From Passive Observers to Local Actors: Influence of Media Framing on Environmental Engagement among Underserved Student Populations

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Abstract: This study explores environmental awareness and engagement among rural, working-class students in the United States—a social group often identified as passive observers of youth activism. This research examines the underlying reasons for this phenomenon and the societal factors that drive individuals to participate in environmental initiatives. It is based on a survey and experimental research conducted among 90 community college students on Eastern Long Island, New York, most of whom are first-generation college students and come from relatively conservative, rural or small-town communities. After responding to questionnaires regarding their learning experience on environmental issues in school, participants were asked to view two short videos reporting on climate change with contrasting framings: one more global and science-driven, focusing on the causes and effects of climate change, and the other more local and narrative-driven, reporting small technological solutions. Their reactions to each report were collected in open- and closed-ended questions. The study indicates that most participants had minimal opportunities for learning about the environmental crisis in their prior education and community interactions, and they do not perceive the urgency of taking action. In addition, while they recognize the value of scientific validity, they are more inspired by optimistic narratives that highlight applications and achievable solutions in their real lives. These results underline that tailored communication strategies and curriculum reform play key roles. Especially in underserved collegiate populations, education and media framings that connect local relevance, emotional engagement and hopeful messaging are most effective in fostering sustainable awareness and civic engagement.

Keywords: environmentalism, activism, media, rural, inequality, youth

Introduction

Environmental issues have been a major concern among today's young generation. In response to this imminent threat, Gen Z students are emerging as powerful advocates for natural protection and climate justice, as evidenced by such youth-led activism as the Sunrise Movement and Zero Hour. Numerous studies have shown that younger Americans tend to hold more pro-environmental attitudes than older cohorts. Pew Research Center (2021) reports that nearly 70% of Gen Z respondents believe urgent action is needed to address climate change, compared to just over 50% of Baby Boomers. Today, high school and college students participating in these movements often describe their environmental activism as both a moral duty and a response to political inaction (Boulianne et al., 2020; Han & Ahn, 2021; Pew Research Center, 2021). Yet, these studies also highlight underlying challenges in this growing trend. Naseif et al. (2025) note that environmentalism is disproportionately prevalent among college-educated youth in urban areas with higher socioeconomic backgrounds, and this leaves Gen Zers from other demographics out of the movement. Wiley et al. (2024) argue that, especially for marginalized youth, participating in environmental actions has often been perceived as a luxury or a privilege. The existing disparity within this generation has hindered environmental initiatives from advancing in wider geographical, socioeconomic, and political circles. This research explores the societal factors that hinder underserved Gen Z students from engaging in environmental initiatives. With the presentation of the findings, this study also aims to provide a potential response for filling the gap in environmental literacy and engagement within this youth generation.

　　Scholars of youth studies recognize the social characteristics of Gen Z as digital natives, a high value on social justice, embracing diversity, community-oriented, and open to

alternative education (Cox et al., 2023; Twenge, 2023). Driving from these distinctions, scholars of environmental studies attribute more involvement on green activism among this generation, compared to previous ones, to three primary factors: 1) greater exposure to environmental education in schools (Krasny, 2020; Monroe et al., 2019; Stevenson et al., 2013); 2) digital media engagement with climate issues (Anderson & Jiang, 2018; Literat & Kligler-Vilenchik, 2022; Pandit et. al., 2025; Sultana, et al., 2024); and 3) lived experience of environmental degradation, such as extreme weather events (Clayton et al., 2017).

Drawing from these generally identified attributes among Gen Z, this study investigates (1) the level of exposure to environmental education among socioeconomically and geographically underprivileged students and (2) the effective digital media framing of climate issues that foster their sustainable awareness and engagement. It hypothesizes that this particular group is significantly disadvantaged in accessing environmental education, resulting in low environmental literacy and a lack of interest, and thus, becomes a passive observer of the movement. To encourage their engagement, instead of focusing on scientific explanations and the devastating global consequences, which are often successful in evoking a strong emotional impact and serving as an effective learning medium in formal educational settings, a micro-level framing of the issue, focusing on relatable local solutions and personal relevance, would be a more effective tactic.

Methods

This research employs two primary methods: a survey and an experiment. The survey inquires about participants' learning experiences of environmental issues in high school and college, and their views on environmental actions, using both closed-ended and open-ended questions. Using both formats enables participants to share their thoughts in both structured and flexible manners. The survey collected valid responses from 90 Gen Z students from general education classes at a community college located on Eastern Long Island, approximately 70 miles from New York City. Most of the participants had recently graduated from local public high schools in small towns or rural areas in this region, where residents often identify as middle- and working-class, and politically conservative. The majority of the participants work for 20 to 40 hours a week while being full-time students. These students reside with their parents or guardians and commute to school by car or local bus. Most of them are first-generation college students, and their career and academic interests vary, ranging from fields such as criminal justice, nursing, early childhood education, social welfare and auto mechanics.

The second part of this research asked the same participant population to view two YouTube videos addressing climate change and identify which presentation is more convincing to them in taking pro-environmental action. The videos were selected for their distinctively different approaches in framing the climate change crisis and its impact on human lives. Both media contents were produced by highly regarded media corporations supported by a significantly large number of subscribers. Each presentation is approximately five minutes in length.

The selection of the video contents and framings is drawn from studies by Clayton & Karazsia (2020) and Ojala (2016), which suggest eco-anxiety presented on social media can either motivate or discourage sustainable actions among today's young generations, and research by Hazboun et al. (2019), Morris et al. (2019), and Olson Hazboun et al. (2019) revealing the substantial impact of the media frames on audience reaction in socio-political contexts. Each selected video intends to evoke a different emotion about the future of climate change in its viewers. The first presentation is titled "The Tipping Point | Climate Change: The Fact," produced by the British Broadcasting Corporation Earth (BBC), which channel has 13.8 million subscribers on YouTube. This content provides a scientifically rigorous overview of the current state of climate change and its future predictions. It cites numerous research studies and focuses on macro-level issues, highlighting the global impact of climate change

on ecosystems and human lives. The program highlights the severe consequences, particularly for developing countries. The second program, "Why It's Not Too Late to Turn the Tide on Climate Change," was presented by the American Broadcasting Company News (ABC), which holds 18.8 million subscribers on YouTube. Unlike the BBC's global perspective, this focuses on more localized issues and reactions. It showcased the initiatives of small businesses in the participants' nearby towns and their work to develop and implement environmentally friendly technologies. To avoid the viewer's recency bias, the order in which these two videos were shown was switched randomly.

After viewing both programs, a closed-ended question asked participants which content they found more convincing in motivating them to take action on climate change. Then, open-ended questions asked them to compare their thoughts on the two presentations and describe their reasons for their preferences.

Results

The survey reveals that participants have had very limited exposure to learning about environmental issues in schools. As many as 40 percent of them reported that none of their high school classes ever discussed environmental issues. Even among 60 percent of the respondents, who reported that their high school teachers spent at least one whole class period discussing related issues, the most frequent topics were introductory ones such as climate change, pollution, and recycling. 82 percent of the survey participants said they had never heard about other crucial topics in school, including overfishing, biodiversity loss, and sustainable agriculture.

The following students expressed a lack of learning opportunities in high school in these ways:

"Our classes revolved around states' standardized-test subjects, and none of my teachers or friends framed climate or conservation issues as personally urgent. Living in a quiet. small town neighborhood where recycling bins were the most visible "green" gesture, I assumed bigger environmental problems were already being handled by experts."

"My high school did not prioritize teaching students about climate change issues. There were few classes where climate change or environmental injustice was even mentioned. Social Issues is a mandatory class to graduate but we did not discuss climate change or air/water/light pollution the entire year. The Earth Science classes did not mention climate change at all."

"I unfortunately did not learn much about the environment in high school and an interest for me to research environmental issues is a rare occurrence."

The above comments highlight two distinct characteristics that surround underserved Gen Z students, namely, a lack of access to environmental education and community engagement in environmentalism. The state where they reside requires all public high school students to pass the standardized tests to earn a diploma. Some schools that hold academically struggling large student bodies tend to focus more on test preparation to increase their graduation rates, leaving little space for students to explore additional subjects. On other occasions, schools are unable to offer many elective courses due to financial constraints, as well as a low number of students who take extra classes beyond the required ones. In addition, at the postsecondary level, these community college students are often more required and enrolled in vocational-oriented training classes rather than liberal arts and science courses. In fact, 70 percent of the students responded that few or no classes they have taken at college so far addressed environmental issues. Because of this, underserved Gen Z students often lack opportunities to be exposed to environmental discussions, even in postsecondary education. This is a significant contrast to the standard curriculum among wealthy, suburban, and urban school districts and four-year postsecondary institutions, where various advanced science, humanities, and social science courses are offered and even required for graduation.

Additionally, as the above first respondent underlines, youth who grew up in not-so-environmentally active communities in rural areas may not develop the view that the threat is imminent and instead may adopt a more laid-back attitude toward the issue. This social surrounding and community discourse are distinct from those typically found in economically advanced urban areas, where youth can encounter green space and activities more frequently in their neighborhood. The following respondents describe the influence of their immediate social circles in these ways:

"I've never really had any interest in environmental issues, because my friends aren't into it either, and my family doesn't talk about it much, so it just doesn't seem important to me."

"I've rarely sought out information about environmental issues. Environmental topics aren't often brought up in my friend group or in casual conversations, so there hasn't had much social motivation to learn more."

When people do not see anyone close to them engaging in environmental action, it is hard to behave differently and envision that their own small effort will pay off in solving a large social issue. Corresponding to this general prediction, their responses to the open-ended questions indicate that many students see the issue as far distant from their own lives. These comments often imply a sense of powerlessness and distrust in the individual's ability to change the future course of large-scale issues. These views are vividly expressed by the following responses:

"I guess the reason why I'm not into it is because it has really nothing to do with my life… why am I going to play a little part that does not impact at all? My part is really not going to do anything."

"I don't think it's something that truthfully interests me. I understand it's important, but what's one person compared to millions of others that aren't doing the right thing?"

"I'm not interested in this topic because I don't have much knowledge of the subjects other than what we learned in class. I had a well understanding that one person can't make a big difference in terms of largely scaled issues."

On other occasions, respondents also attributed their lack of interest to their psychological distance from the larger societal concerns. The following comments represent these views:

"When I was in high school, I rarely sought out information… Most of the discussions felt distant or focused on large-scale problems that didn't directly impact my everyday life."
"I honestly haven't gone out of my way to learn about environmental issues. It isn't that I don't care… It just doesn't feel like something that directly affects my life."

In addition to their psychological distance and avoidance of dealing with the large-scale social issue, some mentioned that finding solutions is not their job, but rather someone else's, who is more expert in the field. The following responses illustrate this view:

"I don't think it's something that truthfully interests me, but someone must be doing something in that field to try and make a change because there's only so much one person can do."

"I guess the reason why I'm not into it is because it has really nothing to do with my life...There is a more qualified and knowledgeable person out there who can better justly fight for the environment than I could."

"It wasn't that I wasn't interested…I just didn't feel a strong personal connection. Environmental science was a school subject, not a real-life concern, to me."

"I don't feel like they are impacting me. I assume everything I heard about climate change was exaggerated, and I don't think I could personally do anything to help."

While a large number of participants attribute their lack of commitment to environmental initiatives to limited opportunities for related education, the community's disengagement, psychological distance from the issue, and anti-intellectual attitudes, not all

are indifferent to it. 12.2 percent of respondents said they care about the issue extremely. 0.6 percent of the students stated they actively participate in environmental activism and protests. They explained their motivation for their engagement as follows:

"What really got me was seeing animals trapped in our garbage. It made me want to learn how to help them, even though I feel it may already be too late."

"My mom taught me to respect nature. Watching Earth 2100 as a kid made me fear climate change's future impact. Till this day, 'Reduce, Reuse, Recycle' is a mantra I live by."

"What really opened my eyes was working at Splish Splash, a water park. I saw how much trash people left behind, and it made me think about the damage of small daily actions."

"I live by the ocean, and ocean trash has always bothered me. It's not a nice thing going to the beach and seeing constant litter. That made me care about the environment more."

Comparison of these students' comments with those of the reluctant students described earlier indicates the importance of meaningful hands-on experiences, constructive interactions with immediate social members, and relevance to their personal lives in motivating these youth to engage in environmental initiatives.

The second half of the research, the two-media-framing experiment, shows that students produced different emotional reactions to their presentations, as indicated in the method section.
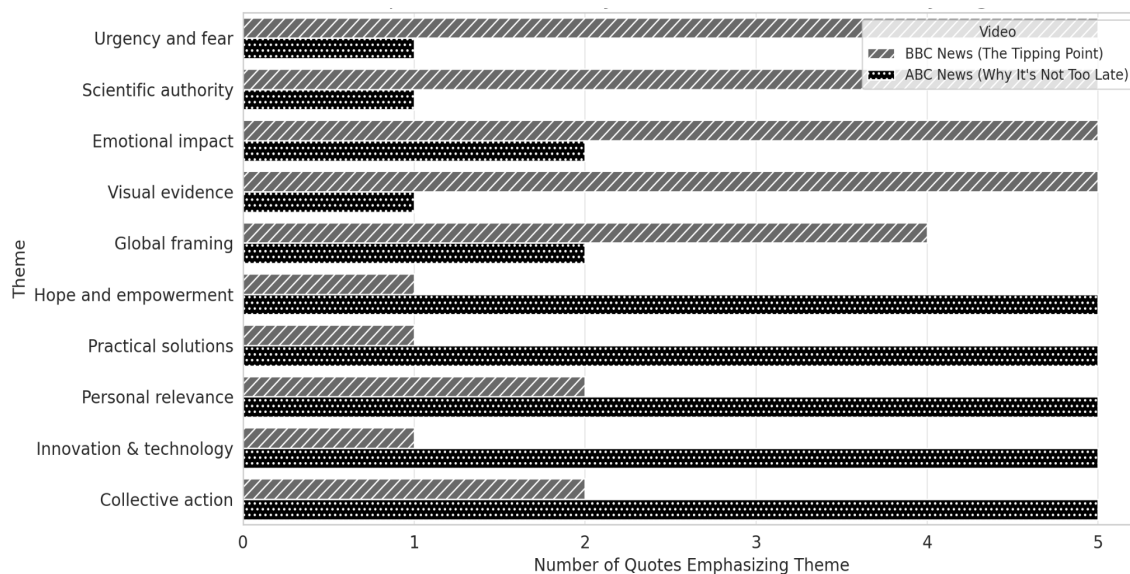

Figure 1. Viewer Identification on Major Themes

Figure 1 presents a comparison of the themes and emotional responses the participants identified in each media presentation after viewing. They generally felt that the BBC Earth video creates a sense of urgency and fear about climate change, emphasizing the authority of scientific evidence through visual evidence. On the other hand, they found that the ABC video elicits more optimistic views, offering practical solutions, technological innovation, and personal relevance.

The closed-ended survey results indicated that more students were moved by the ABC video than by the BBC's. As Figure 2 shows, out of 90 participants, 61 percent of viewers stated that the ABC video was more convincing in taking action against climate change, while 32 percent of them said the same about the BBC video. Seven percent of them felt neither was convincing.
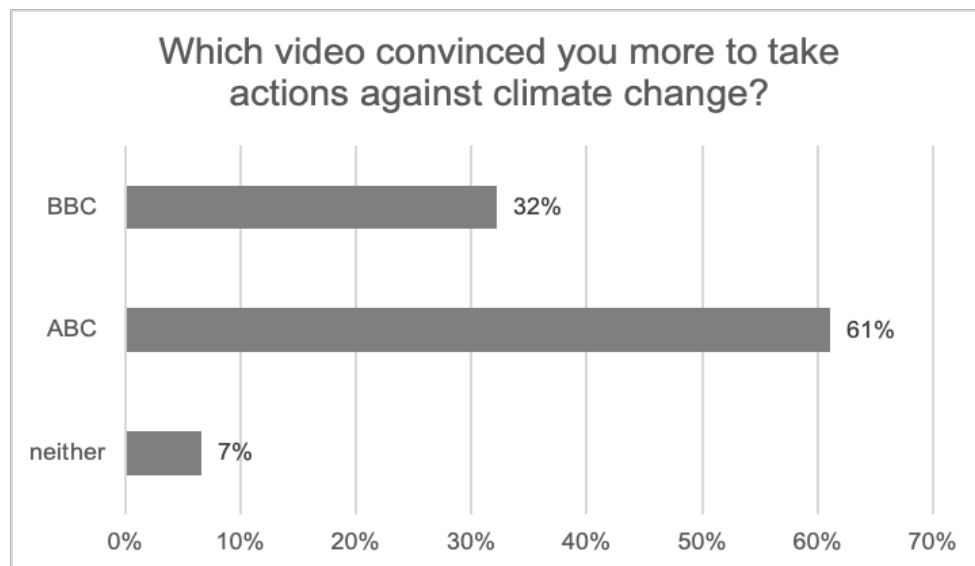
Figure 2. Preference for the Two Media Presentations

One participant, who favored the BBC presentation, commented, "The BBC video genuinely scared me and gave me anxiety. Hearing about irreversible tipping points made the threat feel terrifying and urgent. That fear pushed me to want to be even more environmentally aware."

Another BBC video supporter said, *"The imagery of melting glaciers and methane bubbles made me realize how close we are to disaster. It was terrifying but effective, and I felt an urgent need to act."*

The tactics of presenting scientific evidence and impact on the global community were effective for some students. As illustrated in the above comments, an emphasis on urgency, scientific authority, and visual evidence can have a significant emotional impact on them. This framing of the issue primarily evokes fear and anxiety, which could serve as a driving force for their attention to the issue.

However, the majority of participants found ABC News' presentation more convincing. They believe that focusing on negative aspects and creating fear does not incline them to change their behavior. Instead, they found the optimistic approach more appealing, as shown in the following comments:

"It focused on solutions, not just the scary parts. The examples were easy to understand and made the problem feel less out of reach. That gave me motivation to care and take action in my own life."

"The ABC video stood out because it showed real people making a difference, which made climate change feel less overwhelming and more like something I can help solve in small ways."

For underserved students, who tend to distrust their individual ability to change a large-scale social issue and are accustomed to anti-intellectualism, presenting a small step that their community members are taking makes environmental action more approachable and feasible. Corresponding with this analysis, many other participants who prefer ABC News' presentation commented that connecting environmental issues to personal relevance and their local community encourages them to pay more attention to eco-movements, as well as foster a sense of individual empowerment.

"The ABC video introduced fascinating and unexpected solutions like volcanic dust reducing CO_2 and our local seaweed replacing plastics, which made the issue feel solvable rather than hopeless and purely technical."

"Knowing that not just individuals, but our local businesses are shifting toward sustainability made me realize climate change is real and impact is solvable."

These results indicate the strong influence of media framing on students' attention to environmental issues. While the BBC video was valued for its scientific depth, many participants expressed feelings of being overwhelmed by the sheer scale of the issues presented. They found it more challenging to identify how they could contribute to such large-scale problems, which may have diminished their sense of agency. Many participants felt more compelled by the ABC News presentation. They appreciated the tangible, local examples of sustainability and how they directly related to their lives. The optimistic tone of the media framing of the issue resonated deeply and attracted their attention, making them feel that change is attainable starting within their own communities.

Conclusions

This research suggests that socioeconomically and geographically disadvantaged Gen Z students have very limited access to environmental education and experiences in both their secondary and postsecondary education. A lack of surrounding community engagement and conversation on the issue with their school teachers, family members, and peers also disconnects them from recognizing the threat as imminent. Along with the prevalence of anti-intellectualism among their social circle, many individuals tend to feel overwhelmed by the common scientific evidence provided by experts and do not perceive the issues as their own. These societal factors contribute to their becoming deniers or passive observers of the environmental movement. The combination of the quantitative and qualitative data analyses have underscored four key elements that would drive underserved Gen Z students to transform from passive observers to active change makers: (1) meaningful environmental education with hands-on learning experiences, (2) frequent "green conversations" with immediate school and community members, (3) personal relevance to the issue and (4) fostering a sense of empowerment and impact of their actions.

These findings underscore the importance of understanding the unique experiences and perspectives of targeted student bodies in building an inclusive youth community. The research suggests that the way the issue is framed has a significant impact on the reaction of underserved students to environmentalism. Relying on scientific accuracy and global impact, which may be effective for socio-economically, geographically, and educationally advanced student groups, could backfire for the audience who have limited prior knowledge. While some value scientific validity, underserved youth, whose entire lives are heavily rooted in their local hometowns and distant from the mainstream movement, are often more inspired by optimistic narratives that illustrate practical applications their community members engage in and achievable solutions they can implement in their daily lives.

Lastly, the author acknowledges that the sample size of this research is not sufficient to generalize the findings to a broader population. Additionally, while this research suggests that hands-on education and proper framing of the crisis in presentation can positively change attitudes among underserved students, it remains undetermined whether these changes are sustained over time and whether the students translate them into real-life actions until follow-up studies are conducted. Nevertheless, the findings underscore that the factors motivating youth to engage in environmentalism can vary significantly across different demographics. Therefore, it is crucial that activist leaders and educators tailor their approach in framing the issue to accommodate the audience's socioeconomic backgrounds, educational experiences, and geopolitical culture. This practice can help youth environmental activism become more inclusive and expand it to a larger population within the generation.

Acknowledgments

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