Promoting Climate Literacy through Informal Science Learning Environments

Rob Semper San Diego, CA February 17-18 2010

Informal Science Education Learning Environments Classes Websites **Tours** After-Broadcasts **Events** school **Publication** Convening **Forums**

Over the last 10 years climate change has been addressed in all of these channels.

Climate Literacy

- A climate-literate person
- understands the essential principles of Earth's climate system,
- knows how to assess scientifically credible information about climate,
- communicates about climate and climate change in a meaningful way, and
- is able to make informed and responsible decisions with regard to actions that may affect climate.
- U.S. Global Change Research Program/Climate Change Science Program

Climate Literacy

- •Understands the essential principles of Earth's climate system
 - •the Sun is the primary source of energy for Earth 's climate system.
 - •climate is regulated by complex interactions among components of the Earth system.
 - •life on Earth depends on, is shaped by, and affects climate.
 - •climate varies over space and time through both natural and man -made processes.
 - •our understanding of the climate system is improved through observations, theoretical studies, and modeling.
 - •human activities are impacting the climate system.
 - •climate change will have consequences for the Earth system and human lives.

What is our approach?

What can we do?
What can't we do?
What can we do where?
What should we do?
What shouldn't we do?

What part of climate literacy should we take on?

Climate Literacy

Knowledge

Attitude & Behavior

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Knowledge

- The climate change knowledge agenda is extensive and hard
- Climate change may not be the right level of discussion or even the right topic in itself
- Interest in climate change issues provides a great opportunity to talk about basic science
- New research and tools are needed to address climate change topics in our venues (visualizations, immersive interactives, online media, games)

Attitudes

- Our audience is already experiencing market fatigue
- It is important to acknowledge fear and to offer hope
- The climate change scientific adventure is exciting and being carried out by excited humans
- Climate change science is one of the first science topics where a social science physical science collaboration is required

Behavior

- As educational institutions we should teach people how to think not what to think
- Informed decision making may not always provide the answer one is looking for
- People want to know what they can do, can we find meaningful things for them to do?
- We need to pay attention to our institutional behavior as much as our visitor behavior

- Addressing climate change requires global action.
- Addressing climate literacy requires the ISE community to move beyond the work of individual organizations to create a network of committed institutions and individuals.