Today I Learned What Americans Think About Climate Change

Description:
When discussing climate change in the media, we are often presented with two opinions: either climate change is happening, or it is not. The reality of American opinion is much more complex. After an introduction to media literacy, students explore data from the Yale Project on Climate Change Communication.

Skills & Objectives
SWBAT
• Apply media literacy concepts to evaluate a message in the media.
• Understand that American opinion on climate change is not as simple as two sides, and that most Americans are concerned about climate change.
• Describe some patterns of American opinion on climate change.

Skills
• Media literacy
• Data analysis
• Critical thinking

Students Should Already Know That
• Statistical methods can be used to model a larger population from a smaller sample size.
• Policy changes at the national, state, and local level can have an effect on climate change.

Standards Alignment:
RST.11-12.9 Synthesize information from a range of sources
HSN-Q.A.3 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.
HSS-IC.B.6 Evaluate reports based on data.

Disciplinary Core Ideas:
ESS3.D Global Climate Change
How To Use These Activities:

Pages with the circular “TILclimate Guide for Educators” logo and the dark band across the top are intended for educators. Simpler pages without the dark band across the top are meant for students.

Each of the included activities is designed to be used as a standalone, in sequence, or integrated within other curriculum needs. A detailed table of contents, on the next page, explains what students will do in each activity.

A Note About Printing

All student pages are designed to be printable in grayscale, except for the graphs on page 6. A few copies of this page could be printed color for students to share, or the image projected in the classroom.

The worksheets do not leave space for students to answer questions. Students may answer these questions in whatever form is the norm for your classroom – a notebook, online form, or something else. This allows you, the teacher, to define what you consider a complete answer.

Podcasts in the Classroom: Throughout these Guides for Educators, we invite students to think about how they would share their learning with family and friends. One way to do this is to encourage your students to create their own podcasts - they’re shareable, creative, and have multiple options for embedded assessment. We would love to hear any podcasts or see any other projects you or your students create! Email us at tilclimate@mit.edu, Tweet us @tilclimate, or tag us on Facebook @climateMIT.

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You may notice that the estimated times have a wide range. Depending on your context, you may require simpler or more complex answers from your students. More complex answers will require more time.

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Description</th>
<th>Time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Podcast Episode</td>
<td>Students listen to TILclimate: TIL what Americans think about climate change, either as pre-class work at home or in the classroom. <a href="https://climate.mit.edu/podcasts/e1-til-what-americans-think-about-climate-change">https://climate.mit.edu/podcasts/e1-til-what-americans-think-about-climate-change</a></td>
<td>10-15</td>
</tr>
<tr>
<td>1-2</td>
<td>Media Literacy</td>
<td>A brief introduction to media literacy, followed by questions to practice evaluating a climate-related message in the media.</td>
<td>10-30</td>
</tr>
<tr>
<td>3</td>
<td>Cognitive Biases</td>
<td>An optional addition to the Media Literacy introduction. Students are introduced to two major cognitive biases that affect how we receive and evaluate messages.</td>
<td>10-20</td>
</tr>
<tr>
<td>4-6</td>
<td>Six Americas</td>
<td>Students are introduced to the work of the Yale Program on Climate Change Communication, which has defined six categories of American opinion on climate change. Students learn the six categories, make some predictions, and then evaluate the results of the December 2020 survey.</td>
<td>20-40+</td>
</tr>
<tr>
<td>7-9</td>
<td>Climate Opinion Maps (internet required)</td>
<td>Students explore data collected by the Yale Program on Climate Change Communication via an interactive map-based data visualization. Then, they are asked to evaluate the data for policy support and salience.</td>
<td>30-60+</td>
</tr>
</tbody>
</table>
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What Americans Think
This Educator Guide includes readings, questions, and an investigation into data visualization. Educators may pick and choose among the pieces of the Guide, as suits their class needs.

Parts of this Guide may align with the following topics:
• Environmental science: climate change as a political matter
• History/social science: Politics, government, and public opinion
• ELA/nonfiction: Current events and media literacy
• Mathematics: Statistical data representation

For more on Media Literacy, visit https://www.commonsensemedia.org/news-and-media-literacy/what-is-media-literacy-and-why-is-it-important

MIT Resources
We recommend the following as resources for your own better understanding of climate change or as depth for student investigations. Specific sections are listed below:
• Climate Science, Risk & Solutions, an interactive introduction to the basics of climate change. https://climateprimer.mit.edu/
   - Chapter 01 A brief history of climate science
   - Chapter 02 The greenhouse effect and us
   - Chapter 07 Understanding risk
   - Chapter 09 How long can we wait to act?
   - Chapter 10 What can we do?
• MIT Climate Portal Explainers are one-page articles describing a variety of climate topics. https://climate.mit.edu/explainers
   - Greenhouse Gases
   - Carbon Pricing
   - Climate Targets
   - The National Climate Assessment
Climate Solutions

Climate solutions can be thought of as falling into four categories outlined below. Across all categories, solutions at the community, state or federal level are generally more impactful than individual actions. For example, policies that increase the nuclear, solar and wind mix in the electric grid are generally more effective at reducing climate pollution than asking homeowners to install solar panels. For more on talking about climate change in the classroom, see “How to Use This Guide”.

• **Energy Shift**
  How do decision-makers make the switch from carbon-producing energy to carbon-neutral and carbon-negative energy?

• **Energy Efficiency**
  What products and technologies exist to increase energy efficiency, especially in heating and cooling buildings?

• **Adaptation**
  How can cities and towns adapt to the impacts of climate change?

• **Talk About It**
  Talking about climate change with friends and family can feel overwhelming. What is one thing you have learned that you could share to start a conversation?

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Wrap-Up Discussion Questions

• Media literacy: Why is it important to pay attention to the who, what, and why of a message in the media?

• Six Americas: What do you think about these categories? How would you describe them in your own words?

• Six Americas: What events, stories, or people may have influenced the changes you noticed in the data over time?

• Climate Opinion Maps: What do you think impacts people’s opinions on climate policy?

• Climate Opinion Maps: Were you surprised by any of the results?

• If you were designing a survey about people’s opinions on climate change, what questions would you ask? Why?