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Libraries as centers for science literacy and public science.

Todd Suomela

University of Tennessee - Knoxville, tsuomela@utk.edu

Suzie Allard

University of Tennessee - Knoxville, sallard@utk.edu

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LIBRARIES AS CENTERS FOR SCIENCE LITERACY AND PUBLIC SCIENCE

Todd Suomela, Suzie Allard

University of Tennessee, College of
Communications and Information Science

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SCIENCE COMMUNICATION

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

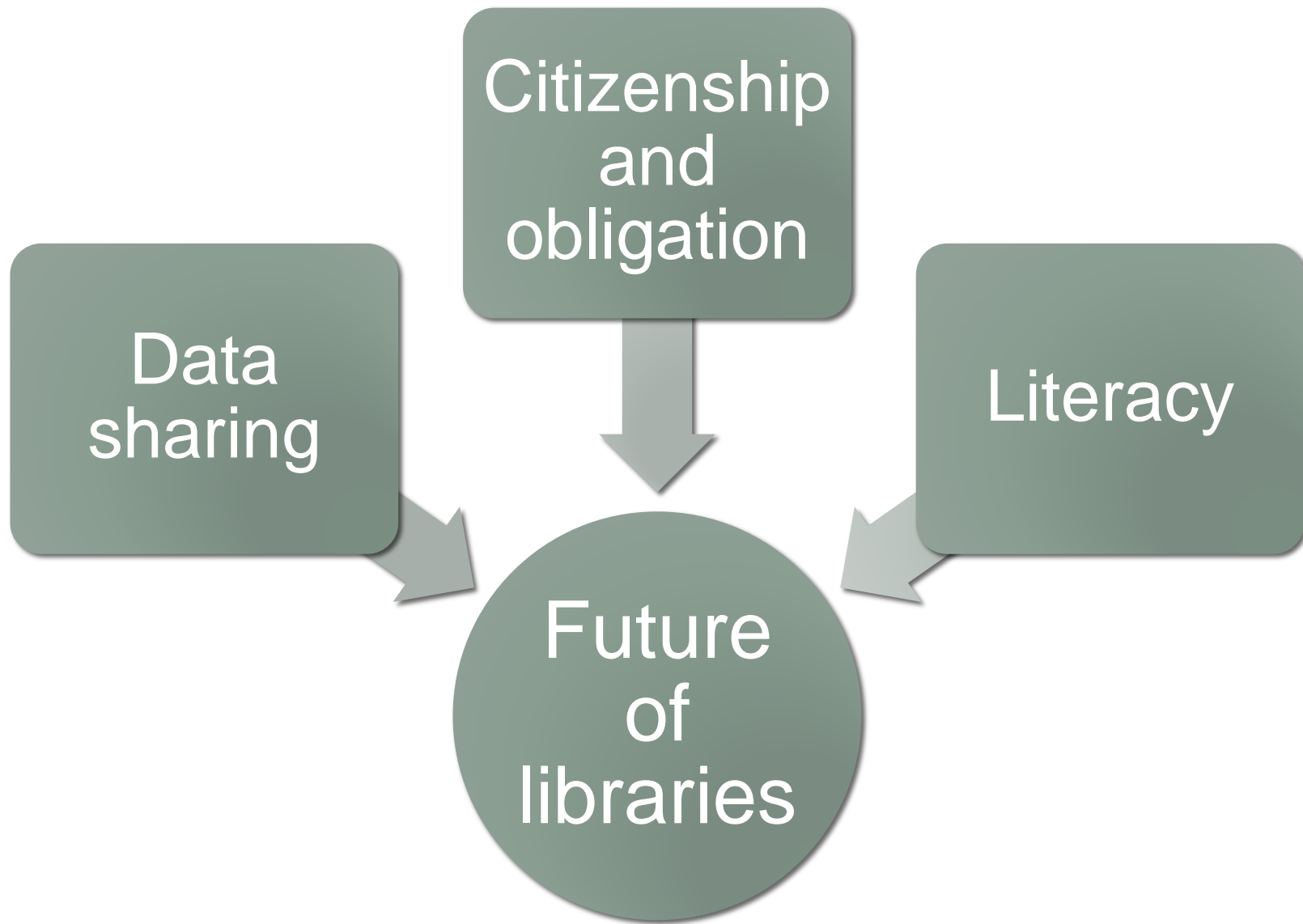
- A more sophisticated understanding of science communication
- Framing effects are present
 - Emotion, class, and other background factors effect the transmission of scientific knowledge to the public
- Brings in democratic theory and practice
 - Builds a forum for communication between scientists and laypeople
 - Does not put one group above the other

Citizen science – an opportunity

To bring public and science together.



THE ROLE OF LIBRARIES



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 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...
 - tes@utk.edu
- 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

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