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Becoming a Global Citizen: Belief vs. Action

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Abstract

Postsecondary institutional mission statements include goals of preparing students to become global citizens. Transformative learning theory is central to global citizenship education (GCE). Many postsecondary institutions provide GCE initiatives through the global competencies approach, which includes self-awareness in intercultural encounters, communications, and general knowledge about world issues. The purpose of this study was to explore perceptions of global citizenship and general knowledge of international food and agriculture issues. A cross-sectional design and random samples of university members provided data. Differences in perceptions of global civic engagement were found; faculty members were significantly more globally engaged. Graduate students had significantly more awareness of being global citizens. Respondents were unknowledgeable about international food and agriculture. Transformative learning and GCE may be incorporated into postsecondary education by using disorienting dilemmas to promote critical self-examination of worldviews. To enliven university missions of preparing global citizens, we must encourage meaningful actions from local to global levels.

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Introduction and Problem Statement

Most postsecondary institutional mission statements include goals of preparing students to become global citizens. Increased knowledge about food production could improve understanding of global food security issues. Ideally, college students studying agriculture should know how international issues affect food security (Francis et al., 2019). Realistically, students are unknowledgeable about such issues. Morales et al. (2017) found university students lacked general knowledge about food and agriculture; only 4% achieved minimally satisfactory test scores (12/20 correct = 60% correct). Comparable results were found by Moriba et al. (2012), Moriba and Edwards (2015), and Wingenbach et al. (2003).

We need leaders who understand the interconnectedness of food systems to address food security issues (Heinert & Roberts, 2016). International issues need to be taught in postsecondary education to prepare students for the global market (Zúñiga et al., 2015). Francis et al. (2019) concluded that university students cannot understand diverse economies or foreign production practices without studying issues affecting global food systems.

This study concerns a southern U.S. university and its mission to develop global citizens in the context of food and agriculture. The university's mission statement promotes principles of global citizenship among its students, faculty, and staff. We sought to determine if these ideals were evident by assessing university members' perceptions of global citizenship and their general knowledge of international issues related to food and agriculture.

Theoretical and Conceptual Framework

Transformative learning theory (Mezirow, 1991) is central to global citizenship education (GCE). Transformative learning "is the process of effecting change in a frame of reference" (Mezirow, 1997, p. 5). It occurs when we try to make sense of disorienting dilemmas (psychological, convictional, or behavioral) that challenge our assumptions. Through critical self-examination of perspectives, new information or experience contrasts with previous frames of reference (knowledge and/or emotional elements). We reject ideas misaligning with our assumptions, or we incorporate new information into pre-existing frames to create new meaning (i.e., learning), thereby changing our worldviews. Critical self-reflection of unfamiliar experiences leads to transformative learning (Brookfield, 2012). Thus, high quality GCE in postsecondary education should include disorienting dilemmas and planned reflection so students acquire new information/experience that challenges perspectives, foster new learning, and shift worldviews (locally and globally).

GCE encompasses multidimensional, complex, interconnected, and competing concepts, which complicate its true origin and current practice. Citizenship typically refers to membership in a nation-state with rights and responsibilities to maintain that membership (Akkari & Maleq 2020); we recognize some stateless societies exist, but this paper focuses on GCE in postsecondary education. Globalization implies differing nations consider and accept or adapt

other nation-states' values and cultures, resulting in exchanges (economic, political, educational, technological) that benefit one or many nations. Conflicting national interests occur in the globalization process.

Many postsecondary institutions provide GCE initiatives in one of two approaches: 1) the global competencies approach provides students with skills needed to compete in a global society; and/or 2) the global consciousness approach provides students with global orientation, empathy, and cultural sensitivity, stemming from humanistic values and assumptions (Dill, 2013, as cited in Goren & Yemini, 2017). Our study used the global consciousness approach. That is, "global citizenship is understood as a multidimensional construct that hinges on the interrelated dimensions of social responsibility, global competence, and global civic engagement" (Morais & Ogden, 2011, p. 449), as known through coursework and campus experiences.

Previous research (Braskamp et al., 2012; Chickering & Braskamp, 2009; Morais & Ogden, 2011) shows that one's sense of social responsibility is based on interdependence and concern for others, society, and the environment. Fonseca et al. (2019) recommended including social responsibility across the curricula with courses involving social, scientific, and cultural activities because social responsibility influences community harmony.

Global competence is understood as having an open mind, seeking to understand others' cultural norms and expectations, and leveraging this knowledge to interact effectively with others (Morais & Ogden, 2011). Other global competency views include abilities such as living and working in multicultural societies (Kang et al., 2017), possessing universal awareness (Stankovska et al., 2019), and interacting and communicating in intercultural situations (Deardorff, 2006). Regardless of definition, most include aspects of self-awareness in intercultural encounters, communications, and general knowledge about world issues and events. Many postsecondary programs seek to increase global competence through short- and long-term education abroad, but some were realized in intercultural online class projects at U.S. and Korean universities (Kang et al., 2017). Thus, GCE is not confined to physical experiences but might be gained in non-travel experiences.

Global civic engagement is when one recognizes and responds to local or global issues with actions such as volunteerism and community participation (Morais & Ogden, 2011). Global civic engagement is not one's perceived global competence (ideals) but one's actions and behaviors toward those ideals. Engagement could be through local civic actions with global intent, such as buying fair trade products that affect global markets. Service-learning courses and volunteerism provide common forms of civic engagement (Rossi et al., 2016). Some research shows limited volunteerism is common among young people who lack strong organizational affiliations (Hyde et al., 2014; Pozzi et al., 2019).

Employers actively seek students with global competencies (Rampasso et al., 2020). Employees with global perspectives are especially needed in the food and agriculture industry (Rampasso et al., 2020; Wolff et al., 2018). The UN Sustainable Development Goals highlighted food

security, responsible consumption, and food production as necessary parts of future food systems to feed 9 billion by 2050 (King et al., 2017). Beyond increased food demand and resource use, we will be threatened with land degradation, desertification, altered carbon, nitrogen, and water cycles (Steffen et al., 2015, as cited in Wolff et al., 2018).

Knowledge influences perception. Our perceptions of being global citizens are shaped partly by our knowledge of international issues. Morales et al. (2017) found U.S. and Latin American students lacked general knowledge of international food and agriculture issues, affirming earlier studies (Moriba & Edwards, 2015; Wingenbach et al., 2003). Morales et al. (2017) and Moriba and Edwards (2015) recommended internationalizing university education, such as adding a global component to the undergraduate curriculum, which might improve general knowledge of international issues. We believed that general knowledge of international food and agriculture issues may differentiate by selected demographics such as college (e.g., agriculture vs. others).

Fostering values of global citizenship is central to many universities' mission statements (Zúñiga et al., 2015) and GCE efforts. However, we do not know what should be included as a global component in undergraduate education or if GCE produces transformative learning without assessing current perceptions of global citizenship and general knowledge of international food and agriculture issues.

Purpose

The purpose of this study was to explore perceptions of global citizenship and general knowledge of international food and agriculture issues. The objectives were to:

1. Assess perceptions of global citizenship.
2. Evaluate general knowledge of international issues related to food and agriculture.
3. Determine if differences existed in perception or knowledge when compared by selected demographics.

Methods

A descriptive cross-sectional design (Creswell, 2005; Field, 2000) was used to collect quantitative data. The target population (N ≈ 75,000) represented members at Texas A&M University in spring 2021. The accessible population (n = 4,100) included students (n = 3,150) enrolled in one of 75 courses with global or international attributes and faculty and staff (n = 950) associated with those courses. All courses were accessed through the university's private online advising system. Stratified random samples were drawn using Dillman et al.'s (2009) methods for deriving probability samples after university ethics review board approval (i.e., IRB2020-1445M). A sample of 351 would represent 4,100; we rounded the sample to 400. Notices were sent three times via the Qualtrics platform. Student response rate was 32%. Faculty and staff response was 6%.

Total responses were 240, reduced to 184 because of partial or incomplete data. According to Dillman et al. (2009), sampling and nonresponse error are two of four possible sources of error in survey research. We used Lindner and Wingenbach's (2002) method to compare early vs. late respondents. No significant differences in summed general knowledge existed between early (M = 9.06, SD = 2.29) and late (M = 9.59, SD = 2.43) respondents; $t(182) = -1.50$, $p = .14$. General knowledge of international agriculture is indicative of nonrespondents.

The research instrument had three sections. The global citizenship scale (GCS; Morais & Ogden, 2011) has 20 statements. Our version of the GCS was edited to remove ambiguity, redundancy, and double-barreled items. Respondents rated perceptions of global citizenship using a 6-point Likert-type scale (1 = strongly disagree … 6 = strongly agree). Negatively worded statements were reverse coded. Post-hoc reliability tests revealed reliable Cronbach's coefficient alphas for GCS dimensions, consistent (αs = 0.66 – 0.85) with others (Morais & Ogden, 2011; Morales et al., 2017). Individual statements for social responsibility, global competence, and global civic engagement produced GCS dimension indices. Faculty and staff response was minimal, which limits the applicability of their results.

General knowledge of international food and agriculture issues (20 questions) was measured with modified versions of international agricultural instruments developed by Wingenbach et al. (2003), Hurst (2013), Moriba and Edwards (2015), and Morales et al. (2017). Some questions were outdated; those were replaced with current issues reported in content-related media (e.g., online news and popular press). Questions had four response choices (one correct answer). Knowledge questions were not specific to one field but a range of topics that might be discussed across the university. Correct and incorrect responses were coded as dichotomous data (0 = incorrect, 1 = correct).

The Kuder-Richardson 20 (KR20) formula test produced a reliability coefficient of 0.33 for the general knowledge section. Low reliability was attributed to item singularity, difficulty, and discrimination (Frisbie, 1988). Five knowledge questions were very difficult (P < 30%) and three were very easy (P > 70%) according to Musa et al. (2018) and Pande et al. (2013). When KR20 scores are less than .60 (Ursachi et al., 2015), caution is necessary. General knowledge of international food and agriculture issues reported herein represents this study's respondents only and should not be generalized beyond that group. Despite low reliability of the general knowledge portion, we included those questions and responses for comparative purposes to previous studies (Hurst, 2013; Morales et al., 2017; Moriba & Edwards, 2015; Wingenbach et al., 2003) and because knowledge influences perception. Hence, we remain in the belief that general knowledge of international food and agriculture issues in this study may be associated with perceptions of being global citizens.

Several demographic questions were included to describe the respondent set. Descriptive analyses were used to report group data. Inferential statistics (ANOVA, t-test) were conducted with a-priori 0.05 levels to determine if significant differences existed in perceptions of global citizenship or knowledge when compared by selected demographics.

Findings

Participants (*N* = 184) were categorized by group, sex, race/ethnicity, and college. They were characterized as undergraduates (59%), female (55%), and white (67%), enrolled in sciences and engineering (30%) during spring 2021 (Table 1).

Table 1

Frequencies for Demographic Variables (N = 184)

Variables	Categories	*f*	%
Groups	Undergraduate students	108	58.7
	Staff member	39	21.2
	Graduate students	20	10.9
	Faculty member	17	9.2
Sex	Female	101	54.9
	Male	81	44.0
Race/Ethnicity	White	123	66.9
	Hispanic	32	17.4
	Others[a]	29	15.8
Colleges	Sciences/Engineering[b]	56	30.4
	Agriculture	52	28.3
	Other Colleges[c]	46	25.0
	Liberal Arts	28	15.2

Note. Frequencies may not equal 100% because of missing data. [a]Includes black (*n* = 5), Asian (*n* = 11), and others (*n* = 13). [b]Includes sciences (*n* = 13) and health sciences (*n* = 13); [c]Includes business (*n* = 14), education (*n* = 9), and others (*n* = 23).

Respondents strongly agreed (*M* = 4.51-5.50) with global competency statements about communicating with others, adapting behavior when interacting with other cultures, and expressing views about pressing global problems to others (Table 2). They disagreed (*M* = 1.51-2.50) with social responsibility statements about global justice and disparities (people around the world get the punishment they deserve, and people around the world get what they deserve). Their disagreement (*M* = 2.51-3.50) with action-oriented global civic engagement statements (e.g., In the next 6 months, I will…) could have been confounded by the novel coronavirus (COVID-19) restrictions during data collection. Some respondents misinterpreted action statements as requiring contact, although it was not implied (i.e., online interactions were possible).

Table 2

Descriptive Statistics for Perceptions of Global Citizenship

Statements	GCS	*n*	*M**	*SD*
I communicate with others from different cultures.	GC	183	4.80	1.09
I adapt my behavior when interacting with other cultures.	GC	182	4.76	.97
I adapt my communication style to others' cultural backgrounds.	GC	184	4.53	1.11
I am comfortable expressing my views about pressing global problems to others.	GC	182	4.51	1.22
I can get others to care about global problems that concern me.	GC	184	4.16	1.10
I am informed about current international issues.	GC	184	3.94	1.18
I can develop a plan to solve a social problem.	GC	184	3.82	1.07
I know how to solve some of the world's worst problems.	GC	182	2.90	1.29
When possible, I buy fair-trade or locally grown products.	GCE	184	4.21	1.27
I boycott brands that harm marginalized people or places.	GCE	183	3.98	1.32
I buy brands that are good stewards of marginalized people and places.	GCE	184	3.86	1.18
I express my concerns about global issues on social media.	GCE	181	3.18	1.69
In the next 6 months, I will participate in a campus forum, music, or other event where people express their views about global problems.[a]	GCE	184	3.12	1.51
Within 6 months, I will work informally to solve a global humanitarian issue.[a]	GCE	184	3.11	1.34
In the next 6 months, I will get involved with a global humanitarian organization or project.[a]	GCE	184	3.02	1.43
In the next 6 months, I will volunteer to help individuals abroad.[a]	GCE	184	2.95	1.39
Within 6 months, I will contact someone in government to seek public action on global issues.[a]	GCE	184	2.74	1.45
It is okay if some have more opportunities than others.[b]	SR	184	3.36	1.32
I think most people around the world get what they deserve.[b]	SR	183	2.20	1.16
I think people around the world get the punishment they deserve.[b]	SR	179	2.13	1.11

Note. GCS Dimensions: GC = Global Competence (self-awareness; intercultural communication; global knowledge); GCE = Global Civic Engagement (involvement in civic organizations; political voice; global civic activism); SR = Social Responsibility (global justice and disparities). *Scales ranged from strongly disagree (1) to strongly agree (6). [a]Data were collected during COVID-19 restrictions; some statements may have been misinterpreted as actions requiring close contact during data collection. [b]Denotes negatively worded statements (Morais & Ogden, 2011).

General knowledge (20 items) of international issues related to food and agriculture resulted in a mean correct score of 9.28 (*SD* = 2.36). Based on a normal distribution, minimal satisfactory knowledge (12 points = 60% correct) was achieved within two standard deviations for ~18% of respondents (*n* = 33). Minimally satisfactory knowledge ranged from 13% of undergraduates (*n*

= 14), to 21% of staff (*n* = 8), 25% of graduate students (*n* = 5), and 35% of faculty (*n* = 6). Respondents were most knowledgeable (correct responses in brackets in Table 3) about "The [Saharan] desert is the world's largest hot desert" and "Economic strength and well-being of a country can be measured by [Gross Domestic Product, annual growth rate, and life expectancy]."

Table 3

Frequencies for Correct Knowledge of International Issues (N = 184)

Questions	*f*	%[a]
The [Sahara] desert is the world's largest hot desert.	167	90.8[b]
Economic strength and well-being of a country can be measured by [Gross Domestic Product, annual growth rate, and life expectancy].	156	84.8[b]
In 2018, China was the world's leading producer of [rice].	135	73.4[b]
[Social Media] has the most weekly users worldwide.	124	67.4
[Wood] is the primary household fuel for low-income groups in Latin America.	115	62.5
Projected world population for 2050 shows most growth in [Asia & Oceania].	106	57.6
Who carries out most of the field work on an African farm? [Women]	102	55.4
[China] is the world's leading producer of pork.	100	54.4
[Chinese, Spanish, English, Arabic] are the four most spoken languages worldwide.	98	53.3
[Rice] is the basic cereal grain for more than half of the world's population.	86	46.7
[France, Ireland, Italy, Sweden] are part of the European Union.	81	44.0
Where would you find a hand-dug underground irrigation system called a Qanat that extends from mountains to fields to plains? [Middle East]	72	39.1
Worldwide population will be about [10] billion by 2050.	70	38.0
[Proteins] are most lacking nutrient in the diets of the world's population.	70	38.0
Which country is the largest producer of tea in the world? [China]	66	35.9
Food production needs to increase [60%] to meet global demand in 2050.	53	28.8[c]
Which food sector uses a greater variety of biological diversity than the other sectors? [Capture fisheries]	36	19.6[c]
In East Africa, it is expected that everyone will [shake hands] upon greeting and departure from meetings.	36	19.6[c]
As of 2018, [12%] of the world's population suffered from chronic hunger.	25	13.6[c]
Although large land areas are brought into cultivation worldwide annually, large amounts are also rendered useless or are reduced in agricultural capacity because of [lack of sufficient farm labor].	10	5.4[c]

Note. Frequencies may not equal 100% because of missing data. Correct answers are in brackets. [a]Overall item difficulty. [b]Item was very easy (P > 70%). [c]Item was very difficult (P < 30%).

Significant differences in perceptions of global citizenship existed when compared by group status (Table 4). Games-Howell post-hoc analyses showed faculty members perceived global

civic engagement scores (M = 34.53, SD = 7.66) were significantly greater ($p < 0.02$) than were staff members' scores (M = 27.97, SD = 8.78), $F(2,181) = 3.42$, $p = 0.02$. A medium ($\eta^2 = 0.12$) effect size (Cohen, 1992) was detected. No significant differences were found in when compared by race/ethnicity, college, or sex.

Table 4

ANOVA Results for Global Citizenship Dimensions by Group Status

Dimensions	Groups	*n*	*M*	*SD*	F	*p*	η^2
Social Responsibility[a]	Undergraduates	108	12.81	2.83	2.09	.10	
	Graduates	20	14.45	2.78			
	Faculty	17	12.88	3.39			
	Staff	39	13.49	2.79			
	Total	184	13.14	2.89			
Global Competence[b]	Undergraduates	108	33.16	5.35	1.69	.17	
	Graduates	20	35.60	4.81			
	Faculty	17	33.82	5.34			
	Staff	39	32.08	7.41			
	Total	184	33.26	5.83			
Global Civic Engagement[c]	Undergraduates	108	29.62	8.29	3.42	.02*	.12
	Graduates	20	33.05	8.04			
	Faculty	17	34.53	7.66			
	Staff	39	27.97	8.78			
	Total	184	30.10	8.48			

Note. [a]Scores ranged from 3-18. [b]Scores ranged from 8-48. [c]Scores ranged from 9-54. Effect sizes (Eta squared, η^2) were based on Cohen's (1992) guidelines for ANOVA tests; a medium ($\eta^2 = 0.059$) effect size was detected.
* $p < .05$.

No significant differences were found in general knowledge of international food and agriculture issues when compared by demographic variables.

Conclusions, Discussion, and Recommendations

A large southern U.S. university's mission statement includes principles of global citizenship to be adopted and practiced among its students, faculty, and staff. Within the framework of transformative learning theory and the global consciousness approach to GCE, we found the university's faculty members perceived themselves as being significantly more engaged as global citizens than did staff members. However, no differences existed when tested by the social responsibility or global competence dimensions. That faculty perceived themselves as having higher levels of global civic engagement was not surprising, given their greater opportunities (as opposed to staff members) for engagement in such activities. What was

surprising is that undergraduates did not view themselves as being more globally engaged. How can we explain this result?

A disconnect exists between faculty members' global civic engagement and their incorporation of it in classrooms or curricula. The disconnect might be resolved if educators 1) integrate their global civic engagement beliefs and actions into teaching activities, and 2) require students' participation in global civic engagement activities in the classroom, across campus, or throughout their communities. The large southern U.S. university in this study, and others, can do much to enliven their mission statements through action, practice, and realistic global civic engagement.

As is the case with many descriptive studies, we cannot determine with a high degree of specificity if students in courses with global or international attributes at a southern U.S. university did or did not acquire transformative learning in relation to becoming global citizens through coursework or experiences. No baseline of global perspective existed prior to the study. We intend to follow-up with respondents to ask about their global perspectives again; a beginning to measuring such attributes will take form.

Based upon the literature and theoretical framework of this study, we postulate that if educators want to change students' worldviews, then planning and incorporating disorienting dilemmas (psychological, convictional, or behavioral) into coursework and academic experience is needed. Christie et al. (2015) used a worldviews survey to 1) engage students in action research, 2) introduce disorienting dilemmas to spark discussion of differing belief systems, and 3) encourage critical self-examination of mental models. The anonymous survey requires participants' ratings of views on euthanasia, immigration quotas, genetics research, the death penalty, privatization, internet censorship, abortion, unemployment benefits, adoption by gay couples, and nuclear disarmament. Not all topics relate to international issues in food and agriculture, but several can be incorporated into many courses about globalization, markets, food production, labor, and government policies.

Transformative learning and GCE can be purposefully planned and incorporated into postsecondary education. When administered effectively, educators will help students make critical connections between belief and action in becoming global citizens. We recommend using Christie et al.'s (2015) worldviews survey to initiate disorienting dilemmas that lead to transformative learning in postsecondary GCE. Doing so increases probabilities of changing students' awareness of values and beliefs, while recognizing that opposing values and beliefs can co-exist in society. Finding common ground on disorienting dilemmas is the first step to effecting changes in one's worldviews.

Global civic engagement requires demonstrating or acquiring a predisposition to act, to do something, that addresses local or global issues outside one's environment. "Volunteerism, political activism, and community participation" (Morais & Ogden, 2011, p. 448) can be incorporated into coursework, especially into courses about food security or social justice issues. Service-learning courses provide entry into civic engagement (Barrett & Zani, 2015; Rossi

et al., 2016) without the need to travel abroad. Volunteering at food pantries or other social programs helps students become engaged locally, which may foster global civic engagement. The university provides many functions, among them is a place where students gain a sense of community, a purpose of being and affiliation. Students gain feelings of organizational affiliation (Ascoli & Pavolini, 2017; Hyde et al., 2014; Meneghini et al., 2016, Pozzi et al., 2019) through volunteerism and service-learning projects. GCE and global citizenship skills are enhanced when postsecondary institutions and civic organizations partner to help students practice global citizenship principles.

We believe undergraduates were naïve idealists, perceiving themselves as global citizens but lacking demonstrable knowledge or actions to justify such worldviews. They *talked the talk but didn't walk the walk*. This situation might be due to the social distancing restrictions during the COVID-19 pandemic when these data were collected. However, we know that some gaps between perception and action can be narrowed with virtual exchange programs (Kang et al., 2017). The virtual exchange program needs more research to determine if GCE produces meaningful changes in worldviews.

Measuring general knowledge of international issues related to food and agriculture remains a mystery in postsecondary education, as found in our and previous studies (Hurst, 2013; Morales et al., 2017; Moriba & Edwards, 2015; Wingenbach et al., 2003). Knowledge is critical to attaining global competencies, yet less than one in five undergraduates and only one-fourth of graduate students achieved passing scores (i.e., >60% correct) in the general knowledge test. While nominally better, about one-third of faculty and one-fifth of staff achieved passing scores, yet those results were not significantly greater than students' marks. Of note was the faculty perception of being informed about current international issues, which was unsupported by their lower-than-expected general knowledge score. Considering the emphasis placed on developing globally competent students, faculty, and staff in higher education, much work remains in obtaining evidence to support such ideals.

Such evidence may be found through studies of employers' needs for global-ready citizens in workplace settings. Harder et al. (2015) found employers at a University of Florida career expo stressed the importance of global competencies as skills, knowledge, and perspectives. Greater numbers of students must increase their general knowledge of international food and agriculture issues. The same might be true for postsecondary educators and staff; however, our results are limited by low response rates among faculty and staff. Still, we believe all postsecondary institution members should increase their general knowledge of international issues, especially those affecting future global food production, if they wish to achieve changed worldviews consistent with being global citizens.

Some progress is being made to improve students' general knowledge of international issues and agricultural facts. Morales et al. (2017) found only 4% of university students passed the knowledge test, while Wingenbach et al. (2003) found about 5% had passed a similar test. Moriba and Edwards (2015) found about 19% had passed the general knowledge test, but that result came from students who had participated in one of three international dimension

undergraduate courses at Oklahoma State University. Students achieved statistically significant, yet small gains in general knowledge after one semester of studying emerging global challenges and trends. More research is needed to determine better measures of the general knowledge of international issues in food and agriculture, especially the knowledge gained through specific coursework, campus activities, or international study/work abroad experiences.

Wingenbach et al. (2003) suggested students' lack of general knowledge of international issues related to food and agriculture was from lacking connections between knowledge and application to international contexts or situations. Wingenbach et al. (2003) mentioned that formal education had limited resources to expand students' general knowledge of international issues related to food and agriculture; however, useful methods now exist in virtual study abroad programs. Many students supported the idea of learning more about international issues related to food and agriculture; however, when asked if they would take action to improve their knowledge of international issues related to food and agriculture, they were unlikely to do so. We think virtual international experiences may prove useful in expanding students' general knowledge of international issues related to food and agriculture. More research is needed to support this claim.

In the end, we found that developing global citizens requires actionable efforts from faculty, staff, and students to enliven their institutional mission statements. When purposeful actions match idealized beliefs about global citizenship, then worldviews can be changed, giving way to societal changes that align with truer definitions of a global society.

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