GOALS AND STANDARDS

- 1. Draw connections between data and science storytelling.
- **2.** Practice using a claim, evidence, reasoning framework to understand a climate change topic.

NGSS Science and Engineering Practices: Engaging in argument from evidence; Obtaining, evaluating, and communicating information

NGSS Performance Expectations: MS-ESS3-3, HS-LS2-7

Common Core ELA Standards: <u>RH.6-8.2</u>, <u>RH.6-8.7</u>, <u>RH.6-8.9</u>, <u>RST.9-10.2</u>, <u>RH.9-10.7</u>, <u>RH.11-12.7</u>, <u>RH.11-12.9</u>, <u>RST.6-8.1</u>, <u>RST.9-10.1</u>, <u>RH.11-12.2</u>, <u>RST.11-12.7</u>, <u>WHST.6-8.1</u>, <u>WHST.9-10.1</u>, <u>WHST.11-12.1</u>

Common Core Math Standards: MP.2, MP.3

LEVEL

11-12 grade or anyone looking to use data visualization and analysis, surveying, and writing skills in real world applications of climate change communication science.

BACKGROUND



Science texts can be intimidating and inaccessible for students and adults alike. Storytelling in science, therefore, is a powerful tool, as it can make the inaccessible relatable. Of course, storytelling in science is based on validated evidence; scientists can use storytelling as a tool to present facts to an audience that builds understanding around science topics.

<u>Yale Climate Connections</u> uses storytelling to build understanding about climate change. Through daily 90-second radio stories, as well as articles, and videos, Yale Climate Connections "connects the dots" between climate change and energy, extreme weather, public health, food and water, jobs and the economy, national security, the creative arts, and religious and moral values, among other themes.

These stories can help explain phenomena portrayed in tools like the <u>Yale Climate Opinion Maps</u>, an interactive map that allows users to visualize and explore differences in public opinion about global warming in the United States.

ACTIVITY DESCRIPTION (40 MINS)

In this activity, students are asked to explore the relationship between a Yale Climate Connections radio story story and data from the Yale Climate Opinion Maps. Students will choose a radio story from a predetermined list. They will then select a question related to their radio story to research using the Yale Climate Opinion Maps. After listening to their YCC radio story and exploring their question using YCOM, students are asked to make a claim and then support that claim using evidence (from the radio story and YCOM) and reasoning. On the Student Page, there is an example of this exercise that they can refer to.



Figure 1. Example of a YCC radio story and related YCOM map.

TIPS FOR SUCCESS

- If you are not familiar with the Claim, Evidence, Reasoning framework, there are
 plenty of resources to help students build that muscle. Check out the <u>NSTA</u>'s and
 <u>Edutopia</u>'s collections of materials on CER for starters. You can always do this
 Connecting Data to Storytelling activity more informally as a discussion or a freewrite.
- Activities like <u>Navigating the Yale Climate Opinion Maps</u> and our <u>Question Bank</u> are
 great ways to familiarize yourself (and your students!) with the Yale Climate
 Opinion Maps and Yale Climate Connections so you can easily help your students
 with questions they may have.