Science On a Sphere Users Collaborative Network

Directory

This directory is a compilation of the information submitted by Network members through the online survey sent out in October 2009. NOTE: some Network members did not submit data and are therefore not included in this directory.
Alaska State Museum
Juneau, Alaska

Primary Point of Contact
Sara Lee Chubb
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2009 Workshop Attendees
Sara Lee Chubb

Innovations
- We are probably the first and maybe only non-science installation of SOS. As a primarily ethnographic institution, it has been and will continue to be a challenge to stretch our programs and also incorporate ethnographic interpretation into our SOS programs. Towards this end, we have encouraged docents to incorporate SOS in their regular tours and also created our own images and a 13 minute movie using SOS to orient visitors to Alaska history and culture.

Lessons Learned
- It is helpful to have winch or other method of raising and lowering the sphere to accommodate other uses within limited gallery space.

Future Vision for Science On a Sphere
“SOS enhances the experience of our out of State visitors, who are often learning about Alaska for the first time. Our local visitors have new and stimulating SOS programs that encourage repeat and frequent visits.”

Future Needs to Accomplish Vision
“Additional real time data sets that invite frequent visits and up to date interpretation. More cultural and historical datasets such as routes and dates of European and Russian exploration. More animal datasets that relate to the arctic and neararctic regions and contemporary issues such as global climate change.”

Areas of Expertise
Formal Education
Content

Notes
Aquarium of the Pacific
Long Beach, California

**Primary Point of Contact**
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**2009 Workshop Attendees**
Derek Balsillie  
Barbara Long – blong@lbaop.org

**Future Vision for Science On a Sphere**
“Looking forward to creating a library of programs fit the sphere and adjacent flat screens to communicate global and local impacts of humans on our planet”

**Notes**
Bishop Museum
Honolulu, Hawaii

Primary Point of Contact
Leon Geschwind
Science Education Manager
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(808) 848-4165

2009 Workshop Attendees
Leon R Geschwind
Brad Evans – ignatz@bishopmuseum.org

Innovations
• Kiosk that can track number of hits for certain data sets. Tsunami travel time animations for any location.

Lessons Learned
• As much as possible, tie in the global to local to make the topic relevant to your visitors.

Future Vision for Science On a Sphere
“Interactive non-linear presentation with the ability to bring in live feeds and make on-the-fly annotations (i.e. weather forecaster).”

Future Needs to Accomplish Vision
“Real-time feeds (i.e. internet). Interactive tools that go beyond red dot.”

Areas of Expertise
Interactivity

Notes
Boonshoft Museum of Discovery
Dayton, Ohio

Primary Point of Contact
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2009 Workshop Attendees
Susan Pion
Jason Heaton – jheaton@boonshoftmuseum.org

Innovations
- We have created content using 3DS MAX.
- We have also created a jukebox style program allowing visitors control dataset selection.

Lessons Learned
- It is useful to learn how to make excerpts from longer programs (like Footprints), how to display PowerPoint on the sphere, and how to engage younger students in SOS programs.

Future Vision for Science On a Sphere
“We would like to implement the following: visual arts competition, children's programming for autoplay, and connecting to other institutions through programming based upon a common environmental concern.”

Future Needs to Accomplish Vision
“Our future vision requires: special permissions, software, more training in content creation, and feedback from formal evaluation of these programs.”

Areas of Expertise
Interactivity
Other Platforms
Docents
Content

Notes
Clark Planetarium
Salt Lake City, Utah

Primary Point of Contact
Rob Morris
Planetarium Education Specialist / Master of the Sphere
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2009 Workshop Attendees
Rob Morris

Innovations
- Saved money and time by conducting projector cleaning and repair ourselves.
- Constructed custom ceiling mounts for projectors.

Lessons Learned
- Get as much of the installation done as you can before the SOS crew arrives. It makes their jobs easier and allows more time for training.

Future Vision for Science On a Sphere
“We are hoping to get to a point where we have significant kiosk and docent run presentations, as well as an auto-run playlist that changes based on time of day and day of week.”

Future Needs to Accomplish Vision
“Honestly...money. We can already create the kiosk, interface software, and train staff. We just don't have the budget to make it happen.”

Areas of Expertise
Maintenance

Notes
Primary Point of Contact
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2009 Workshop Attendees
Carlos Jose Diaz Leal
Abdiel Delgado

Notes
Lessons Learned

- Global systems seem to translate better in visitor experiences when contextualized with more immediate, local examples.

Future Vision for Science On a Sphere

“Through conversations with institutions that currently have Spheres, we hope to gain insight into how to successfully employ visualizations on the floor of an interactive science museum.”

Future Needs to Accomplish Vision

“Networking and discussion with organizations that have made significant inroads with visualization, both using the Sphere and other media.”

Areas of Expertise

Interactivity

Notes
Fiske Planetarium
Boulder, Colorado

Primary Point of Contact
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Education Programs Manager
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2009 Workshop Attendees
Matt Benjamin
Jim Love – james.love@colorado.edu
Doug Duncan – dduncan@colorado.edu
Tom Muncy – Tom.Muncy@Colorado.edu

Innovations
• Supplementary content display systems. We have installed three 40" LCD screen to drive content beyond what SOS can do.
• Development of formal and informal education content.
• Using SOS as a teaching tool for K-12 and College classes.

Lessons Learned
• Evaluation is the only way to truly understand the impacts and effects of content and/or new software for the enjoyment of the audience.

Future Vision for Science On a Sphere
“We will continue to lead the way in which SOS is used as an extension of the class room for all grade levels.”

Future Needs to Accomplish Vision
“Funding to support the development of such content.”

Areas of Expertise
Learning
Interactivity
Formal Education
Docents
Content
Scientific Validity
Maintenance

Notes
GulfQuest
Mobile, Alabama

Primary Point of Contact
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2009 Workshop Attendees
Brent Beall
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Notes
Primary Point of Contact
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2009 Workshop Attendees
Dr. Kang Hwan Lee

Lessons Learned
• Regular presentation (~15min) is very popular.

Future Vision for Science On a Sphere
“To connect with formal education.”

Future Needs to Accomplish Vision
“Categorizing the contents according to the themes or school textbook.”

Areas of Expertise
Formal Education
Docents

Notes
Primary Point of Contact
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2009 Workshop Attendees
Nancee Hunter
Shawn Rowe – shawn.rowe@oregonstate.edu
Craig Risien - crisien@coas.oregonstate.edu

Innovations
- Innovations at our institution include research on designing most effective - and consistent - color schemes for new SOS data sets/visualizations; teacher trainings on using real-time data; and, use of real-time video capture software for evaluation purposes.

Lessons Learned
- Be consistent in your color schematics and think about the audience preconceptions/needs when creating new datasets.
- Teachers are chomping at the bit to have access to this kind of data/tools.

Future Vision for Science On a Sphere
“More K-12 teacher/student involvement in data development; increased use of Magic Planet in learning by K-12 and college students; incorporate data sets with Google Earth/Ocean; scientists public lectures incorporating SOS”

Future Needs to Accomplish Vision
“More training/experience with the using Magic Planet - understanding all of its capabilities and content development; movies from NOAA/NASA that are transferrable to Magic Planet (not just SOS)”

Areas of Expertise
Learning
Formal Education

Notes
Heureka, the Finnish Science Centre
Vantaa, Finland

**Primary Point of Contact**
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**2009 Workshop Attendees**
Sanna Reponen

**Notes**
Primary Point of Contact
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2009 Workshop Attendees
Aaron Foster
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Notes
Primary Point of Contact
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2009 Workshop Attendees
Rebecca Davis

Innovations
• College level content.

Lessons Learned
• Take time to orient the audience to the projection. Start with a std PPT.

Future Vision for Science On a Sphere
“5th & 6th grade outreach; research applications.”

Future Needs to Accomplish Vision
“Tech support resources in-house.”

Areas of Expertise
Formal Education
Scientific Validity

Notes
Innovations
- Coordinating hands-on activities with the SOS, moving back and forth between the two. Currently developing a module that makes use of real time IR data - facilitated program encourages visitors to find fronts and other patterns visible in that data set.

Lessons Learned
- Less is more – our best presentations focus on just one or two data sets, encouraging visitors to look for patterns and discuss the data in detail.

Future Vision for Science On a Sphere
“We are really working on interactive programming that encourages visitors to look for patterns in data, build explanations and share those explanations with facilitators and other visitors.”

Future Needs to Accomplish Vision
“We’d love some increased interactivity with the sphere data – the opportunity to add live notation to datasets a la the John Madden sports analysis technology. We're working on ways to achieve that through more analog means in the absence of necessary time.”

Areas of Expertise
Interactivity
Docents
Content
Data

Notes
Maryland Science Center
Baltimore, Maryland

Primary Point of Contact
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2009 Workshop Attendees
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Amy Wood – awood@marylandsciencecenter.org

Innovations
• Projector mounting system of a column within a column works very well - projectors are very stable.
• Interactive kiosk content is currently being well received - this after several attempts with kiosks that were less successful - kiosks now contain content related to Sphere content but allows visitors to explore topics further.

Lessons Learned
• Location of the Sphere is very important - ours is in a pass-through area of the Science Center and provides too many opportunities for interruptions of live programs
• Live programs work best when introduced to explain the type of technology and presentation is about to begin

Future Vision for Science On a Sphere
“More connection to the SOS Network through Spherecasting - we will be taking part in the Dec. 8 event and have proposed funding to add hardware to be an originator of Spherecasting. Would also like to see professional development opportunities via Spherecasting - where SOS institutions share their expertise with other SOS institutions to better inform the delivery of live programs”

Future Needs to Accomplish Vision
“Resources - human (time), funding and technology”

Areas of Expertise
Interactivity
Docents
Scientific Validity

Notes
Innovations
• We have integrated the ability to show multiple media sources in our SOS presentations including videos, satellite television with DVR capability and internet on flat screen televisions mounted in the SOS exhibit.
• We have integrated an anonymous guest voting feature called iClickers that allows facilitators to poll the audience.

Lessons Learned
• Create your space to be flexible so additional facilitation formats can be supported later.

Future Vision for Science On a Sphere
“Our sphere will continue to be used in facilitated and non-facilitated presentations multiple times each day.”

Future Needs to Accomplish Vision
“Our institution only needs the continued support of NOAA and the SOS Network to continue to develop our presentations.”

Areas of Expertise
Other Platforms
Docents

Notes
Innovations

- We have developed a methodology for delivering fully produced content to spherical projection systems. This includes several technical innovations, as well as an informal catalogue of techniques and strategies for effectively using the sphere to communicate.

Lessons Learned

- The sphere is not a rectangle. This is easy to say, and potentially a bit comical in its obviousness, but it is the root of potential success in using the system to its best purposes.

Future Vision for Science On a Sphere

"Continued development of content creation techniques; development of new methodologies for real-time or near-real-time data displays; expanded export solutions to related projection technologies (i.e. Magic Planet, planetariums, other curved surfaces, 3D systems, etc)."

Future Needs to Accomplish Vision

"Our continued efforts require substantiated evidence of the community's desire for us to continue doing what we do. Political will inside our agency is enthusiastic about our position and potential in the community, but the agency administration requires”

Areas of Expertise

Other Platforms
Formal Education
Docents
Content
Scientific Validity

Notes
Innovations

- We have produced two movies on renewable energy for the Sphere. The movies also have some climate content. We have produced a third movie for the Sphere which uses more datasets, but also serves as an intro to the Lab at our Visitors Center.

Lessons Learned

- Programming is difficult, time-consuming and expensive under any circumstances, and moreso in a government environment.

Future Vision for Science On a Sphere

“More programming and dataset development with an energy slant.”

Future Needs to Accomplish Vision

“Need to gather more global data. Need to streamline internal process”

Areas of Expertise

Content

Notes
Innovations

- **6th Grade Watershed Workshop Program:** This program was a movie/information data set that ran for about 30 minutes. During this time, there were trivia questions, short skits, and live interviews with our educators.

- **Holiday Programs:** The most recent was our Pirates on a Sphere program, which allows guests to explore real pirate legends from around the world and through time. We used this program for our Halloween Presentation, but since it fits with our new travelling exhibit, we are using it as one of our regular floor programs.

Lessons Learned

- To listen to the people that are showing you how to install the system. The NOAA staff know all the essentials about getting your sphere working at peak efficiency.

Future Vision for Science On a Sphere

“We are in the process of designing our new Expedition Earth theatre which will be based on our "Spheres of Influence" or the Earth processes that the Science On a Sphere covers. Our separate "Spheres" will be Magic Planet systems that focus on one Earth system. Also, we will be tying in NOAA’s Tsunami Ready exhibit to our Expedition Earth experience.”

Future Needs to Accomplish Vision

“We currently have the funding for the "Tsunami Ready" exhibit and we have funds to begin our Expedition Earth gallery. As a facility, it is more our staff power that we are lacking.”

Areas of Expertise

Interactivity
Other Platforms
Docents
Data

Notes
Innovations

- Facilitate sphere presence at COP15.

Lessons Learned

- Identify a contact expert within NOAA, develop a working relationship, and build their expertise into your programming.

Future Vision for Science On a Sphere

“Deployment at NOAA facilities.”

Future Needs to Accomplish Vision

“Buy-in from facility managers.”

Areas of Expertise

Other Platforms
Formal Education
Content
Scientific Validity
Data
Primary Point of Contact
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2009 Workshop Attendees
Dan Pisut

Areas of Expertise
Content
Data

Notes
Innovations

- There are two goals for this program (1) to improve the understanding of how spherical display systems can be used to enhance informal science education learning, and (2) to build environmental literacy among the general public through increased use of ocean, coastal, Great Lakes, weather, and climate data in informal education institutions. See NOAA’s Education Strategic Plan for more details: [http://www.education.noaa.gov/plan](http://www.education.noaa.gov/plan).

Lessons Learned

- We have learned that working collaboratively with members of the Network is a key to success.

Future Vision for Science On a Sphere

“We look forward to continuing to work with the Network and other partners to investigate what is possible. We certainly see more interactivity as an area of focus and hope to aid in offering more professional development opportunities for ISE educators.”

Future Needs to Accomplish Vision

“We need more evaluation data and research on the effectiveness of spherical display system programming.”

Areas of Expertise

Learning
Formal Education

Notes
NOAA Pacific Services Center
Honolulu, Hawaii

Primary Point of Contact
Matthew McBride
Data Visualization Specialist
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2009 Workshop Attendees
Matthew McBride

Innovations
- We work most directly with the Magic Planet. Most of the SOS work we do is in support of the Bishop Museum. We have created a couple of flash based kiosks for the Magic Planet we would like to try on the SOS.

Future Vision for Science On a Sphere
“We would like to work on interactive exhibits for the SoS using archived and real time data through a touch screen kiosk. We would like to user to be able to participate in scenarios such as Tsunami monitoring / warning, allowing them to make decisions based on the data displayed on the sphere and the kiosk and using the sphere to display the results.”

Future Needs to Accomplish Vision
“Data, partnerships, and time.”

Areas of Expertise
Learning
Interactivity
Other Platforms
Formal Education
Content
Data

Notes
Primary Point of Contact
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2009 Workshop Attendees
Bill Bendel
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Tom LeFebvre - thomas.j.lefebvre@noaa.gov
Sylvia Hasui - Sylvia.Hasui@noaa.gov
Tom Schlatter - Tom.Schlatter@noaa.gov

Innovations
• As the creators of Science On a Sphere, we are always exploring improvements for SOS. Recent upgrades have included using Wii remotes, SphereCasting, and upgrading the system to operate on just one computer.

Lessons Learned
• Make sure to read all of the documentation on the SOS website. We have worked to make sure that every step of the installation process is outlined and explained.

Future Vision for Science On a Sphere
“We want to continually improve the playback capabilities of SOS and incorporate the suggestions from SOS users. We would also like to support the expanded use of SphereCasting.”

Future Needs to Accomplish Vision
“In order to be successful, we need feedback from the SOS sites and collaborative partners.”

Areas of Expertise
Interactivity
Other Platforms
Docents
Content
Scientific Validity
Maintenance
Data

Notes
North Carolina Aquarium on Roanoke Island
Manteo, North Carolina

**Primary Point of Contact**
Dia Hitt
Marine Educator
[andrea.hitt@ncaquariums.com](mailto:andrea.hitt@ncaquariums.com)
(252) 473-3494 x236

**2009 Workshop Attendees**
Dia Hitt
Kris Smith – [kris.smith@ncdenr.gov](mailto:kris.smith@ncdenr.gov)
Rick Eller - [Rick.eller@ncaquariums.com](mailto:Rick.eller@ncaquariums.com)

**Innovations**
- Use of ocean datasets in unique ways.
- Halloween event content.

**Lessons Learned**
- Build in time for practicing how to do presentations in the round.

**Future Vision for Science On a Sphere**
“Improve use by schools, start teacher workshops and development ocean content based on area topics.”

**Future Needs to Accomplish Vision**
“Practice, time and money.”

**Notes**
Ocean Explorium at New Bedford Seaport
New Bedford, Massachusetts

Primary Point of Contact
Mark Smith  
Executive Director  
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(508) 994-5400

2009 Workshop Attendees
Mark Smith  
Abbey Spargo – aspargo@oceanexplorium.org

Innovations
• Combined the sphere with living exhibits as a complete learning construct. Used the sphere as a tool to provide interns with life skills. Integration of the education program with a local University: the School of Education Public Policy and Civic Engagement.

Lessons Learned
• The sphere cannot be a proxy flat-screen projector. Changing scale departs from the sphere's power as an holistic depiction of the planet.

Future Vision for Science On a Sphere
“Complete integration of the sphere into the learning program and leverage of same throughout other conservation institutions that use living exhibits as an educational tool.”

Future Needs to Accomplish Vision
“Additional personnel would be required to fully realize the vision outlined above and by implication this means additional fiscal resources.”

Areas of Expertise
Formal Education  
Docents

Notes
Oregon Museum of Science and Industry
Portland, Oregon

Primary Point of Contact
Nate Lesiuk
Program Developer
nlesiuk@omsi.edu
(503) 239-7817

2009 Workshop Attendees
Nate Lesiuk
Sue Wu – swu@omsi.edu

Innovations
- OMSI hosted a video shoot using our SOS for the National Geographic's JASON Project. Unique content was developed and presented by a NOAA researcher. The video footage will be featured in a nationally available curriculum for teachers focused on earth science. Through the curriculum, SOS will reach a larger audience than can experience it in person.

Lessons Learned
- We're still learning many new things.

Future Vision for Science On a Sphere
“We are interested in finding a balance between hands-on demonstrations in conjunction with SOS presentations that captures both kid and adult audiences. We are also interested in connecting with local and regional researchers and showcasing current issues.”

Future Needs to Accomplish Vision
“Staff time, networking with other institutions to find effective strategies, making connections.”

Notes
Science Museum of Minnesota
St. Paul, Minnesota

Primary Point of Contact
Patrick Hamilton
Director of Environmental Sciences and Earth-system Science
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(651) 221-4761

2009 Workshop Attendees
Patrick Hamilton
Bryan Kennedy – bkenedy@smm.org
Ken Stone – kenstone.media@gmail.com
Bob Perkerwicz - bperk@bitstream.net

Innovations
- Added a fifth projector to display an image on an adjacent wall that helps interpret our SOS playlist.
- Encouraging colleges and universities to use our SOS as an off-campus classroom experience.
- We have been trying to add a more engaging voice by being more playful in the new film that we are creating for the sphere. Honestly, we probably are still not pushing it far enough.

Lessons Learned
- Provide ample, comfortable seating and make sure that audiences can hear the audio tracks of SOS programs.
- Keep your auto-run films short and simple. When you start creating content for a film you have an enormous laundry list of topics you want to cram in there, but by focusing clearly on your singular main message, you are more likely to produce a film that people will enjoy watching and take something away from.

Future Vision for Science On a Sphere
“Experiment with using SOS as a focal point for civic deliberations on global change issues. We plan to include the sphere as a center piece of our upcoming Future Earth exhibition which will be permanently installed at the Science Museum of Minnesota. The sphere will help the various parts of the show tie together into a global message. However, we need to do some more experimenting to make the sphere and engaging un-facilitated interactive experience. We are begining to brainstorm on this now.”

Future Needs to Accomplish Vision
“More experience with the potential for spherecasts to link geographically dispersed audiences. We hope to learn from other institutions that are building interactivity into their SOS setups, beyond simple jukebox playlist functionality. Seeing how this works socially and technically in other institutions will be useful.”

Areas of Expertise
Learning
Interactivity
Formal Education
Content

Notes
Primary Point of Contact
Elizabeth Ban
COSEE/Ocean Science Education Specialist
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2009 Workshop Attendees
Elizabeth Ban

Innovations
• We have four auto-run programs that cover ocean science basics in plate tectonics, ocean currents, ocean production and climate. These films are a unique solution to showing SOS data to large audiences where docent-led programs aren't necessarily practical.

Lessons Learned
• Learn what the SOS can do and make sure that there are several people trained to use it!

Future Vision for Science On a Sphere
“The NMNH is planning to develop docent-led programs for special events and programs and is seeking input to identify other opportunities. We have several docents with background in climatology and ocean science and we will be working with our AV team and docent program to develop content based on available data sets that help promote NMNH Sant Ocean Hall goals and ocean literacy principles.”

Future Needs to Accomplish Vision
“We are working with our exhibits AV team to develop an easy way to change the SOS programming from autorun to manipulated data sets. We are hoping to hold a regional SOS brainstorming in early 2010 with SOS network institutions in the area to discuss.”

Notes
Primary Point of Contact
Kairo Vivas
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(202) 633-4427

2009 Workshop Attendees

Areas of Expertise
Learning
Other Platforms
Formal Education
Docents
Maintenance

Notes
Innovations

• We use Magic Planet, so comments refer to that sphere. We are now using the freely available McIDAS-V software to access real-time data for our sphere. Scripts can be written to routinely access most types of real-time weather data from public servers.

Lessons Learned

• Canned datasets will not keep an audience captivated (especially kids). As a standalone exhibit, combining the visualizations, information on webpages (that drive our sphere interactively) and voice overs seem to be the most powerful combination for learn

Future Vision for Science On a Sphere

“Continue to tap into public servers and create more real-time products that are educationally beneficial for our audiences. Provide training for institutions that may want to use McIDAS-V for creating real-time visualizations.”

Future Needs to Accomplish Vision

“Grant money would be necessary for travel and labor costs to train personnel at institutions interested in using McIDAS-V. The user workshops would provide time for introductory material, but would not allow time for in-depth training.”

Areas of Expertise

Data

Notes
Primary Point of Contact
Rick McDaniel
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2009 Workshop Attendees

Notes
The Wildlife Experience
Parker, Colorado

Primary Point of Contact
Jessy Clark
Director of Programs
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2009 Workshop Attendees
Jessy Clark
David Farquharson – dfarquharson@twexp.org
Carla Ahrenholtz – cahrenholtz@twexp.org

Innovations
- We created a presentation tied specifically to the exhibit in which SOS resides.

Lessons Learned
- Presentations at our location have been best received when the program is relatively short in length (10-15 minutes tops).

Future Vision for Science On a Sphere
“Produce our own video/movie specific to the exhibit in which SOS resides, and sphere-casting would be another use we'd like to incorporate in the coming years.”

Future Needs to Accomplish Vision
“Funding is our largest hurdle. We have the staff and expertise to do some of the creation, but would need to hire production people to help us create the video/movie.”

Notes
Thunder Bay National Marine Sanctuary
Alpena, Michigan

Primary Point of Contact
Sarah Waters
Visitor Experience Coordinator
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2009 Workshop Attendees
Sarah Waters
Jeff Gray – jeff.gray@noaa.gov

Innovations
- Determining that our SOS required a dedicated area and separate space within our overall exhibits, including a sound barrier in order to maximize spherecasting impact and facilitate formal educational programs.
- We intend on including modifications in the reinstall such as additional electronic wall displays, spherecasting controls, a kiosk, exhibit integrated evaluation tools, built-in seating and additional wall panel displays/information to enhance SOS programming.

Lessons Learned
- Our biggest tip: people like to sit down! Make sure to plan for seating, but with space to allow visitors to walk around the sphere if they wish - there is overwhelming curiosity about "how it works", so make sure you provide information about how the S

Future Vision for Science On a Sphere
“We are designing a 1,600 sq. ft. building addition dedicated to SOS. We plan on integrating SOS as part of formal and informal programming. We want to use SOS to provide unique and engaging environmental literacy programming to our diverse and growing audience in the underserved region of northeastern Michigan. We also want to use SOS bring to the public a better understanding of NOAA and its critical role in earth system research, public safety, and education. GLMHC staff has extensive distance learning experience and infrastructure and seeks to become a leader in spherecasting following our SOS reinstall.”

Future Needs to Accomplish Vision
“Design and build addition, equipment upgrade and reinstall, staff & docent training.”

Notes
Whitaker Center for Science and the Arts
Harrisburg, Pennsylvania

Primary Point of Contact
Steve Bishop
Vice President, Science and IMAX Programs
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2009 Workshop Attendees
Steve Bishop

Innovations
- Theatrical-style live presentations, including costumed characters and science demonstrations

Lessons Learned
- Locating the sphere in a gallery filled with interactive exhibits is problematic. The sphere is dramatic, highly visible and attracts many visitors, but the noise and activity of the exhibits is distracting to sphere audiences.

Future Vision for Science On a Sphere
“We would like to develop autorun and live SOS programs in collaboration with Penn State.”

Future Needs to Accomplish Vision
“We need grant funding. A proposal to NSF in collaboration with Penn State and the Science Museum of Minnesota is pending.”

Areas of Expertise
Interactivity
Docents

Notes