National Science Foundation: Informal Science Education Program

Goal Area: Increasing Public Understanding

Summary:
The Informal Science Education Program (ISE) is part of NSF’s Division of Elementary, Secondary, and Informal Education. It operates two grant competitions annually and the due dates for proposals in 2003 are May 30 and November 17 (NSF 03-511). ISE activities provide rich and stimulating opportunities outside formal school settings where individuals of all ages, interests, and backgrounds increase their appreciation and understanding of science, technology, engineering and mathematics (STEM) education. ISE supports many projects that support mathematics such as:

- A report from the Association of Science-Technology Centers on *Mathematics in Science Centers*.
- The Exploratorium’s *Math Explorer*, that includes games and activities for middle school youth groups.
- Public television programs such as *Cyberchase* that engages 8-11 year olds in mathematics and is accompanied by an outreach programs for parents, schools, libraries and museums.
- The NACME *Math is Power* campaign.
- *Figure This*, jointly funded by NSF and the Department of Education that resulted in the design of Math Challenges for Families.

Purpose:
The purpose of the ISE Program is to support projects designed to increase public interest in, understanding of, and engagement with science, technology, engineering, and mathematics (STEM). The outcome of these projects is an informed citizenry that has access to the ideas of science and engineering and understands their role in enhancing their quality of life. The goals of the Program are to:

- Engage the interest of children and adults to develop scientific and technological literacy, mathematical competence, problem-solving skills and the desire to learn.
- Bring together individuals and organizations from both the formal and informal education communities to strengthen STEM education in all settings.
- Develop and implement innovative strategies that support the development of a socially responsible and informed public and demonstrate promise of increasing participation of all citizens in STEM.

Accomplishments/Results:
All proposals are expected to describe evaluation plans. ISE also provides for applied research projects to address the effectiveness and impact of funded efforts. In addition, all NSF projects are subject to peer review, review by Committees of Visitors, portfolio review and to periodic outside program evaluation.

Plans for the Next Twelve Months:
Areas of special interest for the coming year include:

- Building capacity within and among informal science education institutions through processes such as networking, mentoring, and information sharing.
- Encouraging collaborations within communities and regions that can include science centers, community organizations, media outlets, businesses and individuals.
- Increasing participation of underrepresented groups in science and engineering.
- Modeling effective after-school programs.