

Session Title: Concurrent Session 4B – Creating interactivity with SOS

Moderator: Leon Geschwind

Note taker: Lexie Brown

General Notes:

- Summary of Discussion:
 - 3-5 things we need from the network concerning interactivity:
 - Interactive features that are easy to modify (too vague)
 - **A way to highlight areas on the sphere or draw on the sphere (Madden on the Sphere) = 10**
 - **Annotation features**
 - **Interactives that show cause and effect (example: tsunamis and earthquakes (Bishop), cutting down Amazon) = 9**
 - **Choose your own adventure/decision points that allow visitors to choose direction = 6**
 - **Non-linear presentations on SOS**
 - **Includes on-screen menus**
 - **Incorporating hands-on/other exhibits to reinforce concepts and learning from SOS = 6**
 - On-screen menus (relates to decision points) = see choice 'd' above
 - iClickers – could be used with decision point idea
 - Share the back-end of interactive (coding) = 2
 - Google sites/Google codes
 - Multiple Wii remotes, some in presenter mode and some in audience mode = 4
 - NOAA: keep Magic Planet in mind! (Think about interactive features that work on that platform)
- Maurice Henderson: Ease of modifying
 - Interactive features are easy to keep fresh at each institution
 - Ability to change the user experience
- People that have programming expertise:
 - About 1/3 of people in session
- Sanna Reponen: Interactives that show cause and effect (like tsunami/earthquake example from Bishop's kiosk)
 - Cut down Amazon and see changes in carbon cycle, etc.

- Earthquake example: uses ETOPO2 data (bathymetry data)
 - Propagation circles show time it takes tsunami to move
- Leon Geschwind: Could develop template that could be applied to different datasets
- Number of people that would be interested in a kiosk feature?
 - About eight or so (half of the group)
- Other ways of engaging audiences with SOS
 - Sanna Reponen: Bringing concrete objects, like models, to understand scale and size
 - Sara Lee: Agrees, bringing hands-on/tactile experiences
 - Mark Smith: Inflatable dry ice globes that students can draw on to show what they see on the sphere
 - Working in groups that report out to each other
 - Couple SOS with other exhibits outside the sphere room
 - Audience is school groups of about 60 students and also general audiences (K-gray)
 - Independent choices through technology
 - I.e. choose your own adventure (offer decision points)
 - Non-linear presentations
 - Dave Himes: One mechanism for making choices is on-screen menu
 - Decision points mean a more advanced kiosk that provides that option
 - Michael Biere: Usefulness of on-screen menus – useful or too much to show audiences?
 - Allow choices
 - A majority likes this idea
 - Almost everyone is thinking of using iClickers as a integration piece
 - Could work with decision points
 - May become a default
 - Maurice Henderson: menu is site-designed and we drive action messages to SOS?
 - Dave Himes: we could implement immediately a user interface that allows you to select data points, rotations, etc.
 - Would be another mechanism that would be accessible through a programmable interface (kiosk, Wii)
 - Need to think through issues more thoroughly
- Best Practices in interactivity to complement sphere programs?
 - Mark Smith: Work with Project Oceanology (on-sea experience) – do a plankton trawl
 - Other half of day is spent with sphere
 - Makes connection to local issues before speaking about global issues
- Matt Jacopy: Multiple interactive – would be good to supply the code so programmers could integrate to their own platforms and languages
 - Share the back-end
- Wii remote ideas/uses
 - Rob Morris: More abilities with Wii remote are wanted, such as:
 - Better standardizing movement – easier to use at different points in the room

- More intuitive – audience could use it as well
 - Or providing different mechanisms that would allow the audience to use it
 - Dia Hitt: Let audience use remote (especially with kids)
 - Kids are used to the controls, just need a little instruction
 - Like that it is something they understand, but the inherent movements they are used to don't always work
 - Makes sure everyone gets a turn
 - Maurice Henderson: Uses Wii remote for students with high energy to focus the group
 - Not everyone gets a turn
 - Ashvin Mysore: Would be helpful to have multiple Wii remotes, some in presenter mode and some in audience mode
 - Could use them as clickers
 - Maurice Henderson: Wii is cheaper than a clicker
 - Sara Lee: When we pass around Wii, a lot of fast action will shut down SOS
 - No one else has this issue
 - At what point can we assume that the audience will bring necessary hardware with them, as in a phone application?
 - Many people have text messages – can use that as iClicker through websites
 - Rather than look at single purpose devices
 - Leon Geschwind: Has anyone used texting with other exhibits?
 - Matt: Have seen it where you can get audio for an exhibit
- Other interactive pieces
 - Mark Smith: A way to highlight areas on the sphere or draw on the sphere
 - Dave Himes
- Is it difficult to tell computer where the Wii remote is?
 - Probably possible, but not sure how to do it yet
 - Use one quadrant of the room for presentation – simpler fix?
 - On-screen feedback that indicates where you are in the room and re-orienting the Wii

Recommendations to NOAA (Office of Education, Earth System Research Laboratory, National Visualization Laboratory):

- More abilities with the Wii remote, such as better standardization of movement – easier to use at different points in the room
 - Make it more intuitive so audience can use it
 - Could also be used as an iClicker
- Facilitate the sharing of coding between programmers
- On-screen menus
 - Facilitate non-linear presentations (based on audience preferences)