



PORTAL to the Public

Connecting Scientists with Public Audiences in Informal Settings

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Pacific Science Center
MRSEC 2013







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to the Public

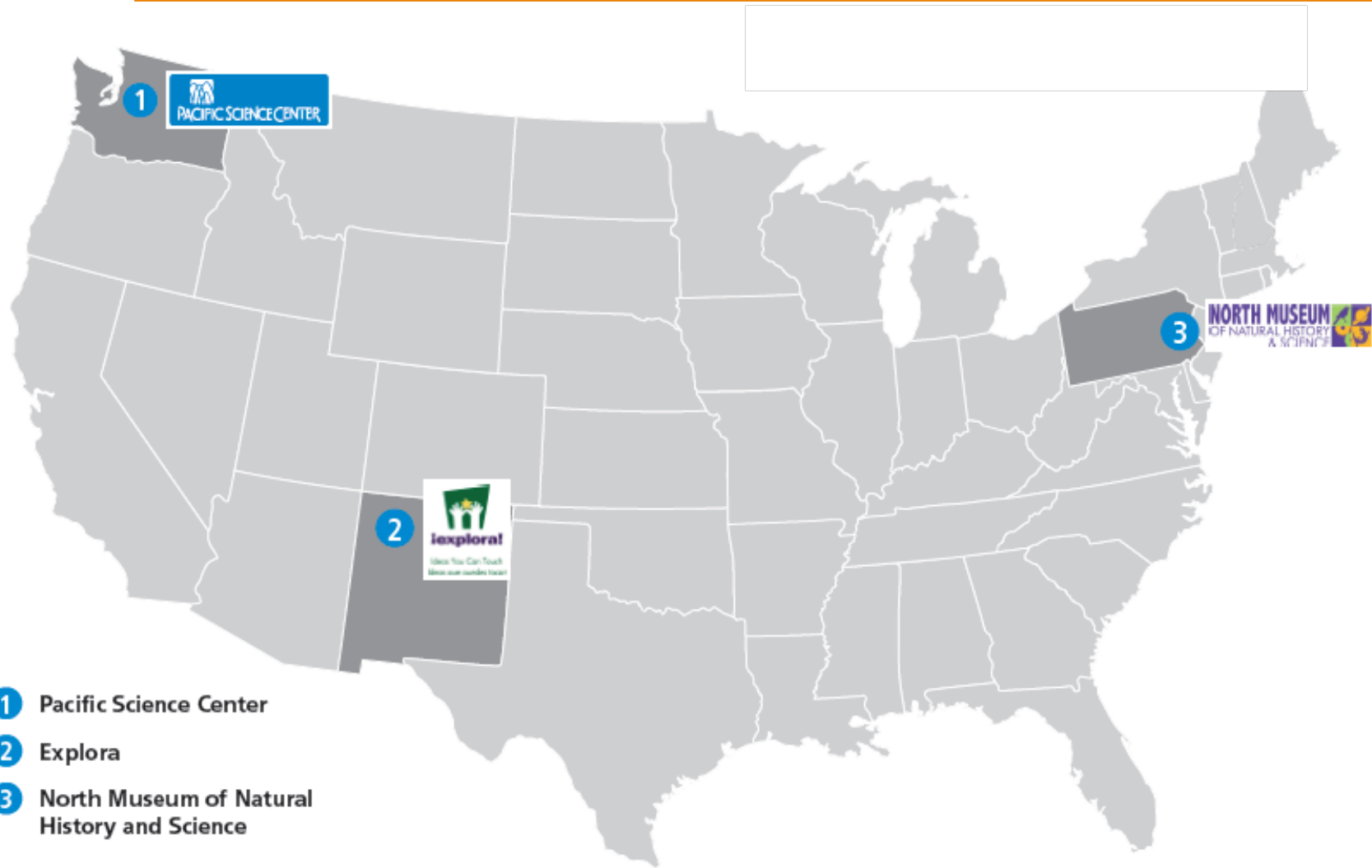
Goal

Portal to the Public is a program designed to assist **informal science education (ISE) institutions** as they seek to bring **scientists and public audiences** together in **face-to-face** public interactions that promote appreciation and understanding of **current scientific research and its application.**



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Partners



- 1** Pacific Science Center
- 2** Explora
- 3** North Museum of Natural History and Science



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Why Face-to-Face?



Challenge

ISE institutions

- sustain relationships with active researchers

Researchers

- opportunities and skills to engage with general audiences

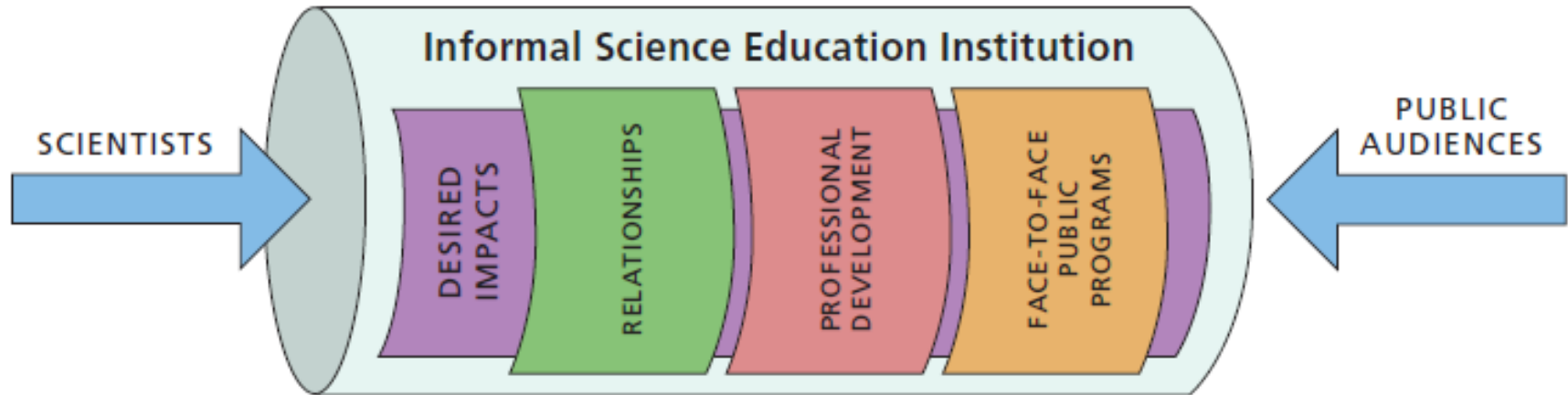
Visitors

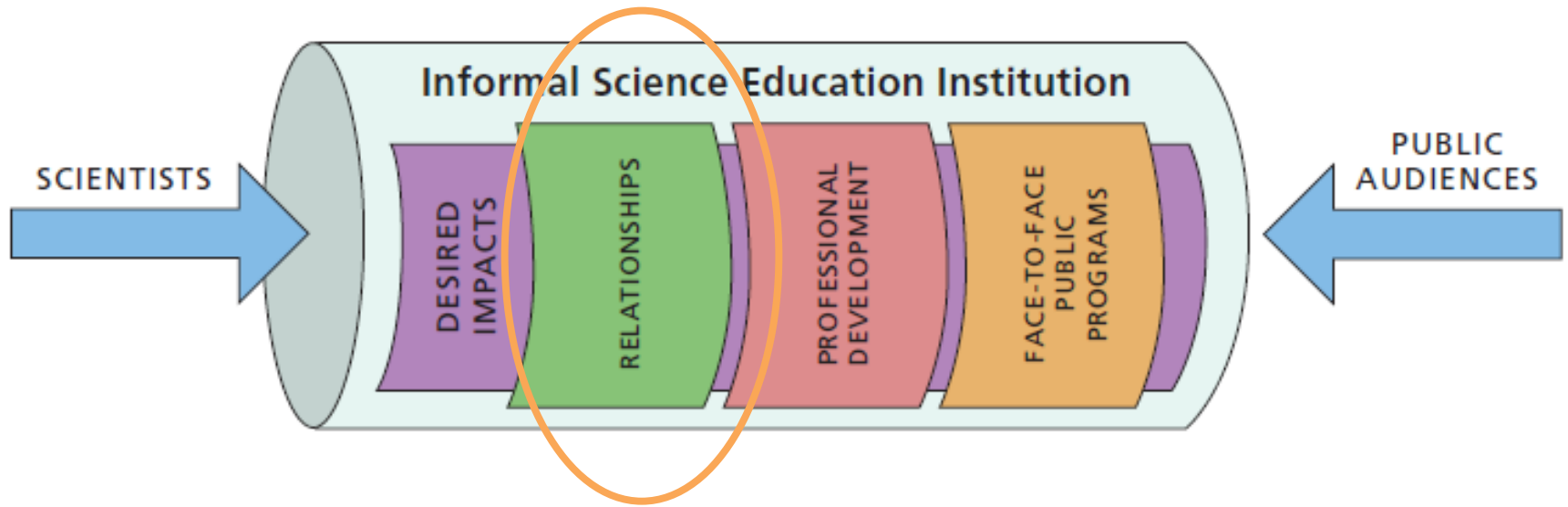
- differing learning goals/motivations and varying levels of expertise



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Guiding Framework








Millersville University

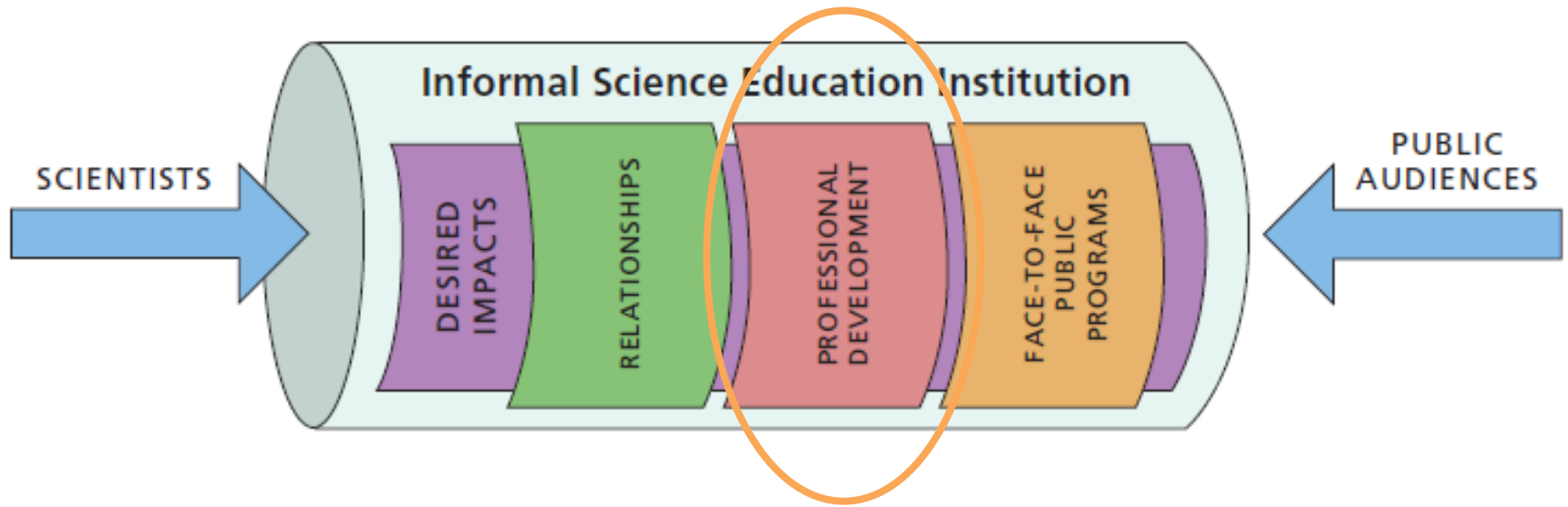


W
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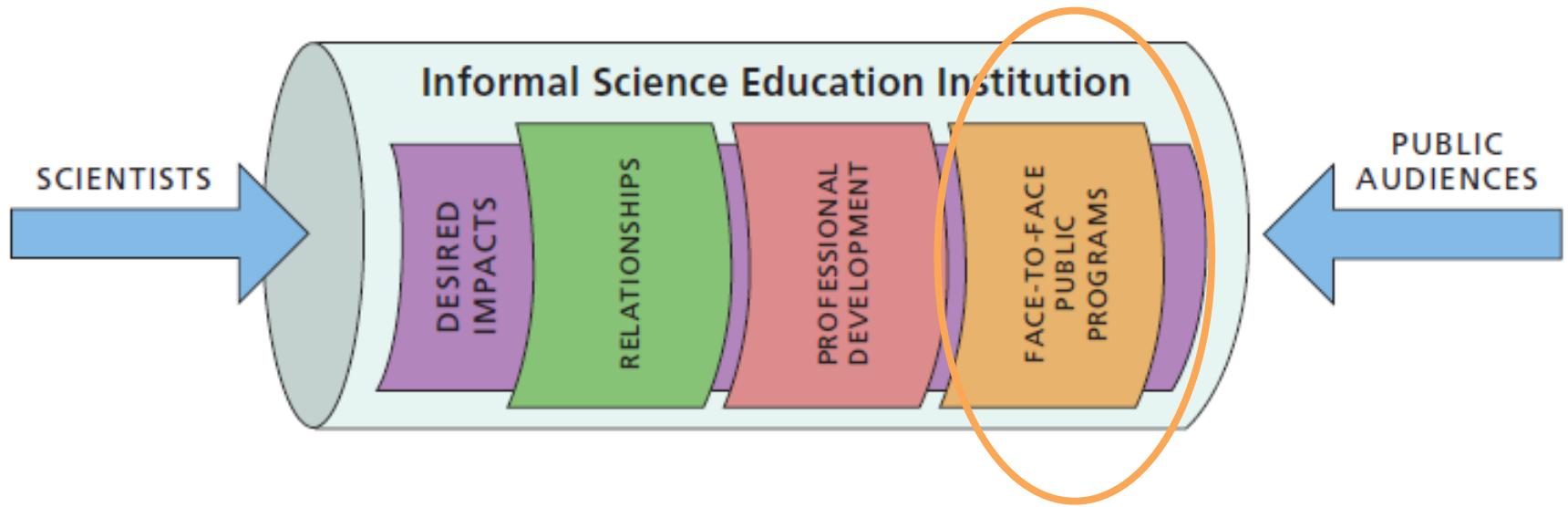


 **Lancaster General**
By your side.

FRED HUTCHINSON
CANCER RESEARCH CENTER

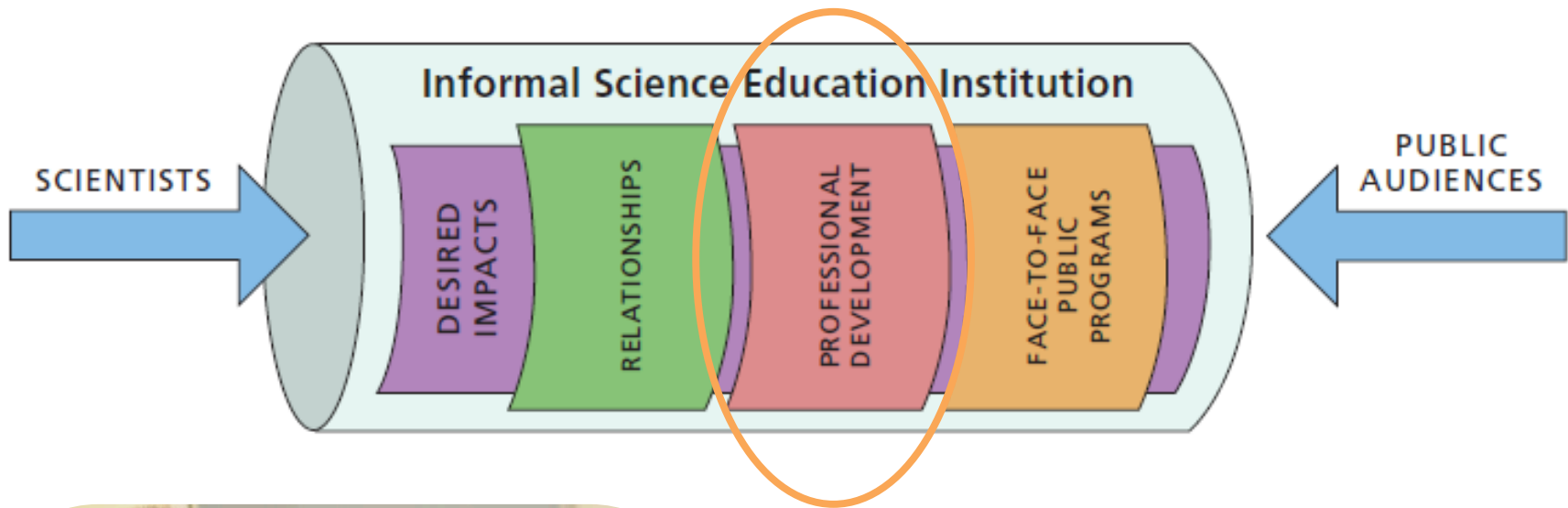












Informal science educators have valuable expertise and experience to share with scientists.



Portal to the Public Professional Development is:



Relevant

Portal to the Public Professional Development is:



Experiential

Portal to the Public Professional Development is:



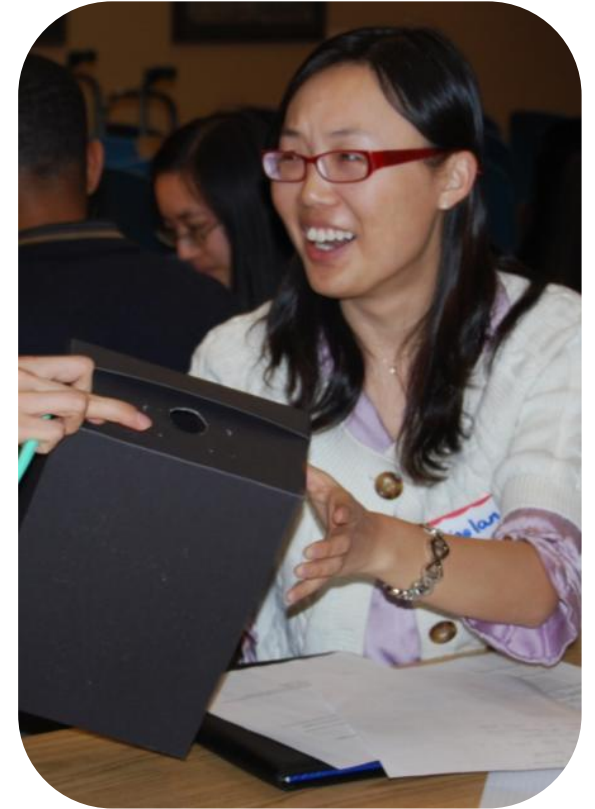
Reflective

Portal to the Public Professional Development is:



Personal

Portal to the Public Professional Development is:



Fun

Professional Development Objectives

Scientists develop communication strategies that support inquiry.

Scientists and ISE staff work together to design and facilitate materials-rich and other learning experiences that actively involve and affect all parties.

Scientists understand the importance to learning of developing personal connections with audiences based on shared experiences.

Scientists develop a broader understanding of how people learn and the nature of informal learning environments.

Scientists and ISE staff develop an understanding of the organizational culture of each other's institutions.



Materials-rich Learning



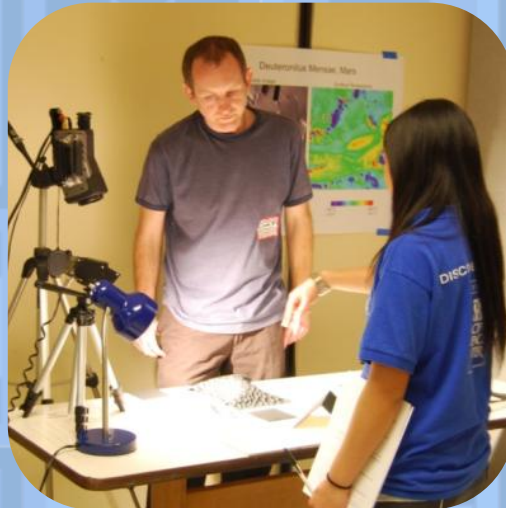
Pleasure of Finding Out



Building a Common Vision



Questioning Strategies



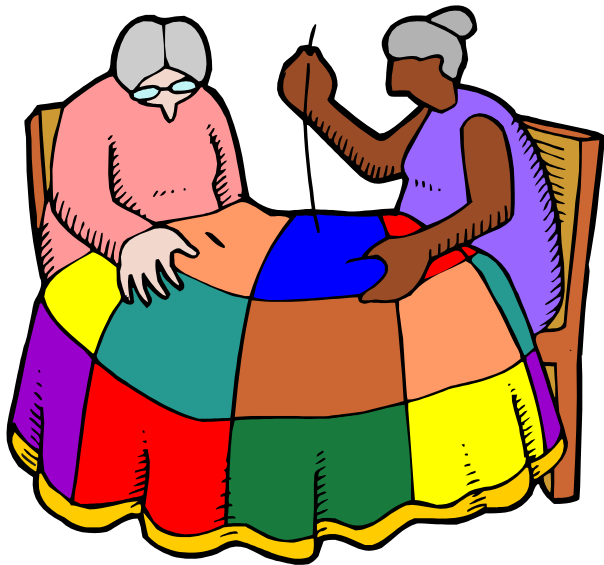
Prototype Rotation



One-on-one Support

Stitching Together Professional Development Experiences:

*An Example from Pacific
Science Center*



Workshop 1

The Pleasure of Finding Out
Activity Showcase
Concept Mapping

Workshop 2

Making Meaning
Personal Learning
Building a Common Vision

Workshop 3

Invitations to Participate
Questioning Strategies
Talk to Your Neighbor
What's in a Word?

Workshop 4

Prototype Rotation

One-on-one Support

Scientist Interview
Activity Development
Materials Procurement

One-on-one Support

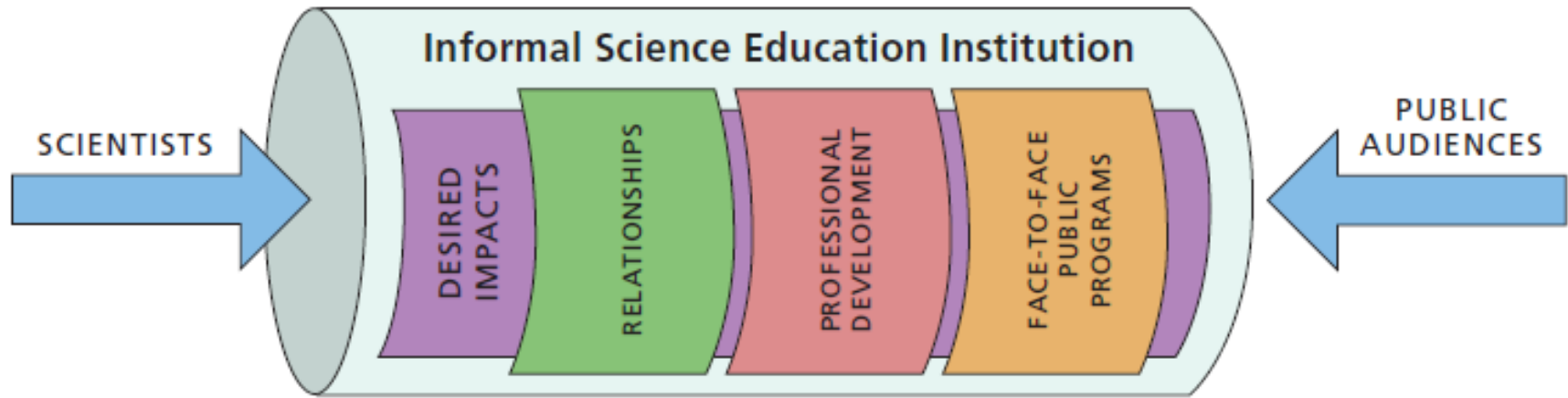
One-on-one Support

Public Programs



Building a Common Vision







PORTAL
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Pilot Dissemination



Products and Resources

3-day training workshop

- Overview of PoP
- Model PD elements
- View Program
- Scientist Panel
- Implementation Plan



Available for purchase

What defines effective PoP?

Define Impacts in advance

Partner who WANT to do outreach
Awareness of scientists' needs
Clear communication
Logistics

Relationships

Own expertise
Value of informal science education
Build PD to support outcomes
Time for reflection

Professional Devt

Variety
Soon after PD
Visitorship matters

Programs

Is PoP worth doing?

Costs – Time, Limited audience

Benefits – Engage, Skill Dev't, BI, Networking



Scientists

Costs – Time, Customization, Redirect resources

Benefits – Skill development, Program innovation,
Change in public perception,
Current science



ISI and Staff

No Costs

Benefits – Hands-on experience, role model for kids,
new programs



Visitors

Is PoP sustainable?

Yes... but it's not magic.

Interest in continuing
Targeted PF
Diverse program options



Scientists

Ongoing strong relationships
Integrate into institutional initiatives
Scale to meet resources
Business model



ISI and Staff

Phase 1: Concept and Development (2007-2012)

Phase 2: Dissemination and Network 2011-2015

The Portal to the Public Network (PoPNet) establishes an infrastructure and communication pathway for ongoing collaboration between institutions who have implemented programs based on the Portal to the Public framework.





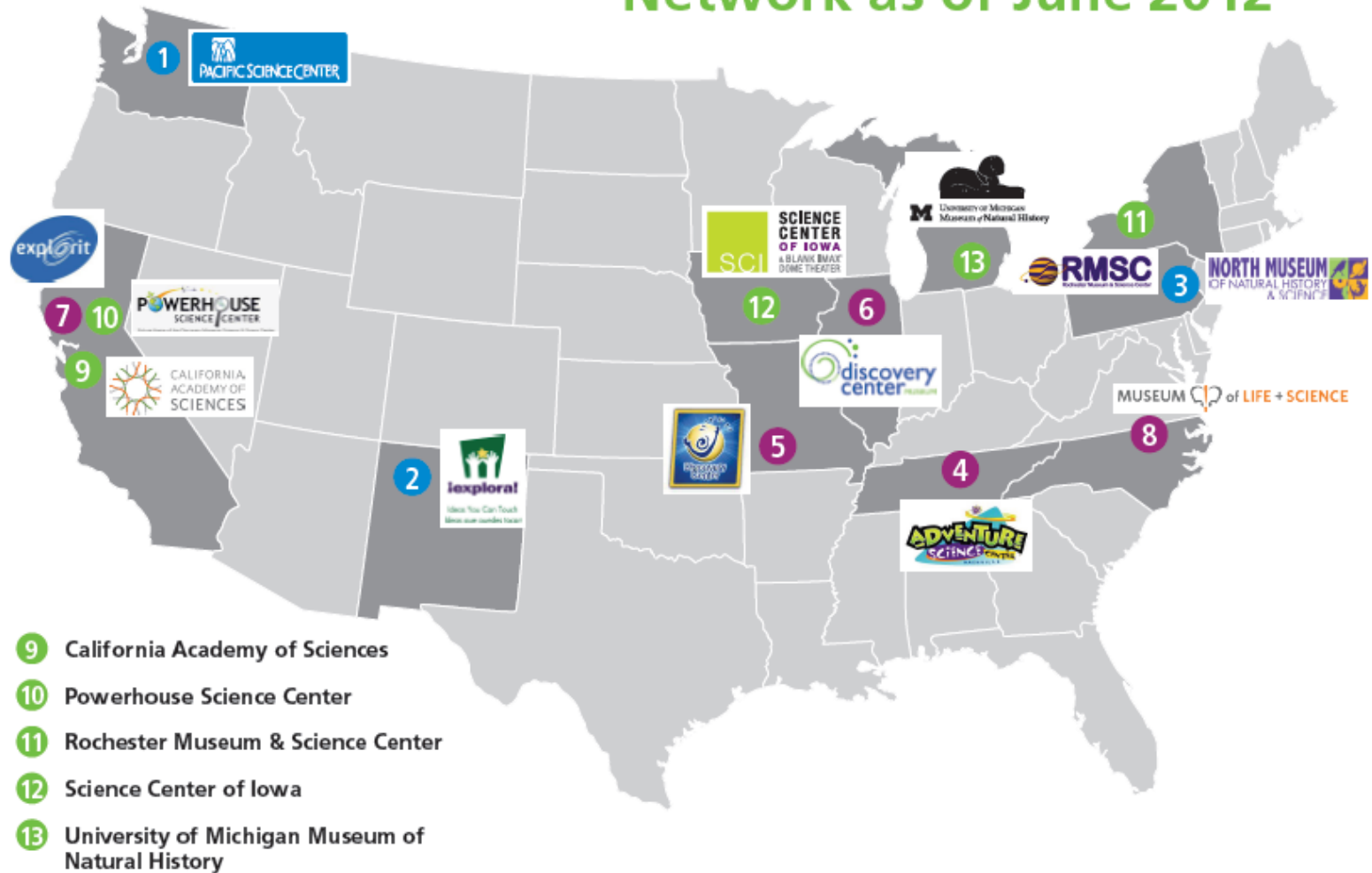
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PoPNet Strategy

1. Dissemination of PoP guiding framework
Faculty/mentors
Existing strategies and resources
Goal: 15 (IMLS) + 20 (NSF) new sites
2. Network
Online community for sites and scientists
Annual Meeting
Goal: Community of Practice with active learning
3. Learning and Evaluation
Refine approach
Goal: Understand application of PoP at sites and participation in Network



Network as of June 2012





Network as of December 2012



- 14 Headwaters Science Center
- 15 Marian Koshland Science Museum
- 16 Natural History Museum of Utah
- 17 Oregon Museum of Science and Industry
- 18 University of North Carolina Morehead Planetarium and Science Center



Network as of March 2013



- 19 Austin Children's Museum
- 20 COSI
- 21 The Discovery Museums
- 22 Miami Science Museum
- 23 North Carolina Museum of Natural Sciences

miami science museum
THE FUTURE BEGINS HERE.

http://popnet.pacificsciencecenter.org

Network: Public Pages

The screenshot shows a web browser window displaying the 'Portal to the Public' website. The browser's address bar shows 'sciencecenter.org'. The website has a blue header with the 'Portal to the Public' logo and a navigation menu with tabs for HOME, ABOUT, COMMUNITY, RESOURCES, JOIN, and PUBLICATIONS. A search bar is located on the right side of the navigation menu. Below the navigation menu, there are three orange boxes on the left side, each containing a link and a brief description: 'Portal to the Public Video', 'Our Community', and 'Framework and Resources'. In the center, there is a diagram titled 'Informal Science Education Institution' showing a flow from 'SCIENTISTS' to 'PUBLIC AUDIENCES' through four stages: 'DESIRED IMPACTS', 'RELATIONSHIPS', 'PROFESSIONAL DEVELOPMENT', and 'FACE-TO-FACE PROGRAMS'. Below the diagram is a large image showing a woman pointing at a whiteboard with a diagram, and a group of people looking at a display. The text 'Framework and Resources' is overlaid on the image, with a link to see a sampling of resources. At the bottom, there is a section titled 'Portal to the Public' with a paragraph describing the program and a quote: 'It's so important to have'.

Portal to the Public

Portal to the Public is a program designed to assist informal science education (ISE) institutions as they seek to bring scientists and public audiences together in face-to-face

"It's so important to have



Issues to Consider

Broadening the Guiding Framework:

- How can we do more to reach underserved audiences?
- How can the mini-grant program best allow for sites' innovation while still maintaining the PoP approach?

Internal Network

- How does the network help sites build financial models to sustain their efforts?
- What does a phased distributed leadership model look like for PoP?



Issues to Consider

Online Presence

- How can we create a self-directing online presence and encourage distributed leadership?
- How can we structure the website to be accessed by non-PoP sites while we are still in the research and development mode?

External Network Connections

- In practice, how does this Network connect with other Networks and other communities of practice? What are potential areas of partnership and collaboration?
- What is the ideal partnership/relationship between PoP sites and non-workshop sites use PoP professional development materials?



Questions and Contact

1. Are there common goals and audiences among the MRSEC and PoP Networks?
2. Is there interest in a customized workshop for MRSEC?
3. What are some areas of future collaboration?

<http://popnet.pacificsciencecenter.org>

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