

Climate Change-Related Projects & Resources for Museums, Science Centers, Planetariums, Aquaria, & Zoos

Prepared for the Climate Change Showcase at the 2019 ASTC Conference in Toronto, Ontario

[Snow: Museum Exhibit, Educational Outreach, and Learning Research](#) - Building on the familiarity and mystique of snow, the University of Alaska Fairbanks, the Oregon Museum of Science and Industry, and COSI's Center for Research and Evaluation are partnering on Winter Worlds (Snow: Museum Exhibit, Educational Outreach and Learning Research), a collaborative project to engage audiences in snow as a platform to explore Earth's climate system and explore how culture affects STEM learning in informal settings. Resources: [2019 AISL PI Summit Poster](#)

[Science Center Public Forums: Community Engagement for Environmental Literacy, Improved Resilience, and Decision-Making](#), led by Arizona State University's Consortium for Science, Policy, & Outcomes and the Museum of Science, Boston, engaged citizens in discussions and explorations of NOAA data about climate-related hazards, resilience strategies, and related policies. The team created forum modules about four climate-related hazards, which were used as a part of forum programs at eight museums. Resources: [Summative Evaluation](#)

[6 Degrees of Influence: Understanding the Interconnectedness of Earth Systems](#) combines a Science On a Sphere presentation with a follow-up creative art activity – designed for middle school students to think of interconnections between natural and human-created phenomena on the planet. The program was developed by the Nurture Nature Center in, Easton PA in collaboration with the Maryland Science Center. Resources: [Summative Evaluation](#)

[The Hidden World of Permafrost](#) is a collaborative research project led by the University of Alaska Fairbanks and the Oregon Museum of Science and Industry. The project explores the interrelationship between thawing permafrost and climate change and builds on 50 years of informal education and outreach at the Alaskan Permafrost Tunnel, the Nation's only underground research facility related to permafrost and climate. Resources: [2016 CAISE PI Meeting Poster](#), [2018 Science for All Video](#), [2019 AISL PI Meeting Poster](#), [Project Website](#)

[CCEP-I: Climate Literacy Zoo Education Network \(CliZEN\)](#) developed and evaluated a new approach to climate change education that connects zoo visitors to polar animals currently endangered by climate change. The partnership brought together a multidisciplinary team led by the Chicago Zoological Society of Brookfield, IL, and a consortium of nine zoos across the country and Polar Bears International. Resources: [Project Website](#), [Climate Change Education: A Primer for Zoos and Aquariums](#), [Global Climate Change as Seen by Zoo and Aquarium Visitors: Final Report](#), [Youth Volunteer Interpreters as Facilitators of Learning about Climate Change: Final Report](#), and [Global Climate Change as Seen by Latin American Visitors: Final Report](#)

[Our Earth's Future](#), developed by the American Museum of Natural History (AMNH), included a series of online and face-to-face adult learning courses that focused on the topic of climate change. Resources: [Our Earth's Future Final Evaluation Report](#), [AMNH Climate Change Resources / Our Earth online course](#)

[Cultural Cognition at Yale Law School](#) is an interdisciplinary team of scholars who use empirical methods to examine the impact of group values on perceptions of risk and related facts. Researcher Dan Kahan has analyzed risk perception, science communication, and the application of decision science to law and policy making. His research has investigated public disagreement over climate change, public reactions to emerging technologies, and conflicting public impressions of scientific consensus.

[Gateway Illusion or Cultural Cognition Confusion?](#) In this paper, the authors responded to the critiques presented by (Kahan, 2017). Contrary to claims that the scientific consensus message did not significantly influence the key mediator and outcome variables in our model, we show that the experiment in (van der Linden et al., 2015) did in fact directly influence key beliefs about climate change. We also clarify that the Gateway Belief Model (GBM) is theoretically well-specified, empirically sound, and as hypothesized, the consensus message exerts a significant indirect influence on support for public action through the mediating variables. We support our conclusions with a large-scale replication.

[Global Climate Change Explorer](#), a website created by the Exploratorium, provides a platform to discover how researchers study climate change and examine the latest scientific data. Users can explore a sampling of data sets from different realms affected by climate change: the [Atmosphere](#), [Oceans and Water](#), [Ice](#), and [Land and Living Systems](#). There is also a [Looking Ahead](#) section where visitors can explore what computer models tell us about our climate's future, the impact on society, and what can be done to slow down and adapt to climate change.

[Species Loss: Exploring Opportunities with Art–Science \(article\)](#) This article explores the goals, impacts, cascading impacts, and lessons learned from art–science collaborations, as well as ideas for collaborative projects. Using three case studies based on Harrower's scientific research into species interactions, the authors illustrate the importance of artists as a primary audience and the potential for a combination of art and science presentations to influence public understanding and concern related to species loss.

Searching InformalScience.org

[InformalScience.org](#) contains a wealth of resources related to climate change and informal STEM learning. To search for more climate resources, go to the home page and click on the Advanced Search button at the bottom of the search box. Under the "Discipline," you can select the term "Climate." You can select other filters such as Resource Type, Funding, Date, or Learning Environment to further narrow your search.

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