Engaging & Empowering Communities for Climate Action
Are Americans Engaged?

WHAT IS ENGAGEMENT?
Engagement is a broad term!
CLIMATE CHANGE RESILIENCE
Is the American Public Engaged on the issue?

The US Third National Climate Assessment (NCA) lists implementation as the number one significant gap in the state of adaptation in the U.S.
WHAT IS THE MOST IMPORTANT AND FIRST STEP TO ENGAGE THE PUBLIC?

Know Thy Audience…
Know Thy Audience...

Where are American’s at with knowing and feeling?
73% of Americans believe global warming is happening with 62% believing it is human caused. December 2018.
Global Warming Belief

• Americans who think global warming is happening outnumber those who think it isn't by more than a 5 to 1 ratio
The Public and Scientific Consensus

Climate Change is Happening and Human Caused

What percent of the American Public understand above?

97%

20%
Most Successful Message to Communicate Consensus

“Based on the evidence, 97% of climate scientists have concluded that human-caused climate change is happening.”

van der Linden, Leiserowitz, Feinberg, & Maibach, 2014
WINNING THE GLOBAL WARMING DEBATE – AN OVERVIEW

Please keep in mind the following communication recommendations as you address global warming in general, particularly as Democrats and opinion leaders attack President Bush over Kyoto.

1. *The scientific debate remains open.* Voters believe that there is *no consensus* about global warming within the scientific community. Should the public come to believe that the scientific issues are settled, their views about global warming will change accordingly. Therefore, *you need to continue to make the lack of scientific certainty a primary issue in the debate,* and defer to scientists and other experts in the field.

Excerpt from the Luntz memo.
Most Americans believe global warming will primarily harm future generations and plant/animal species. Only 29% are Very Worried.

“Global warming will cause…”

- ...a great deal of harm
- ...a moderate amount of harm

Not me, not here, not now...

Concerned but: Lack of personal worry
What does this tell us?

Think global warming is happening (73%)
Don't know if global warming is happening (13%)
Think global warming is not happening (14%)

Percent Who Feel “Very” or “Moderately”...

Helpless and Not Much Hope
What are Common American Values?

Personal Freedom/Choice
Individualism
Patriotism
Self Reliance
Dedication/Hard Work/
Equal Opportunity
Common Sense
Frugalness
Efficiency/Avoid Waste
Conservative
Morality
Uniqueness
Innovation

Social Justice
Equity
Common Good
Reciprocity
Benevolence
Nurturance
Cooperation
Innovation
Avoid Waste
Why are we not talking about it?

About Four in Ten Americans Say They Discuss Global Warming With Family and Friends “Often” or “Occasionally”

“Discuss global warming with family and friends…”

- ...often/occasionally
- ...rarely/never

![Graph showing the percentage of Americans discussing global warming with family and friends over time. The graph includes data from 11/08 to 12/18, with percentages fluctuating between 40% and 74% for the often/occasionally category, and 29% to 65% for the rarely/never category.]
Communicating Climate Change: Do we really know our audience?
Numbers Numb

Stories Succeed
Barriers to Engage

Issue Polarization (obvious)

Lack of Urgency/Not Concern (not me, not here, not now)

Efficacy Gap/Helpless (Can I do anything meaningful?)

Psychological Processing
Risk Without Positive Outcome Separates the Worriers from the Doers

The belief that their actions matter

"Paralysis of Action"
Psychological Processing Barriers

- Discount the Future
- Psychological Distancing
- Optimism Bias
- Confirmation Bias
- Cultural Cognition
- Social Norms
- Cognitive Dissonance
- Heuristics
Barriers

Heuristics: Short cuts the brain makes! Heuristics are strategies to minimize learning time or make more efficient.
Let's test it out...

I’m going to tell you 3 pairs of words. Remember them without writing them down.

Drew Weston, Emory University
System 1

- Fast
- Unconscious
- Automatic
- Everyday Decisions
- Error prone

System 2

- Slow
- Conscious
- Effortful
- Complex Decisions
- Reliable
Mental Models

- Obesity: 300,000 deaths per year
- Tobacco: 450,000 deaths per year
- Alcohol: 88,000 deaths per year

[Cartoon Image: EBOLA!!!]
How to Enter Into a Meaningful Conversation

Be aware of mental models
Understand values
Strive to increase efficacy and hope
Use stories and pictures (when possible)

Be prepared to debunk misconceptions
Common Misconceptions
Debunking a Myth

Three Elements

1) Focus on the **core facts** right from the start, not the myth

2) When referring to the myth, precede the statement clearly indicating it is **false information** or a myth.

3) Lastly, **explain why the myth is false** in clear concise terms.

Keep it simple

It’s not just **what** people think that matters, but **how** they think.
Common Misconceptions

The climate’s changed before!
Myth Versus Fact

FACT: Greenhouse gasses, principally CO$_2$, have controlled most ancient climate changes. This time around humans are the cause, mainly by our CO$_2$ emissions.

MYTH: One of the most common and persistent myths is that the changing climate is natural.

Jumping to conclusions: To infer that humans can't be behind today's climate change because climate changed before humans is bad reasoning.
Common Misconceptions

Models are unreliable!
Myth versus Fact

**FACT:** Models are based on fundamental physical principles. Models successfully reproduce temperatures since 1900 globally, by land, in the air and the ocean.

**MYTH:** A very common myth is that our climate models are unreliable.

Impossible expectations: no model is perfect but they are useful tools that can reproduce the past and provide insights into the future.
Common Misconceptions

What else have you heard in your circles?
How can we help you “answer/address” them?
FACT: The sun and climate are going in opposite directions. Over the last few decades of global warming, the sun has shown a cooling trend. Scientists have concluded the sun can not be the cause of GW.

MYTH: One of the most common myths is the sun is the cause of GW.
Myth versus Fact

FACT: Negative impacts of global warming on agriculture, health & environment far outweigh any positives.

MYTH: A very common myth is that it’s not going to be that bad.

Cherry picking: this focuses on a few good impacts of global warming but ignores the overwhelming number of bad impacts.
Myth versus Fact

FACT: 97 out of 100 of climate experts agree humans are causing GW.
Several independent surveys find 97% of climate scientists who are actively publishing peer-reviewed climate research agree that humans are causing GW.

MYTH: Another common myth is that there is no consensus. For example: OISM Petition Project claims 31,000 scientists disagree with the scientific consensus on global warming.

Cherry Picking: 99.9% of the scientists in the Petition Project are not climate scientists. Anyone with a BS or higher and includes medical doctors, mechanical engineers and computer scientists are listed.
MYTH: A very common myth is that our planet is cooling or was predicted to be heading into an ice age.

FACT: All the indicators show that global warming is still happening. In the 1970s, the majority of climate papers were predicting warming.

Mistakenly, mainstream media reports with overwhelming majority of scientific papers predicted towards warming.
Myth versus Fact

FACT: We can measure temperature in many ways and they all say the same thing - our planet is warming. The warming trend is the same in rural and urban areas, measured by thermometers and satellites, and by natural thermometers.

MYTH: A very common myth is that our temp record is unreliable.

Jumping to conclusions: just because measurements have uncertainty doesn't mean it's unknowable. The uncertainty is smaller than measured global warming.
MYTH: A very persistent myth is animals and plants can adapt.

FACT: Mass extinctions happen when climate changes too fast for species to adapt. Currently species are going extinct at similar rates to past mass extinctions.

MYTH: A very persistent myth is animals and plants can adapt.

Jumping to conclusions: just because species can adapt to some climate change doesn’t mean they can adjust to the rapid climate change happening now.
Myth versus Fact

FACT: Our planet has continued to build up heat since 1998 - global warming is still happening. Every part of the Earth's climate system has continued warming since 1998, with 2015 shattering temperature records.

MYTH: A very common myth is that it hasn’t warmed since 1998.

Cherry picking: looking at one region or a short period ignores the full picture.
Myth versus Fact

FACT: The West Antarctic ice sheet is losing hundreds of billions of tons of ice every year, making it a major contributor to global sea level rise. Satellites measure Antarctica is gaining sea ice but losing land ice at an accelerating rate which has implications for sea level rise.

MYTH: A very common myth is that Antarctica is gaining ice.

Over simplification: A number of factors may contribute to the increase in sea ice - but in no way does it change the fact that climate change is happening.
Resources

Skeptical Science
https://skepticalscience.com/docs/Fact_Myth_Fallacy.pdf

Inoculation Theory

Real Climate
http://www.realclimate.org/

You Tube: 6 Principles for IPCC Scientists to Communicate
https://youtu.be/PlN6qs55NNE

Grist:
https://grist.org/series/skeptics/
“We cannot solve our problems with the thinking we used when we created them.”

—Albert Einstein
Have the Talk: Climate Conversations
Think back to the holidays...

Think back to the holidays every year when family get together to share meals and stories.

Who has experienced family members getting into heated debates?
Roleplay 1!

- Get into pairs
- One student will try to convince the other that cats are better than dogs
- One student will try to convince the other that dogs are better than cats
- You have 5 minutes to try and convince your partner! Try your hardest!
Roleplay 1!

How did that go?
How did it feel trying to be convinced of something?
It’s all in your head

Why do you think people get turned off talking about climate change?

What emotions might come up for people?
It’s all in your head

These emotions can make it hard for people to open up and talk about climate. The brain lights up in alarm and shoots up defense mechanisms like:

- **Denial**: denying the problem even exists
- **Avoidance**: avoiding the problem or conversation
- **Minimizing**: making the issue seem like not a big deal
- **Blame**: blaming others for the problem

Has anyone ever felt these or notice others have felt this when talking about a sensitive topic?
Demonstration

Script between two volunteers
BREAK
The Secret to Talking about Climate Change

Neuroscientists and psychologists have found that conversations can profoundly help this situation. Take a look:

Your task

You’ll practice having climate conversations then plan to have one with a family member, co-worker, or friend in your life.
OARTAC

- **Open**: How you open and set the tone for the conversation. Ask to minimize distractions.
- **Ask**: Ask open-ended questions to learn and understand your partner’s experience. (Not yes / no questions).
- **Reflect**: Reflect back what you heard them say. Reflecting helps the other person know they have been heard.
Tell: Ask if you can tell something you’re feeling or are thinking about. Keep it brief.

Ask: Ask what they think about what you’ve said, other open-ended questions to learn more about them.

Close: Close out the conversation in a respectful way that hopefully leaves them open to having more conversations.
Roleplay 2!

- Take a few minutes to look at the worksheet.
- In pairs, each individual will have 10 minutes to lead a climate conversation using OARTAC.
- Use the Conversation Structure: OARTAC worksheet to help!
Roleplay 2!

How did it go?
How did it feel compared to the first roleplay?
How was it different?
Story of Self

- **story of **self  
  call to leadership

- **story of **now  
  strategy & action

- **story of **us  
  shared values & shared experience

PURPOSE

COMMUNITY

URGENCY
Have the talk

Talk with someone about climate change.
How to Enter Into a Meaningful Conversation

Be aware of mental models
Understand values
Strive to increase efficacy and hope
Use stories and pictures (when possible)
Learn how to frame the conversation
Be prepared to debunk misconceptions
Be aware of body language and attitude
Inspiring Hope

“I don’t care if what I’m doing – what we’re doing – is hopeful. We need to do it anyway. Even if there’s no hope left and everything is hopeless, we must do what we can.”

“I can rescue someone”
QUESTIONS?

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