



RESEARCH ARTICLE

Cultivating Changemakers: Global Health Education for Global Citizenship

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Abstract

Students in higher education are at a critical time of their lives when they are learning the importance of civic engagement and community. Presenting students with the principles of global health, ethics, health disparities, key content issues of communicable disease, gender, and women's rights, are essential pieces of knowledge for developing the whole person and global citizen. At a mid-sized university in the Midwest, a global health course is an option for students to complete as a general education credit. After institutional review board approval was obtained in Summer 2024, a pre/post cross-sectional survey methodology was used to measure student ($n = 179$) attitudes ($n = 10$, $\alpha = 0.878$) and behaviors ($n = 6$, $\alpha = 0.845$) and engagement ($n = 17$, $\alpha = 0.953$) based on

their learning in a global health general education course across four semesters. Results indicate a statistically significant increase in civic attitudes, behaviors, and engagement, with students having a strong sense of empathy and moral cosmopolitan views.

Introduction

Global health is a course that is often only available to students who have a health or biology major focus and may not be available to students outside of those disciplines. Learning about how diseases transcend boundaries, the historical role of disease transmission, and as Dr. Paul Farmer and the organization Partners in Health (2026) have stated, the incredible inequalities that have placed the "staff, stuff, space, systems, and social support"

in disproportionate and inequitable locations around the world, should be available content for all students to explore. College students are at an important time in their lives where they are beginning to understand their place in the world, who they are, and who they want to become. They are becoming more involved with their local communities and are engaging in service learning and civic engagement. Often, students may not even know where to begin to become involved and may be completely unaware of global health challenges and successes. What better way to learn more about the world—and how students can be part of the action—than transcending your local and state knowledge with an adventure into global health?

Civic engagement is an essential component of active community participation, both locally and globally. Civic engagement is an example of high impact practices (HIPs); service learning, global learning, and community-based practices associate positively with student learning gains (Chittum et al., 2022). Personal and social responsibility are also outcomes associated with HIPs, particularly with local and global knowledge and engagement, intercultural competence, ethical and moral reasoning, taking action, and creating foundations for lifelong learning (American Association of Colleges and Universities, 2021). An important component of civic engagement is the role of the global citizen. This person engages positively with other identities and cultures while being aware of and trying to understand the wider world around them, and thus chooses to take an active role in their community (Oxfam Great Britain, n.d.). Inspiring student empathy toward the global community is key. The role of global health in education positively impacts undergraduate students, promotes civic engagement, and further develops a sense of communal empathy. The origin of student involvement may also prove to be relevant, whether it begins at home or through local efforts.

According to the United Nations, global citizenship is an umbrella term that targets social, political, environmental, and economic actions of individuals and communities. The term acknowledges the belief that individuals worldwide are components of "multiple, diverse, local, and non-local networks rather than single actors affecting isolated societies," and addresses the need for the

acceptance and enhancement of individual social responsibility that can result in global benefits (United Nations, n.d.). While the motivation of a global citizen can be contested, global citizenship is essential for the development of a sense of humanity and moral responsibility and interdependence (Nussbaum, 2002), as well as collaboration, and creative decision making for global diplomacy (Haigh & Clifford, 2011; Clifford & Montgomery, 2017). The lack of interest amongst individuals to advocate and engage with current global issues has surged, not just as a public health issue, but also as a global health challenge. A peer-reviewed study found that "efforts to address social and global problems such as poverty, mass hunger, and mass-atrocity crimes are hindered significantly by apathy and low levels of active civil and political engagement amongst populations in developed countries" (Wilson, 2010). Students have concerns, empathy, and interest in various health and worldly issues. However, there is often a sense of apathy when it comes to addressing those issues. Studies have identified recent generations as being more narcissistic as well (Twenge, 2006; Mallan, 2009), stating that young adults as a cohort are more individualistic versus collectivist (Konrath et al., 2011). Apathy towards global citizenship and global health issues impacts a range of individuals, groups, and potential generations. The disconnect presents a challenge for public health: how can empathy can be transformed into action?

The purpose of this study was to examine how the knowledge gained in an undergraduate-level global health course impacts students' attitudes and behaviors towards civic engagement on an individual and collective level. College students in all disciplines can benefit from learning about how to be a global citizen and an active participant in communities both locally and globally. Stoner et al. (2014) maintain that by teaching global health under the umbrella of global citizenship, higher education institutions can play a significant role in cultivating civically engaged students who have the tools to produce meaningful change in society.

Student Apathy

Mousavi and Milasi (2022) discovered that college students exhibited above average levels of social apathy in real-world and virtual environments. Social apathy has two dimensions, civic and altruistic apathy. Civic apathy

is disengagement from public and civic formations, and altruistic apathy involves reduced empathy and concern for others. Social apathy was characterized by disinterest in sociopolitical issues, distrust of participation, and feelings of inefficacy. Universities need to encourage civic engagement among students to strengthen social cohesion and democratic participation.

Between 1979 and 2009 empathy significantly declined among over 13,000 college students, and the sharpest decline was in empathic concern: feelings of compassion, sympathy, and concern for others. Students may feel less connected to social problems or experiences of others, which can contribute to civic disengagement and apathy. Perspective-taking also declined, and students showed a reduced ability and willingness to understand situations from another person's point of view. The largest downshift was after the 2000s, which could be due to increased technology use, reality television, violence, etc. (Konrath, 2011.) Studies from 2016–2018 have also indicated that students will alter their in-person behavior for fear of being ridiculed or mocked (as seen in online platforms) and thus are more likely to shield themselves in person, thereby appearing to be apathetic, uninterested, or unwilling (Marder et al., 2016; Opp, 2018; Kitts & Quintane, 2020; Hoffman et al., 2026). Whether these recoiling behaviors equate to disengagement remains uncertain.

Civic Engagement

Civic engagement is a powerful force that strengthens communities and improves public health. It serves as an important indicator for community health and public health measures. Alberti et al. (2022) discuss how communities that are civically engaged have more social connectedness, trust, and better resource networks. Civic engagement rates are higher in more affluent individuals as well as those with higher education experience. Individuals are most likely to vote as a form of civic engagement, and universities were viewed as the second most appropriate location to vote after libraries, supporting the idea that universities are truly a hub for resource sharing and civic engagement (Alberti et al., 2022).

Barnhardt et al. (2015) discovered that college students who perceive their university as a proponent of

civic engagement and collective responsibility are more likely to participate and implement civic values. Campus culture and messages from faculty and peers alongside campus public advocacy events encourage students to be involved and engage in civic development. Interviews with students revealed that those who recognized civic expectations were more likely to adopt those beliefs as part of their identity. It is apparent that universities have a central role in developing students into the whole person and global citizen.

Global Citizenship

Global citizenship is social, environmental, and economic and involves understanding how actions and decisions in one area of the world can impact people elsewhere. It also involves a willingness to interact positively with different identities and cultures and to actively contribute to making the world more peaceful and just. Global citizenship is fostered by global awareness, social responsibility, and civic engagement (Stoner et al., 2019). Examples of global citizenship include understanding connections between local communities and the wider world, learning about local and global social justice issues, exploring global challenges from different viewpoints, and encouraging people's voices to be heard (Oxfam Great Britain, n.d.). The research study we present here contributes to the knowledge of how civic engagement and global citizenship intertwine and how best to strengthen this among students. We address the gaps in current knowledge regarding the most effective strategies for increasing civic engagement among students and the skills students perceive as a necessary for global citizenship.

Key Research Questions

1. How does knowledge gained by students in a global health course impact attitudes and behaviors toward civic engagement?
2. How do students in the global health course define a "global citizen?"
3. What skills do students feel are necessary for working with local and global communities?
4. How do students feel about the responsibility to address global health issues?

Methods

Study Sample

At a medium-sized university ($n = \sim 21,000$) in the Midwest, all full-time students who were enrolled in the Global Health general education course were invited to participate in the study. Approximately 179 students completed the pre/post surveys, with females being more likely to answer both a pre- and post-survey (73.2%). About 53% of students were Caucasian, 25% identified as African American or Black, and about 6% each identified as Hispanic, Latin(o/a) or Latinx or Asian or Asian American, respectively. At the University, about 60% of students identify as white or Caucasian, with the remaining number encompassing students from underrepresented groups. About 56% of students were involved in a registered student organization (RSO) and live on campus (53.1%).

Project Design

The global health course was developed around a theme of the United Nations Sustainable Development Goals (SDGs) with weekly "adventure" modules that are completed for all courses (in person or online). The topics in the modules are scaffolded starting with principles of global health, health equity and social determinants, culture and health, and health systems as the four primary elements. The remaining modules centered on topics related to specific areas, including child and maternal health. In the online courses, adventure modules included readings, videos, and an activity to engage with the weekly content. All students read Tracy Kidder's book *Mountains Beyond Mountains: The Quest of Dr. Paul Farmer, the Man Who Would Cure the World* and reflected on the experiences of Dr. Paul Farmer and his colleagues in the development of the global non-profit, Partners in Health. Students in the in-person global health class were engaged in several opportunities for civic engagement, including working with a local elementary school to create a Social Development Goals (SDG) quilt (SDG 4, 17), trick-or-treating for UNICEF (SDG 1, 3, 17), school grounds and park cleanup (SDG 15, 17), creation of pollution awareness posters displayed at a local children's museum (SDG 14, 15, 17), establishment of a greenhouse (SDG 13, 14, 15,

17), and partnership with local libraries to celebrate the International Day of Peace (SDG 16, 17). Since students in the online global health courses were unable to engage in some of the more hands-on aspects of the course offered to the in-person classes, the online platform, *Padlet*, was used as a staging for civic engagement opportunities for students in the global health course (Figure 1). The project design involved a pre/post cross-sectional survey design to collect data at two points during the semester. Four semesters of data collection occurred from Spring 2025 until Spring 2026. Project approval was received by the Institutional Review Board in Summer 2024.

Primary Data Collection

A survey was created using Qualtrics and contained a total of 29 questions, including eight demographic questions, ten civic attitudes, six civic engagement behaviors, and five open-ended questions focused on the students' views of global civic engagement and activism. Civic attitudes were defined as personal beliefs and feelings that students have about their own involvement in their community and their perceived ability to make a difference (Doolittle & Faul, 2013). Civic engagement behaviors were defined as actions that a student can take to engage in and make a difference in their community (Doolittle & Faul 2013). The attitude and behavior scales were based on the survey by Doolittle and Faul (2013) and included a ranking seven-point scale for each. The attitude scale ranged from seven to one, with seven expressing strong agreement and one expressing strong disagreement. The options for responding to behavior questions focused on participation, from always (7) to never (1). Open-ended questions were developed to provide insight into students' personal experiences and interpretations of global citizenship and service responsibilities.

Social cognitive theory (SCT) describes behavior as a dynamic and continuous interaction between personal factors, environmental influences, and individual actions. Developed by Bandura in 1977 (Bandura, 1977; McAlister et al., 2008), SCT suggests that individuals who have strong personal agency or self-efficacy are more likely to respond well to behavior change (U.S. Department of Health and Human Services, 2005). Social cognitive constructs related to knowledge, civic appreciation,

FIGURE 1. Padlet for the Global Health Course During Fall 2025 and Spring 2026



and skill sets are important for exploring the links with enhanced civic engagement (Owusu-Agyeman & Fourie-Malherbe, 2021; Metzger et al., 2018; Wray-Lake et al., 2017). After three semesters of data collection, constructs from social cognitive theory (reciprocal determinism, behavioral capability, expectations, self-efficacy, observational learning, and reinforcements) were incorporated to become variables ($n = 17$) in a survey scale. The study examined aspects of behavioral capability through students' existing knowledge and the skills they perceived as necessary for global citizenship (Table 1).

Open-ended questions provided more comprehensive insight into students' personal experiences and interpretations of global citizenship. Questions included, "Do people have a responsibility to address global issues?" "How would you describe a 'global citizen'?" "What skills do you think young adults need to feel empowered to address local and global issues?" (two separate questions), and "How do local efforts impact global successes?" Before the survey was administered during the fourth semester, in Spring 2026, the survey was updated to have one open-ended question, "What is your responsibility to address global health issues?" to try and reduce some of the redundancies in the questions.

The survey was administered to students enrolled in all global health courses during Week 1 and Week 15 of the semester. Completion of the survey was listed as an

assignment in the syllabus and required for all students in the course; however, only students who consented to the study were included for analysis. A Cronbach alpha test was conducted to verify the reliability of all scales, with the survey having high reliability for each scale (civic attitudes $\alpha = 0.878$, civic behaviors $\alpha = 0.845$, social cognitive $\alpha = 0.953$).

Data Analysis

Data was cleaned in Microsoft Excel by removing responses with missing data in addition to duplicate survey submissions. Pre- and post-surveys were also matched based on an identifier known to the participant, then removed from the aggregate dataset. After cleaning the data, a total of 179 participants' matching pre/post surveys were included in final analyses. Data was coded by using the pre-assigned seven (strongly agree and always) to one (strongly disagree and never). Pre- and post-scores were created for all three scales, with higher scores equating to the most positive attitudes and behaviors. The highest and lowest scores obtainable for participants were 70/10 for attitudes, 42/6 for behaviors, and 119/17 for social cognitive constructs, respectively. Closed questions were analyzed using IBM SPSS Statistics software with descriptive statistics for frequencies, percentages, and mean scores for survey scales. Inferential statistics were conducted exploring of correlation with pre-/post-attitudes and

TABLE 1. Social Cognitive Theory Scale, Constructions, and Average Question Scores

Survey Question	Social Cognitive Theory Construct	Pre-Score	Post-Score
The more I am involved, the more I notice positive changes in my community. ^a	Reciprocal Determinism	5.20	5.81
My experiences in civic engagement have changed the way I view social or political issues. ^b	Reciprocal Determinism	5.24	5.98
I can identify the steps I can take to become involved in my community. ^b	Behavioral Capability	5.48	6.03
I know where to find volunteer or service opportunities in my community. ^a	Behavioral Capability	5.75	6.18
Participating in local activities will help me develop my leadership skills. ^a	Expectations	6.00	6.31
Participating in global activities will help me develop my leadership skills.	Expectations	6.01	6.29
My participation in civic engagement makes an impact on a global level. ^a	Expectations	5.05	5.75
Participating in civic engagement helps reduce my feelings of helplessness about world issues. ^a	Expectations	5.33	5.92
I feel confident that I can make a positive difference in my community. ^a	Self-Efficacy	5.29	6.07
I know how to get involved locally. ^a	Behavioral Capability	5.68	6.02
I know how to get involved globally. ^b	Behavioral Capability	3.98	5.20
The action or community involvement of my peers impacts my inspiration to be involved.	Observational Learning	5.46	6.03
The action or community involvement of my professors impacts my inspiration to be involved. ^b	Observational Learning	5.14	5.87
I receive positive feedback from my peers or instructors when I participate in civic engagement. ^b	Reinforcements	5.48	6.01
I feel appreciated and acknowledged when I participate in civic engagement. ^a	Reinforcements	5.62	5.98
My school recognizes students who contribute to local causes. ^a	Reinforcements	5.09	5.59
My school recognizes students who contribute to global causes.	Reinforcements	5.22	5.55
My school recognizes students who contribute to global causes.	Reinforcements	5.22	5.55

^a Indicates a statistical significance, $p < 0.05$ ^b Indicates a statistical significance, $p < 0.001$

behaviors with paired and independent t-tests with independent variables of gender, year in school, race/ethnicity, and Registered Student Organizations (RSO) involvement. Non-parametric tests with Kruskal-Wallis and Mann Whitney U tests were conducted with race/ethnicity and gender variables due to their sample size variances.

Qualitative analysis of responses was conducted using a content analysis to create categories and overall themes (Merriam, 2009). For the question focused on personal responsibility, the article by Stapleton et al. (2014) was used as a guide to identify the participant's response to the global health ethical principles (egalitarian, utilitarian, cosmopolitan-moral, and political, anti-cosmopolitan-realist and pluralist). The alignment for the responses and principles was validated with researchers each matching the response to the principle and comparing responses with an 85% matching rate among researchers.

Results

In the four semesters, 900 students completed the surveys, however, only 179 completed both the pre- and post-test and consented to participate. The first research question explored the knowledge gained from the global health course and the impacts on students' attitudes and behaviors regarding civic engagement. Civic attitudes ($t(178) = -6.537, p = <0.001$) and civic engagement behaviors ($t(178) = -6.843, p = <0.001$) increased in all semesters, with the largest increases for behaviors (29.7 to 32.7) and attitudes (56.9 to 61.5) during Fall 2025. A repeated measures ANOVA indicated no significant differences in pre/post civic attitudes and behaviors by semester. Generally, as civic attitudes tend to increase, civic behaviors also increase over time ($r = 0.692, p = <0.001$). There were no significant differences in pre/post scale scores with respect to year in school, race/ethnicity, and whether students lived on or off campus.

For the social cognitive scale ($n = 54$), questions focused on civic engagement, with local to global actions. The average for each question in the scale increased; however, one question in particular, "I know how to get involved globally," had the largest gain from 3.98 to 5.20 (out of 7) (Table 1). The total score for pre- (91.38) to post-survey (100.83) was statistically significant ($t(53) =$

$-4.798, p = 0.001$). Seniors had the lowest pre/post SCT scale scores (81.72 to 95.09), whereas first-year students had the highest scores (98.5 to 105.18). Students who were involved in a registered student organization were more likely to have higher SCT scores (92.29 to 101.85 vs. 90.48 to 99.81), although this was not statistically significant. There were also no significant differences between whether a student lives on campus and their level of civic engagement or between gender and level of engagement. Qualitative questions explored student perceptions regarding the skills necessary for working with local and global communities and responsibilities to address global health issues.

Skill Sets Needed for Local and Global Action

On the pre-survey, social skills, confidence, and awareness were the skills reported as most important for addressing local issues. Social skills, confidence, and critical thinking and problem solving were the most highly rated skills reported on the post-survey. The number of students who reported support and encouragement, knowledge, platform and voice, and critical thinking and problem solving increased from pre- to post-survey (Figure 2). Regarding skills needed to address global issues, confidence, knowledge, and social skills were the skills rated most important on the pre-survey, whereas critical thinking and problem solving, awareness, cultural competence, and determination and willpower increased from pre- to post-survey (Figure 3). A shift in identifying the importance of skill sets for active participation and critical thinking occurred by the end of the course, with a collective change towards identifying how small successes lead to big impact, celebrating positive changes, taking local action, and collective responsibility.

Global Responsibilities

Approximately 70 responses from two semesters (Summer 2025 and Fall 2025) were used for qualitative analyses. On the pre-survey, most students already displayed moral-cosmopolitan ($n = 47$) ethical views, representing a collective responsibility to act and help others. On the post-survey, this trend stayed firm with most students ($n = 57$) continuing to display a moral-cosmopolitan view. On the post-survey, fewer students identified as

FIGURE 2. Bar Chart of the Skills Necessary for Addressing Local Issues

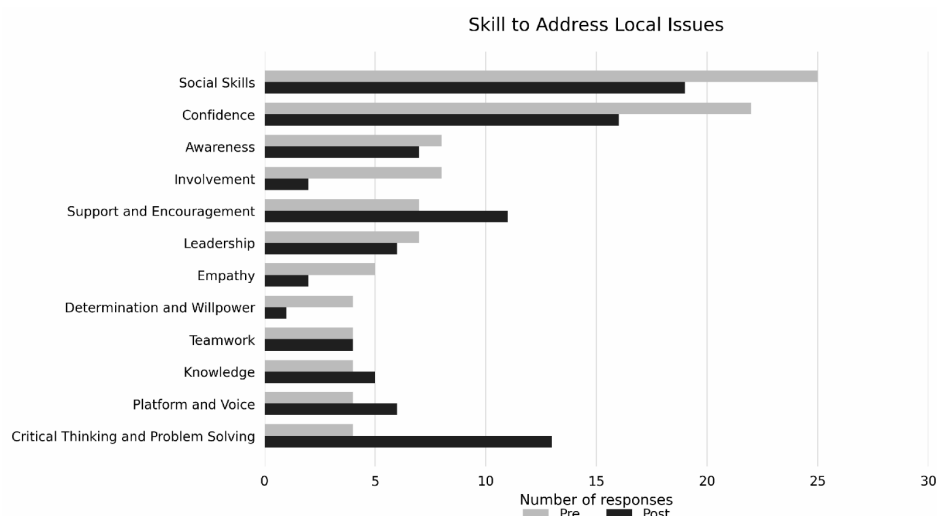
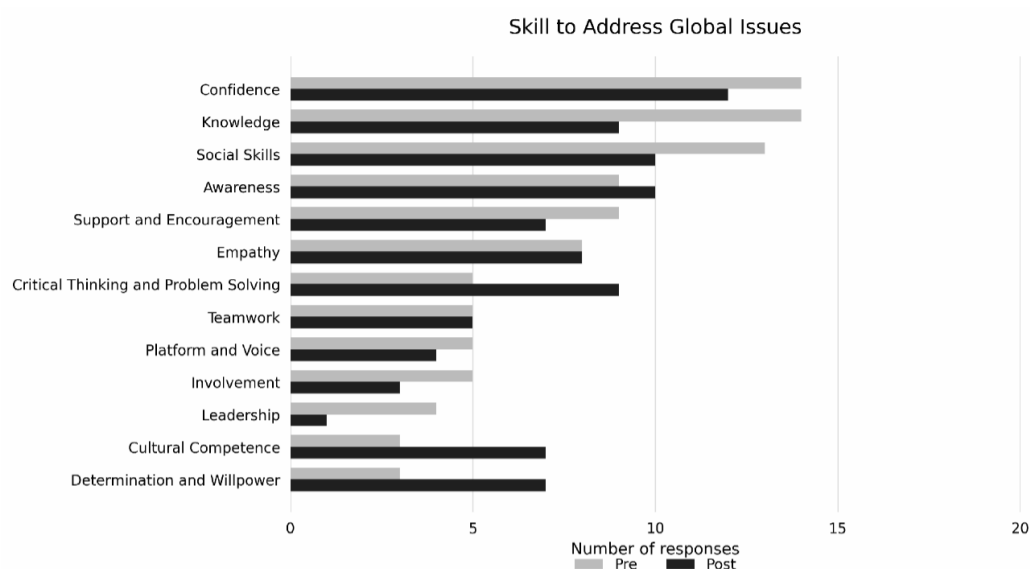


FIGURE 3. Bar Chart of the Student-Identified Skills Necessary for Addressing Global Issues



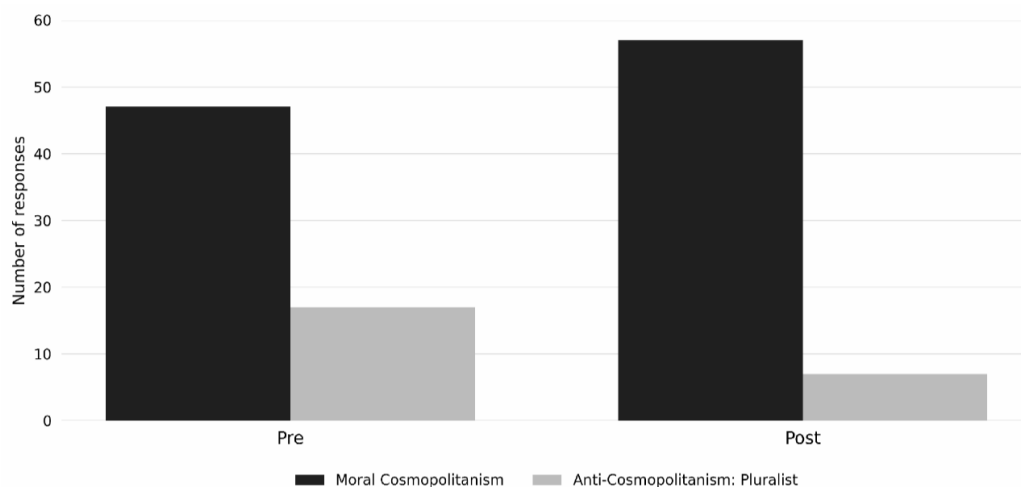
anti-cosmopolitan-pluralist, or as having more national and local interests ($n = 17$, pre; $n = 7$, post) (Figure 4). An example of a moral-cosmopolitan response was, "I think individuals do have a responsibility to address global issues because we should do our best to protect our planet and all of its residents." A student who gave a more anti-cosmopolitan response wrote, "I feel we don't have a responsibility but it's beneficial for all of us to be aware of what is going on." Local actions that lead to global successes was a final theme of the course, encouraging students not only to recognize the challenges in global health, but also to identify how problems are addressed. Students reflected on this experience, and three

themes—"small successes, large impacts," "collective responsibility," and "collective action"—were developed to unpack student responses (Table 2).

Discussion

One of the most important themes of the global health course focuses on learning not just about poverty, but about the causes of poverty around the world. Why are some countries flourishing and others taking multiple steps back from progress? In terms of student attitudes, their growth in recognizing the importance of addressing inequities and poverty had the highest increase (4.99 to 5.7 pre- to post-survey), which is not surprising given the

FIGURE 4. Pre- and Post-Survey Outcomes for Matching the Ethical Paradigm to the Open-Ended Question, "Do people have a responsibility to address global health issues?"



course content. Students also are more likely to start the course having favorable views on global health with the majority following a moral-cosmopolitan view. An important goal of the course, however, is to identify historical global inequities and to demonstrate how ethical principles can guide actions, rather than to identify whose viewpoint is "wrong" or "right." Students often comment on their lack of "power" to be able to make lasting change.

According to one student, "I believe that as a student my responsibility [is] to bring more awareness to these global health issues; since I am a student without any real power all I can do is bring awareness to the issues so people with power can bring a change" [Spring 2026]. Similar to the work of Wilson (2010), students in this study held high levels of concern for moral global health issues. Students in the current study also had high levels of empathy and engagement, which was different from the work of Wilson (2010) and Mousavi & Milasi (2022).

Perhaps student apathy research should be more focused on empowerment; it's not that they are apathetic, it's that they are not part of the change. We should think of addressing apathy as a collective social issue (Mousavi & Milasi, 2022); it occurs when students are not included in elections, witness a lack of compassion from individuals who have power, face reduced access to scholarships and higher education, and encounter discrimination and injustice in higher education (Mousavi & Milasi 2022).

Just as local efforts impact global successes, addressing student empowerment close to home at the college and university level is critically important for inspiring a sense of global empathy and citizenry.

While students made significant gains in their pre/post scores, more work can be done to help students find global health resources that create awareness not only on general topics, but also on when and how to be involved. Results indicated that participants need more support for identifying credible sources in global health, including NGOs, as well as government integrity and support. Emphasizing how and where students can locate these sources will be crucial in future studies. Just as the course focused on global successes, championing the work of students, staff, and faculty as well as community partners is essential to cultivate empowerment and resist burn-out. Linking back to social cognitive theory and, specifically, self-efficacy, participants stated they needed to feel confident, be heard, and have access to platforms where they can address local and global issues. Results suggests that students' ability to act as informed global citizens is closely tied to their perceived capability and the resources available to them. It will be important for future studies to focus on exploring how those specific needs can be addressed and met. Potential considerations could include integrating credible source identification and training and

TABLE 2. Themed Responses to the Question, "How do local actions impact global successes?"

Category Description	Definition of the Category	Pre-Survey Participant Example	Post-Survey Participant Example
Small successes, large impacts	Building Momentum	"Small successes lead to bigger successes, as the smaller ones will encourage other local programs to do the same, and from there it will be a domino effect." "As local problems are solved, it encourages more problems to be solved inspiring change on global efforts." "Everything starts somewhere, meaning that small differences can cannonball into a bigger difference when we all band together." "If you enforce the same efforts locally, and expand that, it will become a common idea."	"Local efforts cause a chain reaction that leads to global success." "As local efforts inspire change, more people become aware of issues and events and create a chain of events that inspires more change." "Local efforts lead to global success which means that small changes add up; when communities solve issues they may have, it inspires others and help them achieve worldwide goals like fighting poverty or climate change." "Local efforts impact global successes because everything starts small. When a community is able to help itself and the area around it, it creates stamina, popularity, and effectiveness of global efforts."
Collective	Reach	"Local efforts build off each other, far and wide. Addressing one local issue in a community, one place at a time, can build global success."	"Local efforts provide a framework solving specific issues. The successful frameworks from local efforts spread to other communities and eventually across the globe."
	Obligation	"I think that if someone is willing to dedicate their time to help out other local citizens they might put in more effort in helping out globally. So it is important that there are large numbers of people wanting to make changes within their local communities."	"They impact global successes because everybody starts locally and branches off. You need to gain experience and do what you think is right to help things going on globally even if its a small change in your community it can influence others."
Collective Action	Local practice	"Local efforts affect national efforts which then cause global successes due to the amount of people voicing what they believe in."	"By making local efforts, it makes it a lot easier to address issues on a global level. By practicing addressing issues in your local area, it makes it a lot easier to speak your opinions about global impacts."

facilitating direct engagement with community leaders and/or policymakers.

With regard to observational learning within social cognitive theory, an important consideration could be exploring more platforms, like Padlet where students can feel inspired to be a global citizen based on the experiences of others. Observing peers' service activities, volunteer reflections, and resource sharing can increase students' awareness of opportunities and enhance their belief that they, too, can contribute meaningfully. For

observational learning to translate into action, these platforms should not only showcase examples but also provide clear, accessible pathways for participation. Future investigations could examine how intentional design of these online spaces might further strengthen students' motivation, self-efficacy, and long-term engagement in both local and global initiatives. One way to explore student motivation would be to encourage online influencers to help to channel messages designed for youth civic engagement by talking about their own experiences,

showing how they engaged, and the outcomes (positive and negative). Finally, an evaluation of course impacts is important for determining whether, post-course, students' behaviors stayed the same or whether their level of civic engagement increased. This methodological goal might be achieved by encouraging the use of cohort strategies and incentives as well as retrospective analyses engaging the students who have previously taken the course.

Limitations

This study was an ongoing effort to document the impacts that taking a global health course can have on civic engagement. There are several limitations to the study, including the ongoing survey development and refinement; there were several semesters with different versions of the survey. There were also two modalities for the course (in-person and online), and while the content was similar, the experiences in learning the material were vastly different—particularly with regard to the students' ability to apply the course principles to service learning. In this small sample, there was no significant difference between the two modalities, which signals that any gains were from the course content.

Conclusion

Across all semesters, students benefit from having spaces where they can observe, learn, and be inspired by the work of global health advocates as they accomplished small tasks that led to large changes. Guided by social cognitive theory, this study shows that fostering confidence, providing credible resources, and creating supportive platforms are essential in preparing students to address local and global issues. Platforms like Padlet demonstrate the potential to bridge from inspiration to action by highlighting real examples of civic engagement and offering direct avenues for participation. Continued exploration of such tools, combined with intentional integration into course design, can help cultivate informed and empowered global citizens.

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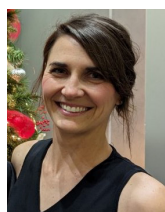


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References

- Alberti, P. M., Alvarado, C. S., Pierce, H. H. (2022). *Civic Engagement: A vital sign of health and democracy*. AAMC Center For Health Justice. <https://www.aamchealthjustice.org/news/polling/civic-engagement>
- American Association of Colleges and Universities. (2021). *Essential learning outcomes*. <http://www.aacu.org/essential-learning-outcomes>
- Bandura A. (1977). *Social learning theory*. Prentice Hall.
- Barnhardt, C. L., Sheets, J. E., & Pasquesi, K. (2015). You expect what? Students' perceptions as resources in acquiring commitments and capacities for civic engagement. *Research in Higher Education*, 56(6), 622–644. <https://doi.org/10.1007/s11162-014-9361-8>

- Chittum, J. R., Enke, K. A. E., & Finley, A. P. (2022). *The effects of community-based and civic engagement in higher education: What we know and questions that remain*. American Association of Colleges and Universities. <https://files.eric.ed.gov/fulltext/ED625877.pdf>
- Clifford, V., & Montgomery, C. (2017). Designing an internationalised curriculum for higher education: Embracing the local and global citizen. *Higher Education Research and Development*, 36(6), 1138–1151.
- Doolittle, A., & Faul, A. C. (2013). Civic engagement scale: A validation study. *SAGE Open*, 3(3), 1–7. <https://journals.sagepub.com/doi/pdf/10.1177/2158244013495542>
- Haigh, M., & Clifford, V. (2011). Integral vision: A multi-perspective approach to the recognition of graduate attributes. *Higher Education Research and Development*, 30(5), 573–584.
- Hoffman, W., Welser, W., & Sammons, M. (2026). Anxious and disengaged: How social media's engagement model has disrupted student capacity to engage in school. Proceedings of the 59th *Hawaii International Conference on System Sciences*, Maui, Hawaii, United States. <https://scholarpace.manoa.hawaii.edu/server/api/core/bitstreams/a4566798-of51-4efi-8575-74320b810b47/content>
- Kitts, J. A., & Quintane, E. (2020). Rethinking social networks in the era of computational social science. *The Oxford Handbook of Social Networks* (pp. 71–97). Oxford Academic.
- Konrath, S. H., O'Brien, E. H., & Hsing, C. (2011). Changes in dispositional empathy in American college students over time: A meta-analysis. *Personality and Social Psychology Review: An Official Journal of the Society for Personality and Social Psychology, Inc*, 15(2), 180–198. <https://doi.org/10.1177/1088868310377395>
- Mallan, K. M. (2009). Look at me! Look at me! Self-representation and self-exposure through online networks. *Digital Culture and Education*, 1, 51–56.
- Marder B., Joinson, A. N., Shankar, A., & Houghton, D. (2016). The extended "chilling" effect of Facebook: The cold reality of ubiquitous social networking. *Computers in Human Behavior*, 60, 582–592. <https://doi.org/10.1016/j.chb.2016.02.097>
- Maxwell-Stuart R., & Huisman, J. (2018). An exploratory study of student engagement at transnational education initiatives: Proactive or apathetic? *International Journal of Educational Management*, 32(2), 298–309. <https://doi.org/10.1108/IJEM-03-2017-0059>
- McAlister, A. L., Perry, C. L., & Parcel, G. S. (2008). How individuals, environments, and health behaviors interact: Social cognitive theory. In K. Glanz, B. K. Rimer, & K. Viswanath (Eds.), *Health Behavior and Health Education: Theory, Research, and Practice* (4th ed., pp. 169–188). Jossey-Bass.
- Merriam, S. R. (2009). *Qualitative Research: A Guide to Design and Implementation*. John Wiley and Sons.
- Metzger, A., Ferris, K. A., & Oosterhoff, B. (2018). Adolescents' civic engagement: Concordant and longitudinal associations among civic beliefs and civic involvement. *Journal of Research on Adolescence*, 29(4), 879–896. <https://doi.org/10.1111/jora.12423>
- Mousavi, S. K., & Milasi M. A. (2022). Students' social apathy in real and virtual worlds: A comparative study. *Athens Journal of Mass Media and Communications*, 8(2), 131–144. <https://doi.org/10.30958/ajmmc.8-2-4>
- Nussbaum, M. (2002). Education for citizenship in an era of global connection. *Studies in Philosophy and Education*, 5(1), 1–25.
- Opp, K. D. (2018). Externalities, social networks, and the emergence of norms: A critical analysis and extension of James Coleman's theory. *Social Research: An International Quarterly*, 85(1), 167–196.
- Owusu-Agyeman, Y., & Fourie-Malherbe, M. (2021). Students as partners in the promotion of civic engagement in higher education. *Studies in Higher Education*, 46(6), 1241–1255. <https://doi.org/10.1080/03075079.2019.1666263>
- Oxfam Great Britain. (n.d.). *What is global citizenship?* <https://www.oxfam.org.uk/education/who-we-are/what-is-global-citizenship/>
- Partners in Health. (2026). *PIH's five S's: Essential elements for strong health systems*. <https://www.pih.org/article/pihs-five-ss-essential-elements-strong-health-systems>
- Stapleton, G., Schröder-Bäck, P., Laaser, U., Meershoek, A., & Popa, D. (2014). Global health ethics: An introduction to prominent theories and relevant topics. *Global Health Action*, 7, 23569. <https://doi.org/10.3402/gha.v7.23569>
- Stoner, L., Perry, L., Wadsworth, D., Stoner, K. R., & Tarrant, M. A. (2014). Global citizenship is key to securing global health: The role of higher education. *Preventive Medicine*, 64, 126–128. <https://doi.org/10.1016/j.jypmed.2014.05.006>
- Stoner, L., Tarrant, M. A., Perry, L., Gleason, M., Wadsworth, D., & Page, R. (2019). Global citizenship through global health. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 31(1), 131–147. <https://doi.org/10.36366/frontiers.v31i1.446>
- Twenge, J. M. (2006). *Generation Me*. Free Press.
- United Nations. (n.d.) *Global citizenship*. <https://www.un.org/en/academic-impact/global-citizenship>
- U.S. Department of Health and Human Services. (2005). *Theory at a glance: A guide for health promotion practice* (2nd ed.). U.S. Department of Health and Human Services: National Institutes of Health. <https://cancercontrol.cancer.gov/sites/default/files/2020-06/theory.pdf>
- Wilson, E. K. (2010). From apathy to action: Promoting active citizenship and global responsibility amongst populations in the Global North. *Global Society* 24(2), 275–296. <https://doi.org/10.1080/13600821003626609>
- Wray-Lake, L., Metzger, A., & Syvertsen, A. K. (2017). Testing multidimensional models of youth civic engagement: Model comparisons, measurement invariance, and age differences. *Applied Developmental Science*, 21(4), 266–284.