secondary schools, national research laboratories, and government and private sector sponsors find ways to eliminate science, engineering, mathematics, and technology (SEMT) educational barriers for students with disabilities. Areas in which your school can participate include:

1. **Advocacy** — Establish “teacher champions” at your school.
2. **Pipelining** — Guide students to promising SMET careers and other support mechanisms.
3. **Student Incentives** — Recruit candidates for RASEM² stipends / mentorships.
4. **Recruitment** — Work with the teacher champions to enroll students in summer science camp.
5. **Teacher Programs** — Join in a RASEM² backed high school teacher/counselor conference.

Issue



High school teachers and counselors are not indifferent to the needs, abilities, and aspirations of students with disabilities. Nevertheless, persons with disabilities report that as high school students they were not encouraged to pursue, or were frequently discouraged from pursuing science and math as educational and career choices. On the other hand, high school math and science teachers, as well as special education teachers feel less credible than usual when the question of encouragement arises. Untrained in the instructional techniques needed to work effectively with students with disabilities, and academically ill-prepared in teaching science and math, members of each group resolve the credibility issue by shying away from actively encouraging students with disabilities to pursue science and math educational and career choices. The apparent dilemma for skilled and talented students with disabilities leads to discouragement and loss of self-esteem resulting in underrepresentation of persons with disabilities in SEMT professions.

\$1,500 Teacher Outreach Projects (TOP)



Efforts to achieve RASEM² goals have resulted in a variety of actions, particularly, RASEM²'s *Teacher Outreach Program (TOP)*. Over the last ten years RASEM has worked very closely with elementary, middle, and high schools to sponsor nearly 60+ TOP projects throughout New Mexico, Oklahoma, and west Texas. In 2000, a total of 7 grants were awarded, with a funding of \$13,000 and cost share of \$17,759. The projects were conducted in schools located in Truth or Consequences, Alamogordo, Gadsden, Albuquerque, Las Cruces, and two in the Navajo Nation. The total number of students involved was 225, and 65 (29%) of them had various disabilities.

Through a process of proposal submissions, project evaluations, and project outcome dissemination, teachers intent on bridging the credibility gap can create motivational contexts in which students who wish to pursue science and math educational and career choices are encouraged to do so.

TOP Proposal Components

Budget



To help teachers prepare TOP proposals and project budgets (\$1,500 maximum), which will be selected on a competitive basis, RASEM² staff will be available to answer questions. Included with this packet is a collection of sample projects to which you can refer for proposal format and budget.

TOP proposals should also emphasize cost sharing—a component built into each proposal budget for the purpose of encouraging long term support of projects through direct involvement of community business leaders, school districts, and advocates. Please show the amount your school and/or community can contribute to the project. Budget items typically include

- equipment (computers, software, tools, adaptive devices),
- teaching units (workbooks, flash cards, etc),
- hardware and construction materials,
- stipends for off-duty teachers,
- transportation for field trips,
- meals, and
- partial travel expenses for conferences presentations.

Collaboration



Collaboration between general education science and math teachers and special education teachers is another important proposal component. By adopting this approach teachers can form teams and bridge the credibility gap by cooperating on mutual projects that

- develop model programs for students with disabilities such as science fairs, science projects, field trips, and after-school activities;
- restructure and adjust math and science curricula to address needs of students with disabilities in math or science labs, experimental instruction methods, computer technologies, and assistive technologies; and
- examine the larger picture of the needs of students with disabilities in the public school and how school administrations can address them through early identification; teacher and staff awareness and preparation; bridging mechanisms between elementary, middle and high schools, and ultimately, post-secondary institutions.

TOP Reports and Presentation



Your proposal should be submitted within 3 weeks of receipt of this packet. You will be notified of funding within 1 week of its receipt at the RASEM² office. Funding will be provided in 3 equal payments distributed at the beginning, middle, and end of your project. To be approved for funding, an end-of-project report is required that discusses the process and results of the project including pre- and post-testing results, student project journals, teacher observations, and other objective test results. A presentation of the results in regional or national conferences or a journal publication based on the project is also strongly encouraged. During the course of the project, the TOP Coordinator will visit with you on-site at the beginning, middle, and end to answer questions and to provide you with project funds.

TOP Proposal Selection Criteria



Generally, proposal funding is proportional to, and its success is measured by its originality, potential to enhance the standard curriculum, organization, and activities. The following are the criteria we use to make the selection:

- **Teacher Champion** —
Choose a teacher champion that will work to help achieve the RASEM² goals outlined in the introduction;
- **Junior Challenger** —
recruit a student(s) from the TOP project who will be recommended for future enhanced SMET opportunities;
- **Innovation in Science, Math and Technology (SMT)** —
the emphasis should be on participatory, hands-on active learning, rather than simple data gathering or accumulation of facts;
- **Collaboration & Teamwork** —
teachers in SMT collaborating either those in special education; utilizing community resources in your classroom; inviting university professors to do projects jointly with you, or adopting curricula developed by other scientific communities such as NASA or NSF;
- **Cost Sharing** —
parents can donate time, money or other forms of assistance, while guest speaker or local expertise can assist in the project; school and community may also contribute money or resources;
- **Community / Parent Involvement** —
increasing support by educating the community about the needs of students with disabilities and the schools they attend; parents are often the key to successful project outcomes through the support of their children, teachers, and school administrations;
- **Sustainability** —
after the initial funding, your project may have enough merit to receive support in the school, community, or other sources to sustain itself in the future, or to make a lasting impact;
- **Inclusion** —
a sizable number of students with disabilities / special education students, along with general education students participating together in the project;
- **Curriculum Enhancement** —
offering program or extra-curriculum that enhances SMT learning while sparking excitement and enthusiasm;
- **Well Written Proposals** —
well organized and activities clearly described.

We Do Not Fund

- Projects that request money mainly to purchase equipment and materials normally purchased by school district, such as computers;
- Projects that mainly follow regular teaching methods and standard curricula;
- Projects that do not show promise of sustainability beyond the TOP funding;
- Projects that are mainly concerned with development of self-help and independent living skills.

Getting Down to Work

The following are tips that will help you prepare your proposal and when you should start your project.

Checking with your supervisor



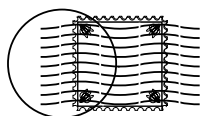
- Be sure to talk with your supervisor and/or principal about your proposal before starting so that they can clarify any school district policies regarding procedures for obtaining RASEM² money for your project.
- The final proposal will have to go through proper channels in your school system and bear the signatures of the responsible school official(s) on the **Signature and Title** page.
- Your project will have to be completed by the end of 2002, so plan to start your project in the spring, summer or fall or run your project through the spring and fall semesters of 2002.

Brass tacks



- The length of the proposal is usually 3-5 typed, single-spaced pages with the first page as the **Signature and Title** page, followed by the **Text** or **Narrative**, and ending with the **Proposed Budget** page. The Narrative should include the following sections (see samples in this packet): Scope or Overview, Objectives, Activities / Procedures, Evaluation, Dissemination of Results, Sustainability, and Summary.
- When you finish your project, you are obliged to submit a **Final Report** which should include the following sections (see sample in this packet): Project Duration, Number of Participants (students with disabilities), Amount Awarded, Activities, Results, Dissemination, and Summary / Comments

Deadlines for Submission and Selection



- Proposals must be **submitted** within three weeks after receipt of this packet. If proposals are mailed in, all submitted proposals must be postmarked three weeks after receipt of this packet.
- If your proposal has been **selected** for funding, you will be notified within one week after receipt of your proposal.

Where to Submit your Proposal(s)



- Submit your proposal to:

Richard Turietta
RASEM²
Southern New Mexico TOP Coordinator
New Mexico State University
PO Box 30001, MSC 3CE
Las Cruces NM 88003