

Teaching Outside of the Margins: School-Based Agricultural Education Teachers' Perspectives on Globally Competent Teaching During an International Experience

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Abstract

Because of the need to produce more globally competent students, researchers have called for integrating global concepts into the agricultural education curriculum over the past decade. Despite this, many teachers have not been adequately prepared to facilitate such in practice. This investigation sought to examine Louisiana school-based agricultural education (SBAE) teachers' perspectives on globally competent teaching during an international experience in Costa Rica. As a result of our analysis of the data, three themes emerged: (1) teaching outside of the margins, (2) global storytelling, and (3) innovative global experiences. The themes narrated the ways in which the teachers articulated how they intended to create globally competent students in SBAE because of their international experience. The findings of this investigation also illuminated a critical implication for the discipline – if we more intimately connect the local to the global, perhaps SBAE could position itself to engage in discussions and address problems associated with diversity, equity, inclusion, and belonging (DEIB) more profoundly. Moving forward, we recommend that teacher educators and state agricultural education leaders explore how international experiences might be used as an entry point for SBAE to engage in critical conversations and understand how issues of DEIB can be addressed more effectively.

Introduction and Review of Literature

In recent decades, the globalization of our world has seemingly reshaped society's social and professional fabric (Longo & Saltmarch, 2011). This shift has led individuals to engage in more globally integrated activities across borders, which has been crucial to growing our world's economy (Myers, 2010). For individuals to be competitive in this rapidly changing workforce, it has become critical to understand how their careers have become situated in the global landscape (Cseh et al., 2019). In the U.S., public schools strive to instill in students the knowledge, skills, and experiences needed to become productive citizens who can succeed in various careers (Rothstein et al., 2008). However, today's graduates must be prepared to live and work in a society that has become defined by unprecedented economic shifts, political instability, and sociocultural values (Roberts-Hill et al., 2024). These trends have become particularly relevant for the agricultural industry, which has been tasked with preparing future generations to succeed in a highly interconnected global economy (Radhakrishna et al., 2003). One strategy that has emerged to address such

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issues has been *global education* – a pedagogical approach that aims to prepare students to be productive citizens in a world in which national borders have become increasingly blurred (Hall & Hite, 2022; Mardi, 2023; Parkhouse et al., 2015; Parmigiani et al., 2022).

To achieve this goal, educators must also be competent in teaching concepts from a global perspective (Pigg et al., 2021; Roberts-Hill et al., 2023). The Longview Foundation (2008) defined global competence as having knowledge and curiosity about world history, an understanding of language, cross-cultural communication skills, and a commitment to ethical leadership. However, for students to be adequately prepared for the global age, educators must also possess knowledge and skills on a range of global issues, pedagogical approaches, the ability to teach students how to analyze data across contexts, understand multiple points of view, and have a solid commitment to ensuring students become responsible citizens of the world (Longview Foundation, 2008).

The idea of preparing teachers to be globally competent has emerged as a relatively new responsibility for teacher educators (Parkhouse et al., 2015). On this issue, Mikulec (2014) explained that the literature on global education has primarily focused on the needs of K-12 students regarding facilitating their global competence development. However, little empirical evidence has examined teachers' global education needs (Mikulec, 2014). This dearth of knowledge has become troublesome because teachers cannot instill global competence in their students without exhibiting such knowledge and skills themselves (Tichnor-Wagner et al., 2019). Further, more than ever before, students populating U.S. public schools have begun to represent more diverse cultural, ethnic, and racial identities (Institute for Educational Sciences [IES], 2020). Case in point, in 2019, more than 28% of the U.S. K-12 student population were children of immigrant parents (Institute for Educational Sciences [IES], 2020). Consequently, the expectations for teachers have expanded to exhibiting competencies such as cultural competence, an understanding of international sociopolitical and economic conditions, and the ability to recognize and adapt to different ethical, political, and social perspectives on acceptable pedagogical approaches (Hall & Hite, 2022; Mardi, 2023).

Despite the need for global competence, many teachers have not been adequately prepared to facilitate such in practice (Parmigiani et al., 2022). For example, in an analysis of more than 200 textbooks on teacher preparation, Zong (2009) found that less than 10% addressed the importance of global education. As such, a key implication from this study was that little attention had been given to global education concepts during the preparation of teachers because of the lack of quality curricular resources (Zong, 2009). This notion has been supported by additional evidence that has found a statistically significant and negative relationship between teachers' beliefs about global education and their intent to integrate such into their curriculum (Zhao, 2010). Therefore, although teachers perceive global education positively, they often do not intend to teach concepts from a global perspective (Zhao, 2010).

Because of the need to produce more globally competent students, researchers have called for integrating global concepts into the agricultural education curriculum over the past decade (Conner et al., 2017; Conner & Roberts, 2013; Foster et al., 2014; Roberts, 2024; Wright et al., 2019). Globally competent teaching refers to the "...knowledge, skills, mindsets, and values needed to [teach students] to thrive in a diverse, globalized society" (Tichnor-Wagner et al., 2019, p. 3). At the university level, Bletscher et al. (2022) reported that agriculture majors received failing grades when tested on their knowledge of international agricultural issues and policy. Perhaps even more concerning was the finding that non-agriculture majors received higher scores than students who majored in agriculture on these concepts (Bletscher et al., 2022). Meanwhile, in school-based agricultural education (SBAE), empirical evidence has been conflicted regarding the global preparedness of teachers and students to address complex issues in the 21st Century (O'Malley et al., 2019; Heinert et al., 2020; Wingenbach et al., 2003). For example, Heinert et al. (2020) found that SBAE students generally held positive attitudes, beliefs, and understanding of international agricultural concepts. However, other empirical evidence has suggested that SBAE students and teachers

lack knowledge of different cultures, people, and issues (O'Malley et al. 2019; Pigg et al., 2020, 2021; Wingenbach et al., 2003). Consequently, more work has been needed to understand how best to prepare SBAE teachers to equip their students with the dispositions, knowledge, and skills needed to navigate a globally integrated society (Roberts & Edwards, 2016; Roberts et al., 2020).

On this point, some researchers (Brooks & Williams, 2001; Gorter et al., 2020) have called for using international experiences to expand SBAE teachers' perspectives on globally competent teaching. For instance, Brooks and Williams (2001) found that after teachers participated in an international experience in Costa Rica, they felt more prepared to teach concepts in SBAE from a global perspective. Similarly, after an international experience in Ecuador, Gorter et al. (2020) reported growth in teachers' attitudes, beliefs, classroom practices, and personal and professional pursuits. Although these findings have been encouraging, insufficient evidence has examined the role of international experiences in shaping SBAE teachers' perspectives on globally competent teaching. The lack of knowledge of this phenomenon inspired this investigation.

Conceptual Framework

Tichnor-Wagner et al. (2019) model of globally competent teaching emerged as the most appropriate lens to interpret the findings of this study. The model suggests that globally competent teaching results from 12 distinct elements that can be delineated using teachers' (a) dispositions, (b) knowledge, and (c) skills. Through this lens, dispositions reflect teachers' attitudes, beliefs, and values using verbal and nonverbal communication approaches. Regarding dispositions, Tichnor-Wagner et al. (2019) explained that teachers should have the appropriate professional attitudes, beliefs, and values to effectively educate students from a global perspective. Therefore, globally competent teachers should embrace diversity, human rights, and differences among all people. In particular, Tichnor-Wagner et al. (2019) argued that two critical dispositions influence globally competent teaching: (1) a commitment to equity worldwide and (2) empathy and valuing multiple perspectives.

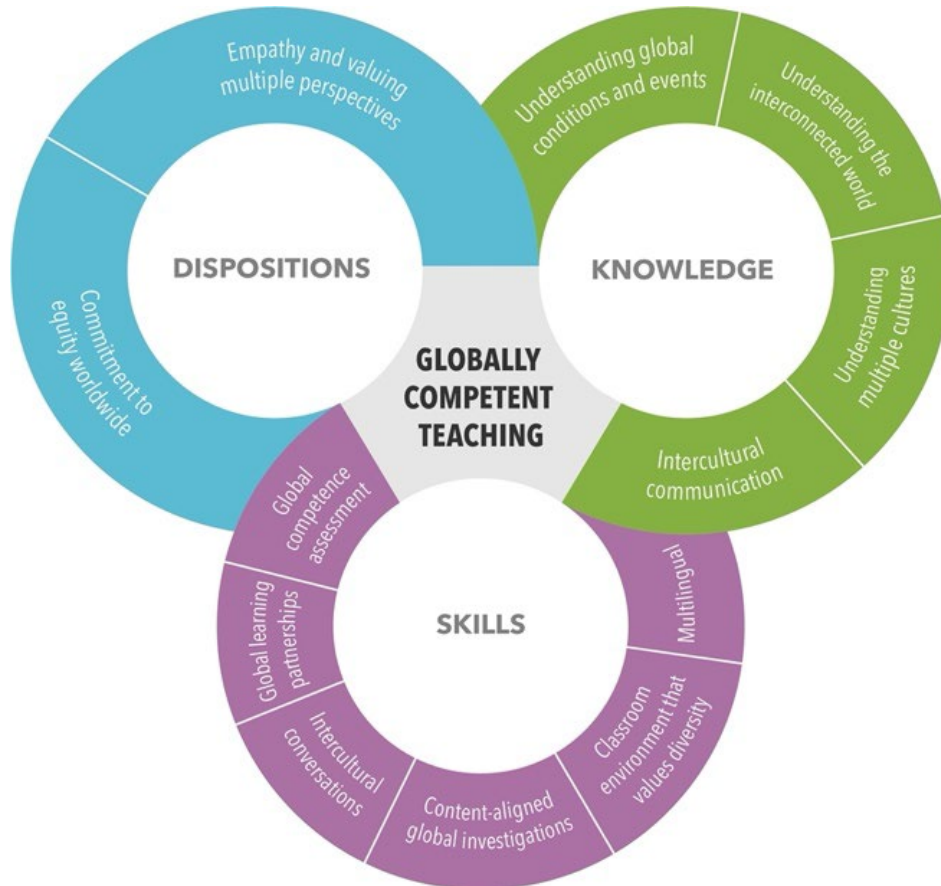
Meanwhile, the knowledge component of the model refers to teachers' interdisciplinary understanding of various cultures, events, and systems across the globe and the ways in which they interconnect. Globally competent teachers should also have a combination of disciplinary and interdisciplinary knowledge to adequately explain how various cultures, events, and systems function around the world. As such, four key elements comprise global knowledge: (1) understanding of global events and happenings, (2) understanding of how the world is interconnected, (3) experiential understanding of multiple cultures, and (4) understanding of intercultural communication.

The final component of the model suggests that teachers must integrate their dispositions and knowledge into their teaching practices to have the *skills* needed to prepare their students for the world. Accordingly, skills represent what teachers, across levels and subjects, should be able to accomplish when using globally competent teaching as they "...pla[n] for instruction by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context" (Tichnor-Wagner et al., 2019, p. 24). Consequently, globally competent teaching includes six primary skills: (1) communicating in multiple languages, (2) creating a classroom environment that values diversity and global engagement, (3) integrating learning experiences for students that promote content-aligned explorations of the world, (4) facilitate intercultural and international conversations, (5) develop partnerships that provide real-world contexts for global learning opportunities, and (6) develop and use appropriate methods of inquiry to assess students' global competence development. In the current investigation, the model helped us make sense of teachers' perspectives on globally competent teaching in SBAE during an international experience in Costa Rica. For example, we used the model to compare our emergent findings to those espoused by Tichnor-Wagner et al. (2019) and noted when similarities and

discrepancies occurred. This process helped us emerge the themes of this investigation. Figure 1 provides a visual representation of Tichnor-Wagnor et al. (2019) model of globally competent teaching.

Figure 1

Tichnor-Wagner et al. (2019) Model of Globally Competent Teaching



Background of the Study

In this study, eight SBAE teachers from Louisiana were selected to participate in a one-week international experience in Costa Rica, which was funded through a USDA-NIFA grant. While in Costa Rica, the teachers had the opportunity to engage with a range of academic and technical experts on issues that affected the country's agricultural industry. Through these educational and cultural experiences, our intent was for the teachers to achieve a broadened global perspective they could use to mentor 21st Century leaders prepared to solve complex problems across cultures. This was facilitated through five programmatic focus areas: (1) coastal loss sessions with scientists in Costa Rica, (2) STEM-focused site visits, (3) cultural tours, (4) the development of instructional case studies, and (5) reflective sessions to that helped the teachers make connections to their experience and the SBAE curriculum in Louisiana.

During the international experience, the teachers were introduced to issues concerning (a) animal science, (b) coastal loss, (c) coffee and cacao production, (d) environmental education, (e) plant science, and more. As the teachers interacted with experts and gained a deeper understanding of issues and problems affecting the industry, they collected four forms of data: (1) audio recordings of interviews with experts, (2)

documents, (3) photographs, and (4) video. The teachers used this data to create instructional case studies, 24 total, that were later distributed to SBAE teachers in Louisiana to globalize an existing curriculum. Our intent when employing this approach was to provide teachers with the resources to support globally competent teaching in Louisiana SBAE.

Purpose of the Study

This investigation examined Louisiana SBAE teachers' perspectives on globally competent teaching. The study aligned with the American Association for Agricultural Education's (2023) research values regarding *Ensuring Diversity, Equity, Inclusion, and Belonging* and *Implementing Programming for International Development* initiatives. Because of changing demographics that affect interactions within the agricultural industry, it has become critical for future agriculturalists to exhibit global competence. One research question framed the study: What were Louisiana SBAE teachers' views on how to foster global competence for their students during an international experience in Costa Rica?

Methodology

In the design of this study, we grounded our decision-making in the epistemological position of constructionism (Crotty, 1998). Constructionism seeks to help make sense of how individuals' experiences and interactions help them make meaning of the world around them. Through this worldview, we chose to use Stake's (1995) instrumental case study design to achieve this investigation's purpose. A case study approach can help provide rich insight into a bounded system (Stake, 1995). In this study, the case was bounded by career and place; for example, all participants were SBAE teachers from Louisiana who were selected to engage in an international experience in Costa Rica. Although case studies using a qualitative design typically cannot be generalized, findings can often be transferable to similar contexts (Stake, 1995).

The teachers ($N = 8$) were selected using a competitive application process in which we emphasized diversity regarding teaching experience, licensure pathway, and diversity regarding the student populations the individuals taught. The participants' teaching experience varied from three to 28 years, with six identifying as female and two as male. Meanwhile, the teachers were evenly divided regarding their licensure route, with four being traditionally certified and the other four having received licensure through an alternative certification pathway.

Reflexivity

In qualitative research, it is critical to address the assumptions, biases, and decisions that influence the investigation (Creswell & Poth, 2016). Therefore, it was important to reveal that the two lead investigators were teacher educators in Louisiana and sought grant funding from USDA-NIFA to facilitate the international experience to Costa Rica. It is also essential to divulge that we work closely with SBAE teachers in Louisiana and had previous professional relationships with all participants in this study. We also traveled abroad extensively and led student groups on study abroad experiences. We also want to disclose that we were responsible for coordinating all activities during the international experience and were present throughout the teachers' time in Costa Rica. The other researchers in this investigation also had international experience. Although they were not present in Costa Rica, they assisted with the data analysis and helped provide an outsider's perspective to help reduce our biases and prejudices that could have negatively influenced our interpretation of the data. We recognize that our experiences and perspectives influenced this study. However, ethical decision-making was emphasized throughout all aspects of the investigation.

Data Sources and Analysis

During the international experience, the teachers were required to submit the following reflective items: (a) audio reflections of their most salient experiences abroad, (b) a photograph and caption of their most significant cultural takeaway, and (c) a photograph and caption of their most significant teaching takeaway. As a result, we analyzed 56 audio recordings and 112 photographs and captions as data for this investigation. Further, we also conducted persistent observations and a two-hour focus group interview with all eight participants on the final day of their experience abroad in Costa Rica.

After the data were collected, we employed Saldaña's (2021) qualitative coding procedures to analyze each data source. Saldaña (2021) explained that a code is "...often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (p. 4). As such, we used structural, descriptive, and in vivo approaches in our first cycle of coding to examine the data using multiple lenses (Saldaña, 2021). This process resulted in 812 first-cycle codes. Next, we utilized axial coding to examine the existing relationships among the first-cycle codes and reduce them to categories. At this point, we met as a research team to negotiate our categories to ensure they made sense in the context of this investigation. During this phase, we also employed thematic analysis to distill our findings further and emerge the study's three themes.

Rigor and Trustworthiness

In this investigation, we weaved Lincoln's and Guba's (1985) standards for rigor and trustworthiness – confirmability, credibility, dependability, and transferability – into each phase to ensure rigor and trustworthiness. Confirmability represents whether researchers have been open and honest about their biases and sources influencing their decision-making. To uphold the standard of confirmability, we (a) fully described our methods and procedures, (b) were transparent about our experiences and relationships that influenced this investigation, and (c) considered alternative interpretations of the data. The second standard, credibility, speaks to whether the findings ring true in the context in which the data were collected. As such, we provided context-rich descriptions, triangulated findings using multiple data sources, and made sure that our conclusions made sense in context.

Dependability, the third standard, addresses whether the investigation was carried out in a systematic way that aligned with standard practices in qualitative research. To achieve such, we (a) collected data that supported the purpose of the study, (b) specified the philosophical paradigms that we drew upon when designing and carrying out the investigation, and (c) ensured that the study aligned with standards of case study research as advanced by Stake (1995). For the final standard, transferability, researchers should consider if the findings could be transferred to similar contexts. To fulfill transferability, we were clear about the parameters and limitations of this investigation while also attempting to provide an accurate description of our procedures to conduct the study and the funding that we received to carry out an international experience for SBAE teachers to Costa Rica.

Findings

As a result of our analysis of the data, three themes emerged (1) teaching outside of the margins, (2) global storytelling, and (3) innovative global experiences. The themes narrated the ways in which the teachers in this study articulated how they intended to create globally competent students in SBAE as a result of their international experience.

Theme #1: Teaching Outside of the Margins

During their time in Costa Rica, the teachers began to voice a shift in their thinking in regard to teaching agricultural and environmental concepts that extended *outside of the margins*. In particular, they began to talk about the need to feature the experiences of marginalized populations when teaching. For example, Participant #7 said: "I am beginning to understand that teaching ag is more than just about teaching facts

but also changing the hearts and minds of my students to [create a more] just world.” On this point, Participant #2 shared: “when I get back home, I want to make sure to teach about how agriculture has a great diversity of people, traditions, and practices. I need to [do a] better job highlighting that diversity in my ag classes.” Participant #4 also began to ponder more deeply why agriculture has been riddled with inequalities throughout the world. She reflected: “there is a lack of machinery and technology [in Costa Rica]. So much of what they do here is primitive. I need to talk more about [the history] of this to my students.” She continued: “I think talking about the privileges we have access to [in the U.S.] in agriculture are not realized or considered by my students.”

Tichnor-Wagner et al. (2019) explained that for teachers to be globally competent, they must have a commitment to *equity*. In the current study, the teachers’ commitment to equity appeared to surface through becoming more critically conscious. Case in point, Participant #1 explained: “this trip has made me aware that my understanding of ag is based on my own experiences and people [in other countries] have completely different assumptions of the industry, and that is okay.” Participant #1 further shared: “when I get back to my classroom, I think I will talk more about how what we consider right and wrong in ag is based on what we know.” He continued: “I need to do a better job with my students about helping them understand that other countries may do something different because they do not have the knowledge or the money to do it like us, and that’s fine.” In a similar sentiment, Participant #8 reflected: “I take for granted how wealthy we are as a nation. I teach my students about how we are the greatest ag power in the world.” She further shared: “However, I think this trip opened my eyes about how I need to teach my students about why this is the case and how we can help other countries ag industries more.” In our observations, we also noted that the participants began to talk informally about how to engage their students in conversations about inequalities and how to address such through teaching.

During our observations, we also noted that the teachers often compared women’s roles to men in Costa Rican agriculture. Further, they probed various experts they interacted with about women’s issues. During the focus group, we asked about their interest in this topic. When prompted, Participant #6 explained: “I think that because I am a woman in agriculture in the United States, I take for granted my ability to take on various roles and responsibilities in the industry.” She continued: “I often get questions from students about why I am an ag teacher since it has historically been a male-dominated profession and industry.” Similarly, Participant #1 shared:

...when I go home, I want to be able to accurately explain the differences between women and men in agriculture here [in Costa Rica]. It’s a conversation that comes up a lot, and I usually try to avoid it. I think this experience has helped me see that I need to talk about gender differences with my students more.”

Therefore, the teachers in this investigation explained how key interactions during the international experience opened their eyes to how power dynamics and issues of equity influenced the agricultural industry – a notion deeply rooted in Tichnor-Wagner et al. (2019) work. Through these experiences, the teachers spoke about how they hoped to make changes to their approach to teaching to feature these issues in their classrooms moving forward.

Theme #2: Global Storytelling

As a result of the teachers’ shifts in global thinking during their time in Costa Rica, they began to ponder ways to instill this perspective in their students – a notion that was not included in Tichnor-Wagner et al. (2019) model. Perhaps the most common strategy the teachers articulated was how to use storytelling to resonate with their students to build empathy and have them more authentically engage in global problem-solving. For example, in their daily reflections, teachers often included specific stories about their time in Costa Rica that they wanted to share with their students. In particular, Participant #5 explained: “I got so

many pictures during our site visit to the repurposed hydroponic system at C.A.T.I.E University. I have a hydroponic system at school, and it's going to be so cool to compare the systems with my students." Meanwhile, we observed Participants #1 and #6 capturing video throughout the international experience. When asked why they did such in the focus group interview, Participant #1 shared: "We got the video because I do not think my recollections will be powerful enough. I want my students to really feel and experience what I have here in an impactful way." Participant #8 also shared during the focus group interview: "I've got to really think about how to talk with my students about my experiences here. I want them to feel what I have felt. So, I have to spend some time figuring out how to talk about global ag more impactfully."

During their daily reflections, the teachers also submitted photographs of moments they deemed a *critical takeaway* (Roberts et al., 2020; see Figure 1). Often these images represented significant *lessons learned* that the teachers hoped to take back to the U.S. to share with their colleagues, family, and students. For instance, Participant #2 submitted an image of various products derived from goat's milk. During the international experience, the teachers had the opportunity to visit a small goat farm and observe them processing the milk to create various food products. Participant #2 explained that based on her experience at the goat farm, she was inspired to tell stories of the processes the farmers used to illuminate key STEM concepts for her students. Meanwhile, Participant #3 shared an image of how plant scientists at C.A.T.I.E. university used repurposed bottles and other recycled materials to carry out experiments to grow various flowers and vegetables. By witnessing this commitment to sustainability in agriculture, Participant #3 hoped to motivate students with minimal resources to continue engaging in the industry. Finally, Participant #6 offered an image of having an opportunity to participate in the harvesting of cocoa. Throughout this process, multiple teachers documented each phase through written instructions, videos, and photographs that they intended to use when they returned to their classrooms to demonstrate the process to their students.

Figure 1

Photos and captions from Participant's #2, #3, and #6



One of the biggest takeaways for me today was the many ways that goat's milk can be processed and used to make quality products. I enjoyed how much the goat expert focused on the STEM embedded within the process and how small herd owners in Costa Rica can process their own products. When I return home, I hope to better highlight STEM concepts embedded within my classes – Participant #2, Photo Caption



You've got to work with what you've got! I often talk to my students about how a lack of resources in ag can't hold you back, sometimes you have to use critical thinking to solve problems. This photo will help demonstrate to my students it doesn't matter if don't have a lot of money for supplies, you can still use what have and be sustainable. I think that is a big difference between Costa Rica and the U.S. – Participant #3, Photo Caption



My mind was blown today getting to harvest cocoa! I can't wait to take process back to my students, they are going to be so excited. I made sure and took notes, video, and plenty of pictures so that I can start working this into my food science class. – Participant #6, Photo Caption

The *stock of stories* brought forth by the teachers in the second theme revealed the ways in which they had internalized their experiences in Costa Rica and began to make sense of how their stories could be used in their careers. Case in point, most teachers diligently documented their experiences and ensured they could make key connections to their curriculum. Despite this, no mention of this phenomenon was expressed in Tichnor-Wagner et al. (2019) model.

Theme #3: Innovative Global Experiences

The final theme, innovative global experiences, emerged during the international experience as teachers brainstormed ways to integrate global learning into their curriculum (Tichnor-Wagner et al., 2019). For example, we observed the teachers talking informally about ways to integrate global concepts into the content they had already taught in SBAE. Further, several participants mentioned organizing an international agriculture experience that would allow teachers in Louisiana to take their students abroad.

We also observed several teachers exchanging contact information with agricultural and environmental professionals they met in Costa Rica so they could arrange virtual guest lectures for their SBAE classes.

During the focus group interview, we asked the teachers about our observations. Participant #2 responded: “Yes, I am thinking about how to teach from a more global perspective now. I think the main thing I want my students to understand is how connected the agricultural industry is throughout the world.” She continued: “I am just figuring out what types of experiences will really help that click for my students.” Participant #7 also echoed this sentiment: “I do not see global learning as an add-on; I think it is embedded in what we do.” He expanded: “I am going to use pictures that I have taken here in my ag mechanics classes to get them to problem-solve ways that Costa Ricans could use basic design principles we learn in class to address problems in crop production here.” Meanwhile, Participant #6 explained: “I am trying to figure out an activity I can do to highlight the different philosophies between the U.S. and Costa Rica toward agriculture, sustainability, and environmental education.” She continued: “I think I just need to do a better job of figuring out ways for my students to have the same *ah-ha* moments that I have had while in Costa Rica.” Therefore, the international experience in Costa Rica made the teachers in this study ponder more deeply how they could more impactfully integrate innovative global experiences into the SBAE curriculum. To this point, #5 passionately explained:

I think we have to change our mindset and then help the ag teachers back home change their mindset. We need to go back and talk about things that we learned and the sustainable agricultural practices that they’re incorporating in Costa Rica. There are small tweaks that our ag programs in Louisiana can make to do a better job teaching ag concepts from a global perspective. One of the professors from EARTH University [said], that it doesn’t have to be 2,000 people that change the world, it could just be one. So, I think if we make small changes, it could start to trickle over and take our ag programs to the next level.

By deeply pondering ways to create innovative global experiences for their students and other SBAE teachers in Louisiana, the teachers in this investigation activated critical global competence skills as advanced by Tichnor-Wagner et al. (2019). For example, the teachers began to discuss ways to embrace diverse perspectives and practices. Further, they also considered new ways to align their content with global concepts (Tichnor-Wagner et al., 2019).

Conclusions, Discussion, Implications, Limitations, and Recommendations

This investigation examined Louisiana SBAE teachers’ perspectives on globally competent teaching. Through our analysis of the data, we demonstrated that the teachers expressed three primary strategies they intended to use to foster global competence for their students as a result of their international experience: (a) teaching outside of the margins, (b) global storytelling, and (c) innovative global experiences. Consequently, we concluded that this short-term international experience for SBAE teachers appeared to expand their perspectives on globally competent teaching positively. In the current investigation, we used Tichnor-Wagner et al. (2019) model of globally competent teaching to ground our study conceptually. It should be noted that although two of our themes aligned with concepts expressed in the model, one theme did not. Further, multiple elements outlined in the model were not articulated by the teachers in this investigation. As such, we conclude that the SBAE teachers in this investigation should not be considered fully globally competent; instead, their global identity appeared to be still emerging. Therefore, we recommend that future research examine whether Tichnor-Wagner et al. (2019) model should be revised to reflect different phases of global competence.

In the first theme, teaching outside the margins, the SBAE teachers reported shifts in how they intended to teach agricultural and environmental concepts. For example, they suggested the international experience motivated them to teach their students how marginalized populations in other countries were impacted by

various issues and problems in the agricultural industry – a notion supported by existing research (Pigg et al., 2020, 2021)). Further, the international experience also appeared to awaken a critical perspective among the teachers in which they began to question structures of power and the marginalization of various populations, such as women in agriculture. Although this notion has been expressed in literature on studying abroad with university agriculture students (Pigg et al., 2021), the sentiment has not been reported for SBAE teachers. In the broader literature, this growth has been described as helping teachers mature regarding their critical consciousness to advance issues of equity in the classroom from a global perspective (Parkhouse et al., 2015). Therefore, we recommend that future research examine how developing a critical consciousness through international experiences for SBAE teachers may positively influence teaching and learning about equity for marginalized populations. We also recommend that researchers explore ways to facilitate such growth through domestic and virtual experiences that would likely be more economically feasible.

In the second theme, global storytelling, the SBAE teachers began to ponder how to articulate their global experiences in ways that would resonate more impactfully for their students – a concept that does not appear to have been reported in the literature on international experiences for SBAE teachers. In particular, the teachers documented their thoughts in their journals, captured videos, and images they hoped to share with their students to help them better understand concepts from a global perspective. We recommend that future research explore strategies that may help teachers better narrate their lived experiences abroad in ways that can lead to growth in their students' global perspectives and knowledge. We also recommend that future investigations explore whether pre- and post-departure sessions on global storytelling could positively impact teachers and their colleagues, students, and families.

The final theme explored how the international experience motivated the SBAE teachers to consider new ways to integrate global learning into their curriculum – a sentiment supported by previous work (Brooks & Williams, 2001; Gorter et al., 2020). Unique to this study, however, were the innovative strategies that the teachers planned to use to globalize their curriculum. For instance, the teachers expressed a desire to lead international experiences for their SBAE students in the future. Further, they also spoke about ways to inspire other SBAE teachers in Louisiana to expand their global competence and positively influence their students. Moving forward, we recommend that future studies examine this notion using a larger sample size and in different contexts to understand whether an international experience can lead SBAE teachers to globalize their curriculum using practical strategies. Further, future research should also explore the multiplier effect that an SBAE teacher participating in an international experience may have on their students, colleagues, family, and friends. Consequently, the growth in global competence of teachers in this study should be examined through additional follow-up investigations to assess changes in their outcomes over time.

Infusing global competence in the curriculum will not be a radical departure from existing beliefs and practices espoused in SBAE (Brooks & Williams, 2001; Gorter et al., 2020). For example, discussions of diversity, equity, inclusion, and belonging (DEIB) have often been deepened and became more nuanced when global perspectives were included (Tichnor-Wagner et al., 2019). Consequently, this investigation illuminated a critical implication for SBAE: to more intimately connect the local to the global. With this change, perhaps SBAE could position itself to engage in discussions and address problems associated with DEIB more profoundly. Moving forward, we recommend that teacher educators and state agricultural education leaders explore how international experiences might be used as an entry point for SBAE to engage in critical conversations and understand how issues of DEIB can be addressed more effectively.

It is also important to note that this investigation had multiple limitations. First, this international experience for SBAE teachers was expensive. We could only carry out the endeavor because we received grant funding from USDA-NIFA. However, due to the positive outcomes of this international experience, we recommend that teacher educators explore ways to make leading international experiences for SBAE teachers more affordable. Perhaps by combining resources or creating a nation-wide scholarship fund, teachers from

across the U.S. could engage in similar experiences in the future. Another limitation of this study was that the international experience was short-term in design – lasting only one week. We recognize that allowing the teachers to have a more long-term international experience would likely have led to more transformative outcomes. However, this was not possible due to the hectic schedules of the SBAE teachers in Louisiana and limited financial resources. As such, we recommend that future research examine the differences among teachers who engage in short versus long-term international experiences. With this knowledge, funding agencies may be more open to supporting long-term international experiences for teachers.

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