



Earth and space Partner meeting Tempe, Arizona | February, 2019

GOOD AFTERNOON

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Earth and space



Earth

Project activities

PUBLIC ENGAGEMENT MATERIALS

STEM activity toolkits Small-footprint exhibitions

PROFESSIONAL RESOURCES

Professional development Regional hubs, website, and infrastructure

EVALUATION

Public impacts Professional impacts

SHARING & CONNECTING

Science Activation community NASA Museum Alliance Other resources



Project outcomes



- 1. Widespread use of project resources, including STEM learning and professional development products
- 2. Broad reach to sizeable public and professional audiences across the US
- 3. New and strengthened partnerships among national and local organizations that support informal and lifelong learning
- 4. Demonstrated learning by public and professional audiences

Evaluation

TYPES OF EVALUATION

Front-end Formative Summative

IMPACTS

Public participants Professional participants



WORK TO DATE

Evaluation findings



Public impacts

Toolkit activities and events

Professional impacts

Resource use Practices

Public impacts



EVALUATION QUESTIONS

Who participates?

- how many people
- geographic location
- demographic groups

What do they learn?

- Earth and space content
- interest and engagement
- relevance
- science identity

METHODS

Partner applications and reports Surveys, interviews, and observations

Toolkits 3.4 million people so far!

250 toolkits in 2017
250 toolkits in 2018
1.5 million people in 2017
1.9 million people in 2018



ToolkitsUnderserved and underrepresented
audiences + general population

GROUP	% OF RESPONDENTS
Girls	90%
Low-income / lower socio-economic status	83%
Racial and ethnic minorities / communities of color	82%
Spanish speaking audiences	53%
Rural	48%
Inner city	41%
Disabled / differently abled	40%
At-risk youth	34%
Other non-native English speakers	32%
American Indian / Alaska Native	20%

Toolkits Activities are enjoyable and interesting



95%

Almost all adults shared that their groups enjoyed and were interested by the activities (95%, n=242)

86%

Most children shared that the activities were "really fun" (86%, n=144)

Toolkits People learn new things



91%

Almost all adults reflected that their groups learned something new at the activities (91%, n=237)

Toolkits Participants feel they can do and learn about science



"They helped me understand a bit better what scientists do. I can do science. Other scientists go to the moon and bring rocks from the moon."

Professional impacts

EVALUATION QUESTIONS

- Who participates?
- staff and volunteers
- geographic area
- What kinds of partnerships are formed?
- Network partner organizations
- subject matter experts
- What do people use and learn?
- products and practices
- content knowledge and understanding

METHODS

Baseline surveys and annual partner surveys Interviews



Professionals 12,300 people so far!



250 toolkits in 2017250 toolkits in 2018313 partner organizations

Resources

NISE Network materials helped partners host eclipse events

96%

Most partners reported that their organization had offered information or educational programming about the solar eclipse

92%

Most partners said their organization utilized or promoted NISE Net materials in relation to their eclipse programming

80% used NISE Net materials for planning 88% used NISE Net materials during event



Practices

NISE Network has affected confidence in practices

How much has NISE Net affected your confidence in your ability to. . .

Engage young children.

Engage diverse or underserved audiences.

Engage audiences with societal content related to Earth and space science. Talk with visitors about difficult concepts such as common misconceptions.

Partner with a community or informal learning organization.

Partner with experts related to Earth and space science including scientist...

Partner with Earth and space science enthusiasts or amateur astronomy club...

Identify, use, and adapt non-NISE Net Earth and space resources.

58%	25%	18%
50%	34%	17%
58%	30%	13%
58%	28%	13%
48%	30%	21%
48%	32%	20%
46%	33%	21%
53%	31%	16%
8-10 rating 5-7 rating 1-4 rating		

A great deal Not at all

WHAT'S NEXT

Evaluation

We look forward to sharing more findings with you in the future.

Thank you for your continued involvement in our evaluation!

Upcoming survey opportunity to share feedback about this partner meeting!

Annual partner survey – Fall 2019 and 2020 Interviews with a selection of professionals – Summer 2019 and 2020

Toolkits



Exhibitions







Professional development

Regular online workshops in 2019–2021 Conferences in 2019–2021



FUTURE PLANS

Brain science and technologies and their societal implications



Sustainable futures

In early stages Rae Ostman, Paul Martin, and Jeannie Colton

What's next for Earth and space?



Make plans for your organization Share your ideas for the Network



Online digital library: **nisenet.org**

Monthly newsletter nisenet.org/newsletter

Social networking: nisenet.org/social





THANK YOU

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