Presentation Training: Part 1

Updated for SOS 5.3

- 1. Before you begin: (Blue Marble with Nightlights)
 - a. Make a playlist
 - i. Add extras at the end you may want to talk about
 - ii. Add presenter notes if you like
 - b. Familiarize yourself with the dataset library
 - i. In case you get requests, the iPad library interface can be difficult to skim through currently (Global Epidemic H1N1, Red Mars)
 - c. Consider length and theme
 - i. Make a presentation with a clear take-away message that can be finished in allotted time (providing example in Part 2)
 - d. Know your audience and content of presentation is age appropriate
 - i. Example: 2nd graders may not be ready for a talk on energy usage or climate models
 - e. Practice with the iPad remote
 - f. Know the technology and history of SOS
 - i. It was invented and is patented by NOAA
 - ii. It consists of 1 linux-based computer, 4 projectors and a 55 lb. carbon fiber sphere
 - iii. It's in over 130 museums worldwide, making a strong network of informal educators spreading scientific literacy
- 2. When you walk in the room:
 - a. Turn on projectors on iPad or SOS computer
 - b. Select your playlist on iPad or GUI
 - c. Pick up the iPad and a laser pointer, set user position
 - d. Walk around the sphere to make sure all projectors are on
- 3. Consider where your audience will view the sphere (ETOPO1)
 - a. Ask your group to sit close together
 - i. It's easiest to view one hemisphere (1/2 of Earth) at once
 - b. Stand in between projectors
 - i. If you stand right in front you may cause a shadow
 - c. Clearest image is directly in front of projector
 - i. If you have a very small group you may be able to position them for best image
 - d. **Slowly** rotate, tilt and replay video sections as necessary
 - i. If you group is large, especially, make sure everyone sees the same
 - e. Consider using the image splitter for single image datasets with a large crowd
- 4. Be careful of assumptions and language
 - a. Use a laser pointer to point to geography and phenomena
 - b. Use Overlays to help with geography and context (Overlay: Country borders, Cities, Lat/Lon, Railroads, Roads)
 - c. Explain colorbars and legends before moving on to describe the dataset

- d. Explicitly distinguish between observations: 1st: ground-based (Shark Migration, Floods Events) or satellite data (Mars: Mars Orbiter Laser Altimeter) or both (Hurricane Isaac Radar over IR), and 2nd: models (Aurora by SWPC)
- e. Define scientific terms
- f. Try to avoid using acronyms
- 5. Know your audience and their level of understanding
 - a. Assess background knowledge by asking clever questions (Hurricane Sandy SST Anomaly)
 - i. What could you say about the Gulf Stream before and during Hurricane Sandy? Can you take it further adding more descriptors to your explanation?
 - 1. This will help you assess whether they know where the Gulf Stream is and whether they can read and understand a color bar and an anomaly map.
- 6. Know and utilize current events on real-time datasets
 - a. Recent earthquakes and hurricanes -within a month- are easily shown and a big hit (Real-Time Earthquakes)
- 7. Use good education practices
 - a. Build on background knowledge
 - i. Use local geographical and age-appropriate references
 - b. Engage the audience as much as possible by establishing dialogue and asking LOTS of questions
 - c. Use positive reinforcement by redirecting wrong answers
 - d. Practice good, long wait time for answer processing and don't allow the same people to answer every question
- 8. Feel free to promote the SOS for personal computers and schools SOS Explorer allowing your visitors to take the experience away with them! sos.noaa.gov/SOS_Explorer

Part 2 – Live Program Example

We will provide a presentation that has a theme, with a take-home message and demonstrates good practices.