

Network-wide Evaluation

Kate Haley Goldman

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Institute *for* Learning Innovation

Understanding, fostering, and promoting lifelong learning



Long Term SOS Outcomes

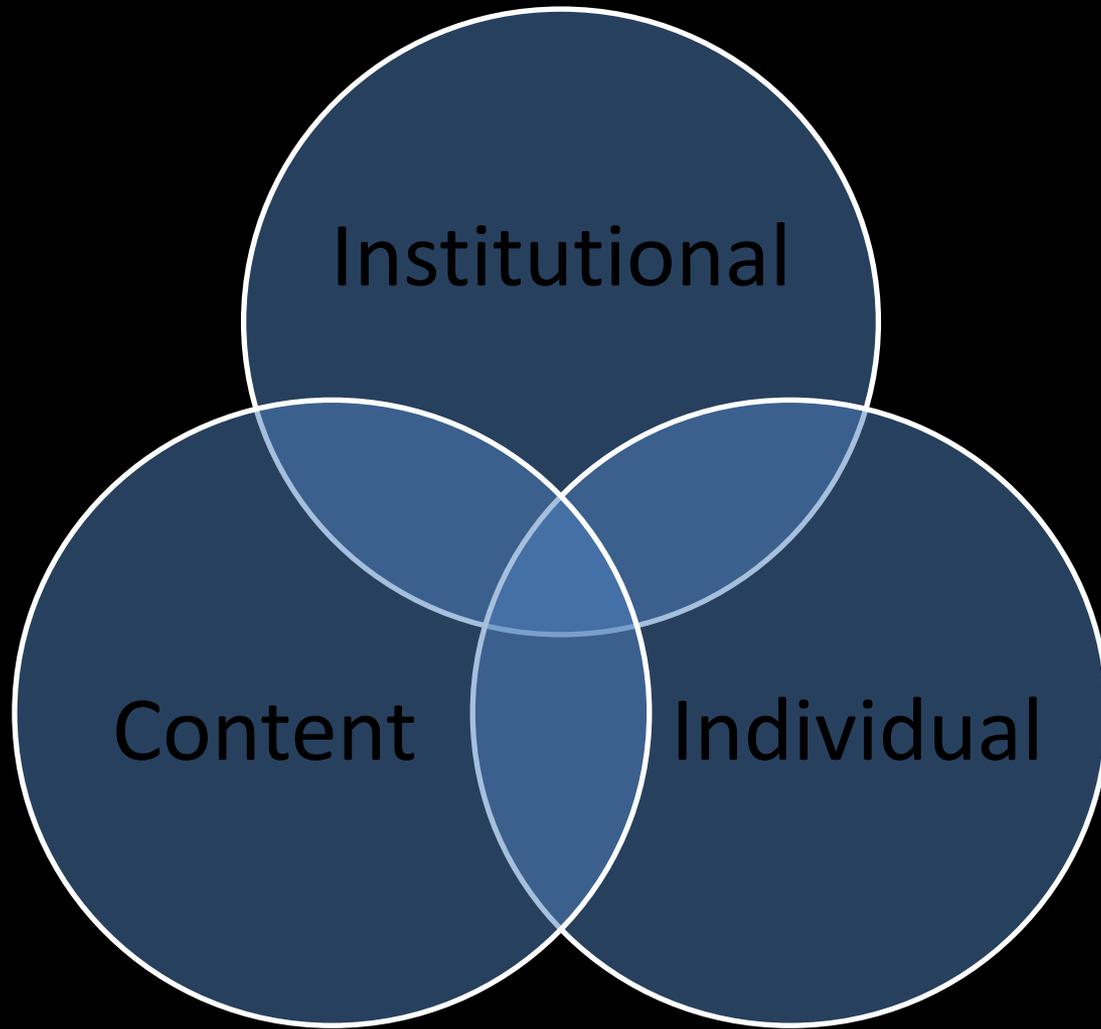
Enhance environmental literacy via visualization.

Indicators:

- Awe/appreciation
- Interconnected/ Interrelated
- Geographic awareness
- Ability to understand complex data
- Better decision makers

Evaluation Questions

- 1. What is the nature and range of the impact of SoS on users?
- 2. Does varying context and other independent variables produce changes in the impact of SoS? And if so, how?



Institutional

Content

Individual

Institutional Variables

- Type of Institution
- Content Focus of Institution
- Size of Institution
- Type of Visitorship
- Physical Sphere Space
- Content Sphere Space
- Facilitation

Individual Variables

- Prior viewing of the sphere?
- Understanding of data visualizations?
- Attitudes towards Science?
- Age?

Open-ended Questions

- Is this the first time you have seen the Sphere?
- In relation to the Sphere presentation you just saw, please complete the following sentence:
 - *One thing I never realized was that.....*
- Does seeing information on the sphere change how you understand the information? In what way?
- Based on what you know about this topic or topics from before you saw this presentation, did you learn anything new?
 - If “yes”, tell me something you learned.

Data Collection Status

- Received data from 11 sites, 4 more with data on the way.
- 5 “missing” sites
- 520 data points thus far, approx. 1/3 missing
- Data is uneven, currently cleaning it

Sample Characteristics

- Half weekday, half weekend
- 23% of showings were facilitated
- 80.2% seeing Sphere for first time

Content*

- 23.1% -- Ocean
- 18.5% -- Astronomy
- 13.1% -- Atmosphere
- 12.5% -- Frozen
- 5.4% -- Footsteps

* Uneven category coding

One thing I never realized is that....

- The ocean produces most of the Earth's oxygen and that the ocean had so many currents.
- We are so small compared to what is out there in our universe and others.
- Education can be so much more interesting and useful than how it is currently done in our schools.

One thing I never realized is that....

- Primarily fact-based information.

- 80% felt that seeing information on the Sphere changed how they understood the information.
- 73% felt they learned something new.

In what way does seeing the data...

3D – Visual – Real -- Perspective

- Flat map doesn't give real scope of how it [sea level] affects the world.
- Can see all parts of the world and in motion - makes it “realer”.
- Puts the information in perspective. 3D makes it more real.

What did you learn?

- Ocean temperature patterns - they were so distinct.
- The tsunami, I didn't realize it spread all the way around the globe.
- The Southern tip of South America is so close to Antarctica; not all of South America is warm.

Unpacking “Awe”

Affective

- I felt a sense of the vastness of Earth.
- I felt a sense of how small Earth is compared to the greater universe.
- I felt a sense of the sacred in regards to Earth.
- I felt a need to take better care of Earth.
- I was thinking about how this planet is my home.
- I was amazed at the beauty of what was shown on the Sphere.

Conservation

- I felt a need to take better care of Earth.
- I was thinking about how this planet is my home.
- I was amazed at the beauty of what was shown on the Sphere.

Cognitive / Data Visualizations

- I appreciated how realistic the information appeared when on the Sphere.
- I learned or was reminded that the earth is always changing and evolving.
- It helped me to visualize certain concepts of time and scale.
- It made me think about the complex interrelations in earth systems.
- I became interested in where the information on the Sphere comes from.
- The Sphere helped me visualize specific events.
- The Sphere helped me better understand geography of Earth or other planetary objects.
- The Sphere helped me understand global processes.

Top 3 Outcomes

- I appreciated how realistic the information appeared when on the Sphere.
- I felt a need to take better care of Earth.
- I was amazed at the beauty of what was shown on the Sphere.

Top 3 Most Common Outcomes

- I appreciated how realistic the information appeared when on the Sphere.
- The Sphere helped me visualize specific events.
- I learned or was reminded that the earth is always changing and evolving.

	Option 1	Option 2	Option 3	Average
I appreciated how realistic the information appeared when on the Sphere.	16.0	13.1	9.1	12.73
The Sphere helped me visualize specific events.	8.0	10.2	12.6	10.27
I learned or was reminded that the earth is always changing and evolving.	5.8	9.8	11.8	9.13
It helped me to visualize certain concepts of time and scale.	8.6	8.9	9.5	9.00
I was amazed at the beauty of what was shown on the Sphere.	10.9	8.2	7.5	8.87
It made me think about the complex interrelations in earth systems.	6.7	9.5	8.6	8.27
The Sphere helped me understand global processes.	4.9	9.8	9.8	8.17
I felt a need to take better care of Earth.	12.4	5.3	5.1	7.60
I felt a sense of the vastness of Earth.	7.5	6.2	6.2	6.63
The Sphere helped me better understand geography of Earth or other planetary objects.	6.7	5.3	5.5	5.83
I felt a sense of how small Earth is compared to the greater universe.	5.8	5.3	4.7	5.27
I felt a sense of the sacred in regards to Earth.	3.1	3.3	2.4	2.93
I was thinking about how this planet is my home.	2.7	2.4	2.4	2.50
I became interested in where the information on the Sphere comes from.	1.3	2.4	3.5	2.40



-Thank you-

HaleyGoldman@ilinet.org

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