

"THE FOOL TELLS ME HIS REASONS.

THE WISE MAN PERSUADES ME WITH

MY OWN."

aristotle

Sunshine Menezes, PhD Metcalf Institute University of Rhode Island

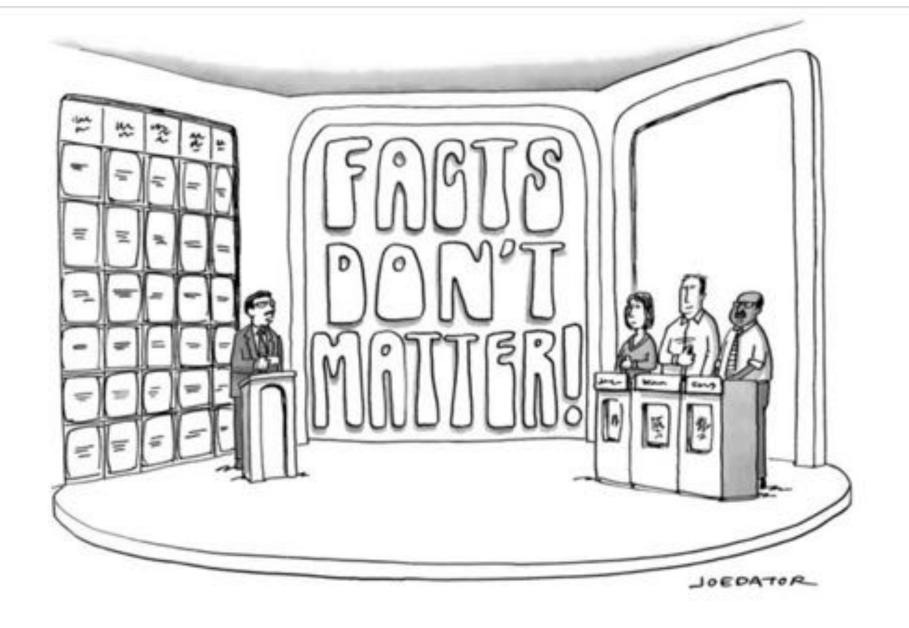
February 21, 2019



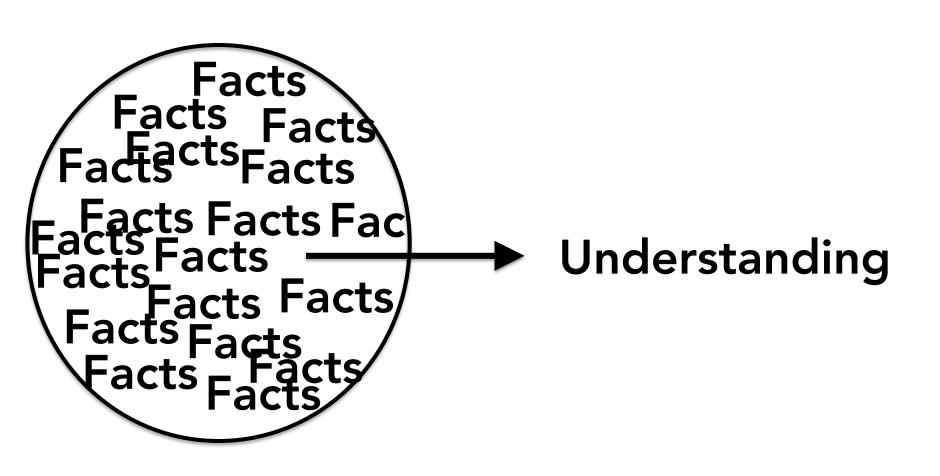


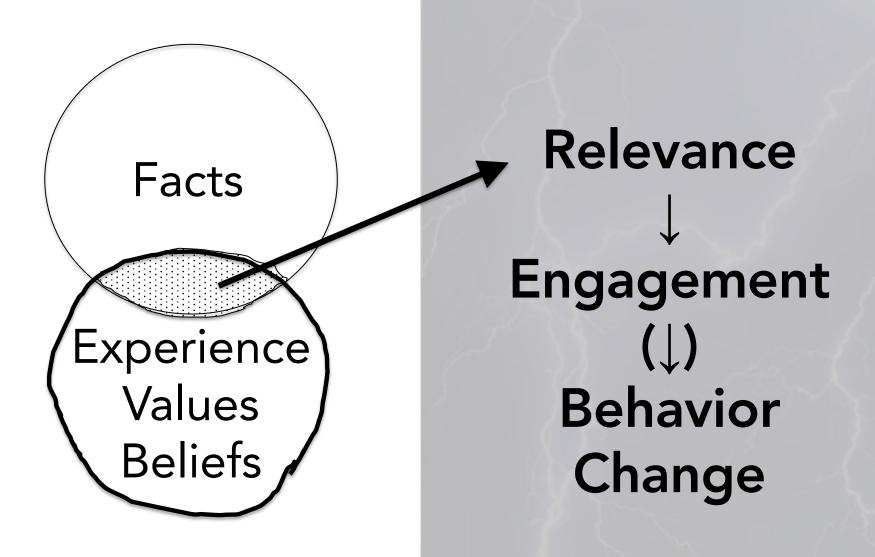
# Bringing science to the conversation since 1998

Photos by Gretchen Ertl and Zak Kerrigan for Metcalf Institute



"I'm sorry, Jeannie, your answer was correct, but Kevin shouted his incorrect answer over yours, so he gets the points."













Images: Jessica Scott, Grand Rapids Press; EPA, Francis Malasig

# What Is "Effective" Science Communication?

#### Strategy!

- 1. Know Your Audience and Situation
- 2. Know Your Goals
- 3. Emphasize Clarity and Relevance
- 4. Foster Dialogue
- 5. Iterate and Adapt

### 1. Know your audience



Images, L-R: C-Span; Jonathan Monfiletto

### 2. Identify your communication goals

- To persuade?
- To build support?
- To spur action?







#### **Tactics**

# Communication Objectives

# Behavioral Goals

Clarity

**Brevity** 

Frames

Dialogue

Story-telling

Non-verbals

etc.

Interest/excitement

Affect/Emotion

Beliefs about ...

Warmth

Integrity

Similarity

Competence

Benefits/risks

**Norms** 

Efficacy

etc.

Vote

Support

Not oppose

Donate

Stop/Start

More/less

etc.

Credit: Anthony Dudo & John Besley

# For effective messaging, think about....

- Audience
- Public opinion
- Connection and Authenticity
- Metaphors/ Analogies
- Images
- Framing



Image: Pixabay

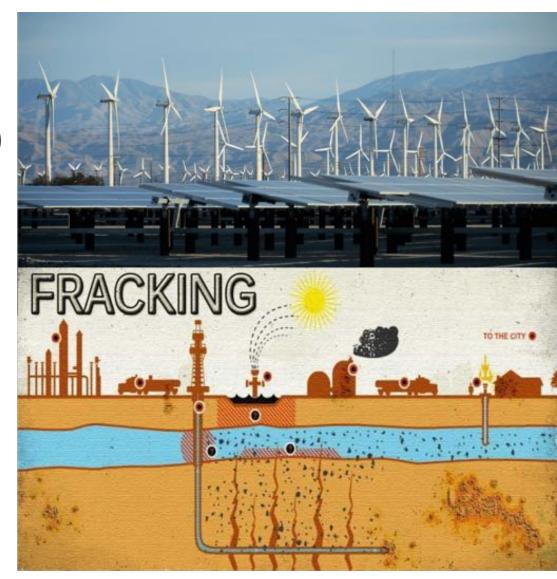
### Perception changes with frames

- Which facts to include or emphasize
- Who serves as the "expert"
- What is the "issue"

These choices create a frame that supports the story and signals what the audience should find important.

# Types of frames

- Gain/loss (Risk)
- Emphasis
- Uncertainty
- Morality
- ???



Images: breakingenergy.com; Composite by G-marius based on a darthpedrius's image

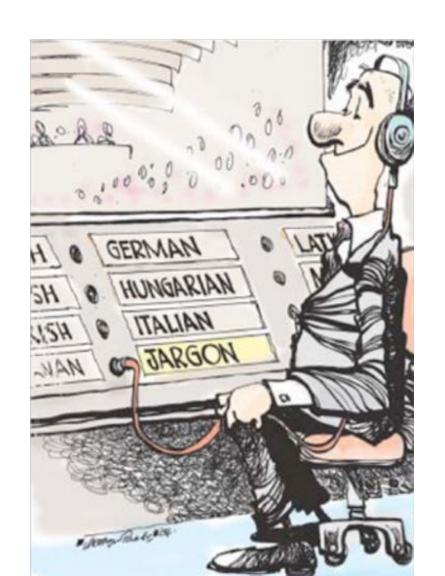
# **Framing Compost**



Images: pixabay

### 3. Emphasize clarity

- Avoid jargon
- No laundry lists
- Metaphors
- Analogies
- Compelling visuals



## 4. Foster dialogue



Listen!
Be responsive
Build trust
Be aware of
mental models

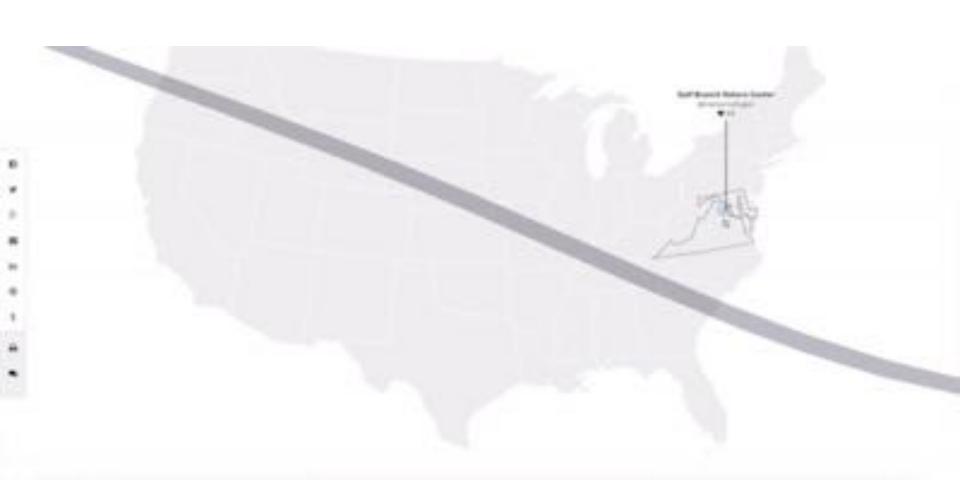
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### Visuals can correct mental models

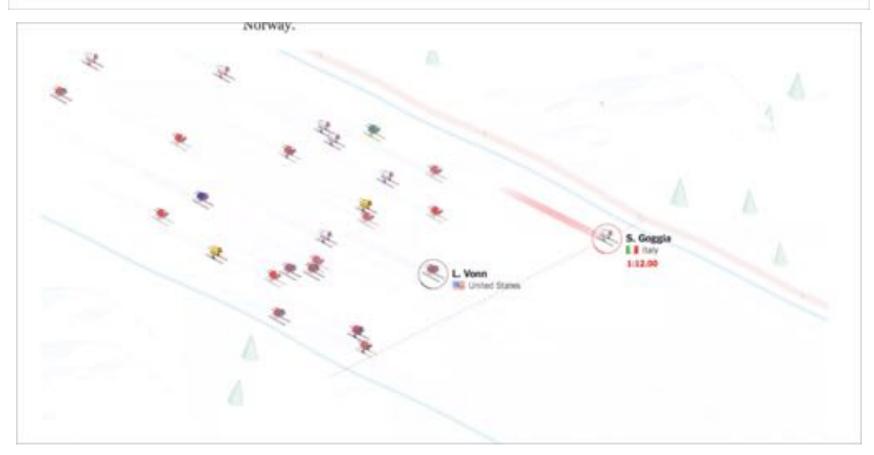


Photos: Natalie Behring/Greenpeace; Flicker, 10 10

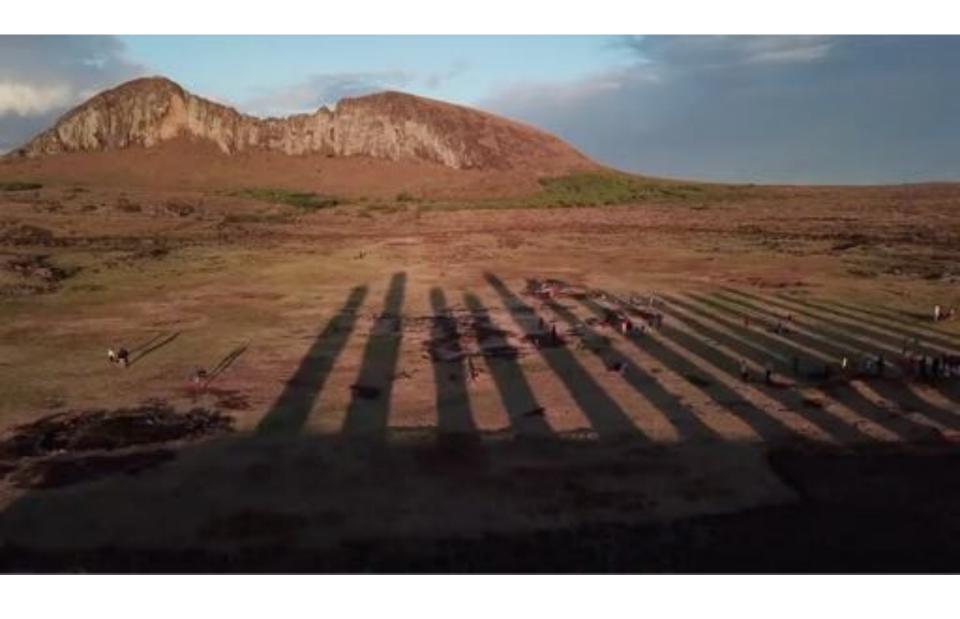


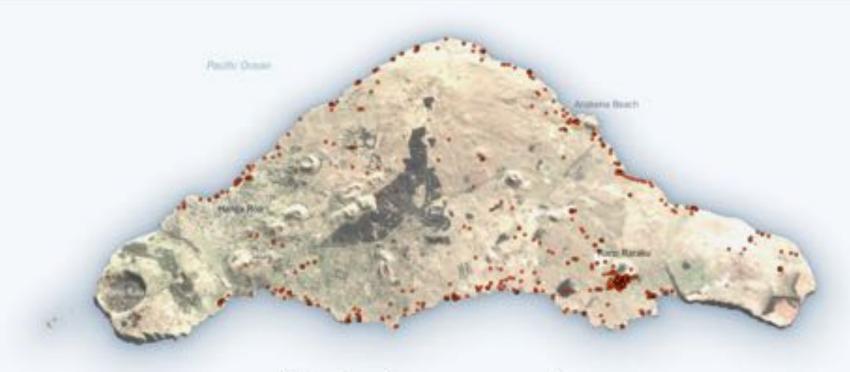


### See the Jumps and Turns That Kept Lindsey Vonn From Downhill Gold



https://nyti.ms/2Cbdc0C





Ringing it are scores of moai statues and their platforms, called ahu.

Dots show locations of ahu and moai.

#### Do Your Homework

- Research public opinion
- Consider audience values
- Consider audience relevance
- Identify your situation
- Identify compelling frames
- Use metaphors & analogies
- Use compelling visuals
- Build connections

#### In a nutshell...

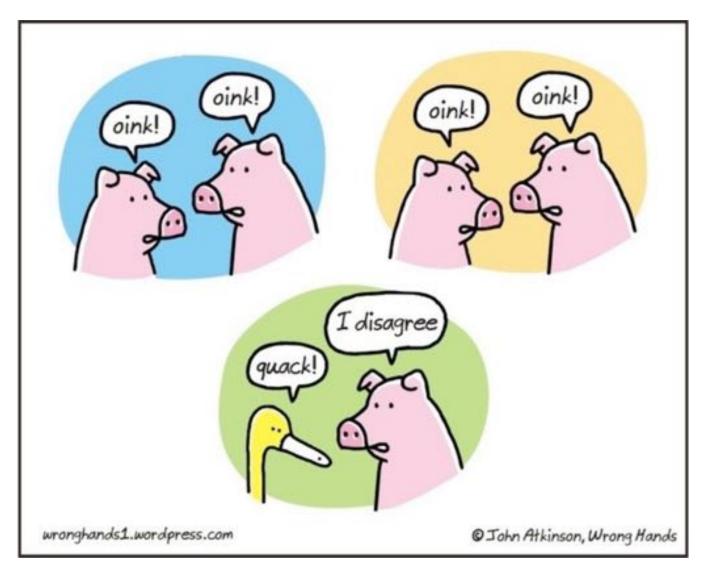
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What? – Issue/Problem
```

Who? – Audience

Why? – Purpose

Where? – Setting/Situation

**How?** – Framing, Relevance, Dialogue



Credit: John Atkinson

#### **Tools You Can Use!**

# Practice framing and clarity by using a Message Box.



Photos (clockwise): USDA on Flikr; Clayton800 on Pixabay; Lawrence Jackson; Gretchen Ertl

#### Audience: Who is impacted by this? Who can change this? Who cares about this?

- What are you seeing in your research that makes you want to communicate?
- How does it affect people and the environment?

#### Problems?

- Who does this help, and how?
- What improves in the short term?
- What improves in the long term?

#### ssue

- If you were looking for information online, what would be the 2-3 word search term you'd use?
- What signal does your word choice send (i.e. 'climate change' v.s. 'global warming')?

- audience value? How does it impact

What does your

- them, or something they care about it? What is important
- about what you're sharing (scale, effects)?

#### Solutions?

- What changes can be made to the way things currently stand?
- Who can make those changes?
- What would it take to solve the Problems identified?



Audience: Who are you trying to engage? What do you know about their interests, values, biases? Why do they need this information?



Setting/ Situation: What is the physical setting for your engagement? What are the constraints of the situation?

- This focuses on a specific aspect of the issue, such as your area of research
- How does the issue affect people, the environment, or the economy?
  - Describe the problem as clearly and concisely as possible
    - · Set up the "So What" here
- Who benefits from solving the problems related to this issue?
- Focus on positive results of taking action
- What changes in the short term if this issue is studied or solved?

Benefits

 What changes in the long term?

#### Problem

#### Frame the Issue

- How would you describe the issue in a 3-5 word internet search?
- How might your word choice affect the audience's response?
- Consider using an action verb to make this more compelling

#### Solutions

- What can be done to address the problems related to this issue? (Policy changes, public health education, research, etc.)
- What can your audience do to address the issue and its related problems?

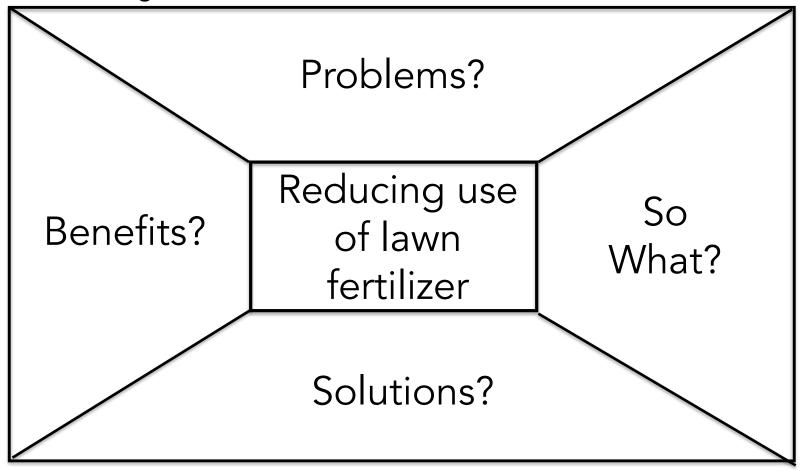
# So What?

- How does the issue relate to your audience, what makes it relevant to them?
- How do the problems and solutions affect the audience or something or someone they care about?

#### **Example Message Box**

Audience: Home owner

Setting: Master Gardener booth at local festival



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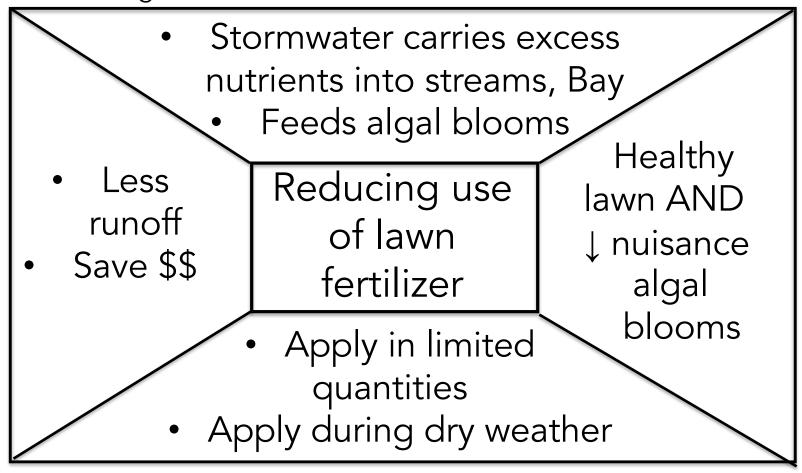






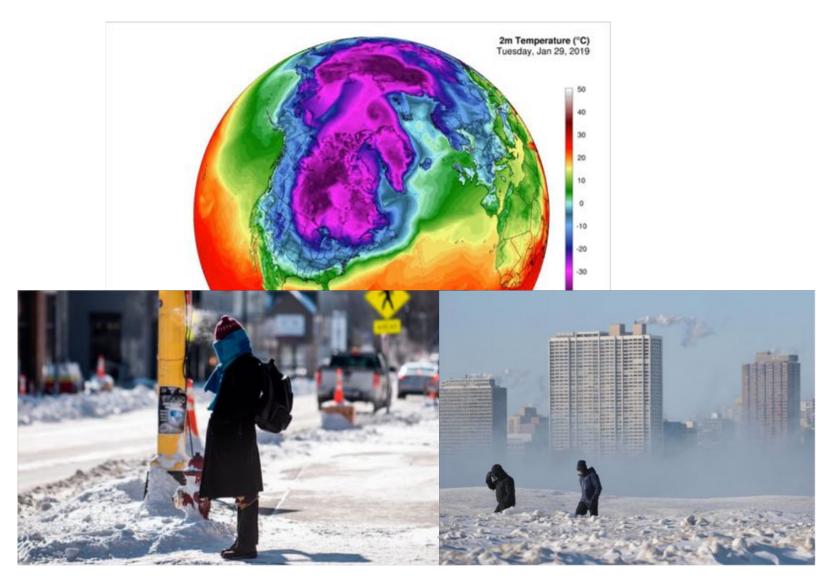
Image: Hydroviv, Prairie Rivers Network

#### **Example Message Box**

Audience: Reporter

Setting: New England regional newspaper

Warmer polar air makes Jet Stream wobbly Wobbly let Stream makes Polar
 Vortex reach further South More Climate resilience in Climate change is change takes communities? making winters many forms power sector unpredictable Protect poplns at public Control what we can risk health (fossil fuel GHG) Prepare for community impacts



Images: Stephen Maturan/AFP; UCS; Scott Olson/Getty Images



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