COMBINING KNOWLEDGE AND BELIEFS IN HIGH SCHOOL CLIMATE SCIENCE INSTRUCTION

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UCAR Boulder, CO
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WHAT IS YOUR WORLD VIEW?

Defined: the framework of ideas and beliefs through which an individual, group or culture interprets the world and interacts with it.

Image: Portrait of Global Aerosols NASA.gov
CASE STUDY: MOUNTAIN LIVING

May 2011
n=981

<table>
<thead>
<tr>
<th>Alarmed</th>
<th>Concerned</th>
<th>Cautious</th>
<th>Disengaged</th>
<th>Doubtful</th>
<th>Dismissive</th>
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<td>12%</td>
<td>27%</td>
<td>25%</td>
<td>10%</td>
<td>15%</td>
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Highest Belief in Global Warming
Most Concerned
Most Motivated

Lower Belief in Global Warming
Least Concerned
Least Motivated

Proportion represented by area
Source: Yale / George Mason University
INGREDIENTS FOR SUCCESS:

- Comprehensive Professional Development
- Intentional Curriculum
- Clear Communication
The UCAR RETI Model works

- Climate Science is Complex
- Teaching Science is different than doing science
- Teachers are liaisons between science and the public

Tell me and I'll forget;
show me and I may remember;
INVOLVE me and I'll UNDERSTAND.

-Chinese Proverb
MY AUDIENCE

- 3 Ranchers
- 2 Evangelists
- 2 Basketball Players
- 1 Fashion Designer
- 1 Beauty Queen
- 2 Environmentalists
- 1 Future Entrepreneur
- 1 Rafting Company Heir
- 1 Competitive Skier
- 1 Summer Camp Heir
Earth Systems: Weather as a common thread
What Science Is... What Science Is not
Synthesized real science into lessons
Sensitive to belief systems

Climatecommunication.org

Teachers educate the public, not scientists
**RESULTS**

- Increased Scientific Literacy: What questions can science answer?
- Acceptance of Climate Change as a real issue, not a controversy
- “Ok, I get it. Now what?”

Source: NASA
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- Research Experiences for Teachers (RETI)
  Becca Hathaway UCAR
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- Other Communication Related Session
  Climate Communication: Tools & Tips
  Susan J. Hassol, Richard C.J. Somerville and James Balog

  Wednesday, 5 December 1:30 PM-3:30 PM
  San Francisco Marriott Marquis Hotel  Golden Gate C1-C3.