

Nanoscale Informal Science Education Network Legacy and Future Plans

NSF Nanoscale Science and Engineering Grantees Conference 2015
Larry Bell, Sr.V.P. for Strategic Initiatives, Museum of Science, Boston



Network
Meeting
June 2015

The NISE Net was established with an award in 2005 to the Museum of Science in partnership with the Science Museum of Minnesota and the Exploratorium as a result of a special solicitation issued earlier in the year.

Nanoscale Science and Engineering Education (NSEE)

Program Solicitation

NSF 05-543

Replaces Document NSF 03-044



National Science Foundation

Directorate for Education and Human Resources

Directorate for Biological Sciences

Directorate for Computer and Information Science and Engineering

Directorate for Engineering

Directorate for Geosciences

Office of International Science and Engineering

Directorate for Mathematical and Physical Sciences

Directorate for Social, Behavioral, and Economic Sciences

“This effort is intended to foster public awareness, engagement, and understanding of nanoscale science, engineering, and technology through establishment of a Network, a national infrastructure that links science museums and other informal science education organizations with nanoscale science and engineering research organizations.”

Project Goals

Educational Deliverables

Strategically plan, develop, implement, and disseminate educational deliverables of all kinds that foster greater engagement with and understanding of nanoscale science, engineering, and technology in a comprehensive way by the general public, as well as K-12 school groups.

Network Infrastructure

Create a sustainable service-oriented infrastructure that supports long-term efforts to educate the public about nanoscale science, engineering, and technology, as well as builds capacity in the field and within participating institutions.

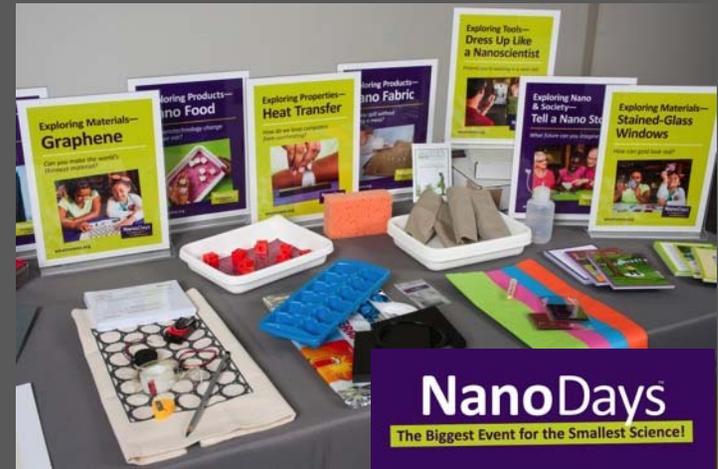
Knowledge base

Stimulate educational research and evaluation that add to the nanoscale informal science education knowledge base, inform continuous improvement of both products and processes, and guide the development of future deliverables

Educational Deliverables

activities/programs

- Online library of 272 resources: 146 from NISE Net, 126 others
- 1650 physical NanoDays kits distributed to 468 different organizations across the U.S.



Network Infrastructure



Knowledge base

- short activities
- long activities
- forums
- theater & stage presentations
- K-12 lesson plans





activities/programs

exhibits

Educational Deliverables

- 93 copies of the *nano* mini-exhibition across the U.S.
- 38 additional exhibits in online library: 16 NISE Net, 22 others

Network Infrastructure



Knowledge base

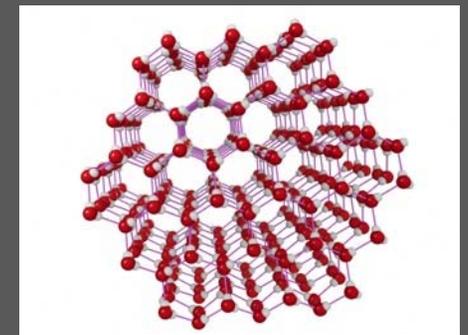


Educational Deliverables

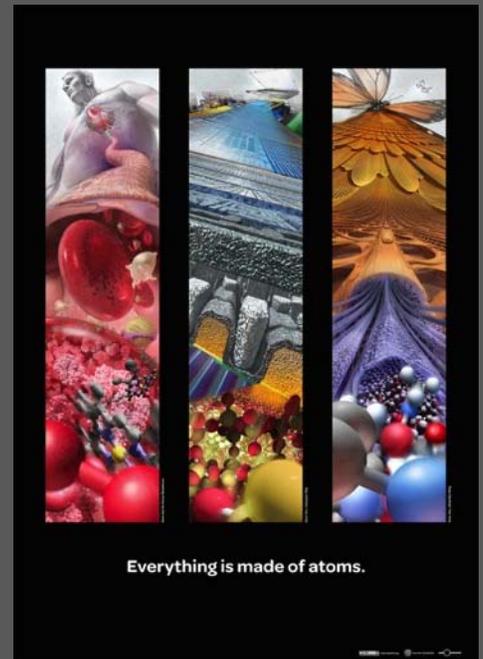
activities/programs

exhibits

media



Network Infrastructure



Knowledge base

192 resources:
images, videos, audio
and podcasts,
interactive media and
games, websites, print
media and posters



Educational Deliverables

activities/programs

exhibits

media

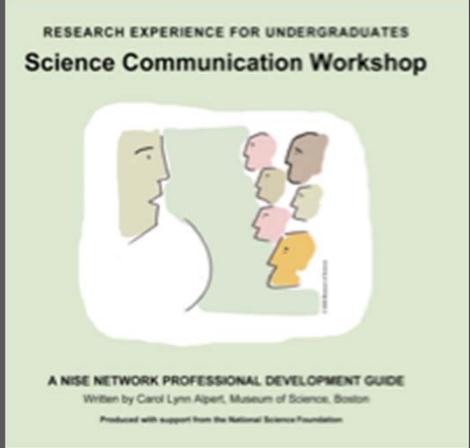
professional dev.



Network Infrastructure

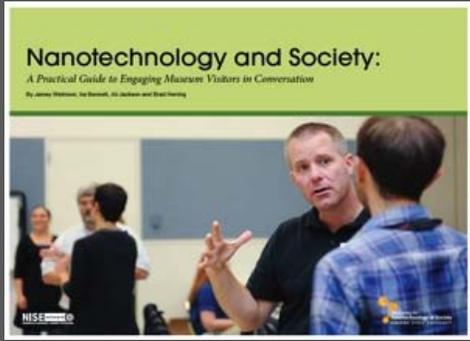


Universal Design Guidelines



Knowledge base

94 guides and PD resources online for scientists and educators, in addition to workshops and conference sessions



Educational Deliverables

activities/programs

exhibits

media

professional dev.

Staff of 18 subawardee organizations developed expertise in project work



Network Infrastructure

project teams



Knowledge base



Year 8 NISE Network Teams

Network Community	Public Engagement	Capacity Building	Knowledge for the Field
Community Leader: Catherine McCarthy NOG: Catherine McCarthy	NanoDays Leader: Ali Jackson NOG: Brad Herring	Online Brown-Bags Leader: Vrylena Olney NOG: Vrylena Olney	Evaluation Leader: Liz Kunz Kollmann NOG: Vrylena Olney Public Impacts Leader: Gina Svarovsky NOG: Catherine McCarthy Professional Impacts Leader: Juli Goss NOG: Vrylena Olney Survey and Data Mining Leader: Liz Rosino NOG: Catherine McCarthy Theory of Action Leader: Liz Kunz Kollmann NOG: Vrylena Olney
Website Leader: Catherine McCarthy NOG: Catherine McCarthy	Programs Leader: Brad Herring NOG: Brad Herring	Team-Based Inquiry Professional Development Leader: Scott Pattison NOG: Brad Herring	
RISE Leader: Larry Bell NOG: Vrylena Olney	Exhibits Leader: Catherine McCarthy NOG: Catherine McCarthy	Inclusive Audiences Leader: Veronica Garcia-Luis NOG: Vrylena Olney Universal Design Workshop Leader: Anna Lindgren-Streicher NOG: Vrylena Olney Bilingual Workshop Leader: Kari Jensen NOG: Brad Herring	
Network Leadership			
NEG NOG	Project Coordination	Administration NEG: Larry Bell NOG: Vrylena Olney	Research Leader: Kirsten Ellenbogen NOG: Vrylena Olney Scientist Partnership Study Leader: Vera Michalchik Organizational Change Study Leader: Christine Reich Evidence-Based Decision Making Leader: Kirsten Ellenbogen



Educational Deliverables

activities/programs

exhibits

media

professional dev.



Network Infrastructure

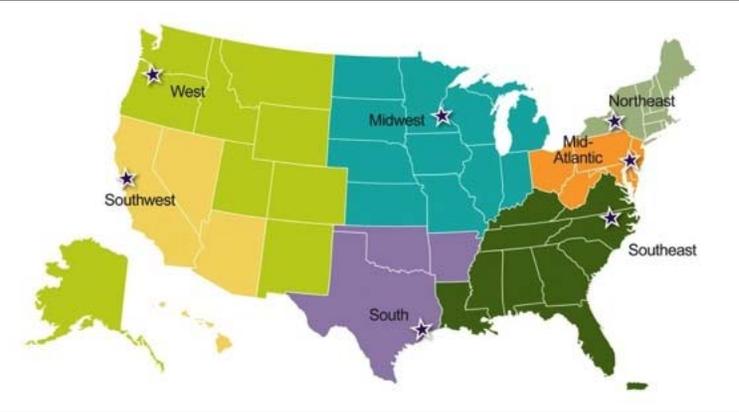
project teams

regional hubs

Seven regional hubs provided hundreds of partners with friendly and helpful connections with the Network



Knowledge base



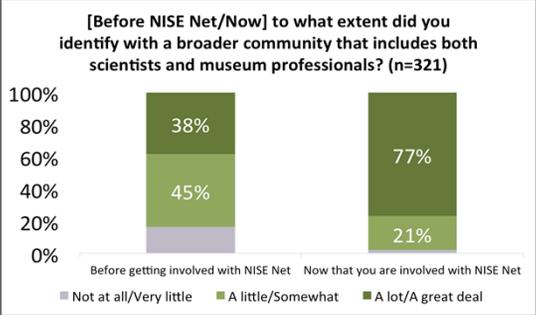
Educational Deliverables

- activities/programs
- exhibits
- media
- professional dev.

Network Infrastructure

- project teams
- regional hubs
- partners

Knowledge base



Hundreds of organizations nationwide include nanoscale science, engineering, and technology in their offerings



Educational Deliverables

activities/programs

exhibits

media

professional dev.

Network Infrastructure

project teams

regional hubs

partners

communications

Knowledge base

NanoDays reports, mini-grant reports, annual partner surveys, database systems supported additional feedback for leaders



Face-to-face meetings, professional conferences, newsletter, website, social media, regional hubs, and kits provided network-wide communication

A Study of Communication in the Nanoscale Informal Science Education Network

Year 6

By: Jane Morgan Alexander, Gina Svarovsky, Juli Goss, Liz Rosino, Leigh Ann Mesiti, Jenna LeComte-Hinely, and Christine Reich

April, 2012

NISE network NANOSCALE INFORMAL SCIENCE EDUCATION

Nano Bite: December 2015

Welcome to the December Nano Bite, the monthly e-newsletter for the Nanoscale Informal Science Education Network (NISE Net) and community.

NISE network NANOSCALE INFORMAL SCIENCE EDUCATION

Search

Programs and Activities Exhibits Media Professional Development Evaluation and Research NanoDays About

The NISE Network is a national community of researchers and informal science educators dedicated to fostering public awareness, engagement, and understanding of nanoscale science, engineering, and technology. Nisenet.org is an online digital library of public nano educational products and tools designed for educators and scientists.



NanoDays March 26-April 3, 2016
The Biggest Event for the Smallest Science!

The NanoDays 2015 digital kit is available for download!

what is nano .org

Twitter Facebook LinkedIn Email

Educational Deliverables

- activities/programs
- exhibits
- media
- professional dev.



Network Infrastructure

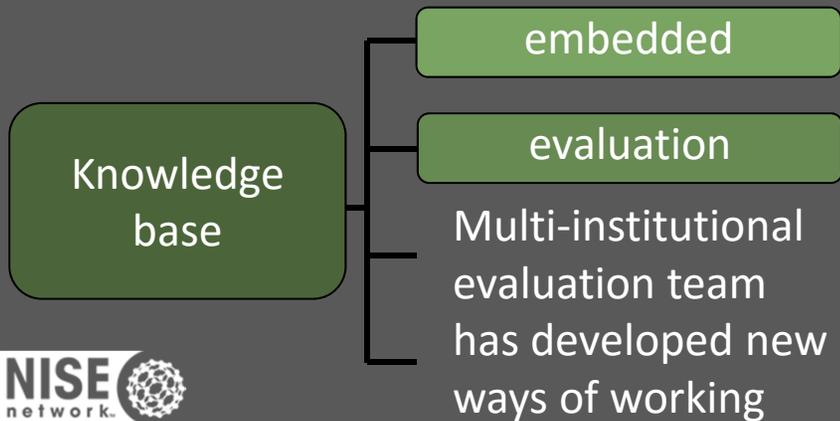
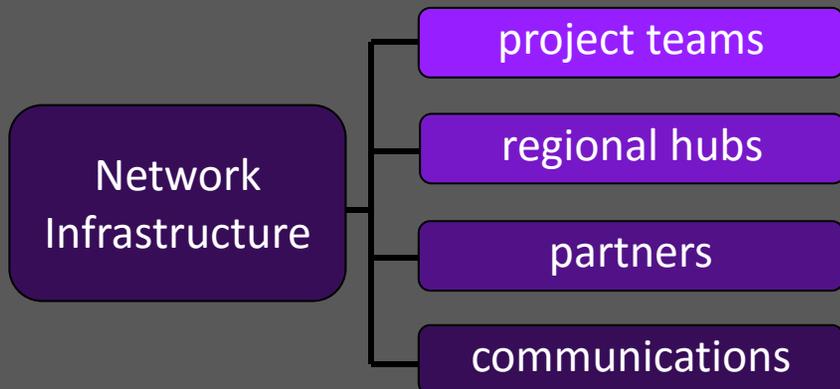
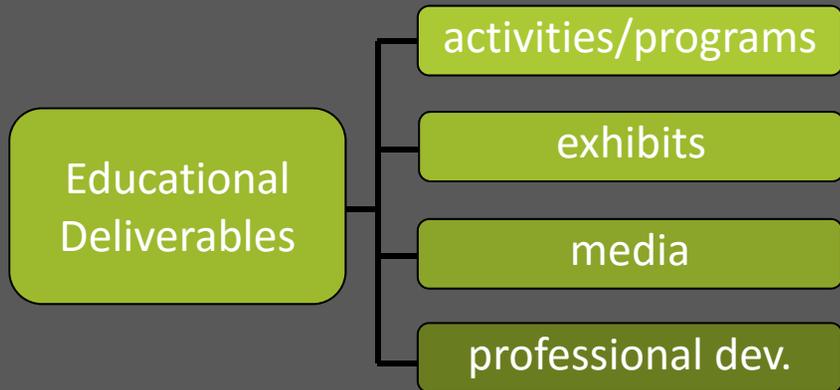
- project teams
- regional hubs
- partners
- communications



Knowledge base

- embedded
- Partners learned by working together and built what they learned into the educational resources





Five front-end studies informed the project

NISE NETWORK PRODUCT

Front-end Evaluation

Nanotechnology and the Public Year 1 Front End Evaluation

In support of the NISE Network, this report reviews 20 secondary research documents with a focus on how nanotechnology has penetrated the consciousness of the general adult public.

Product

Hundreds of formative evaluation studies informed development and design

NISE NETWORK PRODUCT

Formative Evaluation

Nano Mini-Exhibition 2011 Formative Evaluation

During the winter of 2011, SMM survey associates and NISE Exhibits Team members collected a range of data on the mini-exhibition on the floor at SMM.

Product

Twenty summative evaluation reports are currently online with others in development

NISE NETWORK PRODUCT

Summative Evaluation

Summative Evaluation Study of NanoDays 2014 Events

In the spring of 2014, the Nanoscale Informal Science Education Network (NISE Net) Public Impacts evaluation team conducted a summative study of NanoDays, a nationwide festival of educational

Product

Their do-it-yourself form of formative evaluation called Team-Based Inquiry is being disseminated beyond the project



Educational Deliverables

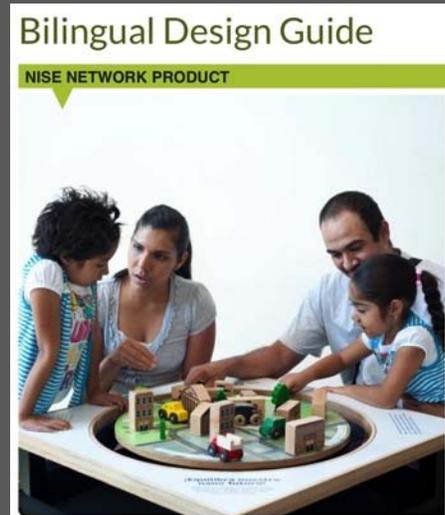
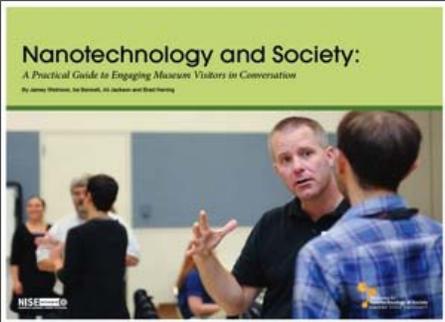
- activities/programs
- exhibits
- media
- professional dev.

Network Infrastructure

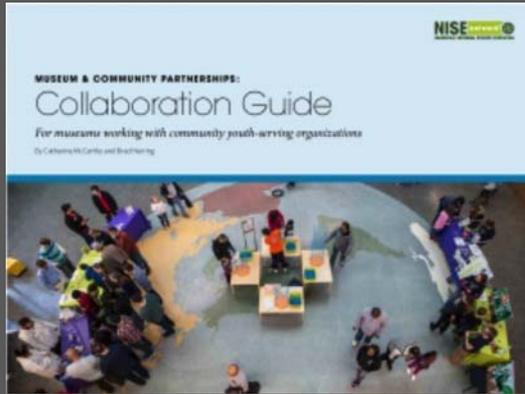
- project teams
- regional hubs
- partners
- communications

Knowledge base

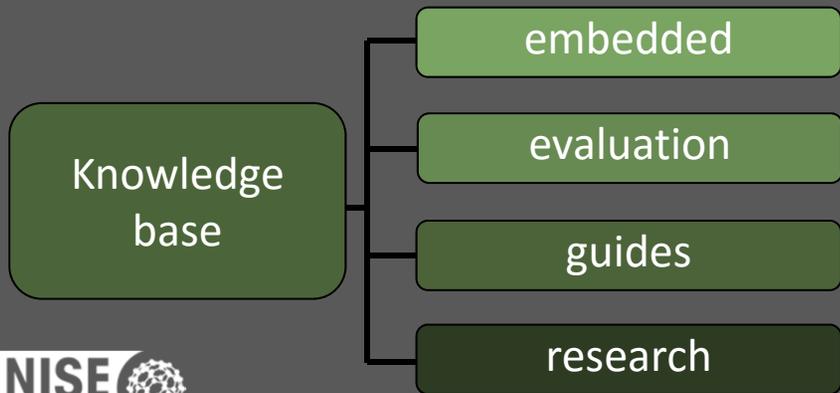
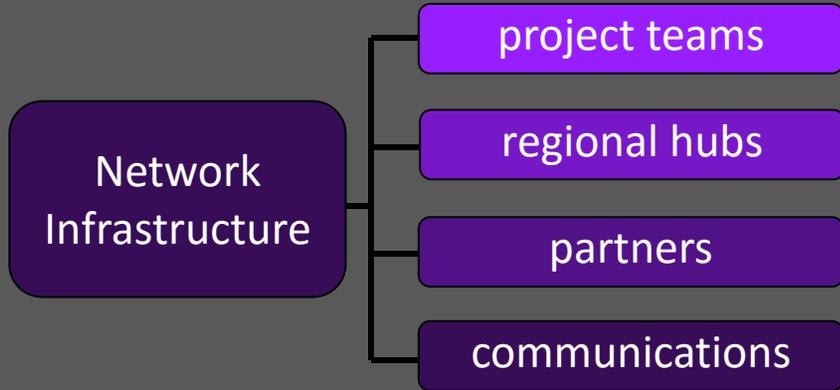
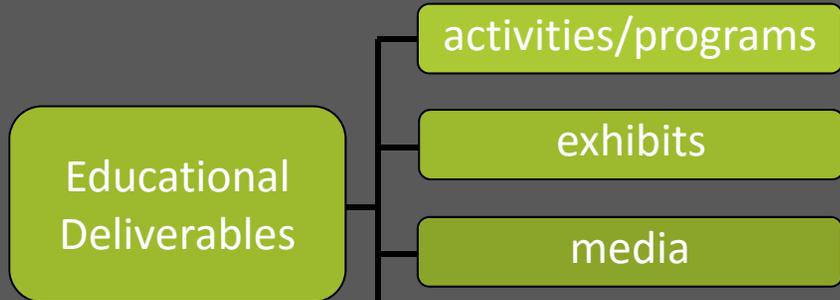
- embedded
- evaluation
- guides



Translation Process Guide



Guides and recorded webinars online



Partnerships in the Nanoscale Informal Science Education Network (NISE Net):

A study of partnerships between university scientists and museum professionals

SRI Education
A DIVISION OF SRI INTERNATIONAL

SRI Education

Nano and Society

Case Study of a Research-to-Practice Partnership between University Scientists and Museum Professionals



Nano Online: Tracking NISE Net's Digital Footprint Final Report

Dietram A. Scheufele (scheufele@wisc.edu) and Leona Yi-Fan Su (su28@wisc.edu)
Life Sciences Communication, University of Wisconsin-Madison

NISE Net Research on How Visitors Find and Discuss Relevance in the *Nano* Exhibition

Research Report

By Elizabeth Kunz Kollmann, Gina Svarovsky, Stephanie Iacovelli, and Maggie Sandford

September 2015

Research on Organizational Change currently underway

Impacts

Professional

Organizational

Public

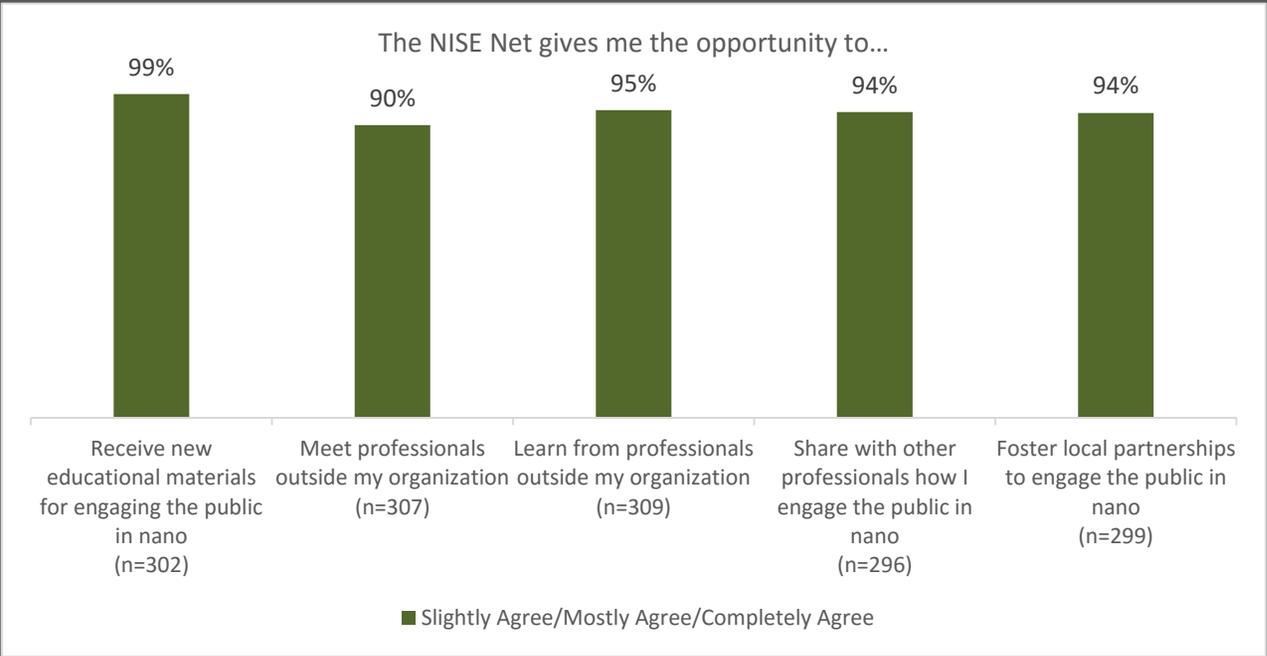
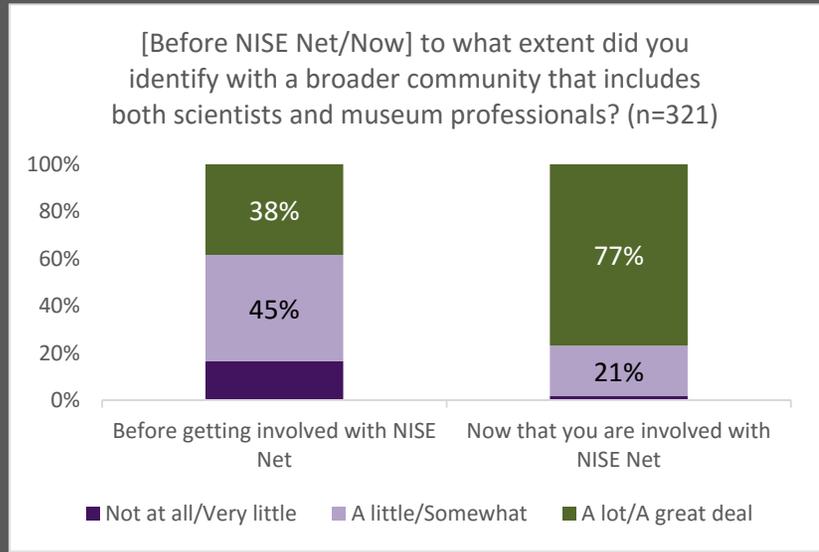


Professional

NISE Net built community and collaboration among university scientists and museum professionals

We're part of this much bigger network that is a nationwide outreach on nanotechnology...I think it brings a level of credibility to what we do. It shows that we're engaged in something much bigger than our little community. -ISE professional

I always identified with a community of scientists. But never had any interactions with people associated with the museum side of things. Through NISE Net, I became involved with our local children's museum. -University researcher





Professional

ISE and university professionals gained confidence from NISE Net in communicating to public audiences about nano

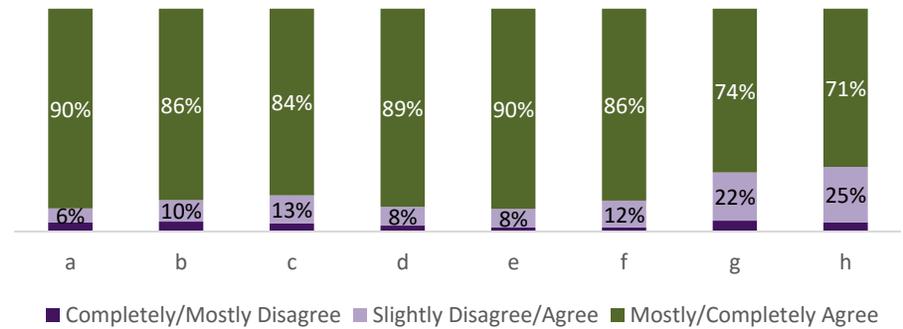
I learned a lot about how to communicate the idea of a nanometer to these students and not only just about the idea of a nanometer, but also how nano affects what we do in real life."

- University professional

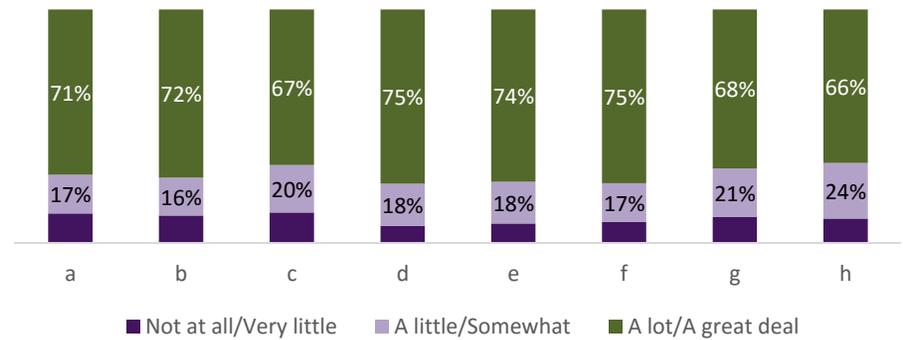
[NISE Net] greatly expanded my personal knowledge and actually made me more aware of nano in the news and just daily life.

-ISE professional

Please rate the extent to which you agree.
I feel confident in my ability to explain to another adult...



How much has NISE Net affected your confidence in explaining to another adult...



- Eight nano concepts used for both survey questions**
- a. The size of a nanometer.
 - b. How nano-sized materials behave compared to macro-sized materials.
 - c. How scientists work at the nanoscale.
 - d. Examples of nano in nature.
 - e. Innovations that are possible because of nanotechnology.
 - f. Ways that nanotechnology improves existing products.
 - g. Risks or potential risks of nanotechnology.
 - h. How the future of nanotechnology may be influenced by political, economic, and personal values.



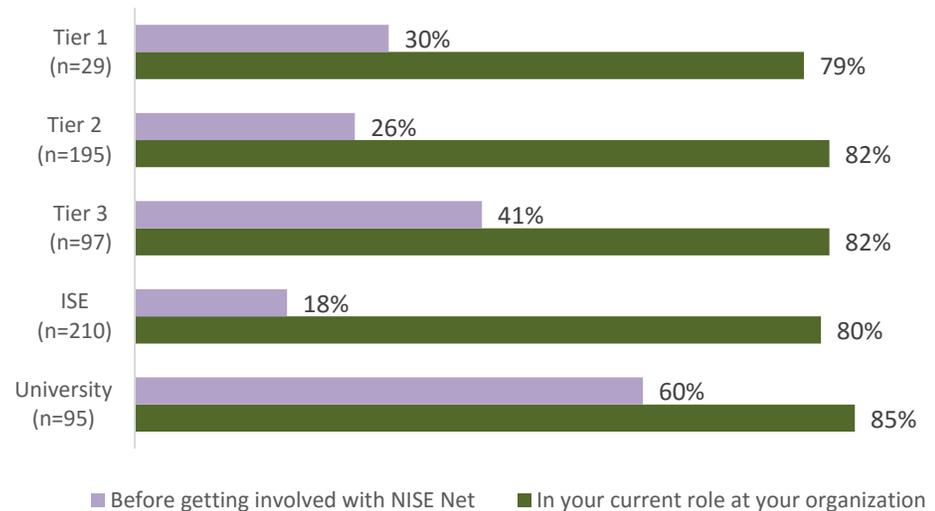
Professionals are significantly more likely to engage the public in learning about nano than they were prior to NISE Net involvement

Professional

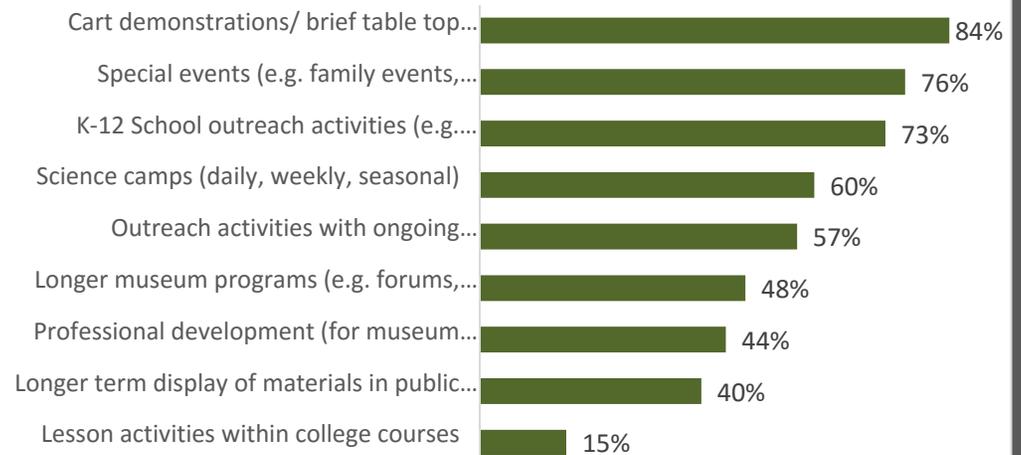
every week, every person in this department uses a direct activity from the NISE Net either in the lab or on the floor or something even in the science theater
ISE professional

I think that's one of the things that's really great about NISE Net is that they have, you know, different iterations with different lengths of times, different set ups, for different aged people.... the NanoDays kit in particular, we were just so impressed that it had everything, including the little plastic standup stand and the tablecloth!
-University researcher

[Before/In current role] did you personally engage any public audience in nano at any time of the year?



In which of the following settings do you personally use NISE Net materials outside of NanoDays?



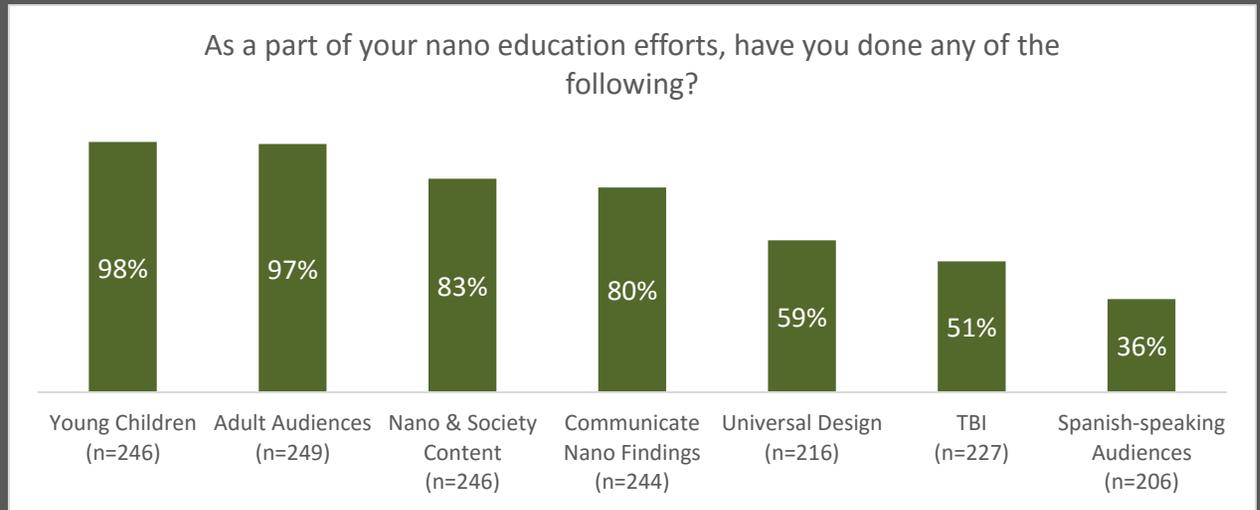
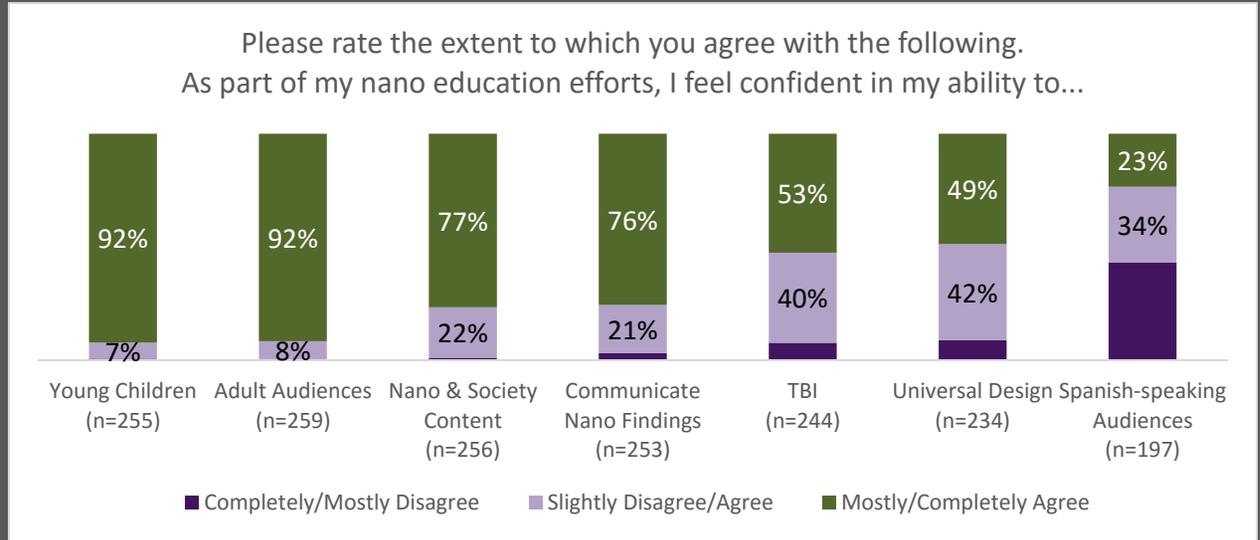


As of year 10, professionals are confident in their ability, and using NISE Net resources, in a variety of ways, especially: engaging young children, engaging adults, engaging audiences with nano & society content, and communicating nano research findings to the public.

Professional

It's just my go-to place for knowledge... if I want to talk about nano and society, science and society, [NISE Net is] the first place I'm going to go.
-ISE professional

The fact that each of the activities comes with a series of resources, pictures, slides, presentation aids, models, that makes it so much easier for people to get the concept ...even when you have people having difficulty understanding what you are saying.
-ISE professional



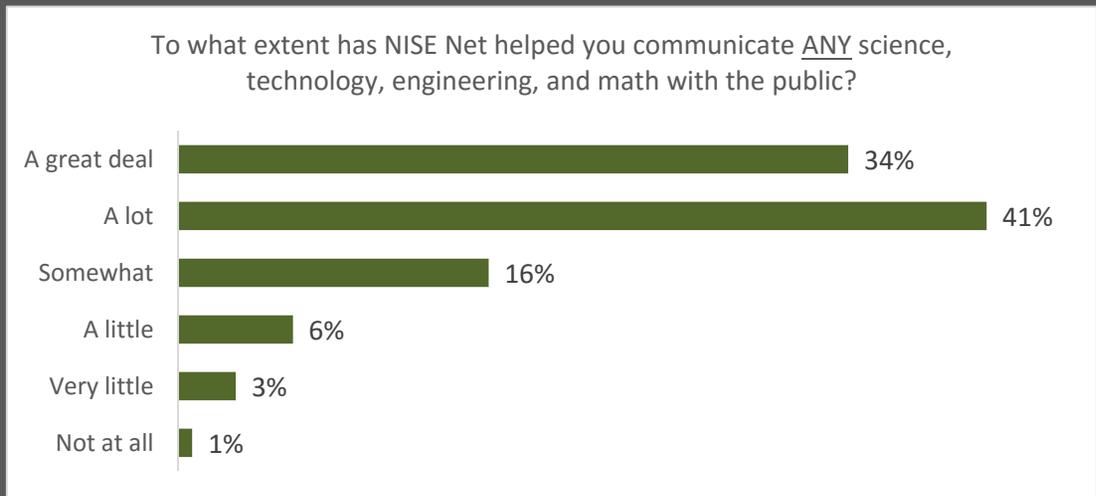
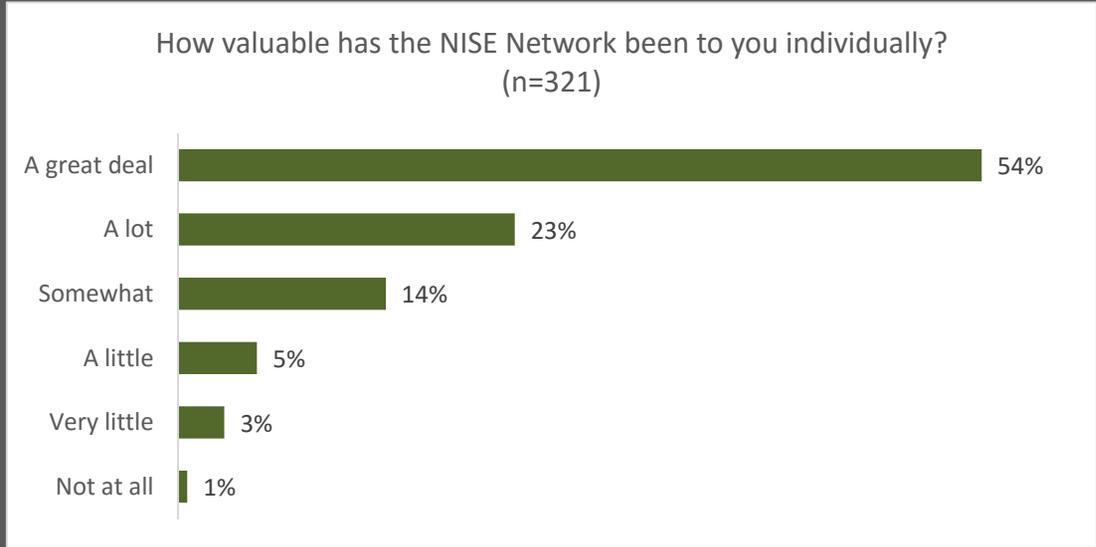


Professionals reported that NISE Net has been valuable to them because it provided models they can emulate, and because it helped them increase partnerships on, and communication of, other STEM topics beyond nano

Professional

I teach undergrad classes and ...I'm an active researcher in the field, so involved in nano at highest research level but NISE Net been extremely valuable providing me outlook, [that it's] not enough to just to research in lab, role as professor is to get work out to students and community. We want to ... interest next generation of scientists just like we are doing. So NISE Net been very valuable for providing information on how to reach out to young students and how to motivate them? NISE Net's been very helpful to me.

-University researcher





NISE Net has been valuable for organizations in a variety of ways

NanoDays not only helps us to attract and retain talented students, but also enables us to enrich the volunteer experiences of our student volunteers....The program has had a significant positive impact not only on our chemistry department, but on (the) university as a whole.

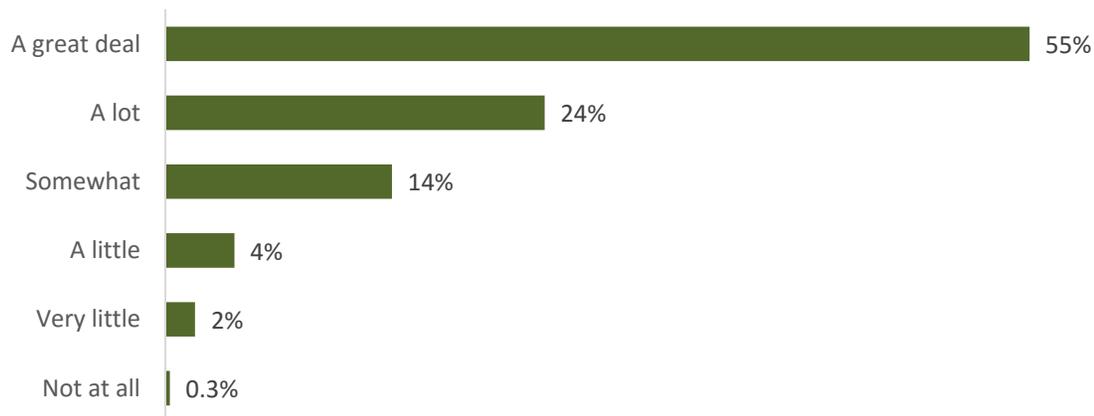
-University professional

Organizational

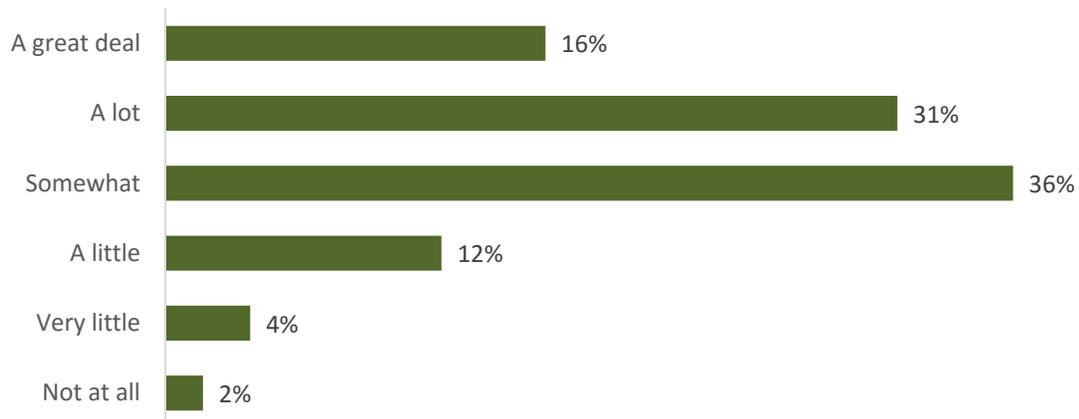
I would say that we're a relatively new museum... we have more of a science focus now than 7 years [ago] and because NISE Net resources are so strong...it strengthens our partnerships and how we do partnerships and has helped us structure our partnerships in a way that are successful.

-ISE professional

How valuable has the NISE Network been to your organization?
(n=319)



To what extent has NISE Net increased the amount of ANY partnerships or collaborations between your organization and another?



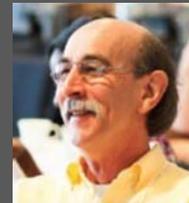


Partners report a wide variety of ways in which NISE Net has had a broad impact upon their organizations



We all work together to create something bigger than ourselves, and something that's not just institutionally changing, but also community changing.

NORA MOYNIHAN, PORT DISCOVERY CHILDREN'S MUSEUM, BALTIMORE, MARYLAND



It's really been a wonderful relationship. Informal science education has become such an important part of MRS that after a few years we incorporated it into our mission. It's critical for scientists to get across their research and the value of it to the general public, so the public can be better decision-makers.

RICHARD SOUZA, MATERIALS RESEARCH SOCIETY



Combined with ongoing professional development, NISE Net resources, and capped with the Nano exhibition, COSI team members across the institution have seized the opportunity to mainstream nanotechnology into their programs.

JOSHUA SARVER, COSI, COLUMBUS, OHIO

The kits are also great models for researchers who would like to create new outreach activities on their research. We have had 4-5 researchers in the past two years develop activities that are modeled on the pedagogical aspects of the NanoDays kits.

KATHRYN HOLLAR, HARVARD SCHOOL OF ENGINEERING AND APPLIED SCIENCE

The mini-grant allowed us to dedicate exhibit space to an exciting and progressive topic. In the past two years, the number of visitors to our museum has increased significantly. The Nano Lab is one of the changes that we think has contributed to our recent successes.

SARAH VON WILLIAMSEN, IMAGINARIUM SCIENCE CENTER, FORT MYERS, FLORIDA

Organizational



NanoDays events are successful in providing event attendees with an engaging experience and in promoting learning of nano concepts.



Public

Indicator of Success	Evidence from Event Attendee Data
Provide engaging NSET programming for public audiences.	Almost all adults and youth surveyed and/or interviewed for the study found NanoDays interesting, enjoyable, and/or fun; almost all adults interviewed said they would return for a future NanoDays event.
Engage the public in learning about NSET.	There were statistically significant increases in adult event attendee confidence about nano; 63% of interviewed adults saw a connection to their lives at NanoDays; 88% of youth interviewed identified specific aspects of NanoDays activities when asked about new technologies.

NanoDays events are also successful in providing event volunteers with an engaging experience and in promoting learning of nano concepts

Emergent Themes	Example	Percent of respondents (n=326)
Experience engaging people	"I've gained experience in communicating science to younger and older audiences."	46%
Gained Nano-related knowledge	"I have learned more about how we use nanotechnology in our everyday life and how it can impact our future."	25%
Great experience/Fun	"I really enjoyed working with our local science organization and have asked to participate again. I am volunteering again next weekend."	21%
Gained general science knowledge	"[I gained an] additional understanding of the physical world."	11%
New perspectives on science and technology	"I gained a whole new outlook on science and am eager to learn more about nano science. I checked out from our local library an audio series on nano. It is very interesting."	8%
Other		10%

Volunteering at NanoDays positively impacts interest in STEM activities/careers and confidence around engaging the public in nano



The *Nano* mini-exhibition is successful in providing visitors with an engaging experience and in promoting visitor learning of nano concepts.



Indicator of Success	Evidence at Science Centers
Sustained Use	Visitor dwell times were nearly 4 times greater than field wide average.
Interest and Enjoyment	Almost all visitors reported high levels of interest/enjoyment for themselves (95% and 96%); the vast majority reported high levels for the children in their group (79% and 87%).
Social Interaction	The vast majority of groups (87%) were observed interacting with <i>Nano</i> as a group.
Broad Age Range	Observed ages of visitors ranged from 0-70+; 53% were children; the most common age range was 30-39 at 18%.
Further Exploration	A majority of groups (75%) used at least one of these elements; over half (52%) used the <i>Where Can You Find Nano?</i> panel.
Learning About Nano Content	There were statistically significant increases in visitor confidence about nano; 59% mentioned at least one area of the NISE content map when asked to describe what they learned.

In addition:

- *Nano* is successful with different types of institutions
- *Nano* shows promise for being successful for Hispanic visitors and visitors with disabilities
- Network partners say *Nano* is catalyzing new and enhanced programming

Public



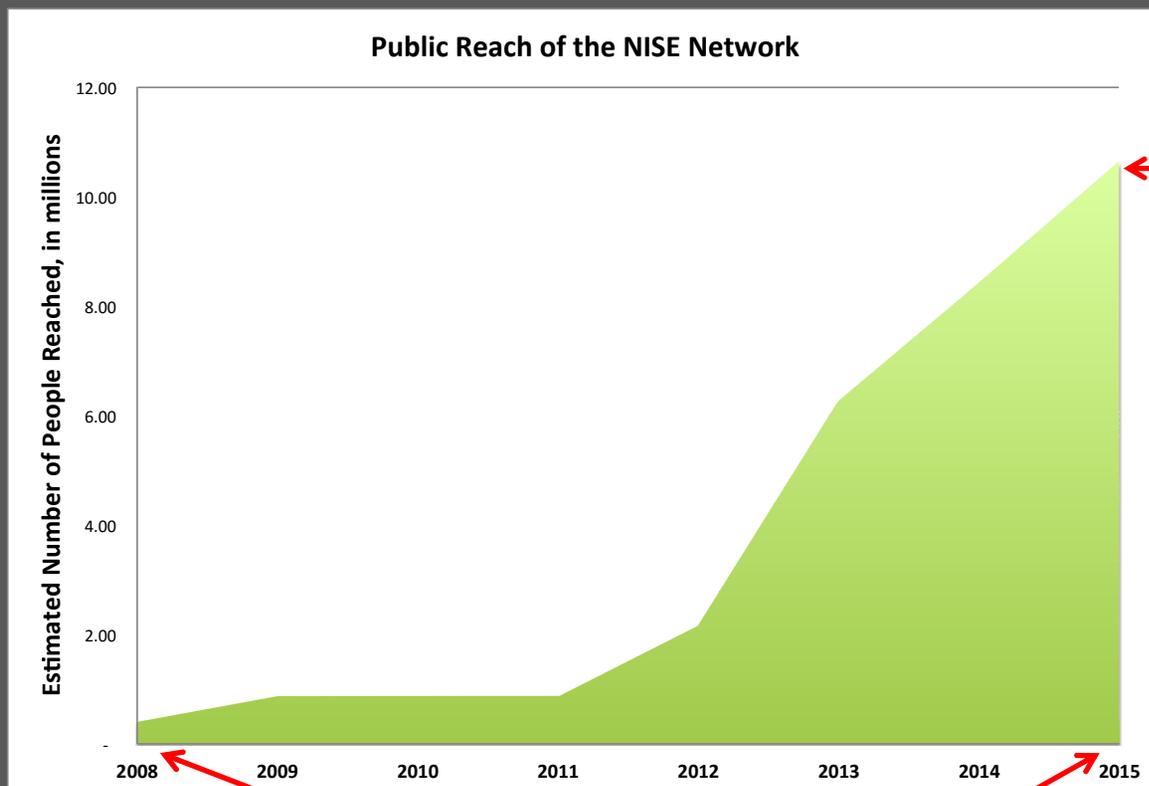
Summative Study of the *Nano* Mini-exhibition

Summative Evaluation

Gina Svarovsky, Juli Goss, Gayra Ostgaard, Nelda Reyes,
Clara Cahill, Ryan Auster, and Marjorie Bequette

May 20, 2013

NISE Net's public reach has grown over the ten years of its work



In NISE Net's final year of funding it reached members of the public at a rate of 10.6 million per year

Annual reach in 2015:

NanoDays events 183,555
Other use of kits 917,774
Nano exhibition 9,536,940

Public

By the end of 2015, it is estimated that the NISE Network will have reached over 30.5 million people over its lifetime.

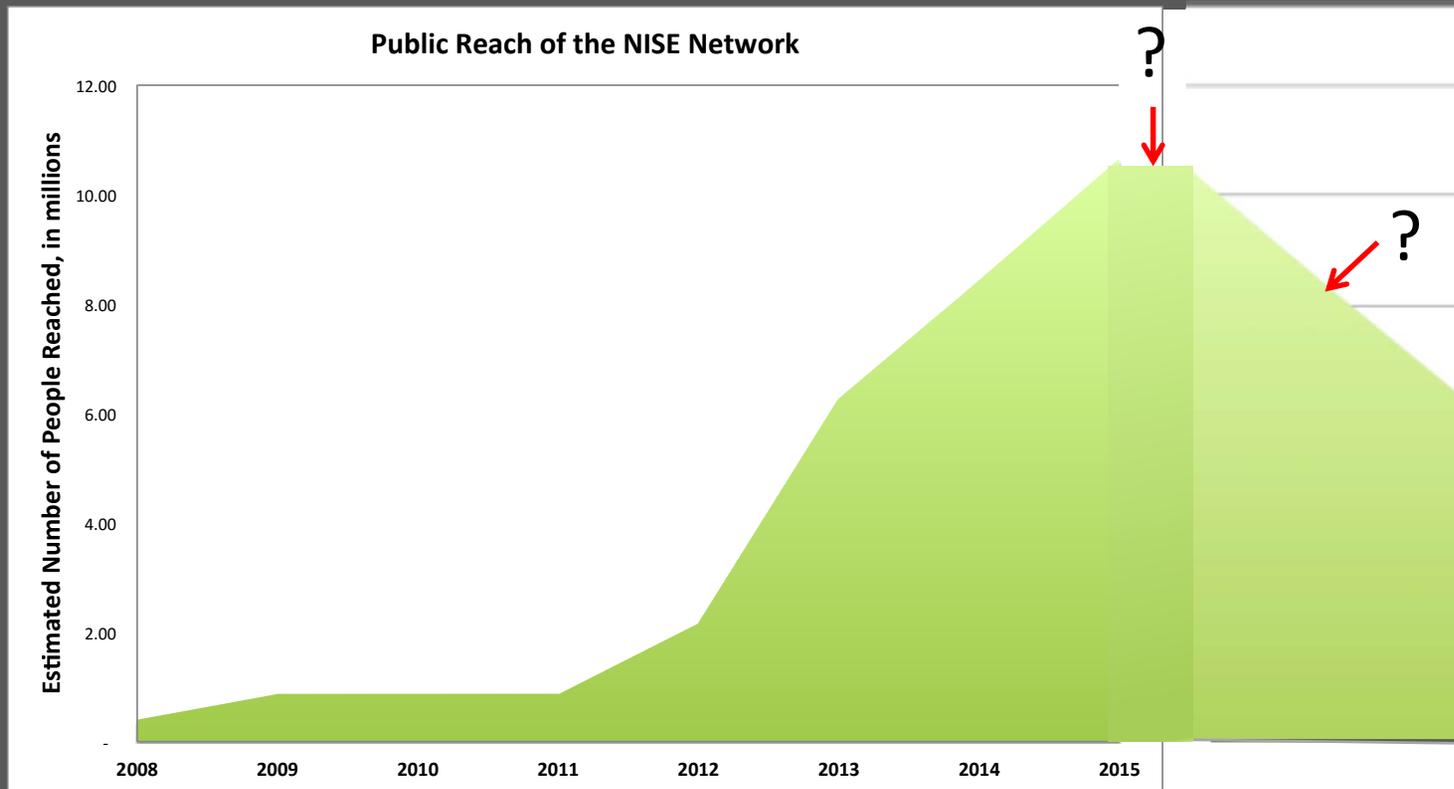


Public Reach Estimations for the NISE Network

Gina Navoa Svarovsky, Juli Goss, and Elizabeth Kunz Kollmann

January 16, 2015

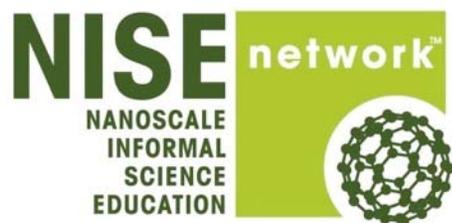
Future Plans



Public

As long as all of the exhibit copies are on display and the kit materials are still used by all as much as in 2015, NISE Net continues to reach over 10 million people each year, but exhibits will eventually be retired and materials depleted, and staff turnover will reduce public reached





- NISE Net's ten years of NSF funding ended Aug 31, 2015
- A six-month supplement and one-year no-cost extension brings final closing date to Feb 28, 2017
- Only Administrative and Evaluation Teams still in operation
- Completion of studies, guides, and reports
- Maintenance of www.nisenet.org website

NanoDays™

The Biggest Event for the Smallest Science!

NanoDays dates for next five years

2016: March 26-April 3

2017: March 25-April 2

2018: March 31-April 8

2019: March 30-April 7

2020: March 28-April 5

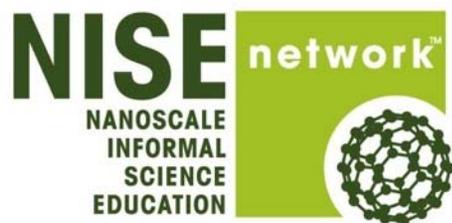


NISE Net Research on How Visitors Find and Discuss Relevance in the *Nano* Exhibition

Research Report

By Elizabeth Kunz Kollmann, Gina Svarovsky, Stephanie Iacovelli, and Maggie Sanford

September 2015



Museum & Community Partnerships

100 kits with hands-on activities designed to facilitate collaborations that engage underserved audiences in nanoscale science, engineering and technology

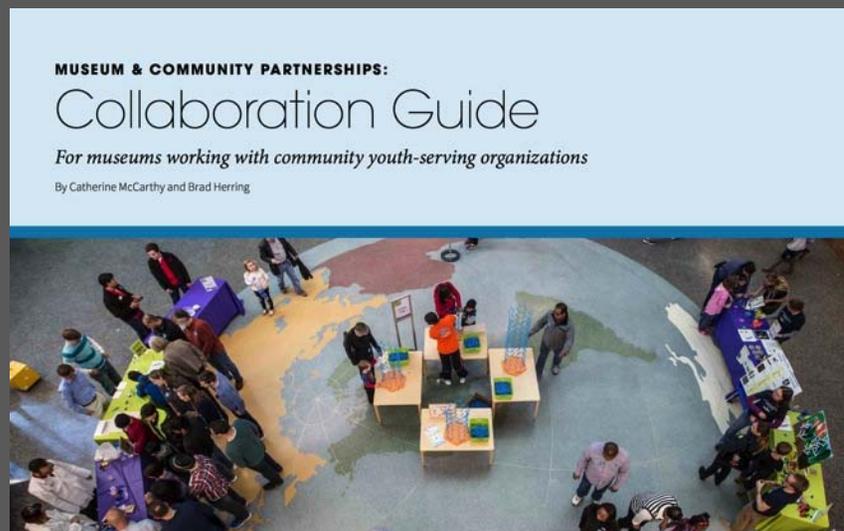


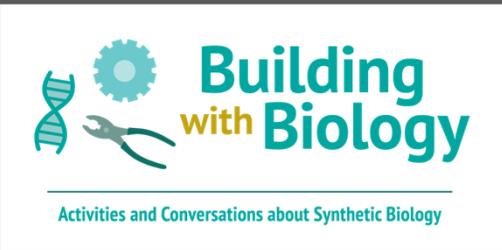
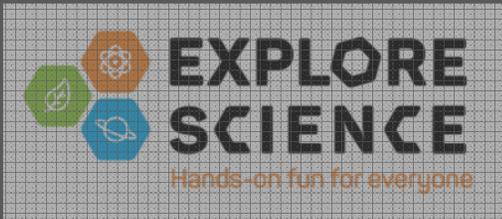
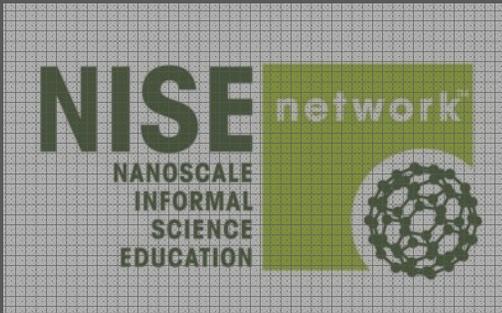
Create new or expanded collaborations between NISE Net partners and a local community partner such as:

- A local community group, afterschool program, library, or summer camp
- A local chapter of a national youth-serving group such as 4-H, Boys & Girls Clubs, Boy Scouts, Girls Inc., Girl Scouts, National Girls Collaborative Project, Parent Teacher Association (PTA), Y (YMCA), and YWCA

HANDS-ON ACTIVITIES

1. Zoom into Nano
 - Get in Order
 - Powers of Ten
 - Measure Yourself
2. Small and Surprising
 - Gravity Fail
 - Ready, Set, Fizz
 - Smelly Balloons
 - UV Bracelets
3. Labs and Tools
 - Draw a Circuit
 - Gummy Shapes
 - Mystery Shapes
4. Tech and Nature
 - I Spy Game
 - Invisible Sunblock
 - Morphing Butterfly
 - Rainbow Film
5. Nano and Our Lives
 - Mystery Sand
 - Stained Glass Art
 - You Decide!





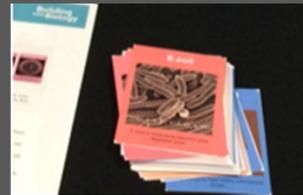
Building with Biology

Advancing Informal STEM Learning (AISL) award to MOS, in collaboration with AAAS, NISE Net partners, MIT, SynBerc, and others to create conversations in museums among scientists and public audiences about the emerging field of synthetic biology and its societal implications

200 Kits of hands-on activities and other materials to support conversations between scientists and public audiences through the U.S. in 2016 built on NanoDays and public forum models developed in NISE Net

A few of the educational activities

A few of the scientists involved



Microbe Match Game

This is a card game exploring microbes that synthetic biologists use in their research and the ways that they engineer them to make new things.



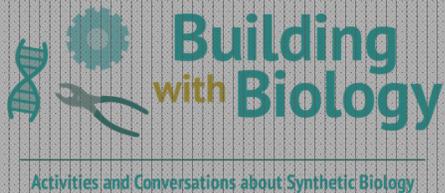
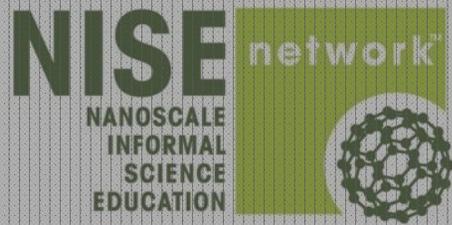
Kit of Parts

This is a hands-on activity where visitors design a model cell that can solve a current problem being tackled by synthetic biologists.



Should We Engineer the Mosquito?

Consider two case studies and share your views on the future of mosquito engineering.



Sustainability in Science Museums

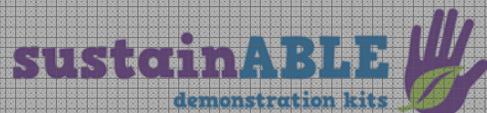
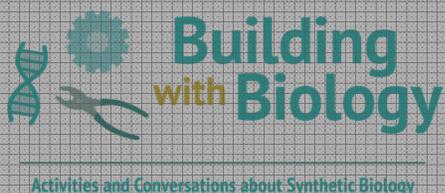
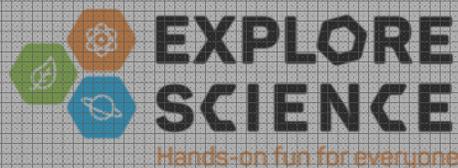
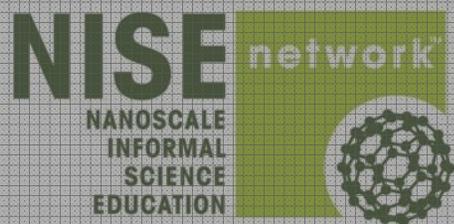
A new opportunity for new and existing NISE Network partners to engage the public in sustainability through the educational power of science centers and museums. ASU's Sustainability in Science Museums program will create trainings, activity toolkits, and other resources to promote sustainability science and practice in museums

50+ kits nationwide to engage the public and professional development and collaboration materials and support

Sustainability Solutions Festivals in February 2017 and 2018

ASU Walton Sustainability
Solutions Initiatives

ARIZONA STATE UNIVERSITY

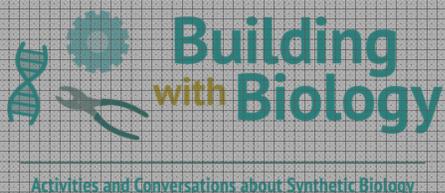
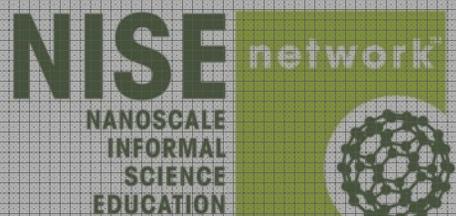


Space & Earth Science Informal STEM Education

NASA award to Science Museum of Minnesota to use the network built by the ten-year NSF investment for space and science education.

\$14.5 million for five years renewable for additional five.

ACTIVITY	PURPOSE	INTERFACE / DISTRIBUTION
Leadership and management	<ul style="list-style-type: none"> • Project direction, management, and execution • Coordination and collaboration with NASA and other selected projects • Reporting to NASA 	<ul style="list-style-type: none"> • Project meetings and telecons • NASA meetings and telecons
STEM educational products	<ul style="list-style-type: none"> • Engage public audiences, including families, K-12 students and teachers, and lifelong learners 	<ul style="list-style-type: none"> • Activity toolkits to 250 network partners in years 2, 3, 4, and 5 • Exhibitions to 50 network partners in years 2-4
Educator professional development	<ul style="list-style-type: none"> • Increase capacity of professional audiences, including museum educators 	<ul style="list-style-type: none"> • Six-week online workshops for 250 network partners in Jan. and Sept., years 2, 3, 4, and 5 • Guides, slides, and videos with Toolkits and Exhibitions
National network	<ul style="list-style-type: none"> • Promote institutional engagement and facilitate participation in SEISE Net • Support partner relationships on national, regional, and local levels 	<ul style="list-style-type: none"> • Four regional hubs, located in the Northeast, South, West, and Midwest
Evaluation	<ul style="list-style-type: none"> • Inform planning and decision-making • Provide data and metrics for NASA reporting and data calls 	<ul style="list-style-type: none"> • Reports and findings from front-end, formative, and summative evaluation • Reports to NASA related to SMD objectives
Dissemination	<ul style="list-style-type: none"> • Share resources, results, and findings with network and NASA stakeholders • Share resources, results, and findings with the broader STEM education field 	<ul style="list-style-type: none"> • Monthly project newsletter and annual report • Digital versions of project resources available on project website, NASA Wavelength, and other commonly-accessed repositories



Other prospective projects

Transmedia Engagement by the Public in Science-in-Society Activities



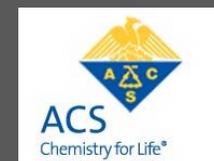
that involve current and enduring science-in-society themes, as first presented in Mary Shelley's novel, Frankenstein, which was published in 1818, nearly 200 years ago

- 1) an online digital museum with active co-creation and curation of its content by the public;
- 2) 50 activities kits for table-top programming; and
- 3) a set of Making activities. The project will also produce professional development deliverables: workshops and associated materials to increase practitioners' capacity to engage multiple and diverse publics in science-in-society issues.

ChemAttitudes: Develop & Disseminate Strategies & Materials to Support Chemistry Interest, Relevance, and Self-Efficacy

To build knowledge about, and create innovative approaches to, delivering informal science learning activities about chemistry using design-based research. A guide written for practitioners and activity materials will be packaged into a kit that will be replicated and distributed for use by informal science educators, chemists, and chemistry students at 250 sites across the U.S.

Planned first step in a larger project in collaboration with the American Chemical Society



With NISE Net's funding for nanoscale informal science education funding ended the NISE Net is re-purposing the infrastructure as the

National Informal STEM Education Network

NISE Net leaders intend to continue to provide strategic leadership, support and coordination across multiple projects, consistent points of contact for Network partners, communication among Network partners and with leaders in the field, and maintenance of online resources to support continued development and dissemination of public engagement resources, professional development and capacity building, and further opportunities for collaboration and networking.



Expert & Citizen Assessment of Science & Technology

A Distributed Network of Institutions for Peer to Peer Public Deliberation

ECAST partners at ASU, MOS, and Woodrow Wilson Center became engaged with each other through our work in nano. Recent and upcoming projects:

- US participation in World Wide Views on Biodiversity
- US participation in World Wide Views on Climate and Energy
- Informing NASA's Asteroid Initiative: A Citizen Forum
- NOAA Science Center Public Forums: Community Engagement for Environmental Literacy, Improved Resilience, and Decision-Making
- Climate Leadership Workshop for White House Office of Presidential Personnel

Science communication training for graduate students, REU students and others is another spin-off of nano ISE work over the last decade, Carol Lynn will say more after the break.

SHARING SCIENCE





Thank You!

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www.nisnet.org



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Network
Meeting
June 2015