



Youth Production of Digital Media to Address the Climate Crisis

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Abstract

This article describes the value of having youth produce digital media—videos, social media, digital images/art, digital stories, and online writing to address the climate crisis. While students are engaged with and producing media on their own, teachers and project coordinators can support students by drawing on examples noted in this article to provide students with technical support and examples for producing different types of digital media.

Keywords

[digital media](#), [ecomedia](#), [social media](#), [climate activism](#), [youth climate activism](#)

Youth are highly concerned about the need to address the climate crisis. In one survey, 59% of youth worldwide note that they are extremely or very worried, and 84% are moderately worried about climate change impacts (Hickman et al., 2021). Given these concerns, 45% experience [anxiety](#) related to how climate change is impacting their lives.

Youth Uses of Digital Media to Communicate About the Climate Crisis

To share their concerns about climate change impacts, youth are turning to digital media: their default platform to communicate with others. 13-to 18-year-olds engage in about

an average of eight-and-a-half hours of screen media daily, with YouTube, Snapchat, and TikTok being the most popular platforms (Common Sense Media, 2022). 56% of American youth are frequently referencing climate change topics online and 45% are posting messages about climate change through use of media (Tyson, 2021). For example, Greta Thunberg's Instagram post about the School Strike for Climate in 2018 led to worldwide youth participation on the Fridays for Future strikes platform fridaysforfuture.org (Hawley, 2022). Other youth employ YouTube, TikTok, Instagram, and Twitter to communicate the need for collective action (Sorce & Dumitrica, 2021).

Youth employ a range of types of digital media—videos, blogs, podcasts, digital art/music, or online writing—to portray climate change impacts and connect with local/global audiences (Beach & Smith, in press). To successfully mobilize climate action, young people need to know how to effectively employ different media tools and how to effectively communicate the need for change. They need to be able to employ these tools to assume activist roles and inspire their audiences to activism too.

"For the vanguards of the present dreaming up new ways to fight global warming...this is an essential point: that the shape and extent of the change they seek depend as much on the tools they use as it does on their own will and hunger" (Beckerman, 2022, p. 2). This suggests the need for engaging youth in projects or classroom instruction that provide technology support and training but also supports students to assume activist roles as change agents when they experience positive uptake from their audiences.

This article summarizes youth use of media to address climate change in our forthcoming book, *Youth Media Creation on the Climate Crisis: Hear Our Voices* (Beach & Smith, in press). The book includes chapters on youth producing videos, digital images/art, social media, digital stories, and online writing media production. Here, we describe examples of the authors' own media projects from selected chapters, as well as related research on producing these different types of media. You can access chapter summaries and related links, activities, and readings on the use of media for communicating about climate change on the [book's website](#).

In the introductory chapter, Marek Oziewicz and Scott Spicer posit the importance of engaging youth in media production related to addressing climate change. Given that media is central to how youth communicate and interact with others in their lives outside

of schools, they argue that teachers or project coordinators need to draw on and transfer these experiences for engaging school and project contexts. This can be done by providing technical training as described in Spicer's (2022) book, as well as by creating venues for students to share their media productions—say, a video critiquing the [“fast fashion” clothing industry](#)—with the general public. One example of such a venue is the University of Minnesota's [Student Produced Sustainability Project Gallery](#).

Oziewicz and Spicer also note the importance of producing media based on cultural perspectives related to moral and ethical concerns about the future of the planet. Portraying and critiquing how the “stories-we-live-by” have shaped our actions—for example, narratives of domination and conquest of nature—can lead to imagining alternative, novel narratives for a sustainable human interaction with the environment.

Video

Youth produce videos to visually portray climate change impacts, record examples of people engaged in protests, enacting adaptation, or mitigation solutions to climate change. In his chapter, Steve Goodman describes how in the [Education Video Center project](#), youth produce documentary videos about environmental justice issues that adversely impact low-income neighborhoods. For example, [Shame on You! That Can Be Reused!](#) confronts the adverse health effects of pollution from trucks on people living in South Bronx neighborhoods (Goodman, 2020). [In another project](#), the Climate Change Initiative at the University of Massachusetts, Lowell, youth generate PSA videos with a more global framing, focusing on the need for understanding climate change as a global phenomenon, as evident in the [Your Voice video](#).

Youth may also frame their videos to portray local versus global climate change impacts. As part of the [Lens on Climate change \(LOCC\) project](#) at the University of Colorado, youth-produced videos spotlight local climate change impact (Littrell, 2022), including the effects of droughts in students' Colorado communities. An analysis of youth participation in the LOCC project found that their participation in the project enhanced students' *re-seeing* (through their visual portrayals of climate change impacts), as well as their *re-enactment* (by shaping their thinking around how they could help their communities) that translates into direct action or continued communication with family

or community members about climate change and other environmental challenges after the program (Littrell et al., 2022, p. 18).

Digital Images/Art/Music

A number of chapters in the book describe youth's production of [digital images/art related to climate change](#). In their chapter, Michelle Jordan, Catherine Lockmiller, and Steven Zuiker describe a project in which high school students participate in a summer solar engineering project related to enhancing the understanding of and the need to use media to promote the use of solar energy. Students then created multimodal slide presentations to portray what they learned about use of media for promoting solar energy. Youth participated in the "[Polar Army](#)" [artwork project](#) (Madder, 2017) and the [Art for Adaptation project](#), using art in ways that change their perceptions of climate change (Bentz, 2020). In their chapter, "Addressing Climate Change and Sustainable Energy Futures Through Creative Music Engagement," Evan Tobias, Kyle Bartlett, Michelle Jordan, and Steven Zuiker, describe how students produced music related to the use of solar energy.

Social Media

Youth frequently employ social media to post about climate change (Tyson, 2021). They use hashtags such as #climatecrisis #climatechange or #FridaysForFuture to interact with others and organize protests such as the School Strike 4 Climate (Boulianne et al., 2020). As Claire Napawan, Brett Snyder, and Beth Ferguson note in their chapter, youth use social media to communicate with followers in ways that build community and enhance their sense of being climate activists. In her chapter, Natallia Goshylyk provides examples of how youth insert emojis and images in their posts to enhance audience engagement. In their chapter, David Rousell, Amy Cutter-Mackenzie-Knowles, and Thilinka Wijesinghe, describes the creation of the [Climate Action Adventure! app](#) as a game-like, social media space for students to share their responses to images and artwork about climate change.

Digital Storytelling

Youth also create digital stories to portray perspectives on climate change. In their chapter, Shiyang Jiang, Blaine Smith, and Ji Shen describe how middle school students adopt the roles of writer, producer, director, cameraperson, or/and editor to create digital stories on sustainability issues, particularly in the Miami area (Smith et al., 2019). In her chapter, Linda Buturian describes how her students [create digital stories](#) about climate change impacts. By responding to novels, graphic stories, and poems in her course [Creating Identities, Learning in and Through the Arts](#), students create digital stories—many of which are [included in her book](#) (Buturian, 2022)—to portray, for example, the adverse [effects of flooding](#) or [waste deposits](#) on the Mississippi River.

Writing for Planning Media Productions and for Communicating on Media Outlets

It is also important to recognize the value of using writing for planning media productions and communicating on media outlets. In his chapter, Antonio Lopez describes the importance of creating scripts and storyboards to plan for the production of videos or podcasts. Youth are also producing writing to share on media outlets such as the [Youth Voices climate change page](#). In their contribution, Liane Xu, Julian Arenas, and Ardra Charath, youth editors on the [Youth Think Climate \(YTC\) Magazine](#), sponsored by the [Action for Climate Emergency](#), describe how they solicit and publish essays, narratives, poetry, art, and music by and for young people. Emily Polk's chapter, in turn, describes having students in her Stanford University composition courses investigate local climate justice issues to then write about them by creating podcasts, blog posts, or submissions to magazine/news outlets.

Teacher Support for Media Production

In conclusion, while students are actively engaged in using media to communicate about climate change outside the classroom, teachers and project coordinators can certainly provide support for engaging students in media productions as part of the schoolwork. In doing so, they need to consider the digital divide related to variations in students' access to digital tools as well as differences in their previous experience in employ these

tools. Within school contexts, teachers may want to draw on assistance from school technology support staff. Within university contexts, teachers may consider interacting with faculty associated with units, centers, or departments focused on climate change or environmental studies. Teachers can support students' media production by:

- having students acquire scientific information about climate change to produce valid information about climate change
- having students clarify their purposes for producing media
- providing instruction on production techniques, for example, how to employ visual images or graphics ([Byrne, 2022](#))
- giving students options for use of different media types (Bernier, 2020).
- creating organizations or clubs within school to support collaborative media production.
- providing relevant feedback to enhance student development in media productions
- having student share media productions through youth-oriented projects such as [Action for the Climate Emergency](#), [Young People's Trust for the Environment](#), [The UK Youth Climate Coalition](#), [Climate Change Education](#), [Youth4Climate](#), [Young Voices for the Planet](#), [Our Climate Our Futures](#), [Connect4Climate](#), and the [Climate Reality Project](#)
- having students employ digital visualization tools for acquiring data or images about climate change impacts in certain regions or communities using tools, such as [Climate Interactive](#), [Community Viz](#), [National Climate Assessment](#), [Visualizing Change Toolkit](#), or [Visualizing Change](#).

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