



SECOND INTERNATIONAL NANOTECHNOLOGY CONFERENCE ON COMMUNICATIONS AND COOPERATION

Abstract

Nanoscale Informal Science Education Network

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The National Science Foundation has funded the development of a Nanoscale Informal Science Education Network (NISE Net) to foster public awareness, understanding, and engagement in nanoscale science, engineering, and technology. The Network must create new collaborations among science centers, informal science education organizations, and the research community. The NISE Net is led by the Museum of Science in Boston, with its core partners – the Exploratorium in San Francisco and the Science Museum of Minnesota in St. Paul. Initially ten other science museum and scientific research organizations are involved as working partners, and over 30 additional organizations as thinking partners and advisors. The Network was launched in October of 2005 and so it is in the middle of its first year of a five-year cooperative agreement with NSF.

Research suggests that the public is relatively unaware, and has little understanding of nanotechnology, its varied potential applications, and its societal implications. And so the Network will create a variety of exhibit and educational components that can be replicated and presented in at least 100 sites nationwide. This nanoscale education effort builds upon the success that science centers have at attracting and engaging family audiences, in order to introduce them to nanotechnology. If we are to be successful at helping the public understand the unique capacities enabled by working at the nanoscale, we will need to find ways to help the public appreciate or understand something about this domain. The Network will work to develop ways of helping the public perceive the properties of atoms and molecules and the unique properties of the nanoscale. Nanoscale science, engineering, and technology encompass rapidly changing fields that raise questions about a wide range of societal implications. The NISE Net will develop ways to quickly update exhibits everywhere so that museums and other informal educational organizations can keep up with the changes and developments. And the Network will develop programs to engage the public in dialogue and deliberation about potential societal and environmental implications.

The NISE Net will take an experimental approach, particularly in its early years, so as to be able to generate new knowledge about how to engage the public successfully in educational activities about nanotechnology. Evaluation of exhibit and program prototypes will play a key role in this effort. The Network will create a public website and a professional resource center site to share effective educational strategies and materials. Another important outcome of this five-year effort, will be to create the Network itself – a sustainable network of informal science educators and exhibit developers, working with nanoscale research centers to inform and engage the public.