

PROMOTING PRODUCTIVE AND HOPEFUL CONVERSATIONS ABOUT CLIMATE CHANGE

Integrating Strategic Framing Into Interpretation Practice

As the Association of Zoos and Aquarium's (AZA) recent position on climate change notes, "by communicating about the impacts of climate change on wildlife and habitats, AZA and its member institutions can play an important role in inspiring people to take personal and civic action that will help decrease atmospheric carbon dioxide concentrations to protect humankind's wildlife heritage." Simply put, informal science education centers are recognizing that they have a unique opportunity and obligation to talk more about climate change with visitors.



By Julie Sweetland

Those conversations can't wait – yet at the same time, beginning them can feel difficult or even daunting. Strategic Frame Analysis™, an evidence-based approach to communications on complex social and scientific issues developed by the FrameWorks Institute, is one way that informal science centers across the country have begun to take up the task of climate interpretation. For example, strategic framing is a cornerstone of the National Network for Ocean and Climate Change Interpretation (NNOCCI), which holds the vision of training enough interpreters with proven communications techniques to change the national discourse about climate change to be productive, creative, and solutions-oriented. Interpreters trained in this approach learn to make intentional, research-based choices about how to frame these issues for visitors – how to start, what to emphasize, what to leave unsaid, and how to make the science of climate change as “sticky,” or memorable, as possible. As a result, interpreters trained in strategic framing develop the confidence to integrate climate change topics into their interactions with visitors, learning to use live animal exhibits as teachable moments about the effects of climate change, especially on marine ecosystems.

Alumni of the NNOCCI Study Circles will tell you that there's no substitute for participating in the community of practice that is developed through these intensive trainings, but a sampler of some of the key framing techniques are included in this article. The research behind these recommendations draws on social science theory and involved extensive testing in the U.S. and Canada.

Practical Tools for Effective Climate Change Communications

Strategic Frame Analysis™ points to three powerful reframing tools – Values, Explanatory Metaphors, and Solutions – that help the public to understand why climate change is important, how it works, and what role they might play in addressing it.

Using Values to Establish What's at Stake

Values, or broad ideals about what's desirable and good, act as a starting point on a topic, guiding attitudes, reasoning and decisions that follow. Opening communications with a value can orient people's thinking on the topic, setting up for success in the interaction that follows. Among several values that FrameWorks tested experimentally, Interconnectedness and Innovation showed broad appeal. These values descriptions capture the essence of the idea; they aren't intended to be used verbatim.

Innovation/Ingenuity

We have the capacity to solve difficult problems through innovation and ingenuity. We have a history of being resourceful, clever, and thoughtful to solve problems and generate new ideas. It's time to phase out old technologies and practices that contribute to climate change, and start supporting energy innovations that benefit both our ecosystems and our economy.

Interconnectedness

Our fate is intertwined with the fate of oceans. What happens in the oceans reflects and affects what happens on land: it's one interactive system. By recognizing the connection between human practices and their impacts on marine life and habitats, we can do a better job of leaving the oceans in good shape for the next generation.

Values can be used to open conversations about a live animal exhibit (“Isn't the color on the coral reef exhibit amazing? Many scientists are applying their ingenuity to figuring out how we can restore health to the reefs, which are losing their color through coral bleaching...”) Or, they might be called upon to expand shallow thinking about the environment (“Yes, we do depend on food from the ocean, but have you thought about the way the ocean depends on humans, too? Our use of fossil fuels for energy is affecting coral reefs...”) Whether used at the beginning of a conversation or elsewhere, values are a more effective way of engaging people in an issue than framing it as a crisis or making other hyper-emotional appeals.

Using an Explanatory Metaphor to Explain the Problem

FrameWorks research supports the findings of many other studies into public knowledge of climate change: the American public simply doesn't understand how global warming works. As a result, they easily confuse the process with the ozone hole, pollution, littering, and other unrelated environmental problems. Teaching the basic science of climate change is therefore a critical step that should be built into every climate interpretation – it should never be taken for granted.

Metaphors are familiar to us all as poetic devices, but FrameWorks' research shows that they can also be uniquely powerful devices for thinking. An explanatory metaphor is a simple, concrete, and memorable comparison that quickly and effectively explains an abstract or complex topic. Among the explanatory metaphors FrameWorks tested for communicating climate change, Heat Trapping Blanket was the most consistent and reliable in expanding public understanding of how climate change works:

Heat-Trapping Blanket: Climate change is caused, in part, by the man-made blanket of carbon dioxide that is building up around the Earth and trapping in heat. The heat-trapping blanket is thickened by burning large quantities of fossil fuels such as coal, oil and natural gas. By burning these fossil fuels, we release carbon dioxide into the air where it builds up and traps heat that would otherwise escape. This blanket effect leads to the warming of the planet, and the atmospheric balance that keeps the climate stable is disrupted.

This metaphor can teach the basic mechanism of climate change in under a minute – allowing interpreters to pack more (and more powerful) explanation into visitors' learning experiences.

Building Public Awareness Of Solutions That Match The Scale Of The Problem

Highlighting what can be done to make things better is a vital part of effectively framing social problems. When communicators describe the problem but neglect to mention possible solutions, the public is left to wonder what to do about the issue, and more often than not, concludes that the problem is too big to solve. FrameWorks research revealed that a sense of fatalism is especially prevalent on the issue of climate change – making solutions messages all the more critical.

CONTINUED, PAGE 16

However, not all ways of framing solutions are created equal. When working to appeal to visitors as citizens with a role to play in a consequential issue, it's important to emphasize civic actions – those taken by communities, through policies and programs that tackle the problem collectively. Also, keep in mind that part of the role that solutions frames play is to foster hope and engagement. To do this job effectively, the solutions mentioned need to match the scale of the problem. Relying on individual actions in solutions frames – “you can do your part by changing your light bulbs” – can actually lead to greater cynicism about the issue. People intuitively sense what experts have shown: to make a difference, the changes we make need to happen on a broad scale.

Currently, the public lacks examples of these kinds of initiatives. The messaging in most zoos and aquariums lacks these examples, too. It's more typical to point to ways that individuals can reduce their personal carbon footprints through consumer or lifestyle choices. What might the impact on public thinking be if these messages were repurposed to highlight more community-level initiatives? It could be as simple as, say, substituting a message about driving less with a rich description of a local transportation initiative that reduced reliance on fossil fuels. But by shifting the emphasis from personal actions to policy actions, zoos and aquariums could contribute to reframing the public conversation from one about sacrifice to one about citizenship; from a discourse focused on loss to one focused on change.

The Climate Change Interpretation ‘Community Of Practice’ Is Alive – And Growing

As the zoo and aquarium community takes on the challenge of communicating more often about climate change, it's important to learn about what makes the difference between effective and ineffective outreach on this topic. There's solid evidence that some ways of framing the issue are likely to decrease visitor engagement – for instance, simply listing the impacts of climate change on a charismatic species. Instead, effective climate interpretation builds peoples' understanding underlying causes and introduces them to well-matched solutions, so that the public understands how to best address the problem.

These framing strategies are currently in use by interpreters across the country, supported by the National Network of Ocean and Climate Change Interpretation. NNOCCI interpreters learn about the impacts of climate change on ecosystems and how to best share that information with visitors, and support each other in taking their learning back to their institutions. To date, NNOCCI has trained staff from nearly 50 zoos, aquariums, and nature centers to effectively communicate about climate change. You can learn more at www.nnocci.org - and you can keep learning more about the framing recommendations throughout this issue of *CONNECT*.

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Communication 'Traps' in Ocean and Climate Change Communications

Framing research often yields counter-intuitive results, finding that seemingly sensible communication strategies don't always have the intended effect. Below, a few often-used communication strategies that FrameWorks Institute has found to have a counter-productive effect on public understanding of the science of climate and ocean change.

The 'Crisis' Trap

Presenting environmental issues as a crisis may garner temporary attention, but the public quickly develops 'compassion fatigue,' concluding that this is yet another dire social problem about which nothing can be done. Avoid this trap by starting communications with tested values such as responsible management to frame why the issue matters and what is at stake, and maintain a reasonable, explanatory tone throughout.

The 'Do One Thing' Trap

Highlighting the environmentally-friendly changes that visitors can make in their daily lives draws attention away from the community and regional strategies that experts say are critical to addressing the root causes of climate change. Avoid this trap by substituting individual-level actions with their community-level counterparts: instead of encouraging visitors to ride bikes rather than driving, mention a local bike-sharing initiative and tell the story of community involvement that led to it.

The 'Invisible Process' Trap

Failing to explain the causes and effects of climate and ocean change results in a lack of public understanding and thwarts solutions. Avoid this trap by using the explanatory metaphor heat trapping blanket to quickly teach the basic mechanism of climate change.

The 'Incidents and Accidents' Trap

Using highly publicized weather events or environmental catastrophes to communicate about climate change reinforces little-picture thinking about the environment and these episodic events are quickly relegated to "yesterday's news." Instead of emphasizing the details of a catastrophe, focus on teaching the broad fundamental principles of climate change illustrated by the event.

The 'Cute Critters' Trap

Relying on visitors' emotional connection to charismatic animals as a way to get visitors to care about climate change impacts can limit the conversation, obscuring a focus on the interconnected nature of ecosystems and the process by which human actions affect them. Avoid this trap by appealing to the value of interdependence: show and tell how humans rely on ecosystems and ecosystems rely on humans.



You Say...They Think

You Say	They Think	What gets triggered in their minds?	What might help?
"Climate change is real and it's happening now."	"I'm sure it will all work out...the climate goes up and down naturally, just as it has for thousands of years."	Nature works in cycles; we couldn't / shouldn't interfere	Show, don't tell. Instead of appealing to scientific authority or asserting that the phenomenon has been "proven," use the Explanatory Metaphor Heat Trapping Blanket to teach the basic mechanism of climate change. "When we burn fossil fuels like coal and gas, we pump more and more carbon dioxide into the atmosphere, and this build-up creates a blanket effect, trapping in heat around the world."
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"Ocean acidification is threatening species such as coral reefs."	"Never heard of that... but people should stop dumping pollution in the ocean!"	Acid rain causes ocean acidification	Remember that most Americans have never heard of ocean acidification. Use an Explanatory Chain that backs up a couple of steps to unpack how CO2 emissions are causing it: "When we burn fossil fuels like coal and oil for energy, we release carbon dioxide into the air. The oceans absorb a lot of this carbon dioxide, which changes the ocean's chemistry. This is called ocean acidification, and it's negatively affecting marine species in many ways."
"We all need to do our part - we need to take action on climate change now."	"I always recycle my water bottles - and I should really sign up for that beach clean-up!"	Individualism (Single-action bias) Climate change works like material pollution	Remember that vague encouragements to "do your part" will lead to equally vague, mis-matched thinking about what actions to take. Expand public awareness about what's needed by describing high-impact local or regional initiatives that are tackling the root cause by reducing carbon dioxide emissions at a broad scale. For example, "We can help protect these species through alternative transportation, such as the fleet of electric buses our city just rolled out."

