Glossary: Museum and research center terms related to the NISE Network

Because the NISE Network bridges the cultures of museums and the academic research world, participants from one profession may not always know the lingo of the other. At the same time, a shared vocabulary is essential for educators and researchers who want to truly collaborate on projects such as writing grant proposals. Therefore, we present the NISE Network Glossary of Two Worlds.

Annual report/Final report – A report grant recipients give to grantors about what they've done with the grantor's money during a given time period.

ASTC – Association of Science-Technology Centers. ASTC is the international professional society for science centers and museums. ASTC serves as a liaison between the NISE Net and the larger science museum community.

Broader Impacts – The ways in which work proposed to NSF will impact audiences beyond the narrow field of the proposer. Broader impacts can be education outreach, diversity, or societal implications investigations, among other things. NSF requires all proposals to include a broader impacts plan, and it's part of the criteria by which proposals are reviewed.

CAREER – A prestigious NSF grant available to untenured assistant professors. CAREER grants are designed to help catalyze research efforts for new faculty. Professors often include outreach in these proposals, making CAREER a good avenue for facilitating collaboration between NISE Net and researchers.

Cart demo – A program in which an educator leads an interactive demonstration or activity about real phenomena to between one and twelve visitors close up.

Catalog – The NISE Net catalog, available at nisenet.org, contains all the products that NISE Net and its partners have developed, including programs, forums, exhibits, and more. The materials are completely open source, meaning anyone can download and use them free of cost. Users are encouraged to post comments on the catalog Website regarding their experience using NISE Net materials and any modifications they may have made (or tried). NISE Net encourages these comments as a way of building community and offering individuals and institutions engaging in nanotechnology-related informal education activities a way to share ideas, successes and failures with one another.

CfP/RfP/Solicitation – Call for Proposals/Request for Proposals. The method a granting agency uses to invite people to submit proposals for grant funding.

Classroom activity – A structured, educator-led workshop or lesson suitable for a small to medium sized group (up to around 20 participants).

Facilitated activity – A hands-on activity facilitated by an educator.

Forum – A public program, often for adults, that offers participants a way to engage in thoughtful conversations about issues related to nanotechnology and its regarding potential societal, environmental, and ethical implications. Forums provide a vehicle for people of diverse views and backgrounds to gain a deeper understanding of nanotechnology by deliberating issues around its applications.

Hack(ing) – Modifying premade materials, such as a Power Point presentation or signage, used to facilitate an activity or presentation. Hackers adapt these materials to suit their institution's goals, needs, and audience. NISE Net encourages partners to hack materials and then share their changes with others.

ISE(I) – Informal Science Education (Institution); organizations (e.g., museums, libraries, after-school clubs, media) that offer science education outside of the traditional classroom environment.

Kits – Boxes of props for programs and hands-on activities along with other instructional materials. NISE Net has several different kits, including a NanoDays kit, regional workshop kits, and program kits.

MRS – Materials Research Society. MRS is an international professional society for researchers in the fields of materials science and engineering. MRS, a subawardee of the NISE Net, hosts a database of researchers available for outreach (link to http://www.nisenet.org/community/advise-nise-net-be-a-nano-expert), and includes many NISE Net efforts at its semiannual meetings.

MRSEC – Materials Research Science and Engineering Center. NSF-funded centers dedicated to materials science, and often nanoscale research. The broader impacts efforts range with the size of the MRSEC program, and some do a wide range of educational activities. MRSECs are also good places to look for researcher contacts. Visit www.mrsec.org.

Museum theater show – A museum program presented as a play in which conflict moves the story line and teaching points. This style may use puppetry, sets, and a set script.

NCLT – National Center for Learning and Teaching in Nanoscale Science and Engineering. Funded by NSF, NCLT was established in October 2004 with Northwestern University as its lead organization. Its vision is to build a globally competitive Nanoscale Science & Engineering (NSE) workforce and well-rounded NSE education leaders.

NISE Net Region – A sub-group of NISE Net, made up of museums all located in the same geographic area. The museum coordinating NISE Net efforts within the region is the regional hub.

NNCO – National Nanotechnology Coordination Office. NNCO provides public outreach on behalf of the National Nanotechnology Initiative.

NNI – National Nanotechnology Initiative. NNI was established in 2001 to coordinate federal nanotechnology research and development. It encompasses the nanotechnology-related activities of 25 federal agencies with a range of research and regulatory roles and responsibilities. The NNI itself does not fund research; however, it informs and influences the federal budget and planning processes through its member agencies.

NSEC – Nanoscale Science and Engineering Center. There are approximately 20 of these university-based centers around the country, funded by the NSF and dedicated to nanoscale science and engineering research. NSECs support a broad range of education and outreach. They are good places to look for researcher contacts. To see a list of the current NSECs (including their locations, research areas, and education efforts), visit http://www.nsf.gov/awardsearch/. Type "nsec" in the "search award category," click "restrict to title only," and click "search."

NSTA – National Science Teachers Association. This is the largest organization in the world committed to promoting excellence and innovation in science teaching and learning for all. NSTA's membership includes 60,000 science teachers, science supervisors, administrators, scientists, business and industry representatives, and others involved in science education.

PI – Principal Investigator – The lead person on a grant. If there are two or more leads, they are considered co-PIs.

PREM – Partnerships for Research and Education in Materials. An NSF-funded effort to foster long-term collaborations between minority-serving post-secondary institutions and universities/centers funded by NSFs Division of Materials Research (DMR). This includes MRSECs or NSECs. As the grant name implies, education and outreach play a large role in PREMs.

Program – An educational experience that's delivered or mediated in person by a facilitator for an audience.

Program officer – An NSF staff member who supervise grantees' work. Program officers have some influence on the success of grant proposals and can offer limited advice to those considering submitting a proposal.

Stage presentation – A program well suited to presentation for large audiences, with a presenter on a stage, addressing a crowd, often with several slides or videos.

STEM – An acronym used by some funding agencies and educators to refer to science, technology, engineering, and mathematics education.

Underrepresented – A term used to describe populations of people who are underrepresented in STEM fields, which means that the percentage of people from a particular group in STEM fields is lower than the percentage of that same group in the U.S. population. NSF includes women, African American, Hispanic, American Indian/Alaskan Native, and persons with disabilities in this category. Sometimes such a group will be referred to using the acronym URM, for underrepresented minority.

Universal Design – The design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design (definition created by the Center for Universal Design, North Carolina State University). **Viz Lab** - NISE Network Visualization Laboratory at the Exploratorium. Its goal is to create and study effective and innovative visualization techniques for understanding and experiencing the nanoscale.

Zoom-ins or Zooms – A product of the NISE Net's Visualization Lab (or Viz Lab), showing the relative sizes of different objects by continually zooming from the macroscale to the nanoscale.