Libraries as centers for science literacy and public science.

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LIBRARIES AS CENTERS FOR
SCIENCE LITERACY AND PUBLIC
SCIENCE

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How to communicate science?

• The world is becoming more complex
  • Increasing levels of technology and scientific knowledge
  • Easier to share across wide areas

• Grand challenges for science
  • How do scientists communicate large-scale issues like global warming among themselves?
  • How do scientists communicate to the public?
  • Examples: global warming, nuclear power, genetically modified organisms, vaccine use
Science Communication

**Deficit model**
- Laypeople just need more education to understand the issues and concepts

**Lay expertise**
- Laypeople have local expertise that can be harnessed to help understand a problem
Science communication

Contextual model

- Laypeople understand based on their contextual experiences

Public understanding

- Laypeople should be integrated into science and technical discussions
Public understanding

• A more sophisticated understanding of science communication

• Framing effects are present
  • Emotion, class, and other background factors effect the transmission of scientific knowledge to the public

• Brings in democratic theory and practice
  • Builds a forum for communication between scientists and laypeople
  • Does not put one group above the other
Citizen science – an opportunity
To bring public and science together.
THE ROLE OF LIBRARIES
Future of libraries

Citizenship and obligation

Data sharing

Literacy
Literacies of different kinds

Information Literacy

- Information literacy has become increasingly important to the library community over the past 40 years (Rader, 2002)
- A global concern throughout the world for librarians and other professionals

Science Literacy

- Increasingly important for reasons of economic development and political decision-making
- Needed to face the grand challenges of the future
Fitting into the mission

Citizen science may be a way to fit into the mission of modern libraries.

“promote[s] libraries as vital institutions that enhance people’s lives through equitable access to knowledge and information” (IFLA Strategic Plan)
Lessons from Lorcan

• Moving away from collections to the creation of knowledge.
  • Citizen scientists are doing this now and we can help.

• Discovery happens elsewhere
  • People outside the academy need our help in order to learn how to discover but also to publicize their successes.

• Libraries have been hidden
  • We don’t have to be hidden. We can engage the public where it lives and where it is working.
Discussion

- How can we bring libraries and science together?
  - Let’s talk about this…
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- Putting a scientist in the library
- Building spaces where people can do science – becoming laboratories for understanding the world
- Meeting spot between government policy and the effect upon the public
Sources and References

• Mount Rainer NPS, http://www.flickr.com/photos/mountrainiernps/6997771177/
