

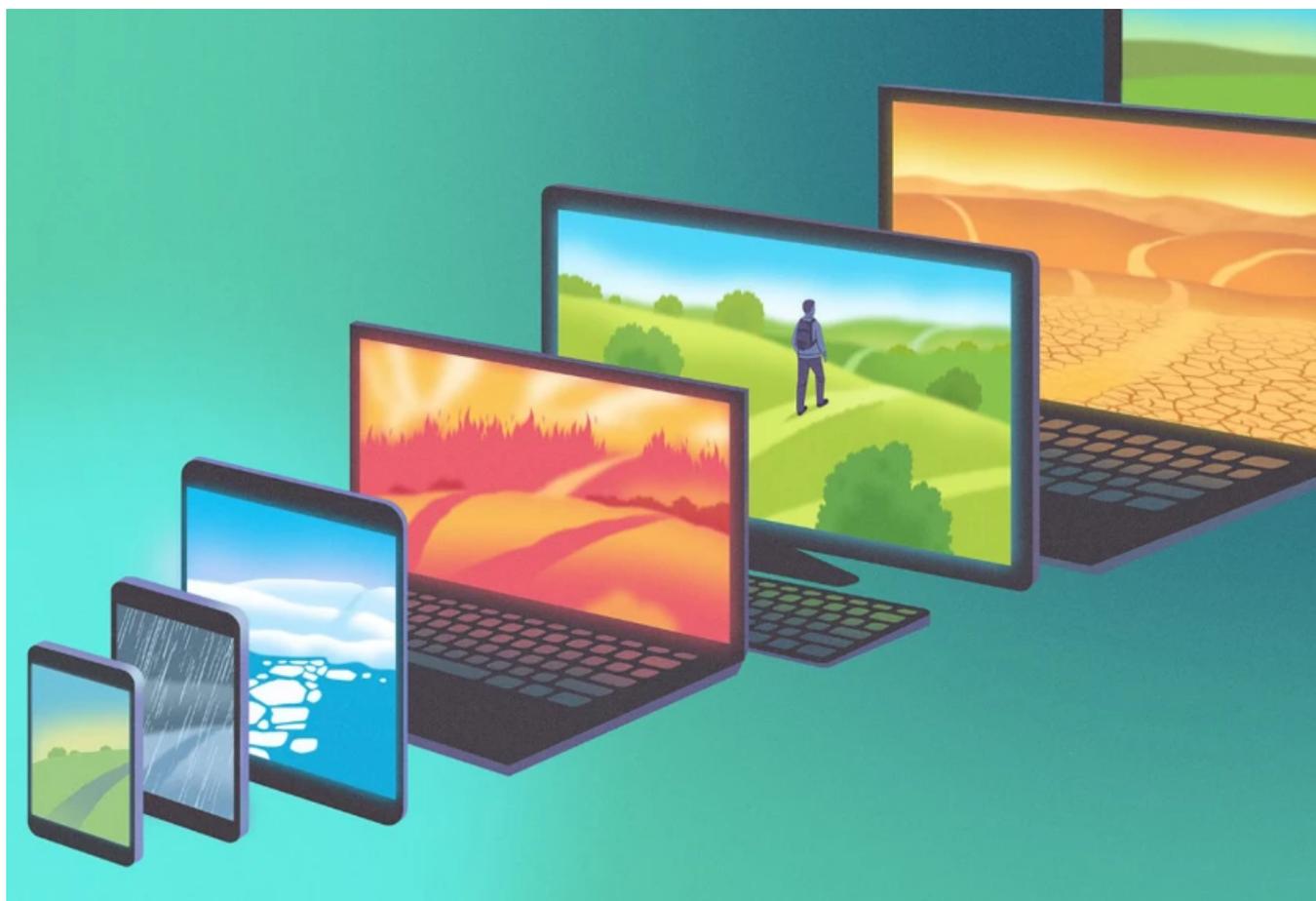
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CLASSROOM TECHNOLOGY

Most Teens Learn About Climate Change From Social Media. Why Schools Should Care



By [Arianna Prothero](#) — January 30, 2023 ⌚ 9 min read



— Dan Page for Education Week

Social media can be a place rich in new perspectives and connections. It can also be a cesspool of misinformation, lies, and conspiracy theories.

It's here that many teens are learning about climate change—a fact that brings with it huge implications for not only the planet and society, but for educators who are charged with

preparing their students for the world beyond the classroom.

Fifty-six percent of 14- to 18-year-olds said in a recent EdWeek Research Center poll that they learn “some” or “a lot” about climate change from social media such as YouTube and TikTok. Among those, a quarter learned a lot.

“I feel like social media is the best way to spread information about this topic to our generation,” said Gabriela Barreto, a high school senior and student activist in Cutler Bay, Fla. “I can’t think of anyone who watches the news like our parents.”

This fact underscores the critical importance of teaching media literacy in schools, educators and experts say. Teens—and adults—can struggle to disentangle fact from fiction on social media and suss out the ulterior motives of content creators.

“I commonly get the question: Whose job is it to teach digital media literacy? The teachers, the parents? I find that teens are mostly teaching each other,” said Lauren Bagdy, an assistant professor of learning, design, and technology in the University of Georgia’s college of education. “They learn from their friends, their older brother, which is not necessarily problematic unless they are teaching each other bad practices.”

Social media is the third most-cited source of information on climate change, following teachers and parents, among the nationally representative sample of teens surveyed by the EdWeek Research Center last fall.

Two-thirds of teens said they had learned some or a lot about climate change from their teachers, the most-cited answer, and 64 percent said the same of their parents.

 A Flourish chart

YouTube is where the largest share of teens—60 percent—say they have seen information on climate change. Facebook, where 46 percent of teens said they have come across information on climate change, was the second most-common source of information, closely followed by TikTok and Instagram.

While the popularity of YouTube, Instagram, and TikTok is no surprise to Bagdy, she said the large proportion of teens who said they get information about climate change from Facebook was unexpected.

Facebook use among teens has been declining for quite some time. Bagdy said that teens mostly see Facebook as a space for adults. But, she added, when teens do use Facebook, it's primarily to connect with family members—who might be sharing articles about climate change or posting their own opinions.

 **A Flourish chart**

Jessica Baltaxe, a high school junior in Fairfield, Calif., said a lot of climate change-related content that she sees comes from the influencers and celebrities she follows, and it's mostly

forgettable.

But then there are images that she will see that she describes as more “polarizing,” that appear to be designed to evoke emotion.

“More of the climate change stuff I just stumble across is really extreme pictures,” Jessica said. “Like a mound of trash in the ocean, or I saw pictures of polar bears eating each other because there is no food and their stuff is melting. It seems like they are using images more on Instagram, which makes sense, to create a strong impression.”

Jessica thinks that when she was a 7th grader first starting out on social media, these images would have grabbed her attention or caused her more worry than they do now that she has a few years of social media use under her belt.

Across the country in Medway, Mass., high school senior Julia Francis says when she chances upon content on climate change, it’s often on YouTube, where she usually goes to watch clips of “Saturday Night Live.”

“I think that’s because the YouTube algorithm has figured out that’s something I would be interested in,” she said.

Julia also gets climate change information from news accounts on Instagram like The New York Times and The Washington Post, and environmental accounts she’s deemed trustworthy. When Julia does come across a climate change conspiracy theory or disinformation, she said it’s usually because an account she follows is debunking it.

Both Julia and Jessica say they’ve learned some about climate change in school. Jessica said she thinks she remembers it being discussed a fair amount in biology class, while Julia recalls the subject only being briefly touched on in a science class. Julia said most of what she has learned on the topic has instead come from her parents, books, and social media.

How to help teens weed out bad information on social media

Whether students are seeking out information on climate change or stumbling upon it can make a big difference in how they interpret and digest it, said Bagdy, who studies how

teenagers learn informally through social media.

“Is this really self-directed, or is it just coming up on their TikTok feed?” she said. “If it’s self-directed, they’re taking the initiative, and that gives way to digital media literacy. That means you can teach them how to look for information and how [to be] more purposeful.”

Those media literacy skills include:

- checking claims with reputable sources and not trying to determine the veracity of information by what’s on the page alone (also known as lateral versus vertical reading);
- understanding how algorithms manipulate what a user sees on social media;
- questioning the motives of content creators; and
- recognizing when online content is trying to evoke a strong reaction and goad users into sharing something without stopping to evaluate its accuracy first.

But there’s a catch. Teens may be less likely to draw on those media literacy skills, said Bagdy, when they are passively consuming content and incidentally come across something related to climate change.

Jeff Adkins, a high school science teacher in Antioch, Calif., is a big proponent of teaching these skills. He encourages his own students to draw on what they learn about scientific literacy and apply it to their online lives.

“I want people to examine the scientific claims: Is it primary or secondary information? All that dovetails with media literacy,” he said. “I think the issue with the public is a lack of scientific literacy. People expect scientists to say, ‘This is the fact forever,’ but professional scientists don’t like this language. They admit that there is a possibility it will be wrong, but that doesn’t mean that there is a lack of confidence in their results.”

While almost all of Adkins’ students have told him they believe the climate is changing, several remain skeptical that it’s related to human activity.

It worries Adkins how big of a microphone social media can give climate deniers, and he said he tries to impress upon his students how, unlike a scientific study published in a journal, there’s little to no quality control over what appears on social media.

Companies such as Meta, which owns Facebook and Instagram, have taken steps to address climate change misinformation on their platforms like adding fact-checking labels to climate change content. Google pledged in 2021 that it would not display ads on websites and YouTube videos that deny climate change. But a lot still slips through the cracks, as a [2021 analysis of Google's ad ban showed](#).

While social media can be a vector for disinformation to cloud impressionable young minds, the extent that it's actually doing so is less clear.

In Education Week's survey, 79 percent of high school students said that climate change is happening, and that it's primarily caused by human activity. While they have that fact down, students are less certain on the mechanics of climate change.

Forty-six percent of teenagers said in EdWeek's survey that the hole in the ozone layer created by gases from spray cans and refrigerators is a significant contributor to global warming. More than a quarter of students said that solar flares and increased radiation from the sun have been a major driver of global warming since the 1800s, and nearly 1 in 5 said that volcanoes are a major source of the greenhouse gases contributing to climate change. All three statements are false.

Even so, Adkins said that over the course of his 25 years as a teacher, the share of his students who believe that climate change is happening and is driven by industry and fossil fuel emissions has increased.

Teens are also getting savvier on social media, said Elizabeth Kirman, a high school science teacher in the lower Dauphin school district in Hummelstown, Pa. She said she's seen a big change in her current students versus those she taught only five years ago.

"They are much more aware of misinformation or disinformation, and they are much more critical of who they follow," she said. "Being on TikTok is fun, but just because somebody famous says it, [students] don't necessarily think that it's true."

She said her students tell her that they get a lot of their information on social media by following climate change hashtags across their favorite platforms, rather than following specific people or groups.

Social media: a source for knowledge and thoughtful discourse?

As long as teens have strong media literacy skills, social media can be a valuable source of information, including as a way to supplement what they are learning in the classroom, said Bagdy.

“I think social media is incredibly empowering to young people especially when it comes to big issues like climate change,” she said. “If they aren’t getting this information from school, or a teen has different opinions than their parents, they can go to these platforms that are free and learn from others.”

Social media can connect teens with communities formed around their interests. It has also become [a powerful tool in their activism](#), as seen by mass protests around climate change and gun violence organized largely on Twitter and other social media sites.

Gabriela, the 18-year-old from South Florida, said it was through social media that she got interested in climate change activism at the end of her junior year of high school.

“Particularly what inspired me was seeing something about ice caps melting,” she said. “I was really moved by the video I saw.”

She eventually found her way to the nonprofit [Action for the Climate Emergency, or ACE](#), which creates social media content on climate change and helps support a national network of young climate activists. Gabriela recruited some of her friends, and together they have attended protests, spoken at local government meetings, and organized petitions.

But for Gabriela and many of her peers, it’s not just videos on TikTok or captioned photos on Instagram shaping their views on climate change. It’s also what’s happening in the real world around them every day. For Gabriela, who lives in the greater Miami metro area, that’s flooding.

“Sea level rise is getting worse and that is pushing people out and driving up housing prices,” she said. “I live with that fear that I don’t think I’m going to be able to live here for the rest of my life.”



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