Making it real

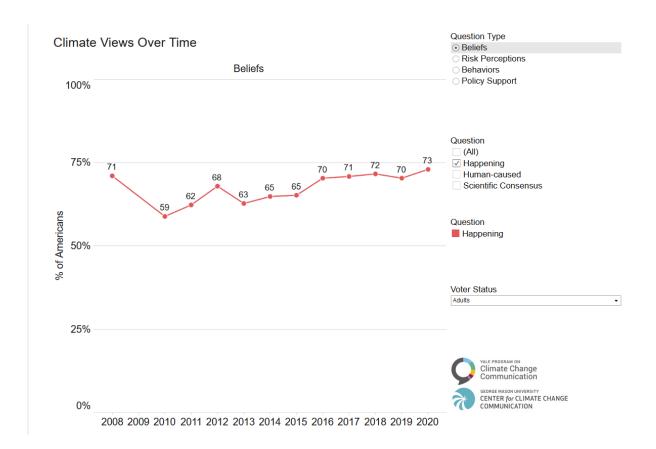
For many Americans "climate change" may feel like an abstraction, not (yet) personally experienced, seemingly far away, maybe happening to someone else, may happen to someone some other time.

Consider these polling results: (https://climatecommunication.yale.edu/visualizations-data/americans-climate-views/)

As of 2020, 73% of the American public agreed that climate change is happening.

Global warming is happening

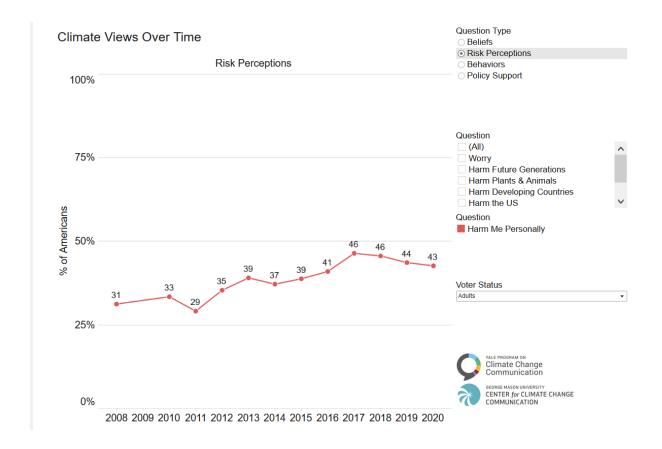
Q: "Recently, you may have noticed that *global warming* has been getting some attention in the news. Global warming refers to the idea that the world's average temperature has been increasing over the past 150 years, may be increasing more in the future, and that the world's climate may change as a result. What do you think: Do you think that global warng is happening?"



But only 43% said they believed that they would be personally harmed by that:

Global warming will harm me personally

Q: "How much do you think global warming will harm you personally?"



Is this a problem when teaching the sociology of climate change?

On the one hand, polls show younger cohorts consistently more likely to agree that climate change is happening, is serious and is caused by human activity. Polling conducted prior to the 2020 elections showed that college age voters considered climate change their most important issue. (https://www.tun.com/blog/poll-climate-change-is-the-top-2020-issue-for-college-voters/; https://thehill.com/hilltv/rising/487048-polling-firm-38-percent-college-students-climate-change-top-issue).

On the other hand, even in the younger cohorts roughly 20% – 1 in 5 – expressed skepticism about climate change. (See, for example, polling data from Pew Research Center at https://www.pewresearch.org/science/2015/07/01/chapter-2-climate-change-and-energy-issues/.) One in five is a minority but in the classroom that's not a trivial minority. And that's just the percent who are skeptical or unconvinced. Add to that those who say climate change is a real thing but do not really feel in their gut that they should care ...

So, what can be done to help make climate change *real* to students?

The first thing to note is that, unfortunately, time is on our side ... in the sense that even if the world starts moving toward more effective responses to the climate threat, impacts will continue to worsen for some years, perhaps decades. (Because, scientists tell us, earth systems are not in equilibrium; the oceans, which have taken up much of the excess solar radiation/heat that greenhouse gases have been trapping, will, over time, release that heat, warming the atmosphere even if concentrations of atmospheric CO2 are no longer increasing.)

The effects of climate change will become, inevitably, more visible, more palpable over time. But that isn't of much help right now...

What, then, can one do now to make it real?

One possibility – but this would require some "homework" by the instructor – would be to do a search in the recent science literature, either directly or as reported in leading print media, for articles that causally attribute one or more current events to climate changes that have already happened. is already having many impacts. In the past year, alone, I can recall the following phenomena that have been causally attributed to climate change:

Extreme heat events, heat records broken

Persistent deep drought

Extreme rain events

Tornadoes out of traditional tornado season, out of traditional tornado alleys

Wildfires

Weather anomalies attributed to changes in the jet stream

Changes in the thermohaline circulation (aka meridional overturning circulation)

Glaciers melting, speeding up (Antarctica, Greenland, Himalavas)

Sea level rise

More intense hurricanes

Permafrost thaw

Shrinkage of Arctic ice

Some of which have begun to have impacts on:

Fishing, farming

Access to adequate quantities of clean water

Economic losses

Migration

Presenting such evidence might be one way to make the argument that the issue is real and worth caring about. As William Gibson (the sci fi /cyberpunk author of the book *Neuromancer*) once said, "The future is already here – it's just not evenly distributed."