

Public Engagement with Science Inquiry Group

Larry Bell, Museum of Science
Tiffany Lohwater, AAAS

Members of the PES Inquiry Group

- **Ellen McCallie**, Director, Center for the Advancement of Informal Science Education (CAISE)
- **Larry Bell**, Senior Vice President for Strategic Initiatives, Museum of Science, Boston (Co-Leader)
- **Tiffany Lohwater**, Public Engagement Manager, American Association for the Advancement of Science (AAAS) (Co-Leader)
- **John Falk**, Sea Grant Professor of Free-Choice Learning and Science Education, Oregon State University
- **Jane L. Lehr**, Co-Director, Theatre Workshop in Science, Technology & Society (TWISTS) and Assistant Professor, Departments of Ethnic Studies and Women's & Gender Studies, California Polytechnic State University
- **Bruce Lewenstein**, Professor of Science Communication, Cornell University
- **Cynthia Needham**, President and Co-Founder, ICAN Productions, Ltd.
- **Ben Wiehe**, Outreach Project Director, WGBH Educational Foundation



PES IG Key Milestones

- Groundwork early 2008
- Initial conference call June 24
- Session at PI Summit July 25
- Work session August 4-5
- Current status - first draft of PES paper undergoing review



Public Engagement with Science

- In science museums, public engagement means just about everything we do programmatically
- In public policy, public engagement with science refers to seeking public input into policy decisions about the application of science and technology in society.



Comparing PUS and PES

- Public Understanding of Science
- Public Engagement with Science

Key Differences in Focus

PUS

- Characterized by one-way transmission of scientific knowledge and process
- Focuses on understanding the natural and human-made world
- Based on the belief that as people become more scientifically literate, they will accept, support, and use science

PES

- Characterized by mutual learning or informing among people of varied backgrounds
- Focuses on current and/or controversial science-related issues
- Based on the belief that both scientists and non-scientists can bring valuable perspectives to help guide the application of science in society



PES and ISE

- What are the opportunities for informal science institutions?
- How can adopting or adapting PES strategies help science centers?
- How can PES in ISE build bridges between science and the public?

Public Engagement with Science

Tiffany Lohwater

ASTC

October 18, 2008

What is Public Engagement with Science? (AAAS perspective)

- A multi-directional dialogue (not a lecture)
- Incorporates varied perspectives
- Listens to and respects the public
- Addresses not only benefits but also the potential limits, perils and pitfalls of science and technology
- Informs the conversation with scientific evidence but listens to other perspectives
- Develops channels that can better respond to societal issues and concern

Public engagement means listening (and responding) to the public about:

- Their concerns about science and technology
 - Risks and benefits
 - Encroachment on human values
- Their priorities among research areas
- Questions they would like or need us to answer
 - Help frame the research agenda

From

Alan Leshner, CEO, AAAS

Public Engagement with Science in ISE ... a new role for ISE institutions?

- Mutual learning for publics and scientists, such that everyone develops new or more nuanced understandings of issues and opportunities
- Empowerment and development of skills to participate in civic activities
- Increased awareness of the cultural relevance of science and science-society interactions
- Recognition of the importance of multiple perspectives and domains of knowledge – including science, values, and social and ethical concerns – to understanding and decision-making around science-related societal issues

Why would (and do) scientists participate in public engagement?

- Majority of academic research is publicly funded
- Direct interaction with the public – as science media coverage shrinks
- Better awareness of public perceptions
- Find ways to make science of interest and relevant to people's everyday lives
- Communication & dialogue skills relevant for other areas of your career – funding, policymakers, etc.
- Brings personal meaning to your work

Public Engagement with Science Inquiry Group

Larry Bell, Museum of Science - lbell@mos.org

Tiffany Lohwater, AAAS - tlohwater@aaas.org