ELEMENTS OF GLOBALLY COMPETENT TEACHING IN PRE-SERVICE & IN-SERVICE AGRICULTURAL EDUCATORS AFTER PARTICIPATION IN A MAYMESTER STUDY ABROAD PROGRAM TO JAMAICA

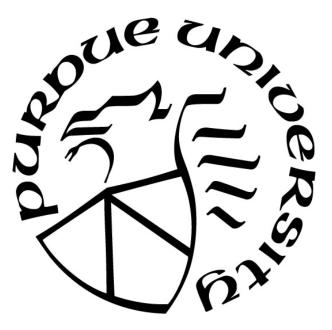
by

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ABSTRACT

In today's evolving classrooms, educators are tasked with going beyond providing the necessary content knowledge to reach the needs of their students. In addition to effectively differentiating instruction, global competency skills have become an increasingly pressing concern as the American society gradually becomes more diverse. In response, recent programs and supports have been created to allow prospective teacher candidates to develop their global competence to better meet the needs of an increasingly diverse and globally connected society.

An explanatory sequential mixed methods research design examined how participation in a short-term study abroad can impact teachers' empathetic dispositions related to globally competent teaching practices. Quantitative data was first collected through an online Qualtrics questionnaire from pre-service, in-service, and other agricultural educators (n=36) who participated in a short-term study abroad experience in Jamaica from 2015-2019. Following the online questionnaire, four virtual follow-up focus groups were conducted via Zoom to further explore the collection and analysis of study participants' self-rated stage of empathy development along the Globally Complement Teaching and Learning Continuum. Inductive coding revealed themes for both internal and external factors influencing study participants' rationale and desired movement along the continuum.

Overall, participants acknowledged the transformative experience during the short-term study abroad to Jamaica as an external factor for building competence in the dispositions element of empathy and valuing multiple perspectives. Implications for practice and suggestions for future research were provided to help agricultural educators develop globally competent teaching practices.

CHAPTER 1. INTRODUCTION

1.1 Introduction

Companies have prioritized global awareness in hiring, continuing education, and leadership development practices in today's workforce (Streiner et al., 2015). Driven by consumer demands, business and industry fields have had to evolve to stay relevant within their prospective areas and to ultimately maintain profits. On the other hand, school systems still have to adopt this mentality for teachers and students alike. Common Core State Standards in forty-six states identify "global competitiveness" as a necessary skill to effectively prepare students for international collaboration. Within our interconnected world, teachers are faced with the responsibility and pressures to prepare students for college and careers in a global-based economy. In addition, they must also teach an increasingly diverse student population. However, in many settings, the population of teachers is not reflective of the diverse populations of their students, and few teachers are confident in their abilities to teach diverse students (McClellan-Kirksey, 2020). As such, there needs to be more emphasis on instructing teachers with new strategies to reach students whose racial, cultural, and linguistic backgrounds may differ from their own (Tichnor-Wagner et al., 2019).

1.1.1 Globalized World

Our connected, globalized society is increasingly dependent upon economic, political, cultural, environmental, and technological interconnectedness (Merryfield, 2008; Hull, 2018). With an increase in digital communication worldwide, teachers and students can be continuously connected to virtual learning platforms and social media. Because of this information overload, educators are required to help students understand and process the amount of information consumed online, and as such, are tasked with going beyond providing the necessary content knowledge to reach the needs of their students.

In addition to effectively differentiating instruction, global competency has become an increasingly pressing concern for public education as the American society gradually becomes more diverse. According to the National Center for Education Statistics, as of 2018, the percentage of students enrolled in public elementary and secondary schools who were White, non-Hispanic

was forty-seven percent, representing a decrease from fifty-four percent in 2009. With an increase in the number of students born outside the United States, classroom educators are tasked with adopting new strategies to create an environment that can effectively engage ethnoracial minorities.

As enrollment trends change the overall composition of United States public schools, teacher education programs have worked in recent years to increase global competency among the skills needed for beginning teachers (Quezada, 2004; Asia Society/OECD, 2018). Tichnor-Wagner et al. (2019, p. 3) defines global competency as a "set of knowledge, skills, mindsets, and values needed to thrive in a diverse, globalized society." Commonly interchangeable within the literature, one can find and use the following terms: global competence, global awareness, global citizenship, global literacy, intercultural competence, international education, and global education.

1.1.2 Globally Competent Teaching Practices

To support the development of globally competent citizens, educators will need to understand the interdisciplinary knowledge needed to thrive in a diverse, globalized society. For this to occur, teachers must first be trained in global competence and feel confident in exploring their own identities (Kerkhoff et al., 2019; West, 2012; Yemini et al., 2019). With significant demographic shifts in both rural and urban communities across the United States, students deserve to be in classrooms with globally competent educators. Globally competent teaching practices include those interrelated dispositions, knowledge, and skills teachers need to instill global competence within their students (Tichnor-Wagner et al., 2019).

Global competence is a multi-dimensional construct that includes the social-emotional, behavioral, and cognitive domains of learning (OECD, 2018; Raimers, 2009; UNESCO, 2015). The cognitive domain includes the "knowledge of global issues, trends, and globalization processes using analytic and critical thinking", the social-emotional domain covers "dispositions of empathy, valuing multiple perspectives, appreciation for diversity, and a sense of responsibility toward a common humanity", and the behavioral domain emphasizes "skills related to effective intercultural communication and collaboration" (Tichnor-Wagner et al., 2019). It is through the social-emotional domain that teachers display their attitudes, values, and commitments. Tichnor-Wagner et al., 2019 details dispositions as a driver for how teachers teach and inevitably the foundation for unlocking further features of global competence.

1.1.3 Immersive Study Abroad Experience

Unfortunately, teacher education programs are among those least internationalized on university campuses (Longview Report, 2009) and offer limited opportunities for pre-service educators to develop global competency awareness. As such, PreK-12 educators are not comfortable with content knowledge surrounding global issues or engaging in international education when they have limited exposure to content, courses, and experiences during their teacher preparation programs (Rapoport, 2009, 2010; Steinemann et al., 2001). However, in recent years, teacher education programs have gradually incorporated several opportunities to cultivate global competency skills in pre-service educators. These include adding a global context into preexisting course work, offering support for learning other languages, professional development, and international exchange programs (Quezada & Cordeiro, 2016). In addition, institutions aim to foster global citizenship for teacher candidates by promoting international study abroad experiences. Mahon and Cushner (2010) concluded that few teachers participate in an immersive cultural experience during their undergraduate programs; however, those that do attend may enhance their cultural sensitivity, nurture empathy for others, and expand their worldwide views. Thus, studying abroad can provide invaluable life experiences and play a vital role in creating globally competent teaching practices in classrooms across the United States.

According to Hartlan (2011), short-term study abroad programs are considered less than a traditional semester or quarter-long program. They can vary in duration from one week to an entire summer. While the shorter length of time and lower cost of those short-term study abroad experiences are attractive, international study programs have much more to offer. Research indicates that even a short-term global experience by teacher candidates can impact the context and content instructed within their future classrooms, impact multicultural competency, and empathize with others, not like themselves (Pence & MacGilivray, 2008; Willard-Holt, 2001).

1.2 Problem Statement

As the United States population becomes more diverse, teacher education programs need to enable prospective teachers to meet those needs. Unfortunately, as classrooms across the United States have become more diverse, educators have not. More than 80% of American public-school teachers are middle-class, Euro-American white women from rural, small towns, or suburbs, who grew up in predominantly white neighborhoods and subsequently graduated from largely, white high schools (Walters et al., 2009). A significant challenge in teacher education is how to prepare the primarily white, pre-service teacher population, to work with diverse students, and to help cultivate an appreciation for a global society in those schools with predominately white student populations (Gay, 2000). The National Center for Education Statistics (1999) found that only 20% of United States teachers feel confident working with children from diverse backgrounds. In addition, Hollins and Guzman (2005) reported that prospective teachers held negative attitudes and beliefs about different cultures than their own and were reluctant to teach in urban school settings, as these schools tend to be more ethnically diverse than those rural and suburban school communities.

In response, recent programs and supports have been created to focus on diversity, equity, and inclusion practices. An international practicum experience can provide the opportunity for developing those cultural competency skills for prospective teacher candidates (Walters et al., 2009). Study abroad experiences have the potential to help novice teachers understand other cultures (Quezada, 2004; Stachowski, 2001), explore the strengths and weaknesses of their educational system, and develop the knowledge, skills, and dispositions necessary to incorporate a global dimension into their teaching practices (Quezada, 2004). Understanding the degree to which a short-term study abroad can impact teachers' empathetic dispositions will contribute to the development of knowledge within the existing literature, inform curricula decisions for those faculty members who lead study abroad opportunities for teacher candidates, and initiate a pathway for globally competent teaching practices in our society.

1.3 Significance of Study

The significance of this study is summarized into the following three categories: 1) it contributes research within the field by addressing the use of the Globally Competent Teaching and Learning Continuum with undergraduate teacher candidates and novice agricultural educators, 2) it informs those faculty members who instruct study abroad courses and design curriculum for teacher candidates, and 3) it informs current educators and learners of globally competent teaching practices.

1.3.1 Contribution of Research

The present study will contribute to existing research within the field by building a foundational knowledge for the use of the Globally Competent Teaching and Learning Continuum with undergraduate pre-service teacher candidates and novice agricultural educators. With the development of the instrument in 2014, a limited body of knowledge of its use has been documented. Because the existing literature surrounds the Globally Competent Teaching and Learning and Learning and Learning continuum implementation in teacher preparation programs, this research will significantly contribute to the knowledge base surrounding its use in current PreK-12 educators.

1.3.2 Advancing Curriculum

This study can inform those faculty members who instruct study abroad courses and design curriculum for teacher preparation programs. Unfortunately, the current plan of study for Agricultural Education majors at Purdue University is very limited in their credit requirements for international understanding selectives (i.e., nine credit hours) and multicultural awareness selectives (i.e., three credit hours) (Purdue University, 2021). For those studying agricultural education, coursework is generally geared towards content knowledge and teacher accreditation. As a result, the preparation for teacher candidates to receive information surrounding globally competent teaching practices is minimal.

Suppose the end goal is to develop globally competent educators; in that case, a backwards design approach can help teacher preparation programs identify the end goals for developing global competence within their teacher candidates. Wiggins & McTighe (2017) detail the backwards design approach as a method to instructional planning that starts with an end goal and works backwards to complete the learning cycle. If using the backwards design method, this study can explain where potential interventions might occur best for those wanting to improve globally competent teaching practices in pre-service and novice agricultural educators.

1.3.3 Informing Educators and Leaners

This study can inform educators and learners of globally competent teaching practices. Upon completing the Globally Competent Teaching and Learning Continuum, educators can utilize their baseline results to construct manageable steps to implement globally competent teaching practices in their classrooms. As teachers seek improvement and progress from nascent to advanced, the Globally Competent Teaching and Learning Continuum moves from personal to interpersonal. Educators begin with the continuum by taking the work upon themselves early on and gradually shifting the responsibility to students in a more advanced developmental level (Tichnor-Wagner et al., 2019). The reflective nature of the Globally Competent Teaching and Learning Continuum allows users to rate themselves by the descriptions provided at each level initially, identify the necessary benchmarks for success, and finally document their movement over time. Because the Globally Competent Teaching and Learning Continuum utilizes self-reflection as a foundation for teacher learning, educators need to recognize that the development of global competency elements is an ongoing journey in which growth is always obtainable. However, with an understanding of their baseline results, Jamaica study abroad participants can serve their educational communities and cultivate their own globally competent teaching practices.

1.4 Purpose of Study

The purpose of this study was to examine how participation in a short-term study abroad can impact teachers' empathetic dispositions as they relate to globally competent teaching practices.

1.5 Research Objectives

The four research objectives that guided this study were:

- 1. Describe the demographics of the study participants, including employment/educational status, race, and additional international experiences.
- Identify study abroad participants' self-rated stage of empathy development utilizing the Globally Competent Teaching and Learning Continuum.
- 3. Explore themes pertaining to empathy within study abroad participants' rationale for selfrating on the Globally Competent Teaching and Learning Continuum.
- Explore themes pertaining to empathy within study participants' response concerning the steps necessary for movement along the Globally Competent Teaching and Learning Continuum.

1.6 Assumptions

The following assumptions were determined throughout the duration of this study:

- 1. Participants have candidly provided answers for both the questionnaire and follow-up focus group.
- Participants have a genuine interest in being involved with the study, and no other motives were utilized for participants to be engaged.
- 3. The inclusion criteria of the study participants assure that all have experienced the same phenomenon (i.e., Maymester study abroad to Jamaica).
- 4. It is assumed that the researcher managed this study under the pragmatist research paradigm with the epistemological assumption that the researcher interacts with that being researched (Creswell & Clark, 2018).

1.7 Limitations

The following limitations were determined throughout the duration of this study:

- Self-Reported Data. Participants utilized the Globally Competent Teaching and Learning Continuum to document their self-rated stage of development for each of the twelve globally competent teaching elements. Participants then justified their ratings through personal and professional experiences. Because data was collected through a self-report mechanism, the accuracy is reliant on the honesty of the responses provided by the participants.
- 2. Social Desirability Bias. Because participants are both teacher candidates and current agricultural educators, there is an element of social desirability bias within this study. Participants may respond by choosing answers in which they think are socially acceptable or deemed appropriate and favorable by others. To address this limitation, anonymization of survey respondent data was implemented.
- 3. Time Poverty. The participant group has several responsibilities outside of the study that could have prevented them from being involved with the initial questionnaire and follow-up focus groups. In order to reduce this threat, frequent email reminders were sent out, and ample time was allotted to complete the questionnaire.

- 4. Confirmation Bias. Another limitation to this study is the possibility of confirmation bias. Human tendency tends to seek information during the analysis process to validate the research objectives for the given study. To eliminate this threat, the researcher has conducted an interviewee transcript review for participants to validate their responses during the focus group sessions and has maintained an open mind throughout the analysis process.
- 5. Introspective Ability. Demetriou et al. (2015) explain that introspective ability is a factor that contributes to the lack of validity as a participant may not recognize a particular problem or quality, even though others would attest to its presence. Through introspection, participants were required to self-reflect on the Globally Competent Teaching and Learning Continuum. To control this limitation, the instrument selected for the study included 12 individual rubrics where participants were required to rate themselves using the descriptions provided. It was also imperative that the instrument selected was previously validated and reliable.
- 6. COVID-19 Pandemic. The COVID-19 pandemic has put a strain on research worldwide. Regulations have required the vast majority of research to be conducted in a virtual space. Thus, the study questionnaire and follow-up focus groups were conducted remotely. The researcher ensured validity through the collection process by ensuring participants were aware of confidentiality throughout the study processes.
- 7. Maturation Effect. The SAGE Encyclopedia of Educational Research, Measurement, and Evaluation (2018) define maturation effect as "any biological or psychological process within an individual that occurs with the passage of time and has an impact on research findings" (p. 1030). To control for this threat, the researcher planned for data collection and analysis of the focus groups following study participants' student teaching experience. In addition, the researcher narrowed the participant pool to those who completed the Jamaica study abroad from 2015-2019.
- 8. Survey Dropout. Survey dropouts can be a significant problem in web-based surveys as respondents express lower interest and an increased burden over those respondents that stay (Galesic, 2006). To address this limitation, various question formats were implemented for accessibility to ensure engagement from all participants.

9. Focus Group Dropout. The final limitation of this study was a limited sample size due to focus group dropout. In order to reduce this threat, the researcher followed a five-contact email strategy to ensure an open line of communication between her and the study participants. Within the five-contact email strategy an invitation to RSVP included two dates and times to accommodate participants' needs.

1.8 Definition of Terms

The following terms were defined for the purpose of this study:

Critical Self-Reflection: Critical self-reflection is defined as the "process by which adults identify the assumptions governing their actions, locate the historical and cultural origins of the assumptions, and develop alternative ways of acting" (Cranton, 1996).

Empathy: Empathy is defined as "the ability to step into another person's shoes and understand that person's thoughts and feelings from their point of view, rather than your own (Tichnor-Wagner et al., 2019, p. 22).

Empathy Development: Empathy development can be defined as a concept in which individuals engage in regular reflection as they understand their own biases and work to reframe their understandings to value differences and build on their initial preconceptions (Tichnor-Wagner et al., 2019).

Ethnocentric: Merriam-Webster defines ethnocentric as characterized by or based on the attitude that one's group is superior.

Global Competence: A set of knowledge, skills, mindsets, and values needed to succeed in a diverse, globally connected society (Tichnor-Wagner et al., 2019; Asia Society, 2011).

Globally Competent Teaching Practices: Globally competent teaching practices are those interrelated dispositions, knowledge, and skills teachers need to instill global competence within their students (Tichnor-Wagner et al., 2019).

Globally Competent Teaching and Learning Continuum- The following definitions are based on the Globally Competent Teaching and Learning Continuum, a self-reflection tool to guide professional growth for educators related to teaching and learning of global competence (Tichnor-Wagner et al., 2019).

Dispositions: Teaching dispositions encompass the "professional attitudes, values, and beliefs demonstrated through both verbal and nonverbal behaviors as educators interact with students, families, colleagues, and communities" (NCATE, 2008).

Knowledge: The knowledge of an educator is defined as a combination of understanding, demonstrating through synthesis and critical analysis, and applying content knowledge of the subjects they teach (InTASC, 2013; NCATE, 2008).

Skills: Globally competent teaching skills are broadly defined as a "way of representing and formulating the subject that makes it comprehensible to others" (Shulman, 1986, p. 9).

PreK-12 Educator: A PreK-12 educator is a licensed individual who can teach formal schooling from pre-kindergarten through secondary graduation.

Agriculture Science Teacher: An agriculture science teacher is responsible for disseminating topics pertaining to agriculture, food, and natural resources.

Pre-Service Teacher Candidate: A pre-service teacher candidate can be defined as an undergraduate student who meets licensure requirements through student teaching and has not yet accepted a position as a full-time, licensed agriculture teacher.

Study Abroad: The following definitions define various international experiences an undergraduate or graduate student can engage in.

Short-Term Study Abroad: A short-term study abroad program is defined as a program that lasts less than a semester. Variations exist between the identifiable lengths of a short-term study abroad program in nearly all institutions (Donnelly-Smith, 2009). For this study, a short-term study abroad program is defined as a program that lasts two-four weeks in duration.

Maymester Study Abroad: A Maymester study abroad is defined as a faculty-led international program that is generally two-four weeks in length and occurs in early May to mid-June.

CHAPTER 2. LITERATURE REVIEW

2.1 Overview

This chapter provides the reader with an overview of teachers' empathetic dispositions related to globally competent teaching practices. The literature review provides an in-depth summary of the comprehensive role teachers play as global educators following a study abroad experience, the essential dispositions necessary for the development of globally competent teaching, and the use of instruments to collectively assess global competence. This chapter will also outline the conceptual and theoretical frameworks used to guide this study.

2.2 Literature Review Methodology

Various academic resources informed this study. Literature was found via Purdue University online libraries, open access websites, textbooks, and peer-reviewed journals relevant to the study. It is important to note that those publications used could only be accessed with the affiliation to Purdue University and through those organizational memberships with which the researcher holds. Two full access journals were utilized for discipline-specific content material and were made available through a paid membership; those include The Journal of Agricultural Education, which is a publication of the American Association for Agricultural Education (AAAE), and the North American Colleges and Teachers of Agriculture (NACTA) Journal.

Literature searches included keywords related to the role of study abroad in developing global competence, teachers' empathetic dispositions, and those commonly used instruments to assess global competence. Keywords in searches related to the development of global competence following a study abroad experience include: study abroad in education, global competence, short-term study abroad, and teacher preparation programs. Additionally, keywords in searches related to teachers' empathetic dispositions include: empathy, teacher empathy, empathetic dispositions, and empathy development. Furthermore, keywords in searches related to assessing global competence include: The Globally Competent Teaching and Learning Continuum, Intercultural Development Inventory, Global Competence Aptitude Assessment, and finally the Beliefs, Events, and Values Inventory.

2.3 Theoretical Framework

Mezirow's (1978a, 1978b) Transformative Learning Theory (TLT) served as the theoretical framework for this study. With an association to adult learning and andragogy, Mezirow's work posits that adults learn best by making meaning of their lived experiences. As learners begin to process and change their personal views of the world, individuals ultimately form new perspectives and make meaning of information differently. The early domains of Kuhn's (1962) paradigm, Freire's (1970) conscientization, and Habermas's domains of learning (1971, 1984) influenced Mezirow's early theory of transformative learning (Mezirow, 1978a, 1991, 2000).

Kuhn (1962) theorized the importance of paradigms after he was led to investigate a disagreement between social and natural scientists on the legitimacy of scientific inquiry. Through his investigation, Kuhn theorized the importance of paradigms in what he defines as "universally recognized scientific achievements that for a time provide model problems and solutions to a community of practitioners" (p. viii). Kuhn's (1962) conception of paradigms is apparent in Mezirow's (1978a, 1978b, 1981, 1985) work which involves a frame of reference that includes both habits of mind and meaningful perspectives. In Mezirow's theory, paradigms served as a frame of reference and a foundational basis for the notion of transformative learning practices.

In addition to Kuhn's (1962) paradigm, Paulo Freire's work influenced Mezirow's initial transformative learning theories. Through conscientization and critical consciousness, Freire argued that for education to be meaningful, teachers need to be democratic and welcome input from all parties, particularly students. It is through Freire's three stages of consciousness growth that influence Mezirow's learning facets of a disorientating dilemma, critical self-reflection, and discourse. Finally, the early work of Habermas's domains of learning influenced Mezirow's theory of transformative learning. Mezirow referenced Habermas's (1971) proposed three learning domains (i.e., technical, practical, and emancipatory) to construct a critical theory of adult learning and adult education.

The foundation of the Transformative Learning Theory rests on experiential activities and the critical component of self-reflection on assumptions and critical discourse. Mezirow (1991) explains that while the achievement of knowledge may be transformative in its regard, it is when knowledge is combined with hands-on experiential learning that more "meaningful ways" can be discovered. As this study seeks to examine how participation in a short-term study abroad can impact teachers' empathetic dispositions concerning globally competent teaching practices, the following Ten Phases of Transformative Learning (Table 2.1) helped provide a theoretical foundation (Mezirow, 1991).

	Table 2.1 Mezirow's Ten Phases of Transformative Learning
Phase 1	A disorientating dilemma
Phase 2	A self-examination with feelings of guilt or shame
Phase 3	A critical assessment of epistemic, sociocultural, or psychic assumptions
Phase 4	Recognition that one's discontent and the transformation process are shared and that others have negotiated a similar change.
Phase 5	Exploration of options for new roles, relationships, and actions
Phase 6	Planning a course of action
Phase 7	Acquisition of knowledge and skills from implementing one's plans
Phase 8	Provisional trying of new roles
Phase 9	Building of competence and self-confidence in new roles and relationships
Phase 10	A reintegration into one's life based on conditions dictated by one's perspective
Note. Mezirow's (1978a, 1978b) Ten Phases of Transformative Learning	

The researcher selected the Transformative Learning Theory to provide theoretical framing for evaluating lived experiences of those participants involved with the Maymester study abroad to Jamaica. A lived short-term study abroad experience can ultimately lead to a learner's transformation. The structural representation in (Figure 2.1) provides a simple organization for understanding the complex process involved within the transformational learning process.

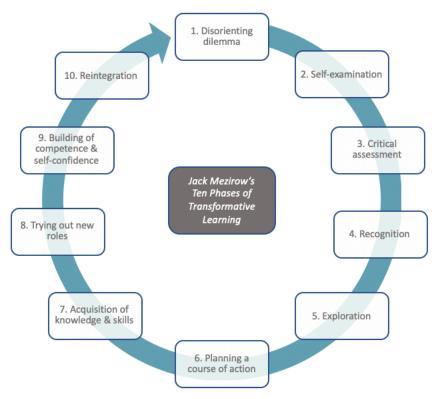


Figure 2.1 Theoretical Framework Model Note. The theoretical framework of this study was informed by Mezirow's (1978a, 1978b) Ten Phases of Transformative Learning

The opportunity for new transformational perspectives can be developed through what Mezirow (1991) refers to as a disorientating dilemma. During a disorientating dilemma, participants are given information that doesn't fit their original understanding and challenges their initial worldview. Through this initial stage, the assumption of learning can foster change and transformation for the individual involved. Following the disorientating dilemma, the main components of transformative learning are based on critical reflection elements. Mezirow (1991, 2000) called for individuals to reflect critically on their lived experiences. Within self-examination, one begins to explore and critically question their initial beliefs. It is then through self-reflection and assessment that significant personal transformations can evolve.

Once learners sort through their initial beliefs and critically reflect, recognition and exploration will begin. Through exploration, learners inquire and consider how changing their fundamental ideas and perspectives will impact their own lives. For a transformational learning strategy then to succeed, an action plan outlining the needed steps is necessary. Mezirow (1991) highlights the focus of the transformative learning theory on the advancement and adaptation of

ones' individual beliefs, attitudes, and emotional reactions. Through acquisition, the new knowledge of skills is structured and organized to initiate the implementation of new roles. According to Perry (2011), those teaching practices that bring forth a challenging experience or problem can present an opportunity for transformation as the students' usual process of doing, thinking, or seeing would be considered outside of their comfort zone. Following the opportunity to explore and try new roles, we become more confident with a new identity and understand the changes. Within the final stage of the transformative process, one's confidence implies that the changes are instrumental and needed to reintegrate and apply new knowledge to understanding future challenges. The interaction and advancement of learners through the Ten Phases of Transformative Learning occurs as a result of active learning in which themselves as individuals are involved.

Few studies have used the transformative learning theory to inform their theoretical foundation in research on short-term study abroad programs specific to undergraduate agricultural education majors (e.g., Dobbins et al., 2019; Foster et al., 2014; O'Malley et al., 2019; Pigg et al., 2020). Evidence though has demonstrated the transformational possibilities of study abroad courses and the long-term impact of those participants after returning home.

2.4 Conceptual Framework

The Globally Competent Teaching Model (Figure 2.2) served as the foundation for the conceptual framework of this study. Tichnor-Wagner et al. (2019) explained that the Globally Competent Teaching Model was developed to delineate the knowledge, skills, and dispositions teachers need to inspire global competence within their students. Global competence is defined as a "set of knowledge, skills, mindsets, and values needed to thrive in a diverse, globalized society" (Tichnor-Wagner et al., 2019, p. 3). The main components of the Globally Competent Teaching Model include twelve individual elements that are interconnected to form a set of knowledge, skills, and dispositions. Through a systematic review of literature that addressed K-12 teachers' global competence development, Tichnor-Wagner et al. (2019) identified the following elements that comprise global competency:

Globally Competent Teaching Dispositions

Element 1: Empathy and valuing multiple perspectives.

Element 2: Commitment to equity worldwide.

Globally Competent Teaching Knowledge

Element 3: Understanding of global conditions and current events.

Element 4: Understanding of the ways that the world is interconnected.

Element 5: Experiential understanding of multiple cultures.

Element 6: Understanding of intercultural communication.

Globally Competent Teaching Skills

Element 7: Communicate in multiple languages.

- Element 8: Create a classroom environment that values diversity and global engagement.
- Element 9: Integrate learning experiences for students that promote content-aligned explorations of the world.
- Element 10: Facilitate intercultural and international conversations that promote active listening, critical thinking, and perspective recognition.
- Element 11: Develop local, national, and international partnerships that provide realworld contexts for global learning opportunities.
- Element 12: Develop and use appropriate methods of inquiry to assess students' global competence development.

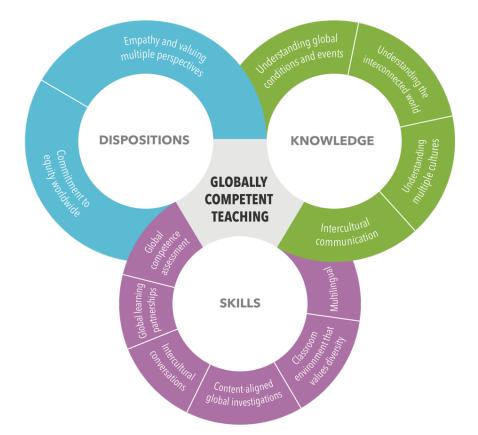
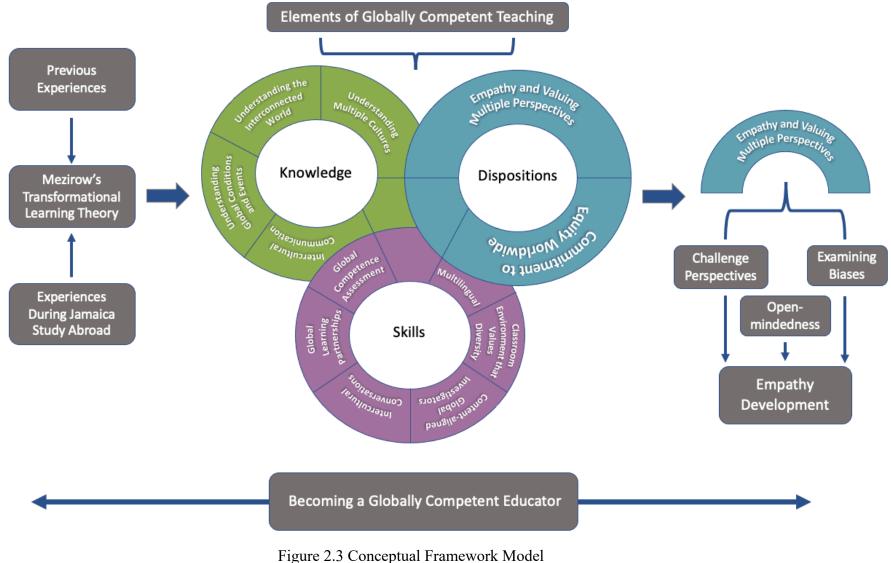


Figure 2.2 Globally Competent Teaching Model (Tichnor-Wagner et al., 2019)

In the Globally Competent Teaching Model (Figure 2.2), the "elements can be conceived as developing simultaneously and iteratively-as opposed to consecutively and linearly (Tichnor-Wagner et al., 2019). In addition, the model refers to educators' globally competent teaching in which dispositions, knowledge, and skills are integrated to develop professional and global competencies in teacher educators. Carter (2020) describes the continuum model as a promising and effective tool suitable for teachers who want to improve their global competence. Given the context of the study participants, the conceptual framework (Figure 2.3) was created to include the Globally Competent Teaching Model.



Note. The conceptual framework of this study was informed by the elements of globally competent teaching (Tichnor-Wagner et al., 2019)

For this study, the researcher selected empathy and valuing multiple perspectives as the primary element of focus. Empathy and valuing multiple perspectives encompass the foundation for global competence and provide a structure that allows educators to challenge perspectives, examine their own biases, and have an open mind towards various perspectives. The premise of teaching encompasses a strong, trustworthy relationship between the students and among the teacher and individual students. Freire (1970) claimed that for education to be transformative, the process must support an empowering relationship between the educator and the students, students and their learning, and within students and their surrounding society. A genuine relationship can serve as the basis for educators to develop global competence in their classrooms. However, the teacher must also welcome input from the students and present critical points of discussion so that they can "affirm themselves without thereby disaffirming their students" (Freire & Faundez, 1989, p. 34). Modeling these dispositions provide a simple structure for understanding the complexity involved in the process of empathy development.

The structural representation in Figure 2.3 includes those factors identified from previous experiences and those specific to the short-term undergraduate study abroad program in Jamaica. A number of those personal experiences contribute to transformational learning and the critical assessment of one's empathy development. Several internal and external factors have contributed to the development of empathy for those participants within this study and can be found in section 4.6, *Research Objective 3*.

2.5 Teachers as Global Educators

According to the National Center for Education Statistics (2021), the population of all racial and ethnic groups has increased since 2000. Rising faster were those populations identified as Asian, Hispanic, Pacific Islander, and those of Two or more races. As a result, the composition of the United States population has shifted, and school-aged children from racial and ethnic groups have increased. For example, from 2000 to 2017, Hispanic school-aged children displayed an increase from sixteen to twenty-five percent; Asian children from three to five percent; and children of Two or more races, from two to four percent. With the increase of cultural diversity in our schools, many in education are placing an emphasis on increasing intercultural competence and global awareness for both students and teachers. However, instructing for global competence in teacher preparation programs is insufficient (Cogan & Grossman, 2009; O'Connor & Zeichner,

2011; Zao, 2010) and several studies indicate teacher candidates and current educators observe the world from an ethnocentric mindset (Cushner, 2014; Grossman & Yuen, 2006; Mahon, 2006). As a result, many teacher education programs have incorporated opportunities to study abroad or offer exchange programs to address this insufficiency. These transformative experiences aim to enhance pre-service educators' global perspectives and cross-cultural competency skills. With the intention to increase teacher candidates' international perspectives and competency skills, the hope is then those skills will transfer to students in their future classrooms.

2.5.1 Global Competence in Study Abroad

The literature on study abroad programs suggests that these experiences enhance cultural intelligence, global awareness, and an appreciation for cultures and perspectives that are traditionally different from those participating (Cushner & Mahon, 2002; Jiang & DeVillar, 2011; Lee, 2011; Pence & Macgillivray, 2008; Phillion et al., 2009; Willard-Holt, 2001). Furthermore, with much of the discipline-specific research in education on cultural competency, studies suggest that international travel (Anderson et al., 2016; Anderson et al., 2006; Bloom & Miranda, 2015; Cushner & Brennan, 2007; Gaia, 2015; Machorro, 2009) and local cross-cultural immersive experiences (Ference & Bell, 2004) prove effective in their ability to enhance cultural and global competence. As such, studies like Schenker (2019) documented the effectiveness of a short-term study abroad program to strengthen global competence. For this study, global competence was measured through the Global Competence Aptitude Assessment at the beginning and end of an eight-week study abroad program (Global Competence Associates, 2018). Findings indicated that the short-term study abroad had positive effects in dimensions of internal and external readiness for global competence and included areas of open-mindedness, attentiveness to diversity, and historical perspectives.

Similarly, Willard-Holt's (2001) study on teacher candidates reported lasting effects from a week-long international teaching experience in Mexico. Through qualitative pre and post questionnaires and interviews, findings indicated participants developed empathy, a greater understanding of dispositions toward global education, and a broader perspective for those with opposing views. However, even with the lasting effects, Willard-Holt (2001) acknowledged that solely teaching abroad does not guarantee the development of global competency skills. Phillion et al. (2009) also suggested that study abroad opportunities are an "intellectual and critical starting point" (p. 335) and must be then supported by coursework and other experiences within their teacher preparation programs.

While several studies suggest that experiences abroad lead to the development of global competency skills, Vande Berg et al. (2012) argue that experiences abroad do not necessarily lead to cultural competence. In addition, he calls for the re-evaluation of the longstanding practices within study abroad and provokes readers to rethink the common assumptions and the design of programs in higher education.

Even though study abroad programs enhance pre-service teachers' global competence, lower-cost alternatives have been recommended. These recommendations come as study abroad programs present restraints due to the affordability and substantial time commitment. Blumenthal and Grothus (2008) argue that students enrolled in studies with a very narrow and rigorous curriculum (i.e., accounting and engineering) struggle to participate due to the considerable time commitment. As such, most study abroad programs are designed as an optional component in the plan of study for students in higher education. Because of the substantial time commitment involved with an immersive experience, participants are typically from a select range of programs and majors (Marklein, 2008). In addition, programs are heavily concentrated with host countries that traditionally have the same cultural, political, and religious ties as those in the United States. The Institute of International Education (2020) reports the overwhelming majority (55.7%) of United States students studying abroad during the 2018-2019 academic year are in Europe and, more specifically, in the United Kingdom, Italy, Spain, France, and Germany.

2.5.2 Components of Global Competency

Even with the immense literature surrounding cross-cultural and globally oriented studies, there is little agreement surrounding the operational definition of global competence (Blumenthal & Grothus, 2008; Deardorff, 2011; Hunter, White, & Godbey, 2006). Dependent upon the discipline, multiple terminologies have been identified, including intercultural competence, global citizenship, and global education, to name a few. Because of the complexity surrounding the definition, Shams and George (2006) detailed the difficulty in identifying the specific components of global competence. One definition of global competence, by the Longview Report (2009, p. 7), is "a body of knowledge about the world regions, cultures, global issues, and the skills and dispositions needed to engage responsibly and effectively in a global environment." For the

purpose of this study, the researcher has decided global competence will address the socialemotional, behavioral, and cognitive domains of learning. These learning domains include the dispositions, skills, and knowledge teachers need to instill global competence within their students.

First, an essential aspect of globally competent teaching is the emphasis on teacher dispositions. Teacher dispositions are defined as the "attitudes, values, and commitments teachers hold and espouse that inevitably influence how they teach" (Tichnor-Wagner et al., 2019 p. 19). Globally competent teachers can look inward and engage in the process of self-reflection by examining themselves as cultural, political, and social human beings positioned in both local and global settings (O'Connor & Zeichner, 2011). Several teaching components follow the dispositions set forth by each educator and include classroom layout, curriculum selection, student motivation, and assessments for learning. Dispositions truly serve as the foundation for how educators teach and are critical for developing globally competent teachers through a systematic review of scholarly work and educational materials. These dispositions include 1) a commitment to promoting equity worldwide and 2) the ability to display empathy and seek out multiple perspectives within their personal lives and classroom practices.

Second, teachers must demonstrate a set of skills necessary to emphasize pedagogical content knowledge. The skills dimension of global competence is recognized in nearly every study related to global proficiency, however there are considerable divisions outlined for what those specific global skills are. The skills necessary for global competence range from personal qualities, such as leadership skills (Jayakumar, 2008; Willard, 2011) and self-reliance (Willard, 2011), to obtainable capabilities such as the mastery to communicate in multiple languages (Lohmann et al., 2005; Reimers, 2009), and handling stress (Willard, 2011). For Tichnor-Wagner et al. (2019) the skills section differentiates globally competent teaching from other models of global competence as it "integrates global dispositions and knowledge into how teachers manage their classroom environment, plan for and implement instruction, and assess student learning" (p. 11). Globally competent teaching skills outlined by Tichnor-Wagner et al. (2019) include the ability to 1) communicate in multiple languages, 2) create a classroom environment that values diversity and global engagement, 3) integrate learning experiences for students that promote content-aligned explorations of the world 4) facilitate intercultural and international conversations that promote active listening, critical thinking, and perspective recognition, 5) develop local, national, and

international 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.

Finally, teachers must have a fundamental knowledge of globalization processes. This knowledge should go above the basic familiarity of specific cultural customs and greetings for those in differing countries (Deardorff, 2006). Instead, the focus should be on a holistic approach to understanding globally sufficient topics such as economic development, sustainability, and security conflicts (Hurtado et al., 1998; Olsen et al., 2005). Furthermore, Reimers (2009) confirmed the importance of knowledge within global competence and affirmed understanding of one's own culture in achieving cultural empathy. He detailed the importance of understanding oneself before understanding others and the implication of facilitating the comprehensive knowledge required for globally competent teaching practices. The construct of global knowledge was identified by Tichnor-Wagner et al. (2019) to include four elements: 1) understanding of global conditions and current events, 2) understanding of the ways that the world is interconnected, 3) experiential understanding of multiple cultures, and 4) understanding of intercultural communication.

2.6 Teacher Dispositions

Teacher dispositions play a critical role in the quality and effectiveness of educators, as do teachers' pedagogical content knowledge and skills (Wasicsko, 2002). Dispositions guide teachers' beliefs and attitudes related to core values such as empathy, fairness, honesty, and social justice; they can also impact professional growth efforts (Singh & Stoloff, 2008). Due to the context of this study, the sole focus was the social-emotional domain of global competence and, more specifically, the dispositions element of empathy and valuing multiple perspectives.

2.6.1 Teacher Empathy

Various definitions of empathy have been generated by researchers from differing disciplines, including psychology (Batson, 2009), social work (Segal, 2011), health care (Hojat et al., 2002), and education (Meyers et al., 2019). Noticeably, the literature surrounding empathy was observed in care-related disciplines as those professions involve tasks that help individuals in need.

Teacher empathy was selected due to the nature of this study and is defined as "the degree to which instructors work to deeply understand students' personal and social situations, feel caring and concern in response to students' positive and negative emotions, and communicate their understanding to students through their behavior" (Meyers et al., 2019, p. 161). Empathy is a noticeable characteristic with an existing range rather than a trait some educators do or do not have. Those educators with high empathetic dispositions genuinely take the time to know and understand their students and encourage them to reach their true potential. As such, it is certainly noticed when educators have and show more empathy than others.

The literature on teacher empathy has been influenced by Carl Rogers's therapeutic process in which the educator is parallel to the counselor or therapist and student to the client (Carkhuff & Berenson, 1967). Within Roger's *Freedom to Learn* (1969), he was the first to approach teacher empathy, saying that "a high degree of empathy in a relationship is possibly the most potent factor in bringing about change and learning" (p.157-158). Through empathetic communication from the educator, the underlying expectation will result from students' greater understanding and acceptance. This association relies on emotional generosity, sensitivity, and the ability to perceive others' feelings within an emotional regard.

Empathy is commonly explored by researchers who conduct studies on intergroup relations (Parchomiuk, 2019). These intergroup relations may be classified based on cultural backgrounds, socioeconomic status, race, political values, and other factors contributing to social tolerance and intolerance. Within the literature, empathy in teacher education surrounds second language learners and individuals with disabilities. For example, Palmer and Menard-Warwick (2012) utilized dialogue journals during a one-month study abroad course in Mexico to better understand the practice of second language acquisition. Through this immersive program, the course was designed to help future teachers become familiar with cultural and linguistic adaptions. Qualitative data from participants indicated an emerging understanding related to the struggles of immigrant students and their expressed empathetic concern regarding ELL students in their future classrooms.

2.6.2 Empathy Development

The development of empathy within the literature has been discussed since 1960, as debates surrounding whether the skill can be learned or identified as an intrinsic concept of human nature (Sahin, 2012). However, even with various discipline-specific definitions, researchers agree

that empathy can be developed over a wide age range (Selman, 1975). From kindergarten children to adult educators, empathy is a learned skill that requires constant effort (Inzlicht et al., 2017) and can be reinforced through education and application (Ancel, 2006; Cunico et al., 2012; Lam et al., 2011). As the ability to empathize develops from an early age, certain biological and socialization factors influence the development of empathy. Examples include genetics, parent-child relationships, patterns of neural activity, and dispositions. It is also noted that individuals tend to be more empathetic to those who look or act like them, have experienced similar trauma, or share a similar goal.

Empathy is situation-specific and is frequently categorized into two domains. The cognitive aspect of understanding someone else's mental state or perspective and the affective aspect of sharing the same feelings of others. When the emotional part of the human brain works to perceive the feelings of others, the cognitive tries to understand why people feel a certain way or offer help. Unfortunately, because humans tend to surround ourselves with like-minded people, our society is empathy deficient. It is our natural ability to hold bias and is the root of some of our biggest problems as a society. To encourage a more empathetic humankind, our capacity to empathize is critical in strengthening the individual educator, community, and nation.

For most, the core of empathy is curiosity, and as such, a key to empathetic development is to have conversations with those that have differing perspectives. Trying to imagine those with opposing views is simply not enough as one cannot truly make a connection and offer compassion. Through conversations, one can go beyond the initial small talk and fully listen to understand a particular topic. In addition to starting new conversations, Helen Riess, a psychiatrist at Harvard Medical School and chief scientist of Empathetics (2021), recommends taking a walk in someone else's shoes. For example, this may include attending someone's house of worship while they attend yours or serving as a volunteer in a community of need. In addition to the few recommendations listed above, specific considerations for developing empathy among educators are detailed in Tichnor-Wagner et al.'s (2019) book *Becoming a Globally Competent Teacher*. Considerations for PK-5 elementary and 6-12 secondary school teachers are provided to further develop the dispositions element of empathy and valuing multiple perspectives.

2.7 Measuring Global Competence

Several validated tools were evaluated to assess intercultural and global competence for the use in this study. Table 2.2 summarizes four assessment tools that measure global competence through personal transformation and includes the purpose, measurement, target audience, instrument format, result format, and cost for each assessment tool. In addition, the following two sections include a detailed description of the Globally Competent Teaching and Learning Continuum and three other survey instruments that assess global competence. These include the Intercultural Development Inventory, Global Competence Aptitude Assessment, and the Beliefs, Events, and Values Inventory.

	Assessment Instrument					
	Globally Competent Teaching and Learning Continuum	Intercultural Development Inventory (IDI)	Global Competence Aptitude Assessment (GCAA)	Beliefs, Events, and Values Inventory (BEVI)		
Purpose	Facilitate professional growth in globally competent teaching practices -Dispositions, Knowledge, Skills	Assess intercultural competence	Measure dimensions of global competence -Knowledge, Skills, and Attitudes	Gain awareness of an individuals' beliefs and values		
Measurement	Development levels for twelve elements of globally competent teaching -Nascent, Beginning, Progressing, Proficient, Advanced	Five stages of intercultural sensitivity -Denial, Polarization, Minimization, Acceptance, Adaption	The Global Competence Model -Internal and External Readiness	Personal beliefs and values -Strongly Agree, Agree, Disagree, Strongly Disagree		
Target Audience	K-12 Educators	Any Profession -Corporate, non-profit, or educational context	Students in Secondary Education -Education to workforce continuum	Any Profession -Corporate, non-profit, or educational context		
Instrument Format	Self-Assessment -Twelve globally competent teaching rubrics	Self-Assessment -50-item Questionnaire	Self-Assessment -Scenario and Behavioral Based Likert-Scale	Self-Assessment -Likert-scale -Extended version (336 item) and short version (185 item)		
Result Format	Twelve rubrics that display manageable steps for continual growth	Individual and group reports	Individual and group reports	Individual and group reports		
Cost	Free	Educational Institute-\$12 Organizational Institute-\$30	Free trial available \$75±	Varies due to organizational licensing fee (\$1,000- \$10,000)		

Table 2.2 A Summary of Four Assessment Tools to Measure Global Competence

Note. The researcher selected Tichnor-Wagner et al.'s (2019) Globally Competent Teaching and Learning Continuum as the assessment tool for this study. The cost listed is current as of July 2021.

2.7.1 Globally Competent Teaching and Learning Continuum

The Globally Competent Teaching and Learning Continuum by Tichnor-Wagner et al. (2019) was developed to serve as a free self-reflection tool for K-12 educators to assess their current globally competent teaching practices. Tichnor-Wagner et al. (2019) created the Globally Competent Teaching and Learning Continuum to ensure the professional growth of globally competent teaching practices. Unlike other tools within the literature, Tichnor-Wagner et al., set out to create their continuum to foster teachers' self-reflection and professional development practices, rather than measuring "their place on a pre-determined scale" (Carter, 2020 p. 31). The continuum includes manageable steps for implementation that outline the twelve elements of globally competent teaching practices into five developmental levels: nascent, beginning, progressing, proficient, and advanced. A copy of the survey instrument which includes an unmodified version of Tichnor-Wagner et al.'s Globally Competent Teaching and Leaning Continuum can be found in Appendix B.

The researcher chose to use Tichnor-Wagner et al.'s Globally Competent Teaching and Learning Continuum (2019) for four reasons. First, the Globally Competent Teaching and Learning Continuum was explicitly designed to measure global competence, which is the focus of this research study. Second, the Globally Competent Teaching and Learning Continuum uses selfreflection as a vital component for teacher learning. Critical self-reflection supports the premise of the transformative learning theory as well as plays a vital role in the experiential learning process. Tichnor-Wagner et al. described the reflective process within the use of the Globally Competent Teaching and Learning Continuum as such:

For each element, teachers first read through each developmental level and select the level that best describes them, reflecting on the professional and personal experiences that justify their choice. Second, teachers identify an element (or elements) they would like to improve and then read the description for the next highest level to understand what is required for growth. Third, teachers take actions that help them reach the next developmental level-for example, reading a series of articles and books, participating in a professional learning opportunity abroad, teaching a new unit that influences global perspectives, or researching organizations that provide service-learning opportunities around issues of global concern. Finally, teachers reflect to see if their actions have led them to the next level or move on to a different element (p.14).

Reflective practice is common in teacher preparation programs and has infused the deliberate way of thinking in support of growth for teacher candidates (Danielewicz, 2001; LaBoskey, 1994; Zeichner & Liston, 2014). Personal reflective practice allows those pre-service educators to identify and examine complex issues that may arise in their classroom teaching environment. Through reflection, pre-service teachers have the opportunity to investigate both teaching and learning from a more personal approach (Larrivee, 2000) and initiate questions to challenge their previous understandings (Liston & Zeichner, 1990).

Third, the Globally Competent Teaching and Learning Continuum was developed through an extensive two-year research process to test the content validity, internal consistency reliability, and internal structure of the self-reflection tool. Through a systematic review of the literature, the initial twelve elements of globally competent teaching were identified. The initial tool then "underwent an extensive review by 57 practicing K-12 teachers, seven teacher educators, and eight global education field experts" (Tichnor-Wagner et al., 2019, p. 14). The self-reflection tool was evaluated for overall stability through a pilot test with 111 practicing K-12 educators and a followup focus group. During the final stage of revisions, a participant evaluation was conducted, including nine individual interviews and a second group of global education experts.

Finally, the researcher chose the Globally Competent Teaching and Learning Continuum for this study to contribute and address a knowledge gap within the body of literature for its use in both pre-service and in-service agricultural educators following a Maymester study abroad to Jamaica. Because of its recent development (i.e., 2014), few studies have utilized the Globally Competent Teaching and Learning Continuum. Of those within the body of literature, the use of the continuum in pre-service teachers is more abundant, while the use for in-service teachers is very minimal.

Use of the Globally Competent Teaching and Learning Continuum varies within the literature. Kopish (2017) explored global citizenship education and the development of globally competent teaching practices through an elective general education course for pre-service teacher candidates. However, for this study, the Globally Competent Teaching and Learning Continuum only provided a framework for the course objectives within the *Issues in Global Education* course. Kopish (2017) described the framework as a "fidelity check" to enhance his own global competencies and to ensure the alignment of course objectives within the course, teacher course, teacher course objectives within his class. Throughout the course, teacher

candidates reflected upon inquiry projects and participated in several cultural, experiential learning opportunities and were then asked to complete five reflective journal entries. Those journal entries were then analyzed using a thematic coding scheme created from the three domains of globally competent teaching: skills, knowledge, and dispositions (Globally Competent Teaching Continuum, 2014). Findings from this inquiry study demonstrate the development of globally competent teacher candidates within the critical domains of global skills, global knowledge, and global dispositions.

In contrast, Crawford et al. (2020) conducted a qualitative case study to describe the design, learning experiences, and study outcomes of those undergraduate pre-service educators enrolled in an Instructional Design course focusing on globally competent teaching. Participants' globally competent teaching practices were measured by pre and post classroom surveys, curriculum artifacts, and interview data from two Instructional Design courses. Participants completed surveys at both the beginning and end of the course to determine if students had "moved" along the path towards global competence. Tichnor-Wagner et al.'s Globally Competent Teaching and Learning Continuum was utilized to assess this movement, and findings were analyzed through descriptive statistics. Crawford et al. (2020) found that most students in the Instructional Design course demonstrated a shift in their perceptions of developing global competence and understanding how to transfer their learning to the design and implementation of curriculum, instruction, and assessment for elementary learners.

Currently, the research on using The Globally Competent Teaching and Learning Continuum has focused on measuring globally competent teaching practices in pre-service teacher candidates. However, this research study addressed a gap in the literature by exploring both preservice and in-service educators. At present, no studies exist that utilize The Globally Competent Teaching and Learning Continuum with in-service teachers. Additionally, this study was unique as it utilized a relatively new self-reflection tool following a Maymester study abroad experience. It is important to note that data collection for this research study did not occur immediately following the return of the study abroad experience. The duration of time between the return of the Maymester study abroad to Jamaica and data collection varied from one to five years. Unlike prior research using this tool, this study is also discipline-specific for agricultural educators.

2.7.2 Other Instruments to Assess Global Competence

Because of the need to assess the impact of educational study abroad experiences, many instruments have been published to measure the various learning outcomes. To evaluate the effectiveness and use of the Globally Competent Teaching and Learning Continuum, it is essential to understand the structural differences of those additional tools that also assess global competency skills. Several instruments exist within the body of literature. For the purpose of this study, the following three models will be discussed: 1) Intercultural Development Inventory, 2) Global Competence Aptitude Assessment, and 3) Beliefs, Events, and Values Inventory.

Intercultural Development Inventory (IDI)

Differing from the Globally Competent Teaching and Learning Continuum, the Intercultural Development Inventory by Hammer and Bennett (2002) measures the overall development of intercultural competence based on one's perceived and actual positioning through the five stages in cultural development: Denial, Polarization, Minimization, Acceptance, and Adaption. The first stages of development (Denial, Polarization, and Minimization) range from an ethnocentric mindset, where the later stages (Acceptance and Adaption) represent a more ethnorelative or intercultural mindset. Unlike the specific use for the Globally Competent Teaching and Learning Continuum, the Intercultural Development Inventory was created for any profession and not specifically for K-12 teacher educators. However, it is noted that the Intercultural Development Inventory is available in two different versions: one for the use in educational institutions and the other for organizational settings. Dependent upon the version, the cost of the Intercultural Development Inventory can vary from \$12 for the use with students in educational institutions to \$30 at the standard price for the organizational version (Intercultural Development Inventory, 2021). Vande Berg (2012) concludes that much of the academic version is administered to those participants involved with a study abroad, a faculty member, or a study abroad facilitator or advisor.

Following the 50-item questionnaire, the Intercultural Development Inventory generates group, subgroup, and individual intercultural competency profiles. A debrief session will then follow to review the detailed guidance provided through the profile reports with a trained and licensed Intercultural Development Inventory Qualified Administrator. The Intercultural Development Inventory has been tested for cross-cultural generalizability to ensure that psychometric scale construction protocols were followed, and participants could not answer the questions to determine how to obtain a higher score (Hammer, 2011; Hammer, Bennett, & Wiseman, 2003). The Intercultural Development Inventory is cross-culturally validated through several studies with over 10,000 individuals representing a range of cultures in domestic and international capacities. Though there are several benefits for the use of The Intercultural Development Inventory as noted previously, the limitations involved (e.g., high cost per individual and the requirement for formal training) did not make it an ideal tool for this study.

Many researchers (Anderson, Lawton, Rexeisen, & Hubbard, 2006; Engle & Engle, 2004; He et al., 2017; Jackson, 2009; Medina; Terzuolo, 2018; Vande Berg, Watson & Wolfel, 2015) have employed The Intercultural Development Inventory to assess intercultural learning outcomes for study abroad experiences. Because the lengths of study abroad programs vary, several studies utilize The Intercultural Development Inventory to analyze different program lengths. Some research even suggests that short-term study abroad programs do not provide students with enough opportunities to develop their intercultural competency. For example, a study by Medina-Lopez-Portillo (2004) compared the development of intercultural sensitivity as measured by The Intercultural Development Inventory (Hammer et al., 2003) of those who studied in Mexico for seven weeks versus those for sixteen weeks. The results concluded that the lengthier program resulted in a more significant gain of intercultural competence.

Global Competence Aptitude Assessment (GCAA)

A somewhat different approach is taken within The Global Competence Aptitude Assessment (Global Competence Associates, 2018). The Global Competence Aptitude Assessment was introduced in 2009 and is similar to that of The Globally Competent Teaching and Learning Continuum in that it is also a self-reflection tool. The assessment includes both scenario-based and behavioral-based Likert-scale self-appraisal items (Global Competence Associates, 2018). Individuals are then assessed through their level of global competency based on their answers to "specific historical, geographical, and situational/hypothetical questions" (Niehaus, 2012, p. 118). The Global Competence Aptitude Assessment is the only instrument that measures all dimensions visually represented in the Global Competence Model. The Global Competence Model (Figure 2.4) represents eight dimensions that form a specific combination of knowledge, skills, and attitudes necessary for global competence. These dimensions are then divided into various capabilities for internal and external readiness. Global Competence Associates (2018) refers to internal readiness as the "self-perspective and attitudinal drivers of global competence." Those competencies within the internal readiness dimension include self-awareness, risk-taking, open-mindedness, and attentiveness to diversity. External readiness refers to a "person's acquired knowledge through education or life experiences" (Global Competence Associates, 2018) and include the competency dimensions of intercultural capability, collaboration across cultures, global awareness, and historical perspectives.

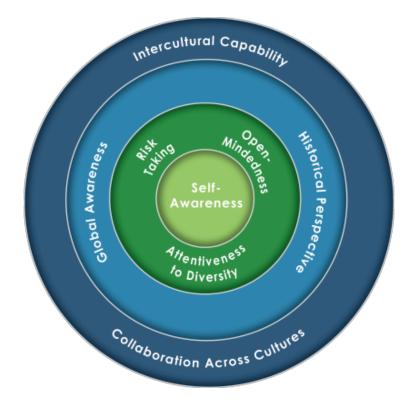


Figure 2.4 The Global Competence Model

Note. The Global Competence Aptitude Assessment (GCAA) is informed by dimensions represented in the Global Competence Model (Global Competence Associates, 2018)

The Global Competence Aptitude Assessment is non-culture-specific and can be utilized in any context. However, Global Competence Associates (2018) does not recommend using The Global Competence Aptitude Assessment in the primary and middle school years as students are only starting to develop their higher-order interpersonal skills. Because it is known that during maturity and into adulthood, significant life experiences evolve, Global Competence Associates (2018) recognizes the significance and importance of re-assessing those acquisitions related to the growth and knowledge of global competence. Kaushik, Raisinghani, Gibson, and Assis (2017, p.83) suggest that The Global Competence Aptitude Assessment does not measure the specific knowledge of one target culture but instead "reports an individual's ability to fit and function within a global environment." Because the assessment can be completed entirely online, participants get immediate results on their eight global competency dimensions and are shown scores ranging from 0-100. According to Neihaus (2012), students completing the Global Competence Aptitude Assessment can identify their basis for finding ways to improve upon their global competence.

The Global Competence Aptitude Assessment provides an individual report for students, including those suggestions needed for improvement in the eight dimensions of global competence. An example of one of those suggestions the particular report provides is through journaling. Schenker's (2019) study investigates the effects of a short-term study abroad on students' global competence. The researcher assessed students' global competence with the use of The Global Competence Aptitude Assessment both before and after an eight-week international study program and recommended one way to foster internal readiness and self-awareness throughout a short-term study abroad program is through a "fixed feature" of reflective journaling, blogging assignments, or daily discussion topics.

Beliefs, Events, and Values Inventory (BEVI)

The Beliefs, Events, and Values Inventory is based on the agreement level with various belief-value statements and the assessment of several cross-cultural characteristics such as receptivity, openness, tendency to stereotype, etc. (Shealy, 2004). The inventory grew out of physiological research and is designed to explain who you are and how your background experiences have shaped the reaction you have to a new learning experience. The Beliefs, Events, and Values Inventory is similar to that of the Intercultural Development Inventory as it is used to assess the process and outcomes of various learning experiences for individuals and/or groups. More specifically, the Beliefs, Events, and Values Inventory has applications for evaluating learning experiences in study abroad and enhancing the quality of teaching for courses and extracurricular programming.

The web-based inventory is currently available in two languages (i.e., English and Japanese) and offers an extended (336 item) and short (185 item) version. Both the extended and short versions of the Beliefs, Events, and Values Inventory consists of four interrelated components: 1) a set of demographic/background items that may be modified for a particular project, 2) a life history questionnaire, 3) two validity and eighteen (long version) or seventeen (short version) scales, and 4) three qualitative experiential reflection items (Shealy, 2015). In addition, this Likert-type inventory provides four response options (i.e., Strongly Agree, Agree, Disagree, and Strongly Disagree) and requires forty to twenty-five minutes to complete, dependent upon the version. Upon completion, both individual and group reports are available to promote reflection regarding the growth and development of participants' beliefs and values.

Unfortunately, to administer this transformational learning instrument, an individual needs to become an authorized administrator and hold an institutional license. Because the demand for participation comes from institutions or larger organizations, the administrator training is specific to their location, and attendance fees range from \$500 to \$750 per person. In addition to the authorized administrator fee, an annual licensing fee is also necessary and varies in price by the number of inventories administered per year. At the time of this study, the Center for Intercultural Learning, Mentorship, Assessment, and Research (CILMAR) at Purdue University has an unlimited site license (annual licensing fee \$10,000) and is free for affiliates of the university. Similar to the Intercultural Development Inventory, the high cost associated with the assessment tool and the requirement for formal training did not make it applicable with this study.

Excellent reliability and evidence of validity are indicated throughout the Beliefs, Events, and Values Inventory development since the early 1990s. Grant, Acheson, and Karcher (2021) utilized the Beliefs, Events, and Values Inventory as both a formative and summative assessment during an agricultural-focused study abroad program in Vietnam. Roy et al., 2014 detail the importance of formative and summative assessments as a critical component of a study abroad program evaluation. Formative assessments are periodically placed throughout the course to evaluate student learning and to improve upon the teaching methodologies. In contrast, a summative assessment evaluates the learning outcomes in their entirety at the end of a program (Dixson & Worrell, 2016). The study collected preliminary data to raise awareness for the importance of intercultural competence development in international programming and curriculum design. Results from the Beliefs, Events, and Values Inventory were assessed during week one of

the semester course and after completing a six-teen-week semester course with an embedded nineday study abroad to Vietnam.

CHAPTER 3. METHODOLOGY

3.1 Overview

This chapter provides an overview of the methods, procedures, and analysis used for this study. In particular, a brief overview of the purpose and research questions are provided to enforce research design practices later on within the chapter. The selection of the research design method, The Instructional Review Board requirements, participant selection, and instrumentation will also be discussed.

3.2 Purpose of the Study

The purpose of this study was to examine how the participation in a short-term study abroad can impact teachers' empathetic dispositions as they relate to globally competent teaching practices.

3.3 Research Objectives

The four research objectives that guided this study were:

- 1. Describe the demographics of the study participants, including employment/educational status, race, and additional international experiences.
- 2. Identify study abroad participants' self-rated stage of empathy development utilizing the Globally Competent Teaching and Learning Continuum.
- 3. Explore themes pertaining to empathy within study abroad participants' rationale for selfrating on the Globally Competent Teaching and Learning Continuum.
- Explore themes pertaining to empathy within study participants' response concerning the steps necessary for movement along the Globally Competent Teaching and Learning Continuum.

3.4 Research Design

A pragmatist research paradigm informed the researcher throughout the duration of this study. Pragmatism relies on the questions being asked and the use of data collection in multiple ways to ensure practical consideration for real-world practice. A pragmatist worldview can "fruitfully" combine research methods to make use of what works by using an approach that values knowledge from both an objective and subjective view (Hoshmand, 2003). Because a mixed methods researcher collects data at two distinct yet connected phases, an all-encompassing worldview was best used for this study. The researcher utilized a pragmatist worldview to adopt a pluralistic stance of gathering multiple types of quantitative and qualitative data to best answer the research objectives.

This research was an explanatory sequential mixed methods design study of teachers' empathetic dispositions following a short-term study abroad to Jamaica. In an explanatory sequential mixed methods design, the data collection procedures involve collecting quantitative data, analyzing the quantitative data, and using the results to inform the follow-up qualitative data collection (Creswell & Clark 2018). Figure 3.1 diagrams the explanatory sequential mixed methods research design model.

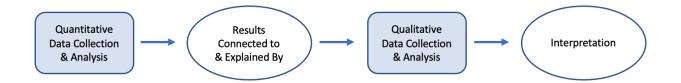


Figure 3.1 Explanatory Sequential Mixed Methods Research Design Model (Creswell & Clark, 2018)

The explanatory sequential mixed methods research design is commonly used when the researcher wants to form groups based on quantitative results and then follow up using those groups through subsequent qualitative research (Morgan, 1998, 2014; Tashakkori & Teddlie, 1998). Participant characteristics observed (i.e., current educational/employment status) during the quantitative analysis phase informed the researcher of the purposeful sampling identified for the three distinct follow-up focus groups. The following two sections include an overview of the

quantitative and qualitative research design methods used within the explanatory sequential mixed methods research design.

3.4.1 Quantitative Research (Questionnaire)

The explanatory sequential mixed methods design begins with the collection and analysis of quantitative data. The explanatory sequential design is most useful when the researcher has access to a quantitative instrument to measure the constructs of the primary interest (Creswell & Clark, 2018). For this study, participants were asked to respond to an online Qualtrics questionnaire that utilized an unmodified version of Tichnor-Wagner et al.'s (2019) Globally Competent Teaching and Learning Continuum and demographic questions that addressed non-identifying information. With the use of this instrument, study participants were able to assess their self-rated stage of empathy development. In the second phase, the researcher identifies specific quantitative results and then utilizes those results to guide the development of the qualitative piece. Because it can be difficult for the researcher to secure institutional review board (IRB) approval using this design, the researcher only made slight revisions to the qualitative study instrument.

3.4.2 Qualitative Research (Follow-Up Focus Groups)

The quantitative data collection and analysis serve as the foundation for the subsequent qualitative piece. The primary purpose of the qualitative phase is implemented to explain the initial quantitative results and provide a more in-depth understanding of the collection and analysis in the initial quantitative phase. The explanatory design is well suited for qualitative data to explain quantitative significance (or non-significance), outliers within the data, or any surprising or confusing results (Bradley et al., 2009; Morgan, 2014; Morse, 1991). To follow up on the specific quantitative results a virtual follow-up focus group was employed to help explain participants' response for self-rating on the Globally Competent Teaching and Learning Continuum and the steps necessary for improvement. Three groupings (i.e., pre-service teacher, in-service teacher, and other) emerged from the quantitative data analysis and were vital in forming the virtual follow-up focus groups. Following the virtual follow-up focus groups, the researcher interprets the extent to which the qualitative themes explain and provide insight to the initial quantitative results.

3.5 Instructional Review Board Committee

To ensure confidentiality for all participants involved within this study, the researcher first completed the Collaborative Institutional Training Initiative (CITI Program) in The Protection of Human Subjects Research online training module. In addition to The Protection of Human Subjects Research training module, the researcher also completed The College of Education-Field Specific Responsible Conduct of Research (RCR) Training. Following the completion of the two required online modules, an application was submitted to the Institutional Review Board (IRB) and the Committee on the Use of Human Research Subjects at Purdue University. The application entitled "M. Grant-Globally Competent Teaching" contained all required information including the questionnaire, semi-structured interview guide, and information regarding the target population. The IRB Review Board found that the study (IRB protocol: 2020-449) qualifies for exemption status and was approved on October 6, 2020. A copy of the approval letter is attached in Appendix A.

3.6 Participants

The targeted population for this research study included those Purdue University undergraduate agricultural education students who participated in the Jamaica Maymester study abroad from 2015-2019. Because the design and delivery of the Maymester study abroad was consistent from 2015-2019, the five-year time frame was selected to ensure the participants in this study had similar experiences. Currently, the study participants have different roles as they are in various stages of their professional career. The various stages (i.e., pre-service teacher, in-service teacher, and other) were identified during analysis of the questionnaire and were later utilized in the virtual follow-up focus groups. Reference Chapter 4, section 4.4.1 "*Demographic Analysis*" for a more comprehensive overview of the study participants. In this section, participants' employment/educational status, race, and additional study abroad experiences are provided.

3.7 Instrumentation

Two research instruments were used throughout the duration of this study. The study began with an online questionnaire that utilized an unmodified version of Tichnor-Wagner et al.'s (2019) Globally Competent Teaching and Learning Continuum and demographic questions that addressed non-identifying information (Appendix B). In the second phase of research, virtual follow-up focus groups were conducted through a semi-structured interview guide (Appendix C). The following two sections include an overview of the instrumentation used throughout the duration of this study.

3.7.1 Globally Competent Teaching and Learning Continuum

The Globally Competent Teaching and Learning Continuum comprise of twelve distinct yet interrelated global competency elements that identify the dispositions, knowledge, and skills educators need to prepare their students to prosper in a globalized society. To initiate a commitment for global understanding, the Globally Competent Teaching and Learning Continuum was created as a self-reflection tool for educators wishing to reflect on and assess their current level of global competence. Teachers of all experience levels are invited to utilize the continuum to incorporate globally competent teaching elements into their daily instruction.

Within the online questionnaire, section two introduced study participants to the Globally Competent Teaching and Learning Continuum. Participants were then asked to report their selfrated stage of development for the twelve global competency elements on individualized rubrics containing five developmental levels (i.e., nascent, beginning, progressing, proficient, and advanced). The first section (questions 3-6) elicited information for the four global competency elements within the knowledge category. Those four elements include: 1) understanding global conditions and events, 2) understanding the interconnected world, 3) understanding multiple cultures, and 4) intercultural communication.

The following section (questions 8-13) included those global competency elements within the skills domain. Tichnor-Wagner et al. (2019) refer to globally competent teaching skills as those that "promote students' growing interest in and knowledge about the world through their classroom environment and instructional experiences" (p. 121). This section asked study participants to carefully read the six global competency elements within the skills domain and record their selfrated stage of development. The six globally competent teaching skills include: 1) multilingual, 2) classroom environment that values diversity, 3) content-aligned global investigators, 4) intercultural conversations, 5) global learning partnerships, and 6) global competent assessment. It is important to note that study participants were asked to only identify their developmental level for the previously stated elements in both the knowledge and skill categories within the online questionnaire. The final section (questions 15-21) of the questionnaire asked participants to assess their self-rated stage of development utilizing the Globally Competent Teaching and Learning Continuum. This section included those global competency elements within the disposition category and contained the following two components: 1) empathy and valuing multiple perspectives and 2) commitment to promoting equity worldwide. Because the study focused on empathy development, the researcher added two additional prompts to those elements within the disposition category. After study participants self-selected their developmental level, they were tasked with providing a brief rationale for their decision. In this rationale, study participants were asked to provide written evidence from their professional and/or personal experiences to support their self-rated stage of development. In addition to their reasoning, the final prompt asked study participants to identify areas of improvement. By reading the description of the next highest developmental level and providing at least two actionable steps for continual growth, study participants could implement actionable steps needed to ensure momentum along the Globally Competent Teaching and Learning Continuum.

The researcher provided an example answer to elicit a more meaningful response within the two additional open-ended prompts. For those unfamiliar with global competency elements or unsure of what is needed for continual growth, the example provided can ensure that statements are more precise and give the study participants more detailed information.

3.7.2 Demographics

To help understand the identity of the study participants, the online questionnaire included a demographics section that promoted participants to answer a series of questions regarding their racial identity, current educational/employment status, and information about international travel experiences. Within section one, participants were asked to identify the year they completed the Maymester study abroad to Jamaica, if Jamaica was their first international experience, and if they had traveled internationally since the experience. If study participants selected that they had traveled before and after the Maymester study abroad to Jamaica, a secondary set of questions appeared to provide details on the type of travel (i.e., educational, leisure, or service), country name, and duration. For the purpose of this study, educational was defined as part of a study abroad experience, leisure as personal travel only, and service as part of a volunteer organization or religious event. Participants were then asked non-identifying questions related to their educational status as current Purdue University Alumni or current Purdue University Undergraduates. If participants selected Purdue University Alumni, they were asked about their current occupation. If PreK-12 Educator was chosen a series of secondary questions appeared for them to identify current grade levels and courses taught. If participants selected Purdue University Undergraduate, they were asked their current major. To avoid confusion throughout the questionnaire, skip logic was implemented, and participants were not shown questions that didn't apply to them. Reference Chapter 4, section 4.4.1 "*Demographic Analysis*" for a more comprehensive overview of the study participants' demographics. Participants' employment/educational status, race, and additional study abroad experiences are provided in this section.

At the conclusion of the online questionnaire, a miscellaneous section was included to thank the study participants for their time and invested interest in promoting global competency within agricultural education at Purdue University. Study participants were also asked if they would be interested in joining a virtual follow-up focus group with other Jamaica study abroad participants. If participants selected yes, they were asked to provide a current email address. Because the Globally Competent Teaching and Learning Continuum serves as a self-reflection tool, it was important for the researcher to provide an opportunity for the study participants to request a copy of their questionnaire responses. If the study participant elected to receive their questionnaire results, an email was sent through Qualtrics that contained their answers. The final two questions were added to the online questionnaire for study participants to elaborate on any additional thoughts about their experience during the Jamaica study abroad program or the online questionnaire format. The enlarged text box allowed study participants to comment on and collect open-ended, written feedback from respondents.

3.7.3 Semi-Structured Interview Guide

A semi-structured interview guide was utilized as the final instrument for this study. The interview guide was developed out of the prompts within the online questionnaire and was later used in the four virtual follow-up focus groups. This instrumentation was selected to allow for the flexibility of the pre-determined questions, while also allowing the study participants to take the focus group beyond the discussion guide if necessary. Before its use, the instrumentation was reviewed and approved by a panel of experts. The researcher developed questions intended to gain

additional insight into the participants' experiences during the Maymester study abroad to Jamaica and the components of their self-rated stage of empathy development.

The researcher designed the semi-structured interview guide to include a checklist of prompts and questions to cover during the pre-determined one-hour sessions to promote a worthwhile discussion. The interview protocol consisted of five sections. The first section included a welcoming statement that introduced the purpose of the scheduled focus group and expressed the importance of the study participants' feedback surrounding the dispositions, knowledge, and skills necessary to becoming a globally competent educator. The second section of the semistructured interview guide conveyed pertinent information regarding the confidentiality of the responses given within the session and the importance of the information being shared by those within the virtual space. Ground rules were also discussed to explain the expected behavior of those involved within the virtual follow-up focus groups. To follow, a brief introduction of the moderator was given. Because the researcher served as the sole moderator, it was vital for her to share her positionality as some study participants could have been unfamiliar or reluctant to provide detailed information. The focus group discussion followed and included seven open-ended questions that asked study participants to reflect upon their global perspectives, provide empathy towards others, and their results to the Globally Competent Teaching and Learning Continuum. The fifth and final section of the semi-structured interview guide consisted of a sincere thank you to those study participants involved and expressed the value that their responses have on the research surrounding study abroad experiences at Purdue University.

3.8 Validity and Reliability

Utilizing a mixed methods approach presents a set of challenges surrounding the validity and quality of the intended research. Tashakkori and Teddlie (2010) identified one of the main issues in mixed methods research is the discussion that surrounds the validity and quality of the research. To ensure consistency within the research instruments, the construct validity, internal validity, and external validity need to be assessed. Because an explanatory sequential mixed methods approach was utilized in this research study, it is essential that the researcher address validity and reliability threats in both quantitative and qualitative data sets. It is important to note that the researcher engaged in several strategies to minimize threats to validity and reliability. To ensure both data sets are addressed, the subsequent two sections identify the specific validity and reliability checks for the online Qualtrics questionnaire and semi-structured interview guide.

3.8.1 Quantitative Research (Questionnaire)

It is noted that self-reported studies, including questionnaires, lack validity as study participants select a response without interference. However, for this study the online questionnaire utilized an unmodified version of the Globally Competent Teaching and Learning Continuum along with demographic questions approved by a panel of faculty members at Purdue University.

The Globally Competent Teaching and Learning Continuum was developed through a twoyear interactive research process that included four developmental stages. Tichnor-Wagner et al. (2019) confirm the tested content validity, internal consistency reliability, and internal structure of the tool in which study participants self-assess their global competency elements. Through a systematic review of the literature, twelve globally competent teaching elements were first identified. In stage two, the previously identified global competency elements were broken down into developmental levels. Tichnor-Wagner et al. (2019) explain that the "initial rubrics underwent an extensive review by fifty-seven practicing K-12 teachers, seven teacher educators, and eight global education field experts to determine the representative and relevance of the elements along with their developmental levels" (p. 14-15). In stage three, a pilot test including 111 practicing K-12 teachers and a focus group of educators were utilized to evaluate the twelve elements' internal consistency and overall stability, along with the five developmental levels. Within the fourth and final stage, participant interpretation, use, and content validity were assessed through interviews and included nine in-service teachers representing a wide range of experience levels. In addition, the second group of global education experts were asked to provide their professional review of the self-reflection tool. Through these systematic procedures, the rigorous quantitative feature was developed using psychometric design steps as a strategy to minimize validity threats.

Along with the extensive review of the unmodified Globally Competent Teaching and Learning Continuum, the demographic questions were also assessed by four Purdue University faculty members. In the early stages of development, the demographic questions were analyzed to establish face validity and reviewed by a staff member with survey expertise in the Office of Multicultural Programs in the College of Agriculture at Purdue University. To ensure inclusivity of the written questions and responses, the demographic questions were revised to include nonmutually exclusive alphabetized response options. Alphabetized response options were implemented within the online Qualtrics questionnaire to avoid any cultural or predisposed hierarchy. Following the initial revisions, the demographic questions were approved by three faculty members with expertise in the area.

3.8.2 Qualitative Research (Semi-Structured Interview Guide)

To minimize validity threats, it was discussed that each significant qualitative finding must be used to inform the development of those specific elements within the quantitative piece of this study. The qualitative research instrument was evaluated for face and content validity by a panel of three experts within the field. Those who reviewed the survey instrument were selected based on their knowledge of research methods, focus group development, and subject matter within the field of study abroad. The panel of experts and their provided feedback was used for the finalization of the semi-structured interview guide.

A common validity threat in an explanatory sequential mixed methods research design consists of selecting the same participants for both the quantitative and qualitative data tests (Creswell & Clark 2018). Unfortunately, a large sample size was not feasible, and those within this mixed methods study represented both data sets. However, to ensure validity within the collection of qualitative data, the credibility and transferability needed to be examined. For this study three strategies were deemed appropriate and were assessed through member checking, triangulation of data from several sources, and reporting of disconfirming evidence.

To ensure qualitative validity, an interviewee transcript review (ITR) was utilized approximately one month after the virtual follow-up focus groups. An interviewee transcript review (ITR) is a form of member checking used to improve upon the validity of the research and to provide the interviewee an opportunity to correct errors and/or inaccuracies within the audio transcript. Study participants were contacted via email and asked to review the audio transcript for the accuracy of their responses (Appendix D). In addition, to validate their experiences detailed in the virtual follow-up focus group, study participants were asked to validate their response through a brief Qualtrics survey (Appendix E). No errors and/or inaccuracies were reported, and as such, study participants agreed that the transcribed data was an accurate reflection of their experiences. To develop a comprehensive understanding and to build upon evidence from the quantitative and qualitative data sets, another strategy used to improve the validity of this research study was the triangulation of data drawn from several sources. A triangulation analysis including questionnaire responses, participant comments, and visual observations through the virtual followup focus groups ensured the findings depicted a mixed method approach encompassing multiple data sets. The third and final strategy used to check for qualitative validity consists of reporting disconfirming evidence. Creswell and Clark (2018) define disconfirming evidence as "information that presents a perspective that is contrary to the one indicated by the established evidence" (p. 217). Because the focus of this study surrounds the development of empathy, it was important for the researcher to include those themes and study participant responses that diverged from only the positive information or those confirming the perceived hypothesis. Evidence to support this strategy can be identified in Chapter 4 and includes information that answers research objectives 1-4.

3.9 Data Collection

This mixed method study used a combination of quantitative and qualitative data collection methods. Data collection for this study consisted of two components: 1) quantitative research through an online Qualtrics questionnaire and 2) qualitative research through follow-up focus groups. The following two sections include an overview of the quantitative and qualitative data collection methods used within this research study.

3.9.1 Quantitative Research (Questionnaire)

Qualtrics, a Purdue University licensed web-based survey analysis tool, was used for questionnaire distribution and data collection. Distribution for the initial stage of this study followed the Dillman's Tailored Design Method using a five-contact email strategy (Dillman et al., 2014). Cook et al. (2000) explain that an effective way to increase the response rate within a web-based survey is to send multiple contacts. Therefore, for this study, a Dillman's five-contact email strategy was utilized. Table 3.1 presents the dates on which the five-contact email strategy was completed.

Action	Date of Contact		
Pre-Notice	October 30, 2020		
Invitation	November 2, 2020		
First Reminder	November 16, 2020		
Second Reminder	November 30, 2020		
Third and Final Reminder	December 2, 2020		

Table 3.1 Dillman's Five-Contact Email Strategy for Questionnaire Distribution

Note. Study participants were contacted on November 30, 2020 by Dr. B. Allen Talbert, Professor of Agricultural Education and lead faculty for the Maymester study abroad to Jamaica.

A pre-notice email was sent via Qualtrics to notify participants of the research study (Appendix F). This email contained a brief introduction of the researcher and an overview of the involvement with the study. It also informed the participants of the future request to participate in and complete the forthcoming questionnaire. An invitation to participate then followed the prenotice email (Appendix G). Within the invitation, participants were asked to complete the electronic questionnaire regarding their understanding of global competency elements following an undergraduate study abroad experience to Jamaica. After two weeks, the first reminder email was sent to participants that did not respond to the initial invitation or had not yet completed the questionnaire in its entirety (Appendix H). Two weeks after the initial reminder email, a second reminder was sent from Dr. B. Allen Talbert, Professor of Agricultural Education, and lead faculty for the Maymester study abroad to Jamaica (Appendix I). To provide legitimacy and to build upon previous relationships, this communication was vital to reach participants unfamiliar with the researcher, drawing upon Dilllman et al.'s (2014) assertion that an early, established relationship can be leveraged to provide a reason for participants to respond to web-based questionnaires. The third and final reminder email was then sent out by the researcher and emphasized the importance of the recipient's response.

Participant Response

In total, all eighty participants from the Maymester study abroad to Jamaica from 2015-2019 were eligible and notified through Qualtrics to participant in this study. Of those, fifty-six surveys were started, resulting in a response rate of 70%. However, this could mean study participants opened the questionnaire but only responded to a few questions or completed the questionnaire in its entirety. To prepare the questionnaire data for analysis, the researcher involved the use of data cleaning. Rahm and Do (2000), defined data cleaning as "detecting and removing errors and inconsistencies from the data in order to improve the quality of data (p. 5)." Through this process the researcher detected twenty incomplete and/or irrelevant responses and were therefore omitted. After eliminating incomplete responses through data cleaning, thirty-six participants who completed the entire questionnaire were included in data analysis. The final response rate for the questionnaire was 45%.

Figure 3.2 follows the Dillman's Five-Contact Email Strategy for Questionnaire Distribution and displays the thirty-six study participants' questionnaire completion date ranging from November 2, 2020 to December 18, 2020. Following communication efforts on those dates presented with an asterisk, the number of completed questionnaires was much higher. For example, after the invitation email was sent on November 2nd, five study participants completed the online questionnaire the following day. In addition, the first reminder email was sent on November 16th and four participants responded on November 17th. It is also observed that the two final reminder emails on November 30th and December 2nd presented a greater number of completed surveys.

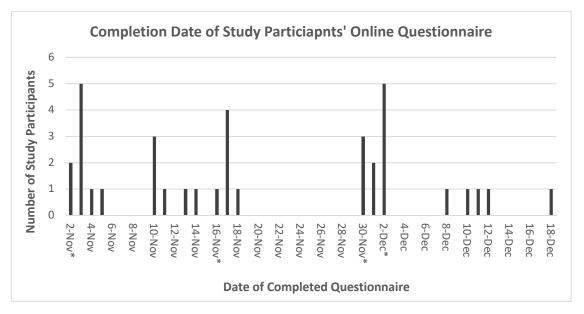


Figure 3.2 Study Participants' Questionnaire Completion Date

Note. Dates displayed with an asterisk are those specifically selected to follow Dillman's Five-Contact Email Strategy for Questionnaire Distribution. Dillman's Five-Contact Email Strategy includes an invitation email and subsequent reminder emails. Several dates from November 2, 2020 to December 18, 2020 had no completed questionnaires and are indicated by a gap.

3.9.2 Qualitative Research (Follow-Up Focus Groups)

During the online Qualtrics questionnaire, study participants were asked if they would be interested in participating in a virtual follow-up focus group with other Jamaica study abroad participants. Eighteen of the thirty-six study participants agreed to be contacted. Of those eighteen, seven identified as current pre-service teachers, five as in-service agricultural educators, and six were grouped into a miscellaneous category titled as "other". For the purpose of this study preservice teacher is defined as those study participants pursuing a teaching license, in-service teacher as those actively in the PreK-12 classroom that hold a current license, and other as a current graduate student, extension educator, non-formal educator, or those no longer in education. The clear delineation of study participants' current educational/employment status made it easy for the researcher to identify three distinct groups for the virtual follow-up focus groups (i.e., pre-service teacher, in-service teacher, and other). Participants were again contacted through a modified fivecontact email strategy to help distribute information regarding the virtual follow-up focus groups. A pre-notice letter was omitted for this portion of the study as participants previously agreed to be contacted and involved with the follow-up focus groups. Table 3.2 follows a modified five-contact email strategy and displays the email distribution for the eighteen study participants interested in attending the follow-up focus groups.

An invitation to RSVP was sent from the researchers' Purdue email to notify participants of the forthcoming focus groups (Appendix J). This email thanked the participants for completing the online Qualtrics questionnaire and included an invitation to participate in the virtual follow-up focus groups. Two potential dates and times were listed in the invitation to allow for flexibility. Study participants were then asked to RSVP with the date and time that would accommodate their schedule best. After four days, the first reminder email was sent to study participants who did not respond to the initial invitation to RSVP (Appendix K). Four days after the initial reminder email, a final reminder was sent to only the in-service and other study participant groups (Appendix L). The researcher did not send a final reminder email to pre-service study participants because each pre-service participant had previously responded with their availability. Once the deadline surpassed, it was assumed that the study participants who did not respond did not wish to participants for each follow-up focus group (Appendix M). On the day of the scheduled follow-up

focus group, a day of event reminder was sent to participants that included the ZOOM link (Appendix N).

	Date of Contact				
Action	Pre-Service	In-Service	Other		
	Teacher Teache				
Invitation to RSVP	March 22, 2021	March 22, 2021	March 22, 2021		
First Reminder to RSVP	March 26, 2021	March 26, 2021	March 26, 2021		
Final Reminder to RSVP	-	March 30, 2021	March 30, 2021		
Zoom Link Sent in Email and Calendar Invite	April 1, 2021	April 1, 2021	April 1, 2021		
Day of Event Reminder	April 7, 2021 & April 13, 2021	April 14, 2021	April 6, 2021		

Table 3.2 Email Distribution for Follow-Up Focus Groups

Note. All pre-service study participants responded to the invitation to RSVP by the deadline and no final reminder to RSVP was necessary. Two virtual follow-up focus groups were held to accommodate the schedules of the pre-service study participants.

Participant Response

Four individual follow-up focus groups were conducted to accommodate the needs of those participants within this study. Of the eighteen study participants that agreed to participate in the virtual follow-up focus group, ten responded to the invitation to RSVP. Five identified as current pre-service teachers, three as in-service agricultural educators, and two were grouped into a miscellaneous category titled as "other". The focus groups were conducted roughly four months after the completion of the online Qualtrics questionnaire. The four follow-up focus groups were held virtually due to the restrictions put into place from the COVID-19 global pandemic. Each focus group was recorded using ZOOM, a cloud-based audio and video-conferencing service. Participation was voluntary, and all study participants were allowed the opportunity to opt out at any point throughout the focus group. A semi-structured interview guide was prepared in advance of the virtual follow-up focus groups and intended to gain additional insight to study participants' rationale for self-rating and continual growth along the Globally Competent Teaching and Learning Continuum. The same semi-structured interview guide was used for each of the four focus groups. However, the moderator also formed additional questions to build upon study participant responses. In addition, study participants were allowed to share additional information and experiences that were not explicitly asked about. After each one-hour session, an audio transcript was populated from the ZOOM recording and transcribed for accuracy by the researcher. Intelligent transcription was utilized to transcribe the qualitative data from the ZOOM recordings. This transcription method included light editing of the audio file to omit phrases irrelevant to the conversation or discussion topics presented within the semi-structured interview guide. Following the qualitative data transcription, study participants were contacted for an interviewee transcript review (ITR). This form of member checking was used to clarify participants' ideas within the audio transcript.

3.10 Data Management

Questionnaire data for this study was collected and stored online through Qualtrics, an online software tool for creating and distributing web-based surveys. Qualtrics utilizes a two-factor authentication that allows only the primary contact to access the study data. At the conclusion of data collection, the questionnaire results were exported and stored on Purdue Box. Through Purdue Box, only the principal investigator and primary contact on the study had access to the results.

Audio transcripts from the follow-up focus groups were downloaded from the researchers' personal password protected ZOOM account. During the coding process, pseudonyms were applied for participants to create anonymity. Audio transcripts were also stored within the online Purdue Box storage system in accordance with IRB guidelines.

3.11 Data Analysis

Data throughout this research study was analyzed using a combination of tools for both quantitative and qualitative data sets. Research objectives one and two included quantitative data collected via an online Qualtrics questionnaire and was later entered into a statistical software program, Statistical Package for the Social Sciences (SPSS), version 26. Through the demographic analysis of study participants, three groupings were determined and used throughout the data analysis (i.e., pre-service teacher, in-service teacher, and other). Research objectives three and four included qualitative data that consisted of open-ended questions from both the online Qualtrics questionnaire and the semi-structured interview guide used during the follow-up focus groups.

Qualitative responses were coded inductively using a computer software package, NVivo Pro, version 12.3. Table 3.3 highlights the data analysis plan for the research study and includes the research objectives, measures, level of measurement, variables, and data analysis procedures.

Research Objectives		Measures/ Evidence	Level of Measurement	Variable	Analysis
1.	Describe the demographics of the study participants, including employment/educational status, race, and additional international experiences.	Online Qualtrics Questionnaire -Close-ended questions	Nominal	Demographics	Frequency Percentage
2.	Identify study abroad participants' self- rated stage of empathy development utilizing the Globally Competent Teaching and Learning Continuum.	The Globally Competent Teaching and Learning Continuum -Element Rubric: Empathy and Valuing Multiple Perspectives	Ordinal	Developmental Levels: Nascent Beginning Progressing Proficient Advanced	Frequency Percentage Mean Median Mode SD Minimum Maximum
3.	Explore themes pertaining to empathy within study abroad participants' rationale for self-rating on the Globally Competent Teaching and Learning Continuum.	Online Qualtrics Questionnaire -Open-ended questions Semi-Structured Interview Guide -Follow-Up Focus Group	Nominal	Themes: Empathy development	Inductive Qualitative Coding
4.	Explore themes pertaining to empathy within study abroad participants' response concerning the steps necessary for movement along the Globally Competent Teaching and Learning Continuum.	Online Qualtrics Questionnaire -Open-ended questions Semi-Structured Interview Guide -Follow-Up Focus Group	Nominal	Themes: Continual growth along the Globally Competent Teaching and Learning Continuum	Inductive Qualitative Coding

Table 3.3 Data Analysis Plan by Research Objective

Note. Participants utilized Tichnor-Wagner et al.'s (2019) Globally Competent Teaching and Learning Continuum as a self-reflection tool to identify their own developmental level.

3.11.1 Demographic Analysis

To analyze research objective 1, (Describe the demographics of the study participants, including employment/educational status, race, and additional study abroad experiences), the researcher analyzed responses from the demographics section of the online Qualtrics questionnaire. All quantitative data from the demographic analysis was analyzed using the Statistical Package for the Social Sciences (SPSS), version 26. Quantitative data from the online questionnaire was coded into SPSS according to the researcher-designed codebook. Descriptive statistics were then used to analyze the data and show the measure of frequency through a percentage.

3.11.2 Self-Rated Stage of Empathy Development

Analysis for research objective 2, (Identify study abroad participants' self-rated stage of empathy development utilizing the Globally Competent Teaching and Learning Continuum) was similar to research objective 1. The researcher analyzed quantitative responses from the online Qualtrics questionnaire within the self-rated stage of development for the disposition titled *"Empathy and Valuing Multiple Perspectives"*. Similarly, to research objective 1, all quantitative data from the analysis of the self-rated stage of empathy development was analyzed using the Statistical Package for the Social Sciences (SPSS), version 26 and coded according to the researcher-designed codebook. Descriptive statistics to measure central tendency, dispersion, and frequency were used to analyze study participants' self-rated stage of empathy development.

3.11.3 Rationale for Self-Rating

To analyze research objective 3, (Explore themes pertaining to empathy within study abroad participants' rationale for self-rating on the Globally Competent Teaching and Learning Continuum), the researcher analyzed study participants' self-rating on the Globally Competent Teaching and Learning Continuum along with the open-ended responses from both the online Qualtrics questionnaire and the follow-up focus groups. Qualitative data from study participants' rationale for self-rating along the continuum was coded using an inductive coding methodology (Saldaña, 2013). The inductive coding method was chosen to allow research findings to emerge through frequent and significant themes rather than a predetermined set of codes. It was important

that the major themes were analyzed inductively to allow for the qualitative data to speak for itself and be from the perspectives of the study respondents. Qualitative data from the study participants' self-reflection rationale was inductively coded using NVivo Pro, version 12.3, a qualitative data analysis software program. The prominent themes were identified from the transcribed qualitative data files and supplemented with the data outcomes reported from objective 2.

3.11.4 Strategies for Continual Growth

Analysis for research objective 4, (Explore themes pertaining to empathy within study participants' response concerning the steps necessary for movement along the Globally Competent Teaching and Learning Continuum) was similar to that outlined in research objective 3. Data reported to inform this objective was derived from two qualitative data sets asking study participants to identify strategies for improvement as they aim to move along the Globally Competent Teaching and Learning Continuum. The two data sets include study participant responses from the online Qualtrics questionnaire, and the follow-up focus group about the identified strategies for improvement were analyzed using NVivo Pro, version 12.3, and coded utilizing an inductive approach. Interrelated themes were categorized based on the overall qualitative approach and identified from the two transcribed data sets.

3.12 Positionality Statement

Two methodological tools in this study contained open-ended questions which allowed study participants to give free-form answers. Those responses were then analyzed using qualitative methods. Thus, the acknowledgement of the role and potential influence a researchers' bias can have on those performing qualitative work, is a critical component (Bourke, 2014). As the researcher, it is important for me to share my positionality in context of this research. Researcher positionality is a necessary process for self-reflection and a determination of self within the social constructs for those viewpoints assumed by the researcher themselves (Throne, 2019). I am a white, heterosexual young adult that identifies as a cisgender female from Greenfield, Indiana. In 2011, as a freshman studying agricultural education at Purdue University, I had the opportunity to participant in the same Maymester study abroad experience to Jamaica as my study participants.

It was this initial short-term study abroad that sparked my interest for future international opportunities during my time as an undergraduate student and subsequently as a high school agricultural educator. During my four years as a high school agricultural educator, I spent my summers abroad teaching both English and Agriculture Education in various countries. It is because of my study abroad experiences that I have an interest in examining how the participation in a short-term study abroad can impact teachers' empathetic dispositions as they relate to globally competent teaching practices.

Currently, as a graduate research and teaching assistant in the Department of Curriculum and Instruction at Purdue University, I have had the opportunity to serve as a teaching assistant for ASEC 341 and ASEC 440. Students pursing a bachelor's degree in Agriculture Education complete this coursework and it should be noted that a number of study participants were enrolled in those courses in which I was a teaching assistant. The insider status of the researcher is clearly understood. In order to minimize my own personal bias, an objective analysis of both the questionnaire and focus group data collectively influenced participants' responses.

CHAPTER 4. RESULTS

4.1 Overview

This chapter presents the findings of the four research objectives identified within this study. The subsequent sections are divided based upon the research objective and the results for each. An overview of the study participants' demographic characteristics is presented first, followed by the findings of participants' self-rated stage of empathy development. The final two research objectives explore themes pertaining to study participants' rationale for self-rating and the required steps to move along the Globally Competent Teaching and Learning Continuum.

4.2 **Purpose of the Study**

The purpose of this study was to examine how the participation in a short-term study abroad can impact teachers' empathetic dispositions as they relate to globally competent teaching practices.

4.3 **Research Objectives**

The four research objectives that guided this study were:

- 1. Describe the demographics of the study participants, including employment/educational status, race, and additional international experiences.
- Identify study abroad participants' self-rated stage of empathy development utilizing the Globally Competent Teaching and Learning Continuum.
- 3. Explore themes pertaining to empathy within study abroad participants' rationale for selfrating on the Globally Competent Teaching and Learning Continuum.
- Explore themes pertaining to empathy within study participants' response concerning the steps necessary for movement along the Globally Competent Teaching and Learning Continuum.

4.4 Research Objective 1

The first identifiable research objective was "Describe the demographics of the study participants, including employment/educational status, race, and additional international experiences." This objective sought to understand the identity of the participants involved with this study. To address this research objective, participants were asked basic demographic questions within the online questionnaire. The results of the demographic characteristics are presented in the following two sections.

4.4.1 Demographic Analysis

This section provides the findings of the participants' demographic characteristics. From 2015-2019, eighty Purdue University agricultural education undergraduate students have participated in the Maymester study abroad to Jamaica. Of those eighty identified, fifty-six participants opened and filled out some portion of the online questionnaire. For various reasons, twenty participants dropped out of the questionnaire in different sections, and their data was not included in the final analysis. After removing the twenty incomplete questionnaires, it was determined that the researcher had thirty-six study participants who completed the questionnaire in its entirety. Table 4.1 outlines the demographic characteristics of the thirty-six participants who met the study criteria and fully completed the online questionnaire. Of those demographic characteristics, at least half of the participants classified their current educational status as Purdue University Alumni and two-fifths as current Purdue University Undergraduates. The remaining study participants selected "Other" and were asked to elaborate in the text box provided. The two respondents who chose "Other" indicated that they were pursuing a graduate degree at Purdue University.

Two prominent groups were displayed for participants' employment status and were identified as PreK-12 Educator (36.1%) and Other (41.7%). Within the online questionnaire study participants that selected "Other" were then prompted to specify their employment status within the text box provided. Of those study participants who selected "Other," all fifteen participants indicated their current employment status as full-time undergraduate students. The vast majority of study participants reported their race as White (94.4%), while one participant identified as Biracial (2.8%). One participant also selected that they preferred not to answer the question.

Categ	gory	n	%
Educa	ational Status		
	Purdue University Alumni	19	52.8
	Purdue University Undergraduate	15	41.7
	Other	2	5.5
Total		36	100
Empl	oyment Status		
	Extension Educator	2	5.5
	Graduate Student	3	8.3
	No Longer in Education	2	5.5
	Not Currently Employed	-	-
	Part-Time Employment	-	-
	PreK-12 Educator	13	36.1
	Non-Formal Educator	1	2.8
	Other	15	41.7
Total		36	100
Race			
	Asian/Pacific Islander	-	-
	Bi-racial	1	2.8
	Black	-	-
	Indigenous	-	-
	LatinX	-	-
	Middle Eastern/North African	-	-
	White	34	94.4
	Prefer Not to Answer	1	2.8
Total		36	100

Table 4.1 Demographics of study participants (n=36) including educational status, employment status, and race

Note. No participants reported not currently employed or part-time employment when asked their employment status. No participants reported their race as Asian/Pacific Islander, Black, Indigenous, LatinX, or Middle Eastern/North African.

4.4.2 Additional International Experiences

Along with participant demographics, the online questionnaire asked for study participants to share their involvement with other international experiences both before and after the Maymester study abroad to Jamaica. Table 4.2 outlines the participants who reported international experiences both before and after the Maymester study abroad to Jamaica. Of the thirty-six study participants, twenty-eight (77.8%) had no prior international travel experience and a number of study participants even shared that traveling to Jamaica was their first time on an airplane. The remaining eight participants (22.2%) reported that they had traveled internationally before the Maymester study abroad to Jamaica. Detailed information regarding the location, reason, and duration of the participants' international travel experiences before the Maymester study abroad to Jamaica are outlined in the subsequent section titled "*International Experience Prior to Jamaica*".

Following the Maymester study abroad to Jamaica, sixteen (44.4%) study participants reported that they had not traveled internationally since their return to the United States. It is important to note that international travel restrictions were implemented in March of 2020 due to the COVID-19 global pandemic. These travel restrictions have made it nearly impossible to travel internationally and as such study participants have been limited. However, of the thirty-six study participants, over half (55.6%) indicated that they have traveled internationally following the Maymester study abroad to Jamaica. Detailed information regarding the location, reason, and duration of the participants' international travel experiences after the Maymester study abroad to Jamaica are outlined in the subsequent section titled "International Experience Following Jamaica".

Table 4.2 Study participants' (<i>n</i> =36) additional international experiences before and after the
Maymester study abroad to Jamaica

Category	п	%
Prior International Experience No Prior International Experience	28	77.8
Prior International Experience	8	22.2
Total	36	100
Subsequent International Experience		
No Subsequent International	16	44.4
Experience Subsequent International Experience	20	55.6
Total	36	100

International Experience Prior to Jamaica

Of the thirty-six study participants, only eight identified that they had traveled internationally before the Jamaica study abroad experience. It is important to note that the Maymester study abroad to Jamaica is targeted to freshmen studying Agriculture Education at Purdue University. As such, study participants may not have had the opportunity for international travel before their freshman year. To capitalize on the demographics of those study participants who indicated international travel before Jamaica, participants were divided into three distinct categories (i.e., pre-service teacher, in-service teacher, and other). The location of international experiences before Jamaica was divided by the number of countries visited and reported in Table 4.3. Of the eight study participants that indicated prior international travel, the majority had traveled to only one country. Two pre-service teachers (25.0%) and three other participants (37.5%) indicated previous international travel to a single country. Along with those study participants who indicated previous international travel to only one country, an additional inservice teacher (12.5%) reported their prior international travel location to two-three countries, while one (12.5%) pre-service teacher and one (12.5%) other study participant had the opportunity to travel to four+ countries. Study participants visited a total of nineteen countries prior to the Jamaica study abroad experience. Ireland, Canada, and Costa Rica were the most common countries visited by study participants prior to the Maymester study abroad to Jamaica.

Category	Pre-Service Teacher		In-Service Teacher		0	ther	Total		
	n	%	п	%	п	%	п	%	
Location									
One Country	2	25.0	-	-	3	37.5	5	62.5	
Two-Three Countries	-	-	1	12.5	-	-	1	12.5	
Four+ Counties	1	12.5	-	-	1	12.5	2	25.0	
Total	3	37.5	1	12.5	4	50.0	8	100	

Table 4.3 Location of study participants (n=8) international experience prior to Jamaica

Note. No pre-service or other study participants reported traveling to two-three countries prior to Jamaica. No in-service study participants reported traveling to one country or four+ countries prior to Jamaica.

Along with the location of international travel before Jamaica, study participants were also asked to indicate the duration and reason for their travel. Because several study participants stated that they had traveled to multiple countries prior to the Jamaica study abroad, the following analysis is based on the number of countries visited (n=19). The duration and reason of countries visited prior to Jamaica is outlined in Table 4.4. Of the nineteen countries visited by study participants, the most popular duration was one week or less. Pre-service teachers reported the duration of their travel as one week or less for six countries (31.6%), while other study participants reported their travel as one week or less for eight countries (42.1%). The remaining countries visited before the Jamaica study abroad were two-four weeks in duration and highest among inservice teachers. No study participants categorized their prior international experiences for a duration longer than four weeks.

To grasp participants' additional study abroad experiences before Jamaica, the researcher asked study participants to categorize their travel experiences into three distinct categories (i.e., educational, leisure, or service). For this research study, educational was defined as part of a study abroad experience, leisure for personal travel, and service as part of a volunteer organization or religious event. Of the nineteen countries visited half (52.6%) were educational, five (26.3%) visited by in-service teachers, and five (26.3%) from other study participants. The remaining nine countries were visited for the sole purpose of personal travel and were represented by pre-service teachers (10.5%), in-service teachers (15.8%), and other study participants (21.1%). No participants categorized their international travel before Jamaica as service.

Category		Pre-Service Teacher		In-Service Teacher		Other		otal
8 /	n	%	n	%	п	%	п	%
Duration								
One Week or Less	6	31.6	-	-	8	42.1	14	73.7
Two-Four Weeks	1	5.3	3	15.8	1	5.3	5	26.3
Two-Four Months	-	-	-	-	-	-	-	-
Semester	-	-	-	-	-	-	-	-
Year+	-	-	-	-	-	-	-	-
Total	7	36.9	3	15.8	9	47.4	19	100
Reason								
Educational	5	26.3	-	-	5	26.3	10	52.6
Leisure	2	10.5	3	15.8	4	21.1	9	47.4
Service	-	-	-	-	-	-	-	-
Total	7	36.9	3	15.8	9	47.4	19	100

Table 4.4 Duration and reason of international countries visited (n=19) prior to Jamaica

Note. Analysis was conducted from 8 study participants that indicated prior international travel experience (pre-service teacher n=3, in-service teacher n=1, and other n=4). No study participants reported that their prior international experiences were categorized as service or for a duration longer than four weeks. No in-service study participants reported travel prior to Jamaica as educational or for one week or less. Educational was defined as part of a study abroad experience, leisure for personal travel, and service as part of a volunteer organization or religious event.

International Experience Following Jamaica

Of the thirty-six study participants, twenty identified that they had traveled internationally following the Jamaica study abroad experience. This was a significant increase from the eight that had traveled before the Maymester study abroad to Jamaica. Only five of the initial eight study participants reported traveling internationally following the study abroad. Even though international travel following the Jamaica study abroad experience had increased, it is also noteworthy to mention that study participants could have missed additional opportunities to travel abroad due to the global pandemic and restricted travel bans. For twenty-eight study participants, Jamaica served as their first international experience with fifteen later categorizing their study abroad experience to Jamaica as a gateway for future international travel opportunities.

Similar to the analysis of international travel prior to Jamaica, study participants were divided into three distinct categories (i.e., pre-service teacher, in-service teacher, and other). The location of international experiences following the Jamaica study abroad was divided by the number of countries visited and reported in Table 4.5. Of the twenty participants who traveled following the international experience to Jamaica, seventeen (85%) reported traveling to only one country. Six pre-service teachers (30.0%), six in-service teachers (30.0%), and five other study participants (25.0%) indicated international travel to a single country following the study abroad to Jamaica. Along with those study participants who indicated international travel to only one country, an additional pre-service teacher (5.0%) and other study participant (5.0%) reported their prior international travel to four+ countries. Additionally, one other study participant (5.0%) had the opportunity to travel to four+ countries. Study participants visited a total of twenty-seven countries after the Jamaica study abroad experience. Ireland, Haiti, Greece, Canada, Mexico, and the Dominican Republic were the most common countries visited by study participants following the Maymester to Jamaica.

Category	Pre-Service Teacher		In-Service Teacher		Other		Total	
	n	%	n	%	n	%	n	%
Location								
One Country	6	30.0	6	30.0	5	25.0	17	85.0
Two-Three Countries	1	5.0	-	-	1	5.0	2	10.0
Four+ Counties	-	-	-	-	1	5.0	1	5.0
Total	7	35.0	6	30.0	7	35.0	20	100

Table 4.5 Location of study participants (n=20) international experience following Jamaica

Note. No pre-service or in-service study participants reported traveling to four+ countries following the Jamaica study abroad. No in-service study participants reported traveling to two-three countries after the Jamaica study abroad.

Similar to the prior international experiences outlined in the previous section, study participants were asked to indicate the duration and reason for their travel following the Jamaica study abroad. Because several study participants stated that they had traveled to multiple countries following the Maymester to Jamaica, the subsequent analysis is based on the number of countries visited (n=27). Table 4.6 reflects a similar trend in reporting the duration and reason of those international countries visited following the Jamaica study abroad. Comparable with the findings from study participants' prior international travel experiences, the most popular duration was those

travel opportunities categorized as one week of less. Overall, other study participants reported the duration of their travel as one week or less for seven countries (25.9%), and both pre-service (14.8%) and in-service teachers (14.8%) reported their travel as one week or less for four countries. The remaining countries visited after the Jamaica study abroad were two-four weeks in duration and highest among the other study participants. No participants categorized their international experiences following the Maymester study abroad to Jamaica for a duration longer than four weeks.

In addition to the location and duration of the international experiences following the Jamaica study abroad, the researcher asked study participants to categorize their travel experiences into three distinct categories (i.e., educational, leisure, or service). For this research study, educational was defined as part of a study abroad experience, leisure for personal travel, and service as part of a volunteer organization or religious event. Of the twenty-seven countries visited over half (55.5%) were for educational purposes, five (18.5%) visited by pre-service teachers, two (7.4%) by in-service teachers, and eight (29.6%) from other study participants. A smaller portion of study participants indicated that their international travel following Jamaica for was leisure (37.0%) and only two for service (7.4%). No pre-service study participants categorized their international travel following Jamaica as service.

Category		Pre-Service Teacher		In-Service Teacher		Other		otal
	n	%	n	%	п	%	п	%
Duration								
One Week or Less	4	14.8	4	14.8	7	25.9	15	55.6
Two-Four Weeks	4	14.8	2	7.4	6	22.2	12	44.4
Two-Four Months	-	-	-	-	-	-	-	-
Semester	-	-	-	-	-	-	-	-
Year+	-	-	-	-	-	-	-	-
Total	8	29.6	6	22.2	13	48.1	27	100
Reason								
Educational	5	18.5	2	7.4	8	29.6	15	55.6
Leisure	3	11.1	3	11.1	4	14.8	10	37.0
Service	-	-	1	3.7	1	3.7	2	7.4
Total	8	29.6	6	22.2	13	48.1	27	100

Table 4.6 Duration and reason of international countries visited (n=27) following Jamaica

Note. Analysis was conducted from 20 study participants that indicated prior international travel experience (pre-service teacher n=7, in-service teacher n=6, and other n=7). No study participants reported that their international experiences following Jamaica were categorized for a duration longer than four weeks. No pre-service study participants reported travel following Jamaica as service. Educational was defined as part of a study abroad experience, leisure for personal travel, and service as part of a volunteer organization or religious event.

4.5 Research Objective 2

The second identifiable research objective was "Identify study abroad participants' selfrated stage of empathy development utilizing the Globally Competent Teaching and Learning Continuum." This objective sought to understand the study participants' perceived competency level of empathy and valuing multiple perspectives. To address this research objective, participants were asked to utilize the Globally Competent Teaching and Learning Continuum within the online Qualtrics questionnaire as a self-reflection tool to rate themselves given the provided five developmental levels: nascent, beginning, progressing, proficient, and advanced. The results from the globally competent teaching element (i.e., empathy and valuing multiple perspectives) are presented in the subsequent sections.

4.5.1 Overall Self-Rated Stage of Empathy Development

This section provides the findings of the thirty-six participants' self-rated stage of empathy development. The extent to which participants define their developmental level for empathy and

valuing multiple perspectives was measured utilizing Tichnor-Wagnor et al.'s Globally Competent Teaching and Learning Continuum. Table 4.7 depicts the frequency of overall responses (n=36)for study participants' self-rated stage of development for empathy and valuing multiple perspectives. Two prominent developmental levels were displayed for the frequency of participants' self-rated stage of empathy development and were classified as progressing (36.1%) and proficient (33.3%). Within the Globally Competent Teaching and Learning Continuum, the progressing developmental level is centrally located and is the stage in which participants have identified their own beliefs and biases and are now ready to trace back those origins. One-fifth of total participants identified their developmental level as advanced (19.4%) and were open to taking on opposing perspectives by self-selecting sources that contradict those that confirm prior opinions. For example, Tichnor-Wagner at al. (2019) recommends selecting differing podcasts, television news channels, and even following organizations on social media in order to expand viewpoints that otherwise would have been dismissed. Three study participants (8.3%) utilized the statements provided to confirm their development level as beginning and the remaining individual response (2.8%) identified as nascent and had not yet explored how their personal beliefs have shaped their worldview.

Table 4.7 Overall frequency of study participants' (<i>n</i> =36) self-rated stage of development for empathy and valuing multiple
perspectives

Developmental Level	Statement	n	%
Nascent	I have not yet explored how my personal beliefs have shaped my worldview.	1	2.8
Beginning	 I can identify my personal beliefs and experiences and recognize how they shape my view of the world. I recognize that I might hold stereotypes. 	3	8.3
Progressing	 I understand that my beliefs and experiences are not universally shared. I can identify the influences that shape how others and I view the world. I am willing to explore the experiences and perspectives of people who challenge my beliefs. 	13	36.1
Proficient	 I recognize biases and limitations of my own perspective and those of others' perspectives. I recognize how my personal beliefs influence my decisions as a teacher. I empathize by seeking to understand the perspectives of others. 	12	33.3
Advanced	 I challenge my personal assumptions to understand viewpoints that differ from my own. I value diverse perspectives, including those that challenge my own. 	7	19.4
otal		36	100

Note. Participants utilized Tichnor-Wagner et al.'s (2019) Globally Competent Teaching and Learning Continuum as a self-reflection tool to identify their own developmental level.

In addition to the displayed overall frequency of study participants' self-rated stage of development for empathy and valuing multiple perspectives, descriptive statistics shown in Table 4.8 include the measure of central tendency (M=3.58) and dispersion (SD=.996). The descriptive statistical analysis exhibit study participants' relatively high level of confidence within their self-rated stage of development for empathy and valuing multiple perspectives.

Table 4.8 Descriptive statistics of study participants' (n=36) self-rated stage of development for empathy and valuing multiple perspectives

Mean	Median	Mode	SD	Min	Max
3.58	4.0	3 (Progressing)	.996	1 (Nascent)	5 (Advanced)

Note. 1=Nascent, 2=Beginning, 3=Progressing, 4=Proficient, and 5=Advanced.

4.5.2 Categorized Self-Rated Stage of Empathy Development

To capitalize on the demographics of the participants within the study, the self-rated stage of empathy development from all thirty-six study participants was also analyzed into three distinct categories (i.e., pre-service teacher, in-service teacher, and other). The frequency of participants' self-rated stage of development for empathy and valuing multiple perspectives was divided by current employment status, then calculated and reported in Table 4.9. On average, responding pre-service teachers (46.7%) and other study participants (37.5%) rated themselves as progressing, while in-service respondents recorded much lower at (23.1%). As mentioned previously, the progressing developmental level is where participants have identified their personal beliefs and biases. In addition to knowing their biases, study participants can also begin to trace back the origins of those identified and explore opportunities in which challenge their beliefs. Even though most study participants self-rated their developmental level as progressing, nearly one-third of all study participants self-rated as proficient and an observed natural decrease occurred in those respondents from all three categories reporting a developmental level of advanced. Of the thirty-six study participants one pre-service teacher indicated as nascent, with only three in-service teachers responding as beginning.

Developme ntal Level	Statement	Pre-Service Teacher		In-Service Teacher		Other		Total	
		n	%	п	%	п	%	п	%
Nascent	• I have not yet explored how my personal beliefs have shaped my worldview.	1	6.7	-	-	-	-	1	2.8
Beginning	 I can identify my personal beliefs and experiences and recognize how they shape my view of the world. I recognize that I might hold stereotypes. 	-	-	3	23.1	-	-	3	8.3
Progressing	 I understand that my beliefs and experiences are not universally shared. I can identify the influences that shape how others and I view the world. I am willing to explore the experiences and perspectives of people who challenge my beliefs. 	7	46.7	3	23.1	3	37.5	13	36.1
Proficient	 I recognize biases and limitations of my own perspective and those of others' perspectives. I recognize how my personal beliefs influence my decisions as a teacher. I empathize by seeking to understand the perspectives of others. 	5	33.3	4	30.8	3	37.5	12	33.3
Advanced	 I challenge my personal assumptions to understand viewpoints that differ from my own. I value diverse memory assumptions including these that shallenge my own. 	2	13.3	3	23.1	2	25.0	7	19.4
Total	• I value diverse perspectives, including those that challenge my own.	15	100	13	100	8	100	36	100

Table 4.9 Frequency of study participants' (*n*=36) self-rated stage of development for empathy and valuing multiple perspectives categorized by current employment status

Note. Participants utilized Tichnor-Wagner et al.'s (2019) Globally Competent Teaching and Learning Continuum as a self-reflection tool to identify their own developmental level. This data set was calculated and displayed separately into three distinct categories. Pre-service teacher is defined as those study participants pursing a teaching license, in-service teacher as those actively in the PreK-12 classroom that hold a current license, and other as a current graduate student, extension educator, non-formal educator, or no longer in education. No in-service or other study participants classified their empathy development level as nascent. No pre-service or other study participants classified their empathy development level as beginning.

In addition to the frequency of study participates' self-rated stage of empathy development, the following three sections include the mean, median, mode, standard deviation, minimum, and maximum scores reported for those study participants categorized into pre-service teacher, inservice- teacher and other.

Pre-Service Teachers Self-Rated Stage of Empathy Development

This section provides the findings of the fifteen pre-service teachers' self-rated stage of empathy development following a Maymester study abroad experience to Jamaica. Table 4.10 outlines the descriptive statistics for those undergraduate students who were actively pursuing a teaching license in agricultural education. It is important to note that during the completion of the online Qualtrics questionnaire (i.e., November-December 2020), pre-service teachers had minimal classroom experience and had not yet completed their student teaching practicum. Pre-service teachers reported a much lower self-rated stage of development for empathy and valuing multiple perspectives when compared to both the overall group score and those study participants categorized as in-service teachers and those within the other category (M=3.47, SD=.990). Even though the response for pre-service teachers was below the overall average, they still fell within the progressing developmental level and were comfortable reporting their personal biases.

Table 4.10 Descriptive statistics of pre-service teachers' (*n*=15) self-rated stage of development for empathy and valuing multiple perspectives

Mean	Median	Mode	SD	Min	Max
3.47	3.0	3 (Progressing)	.990	1 (Nascent)	5 (Advanced)

Note. 1=Nascent, 2=Beginning, 3=Progressing, 4=Proficient, and 5=Advanced.

In-Service Teachers Self-Rated Stage of Empathy Development

In-service teachers responded similarly to pre-service teachers in their response to development for empathy and valuing multiple perspectives. Table 4.11 provides the findings of the thirteen in-service teachers' self-rated stage of empathy development through descriptive statistics. At the time of the online Qualtrics questionnaire, those study participants within the inservice teacher category are those with a current Indiana Career and Technical Education (CTE): Agriculture license. In-service teachers identified their developmental level of empathy and

valuing multiple perspectives slightly higher than those pre-service teachers, yet significantly lower than those in the other category (M=3.54, SD=1.127). Of note, in-service study participants only selected developmental levels from beginning to advanced.

 Table 4.11 Descriptive statistics of in-service teachers' (n=13) self-rated stage of development for empathy and valuing multiple perspectives

Mean	Median	Mode	SD	Min	Max
3.54	4.0	4 (Proficient)	1.127	2 (Beginning)	5 (Advanced)

Note. 1=Nascent, 2=Beginning, 3=Progressing, 4=Proficient, and 5=Advanced. No in-service study participants selected 1 (Nascent).

Other Self-Rated Stage of Empathy Development

This section provides the self-rated stage of empathy development for those eight study participants included within the other category. At the completion of the online Qualtrics questionnaire, the other category comprised of those study participants who identified as current graduate students, extension educators, non-formal educators, and those no longer in education. Table 4.12 depicts how participants in the other category assessed their developmental level for empathy and valuing multiple perspectives much higher than those in the pre-service and inservice categories (M=3.88, SD=.835). In addition to reporting a significantly higher developmental level than those in the pre-service and inservice categories, other study participants also identified higher than the overall average. Of note, study participants within the other category only selected developmental levels from progressing to advanced. No study participants within the other category assessed themselves on the Globally Competent Teaching and Learning Continuum as nascent or beginning.

 Table 4.12 Descriptive statistics of other study participants' (n=8) self-rated stage of development for empathy and valuing multiple perspectives

 Macronomous Madian

	Mean	Median	Mode	SD	Min	Max
-	3.88	4.0	3 (Progressing) &	.835	3 (Progressing)	5 (Advanced)
			4 (Proficient)			
	Mate 1-Neger	at 2-Dealant	in a 2-Due ana asin a	1-Dueficient	and 5- A dream and	No other

Note. 1=Nascent, 2=Beginning, 3=Progressing, 4=Proficient, and 5=Advanced. No other study participants selected 1 (Nascent) or 2 (Beginning). This data set includes two modes (Bimodal).

4.6 Research Objective 3

The third identifiable research objective was "Explore themes pertaining to empathy within study abroad participants' rationale for self-rating on the Globally Competent Teaching and Learning Continuum." This objective sought to understand study participants' rationale for self-selecting within the global competency element of empathy and valuing multiple perspectives. To address this research objective, study participants were asked to briefly explain their rated competency level for the disposition's element. Data from the online questionnaire and virtual follow-up focus groups were triangulated to ensure evidence of an emergent code or theme. The findings revealed that internal and external factors influenced the study participants' rationale for self-rating on the Globally Competent Teaching and Learning Continuum. Internal factors were broadly defined by the researcher as those personal attributes that influence one's behavior and actions, while external factors were those influences or situations by outside motives. The qualitative results are displayed by three distinct demographic categories (i.e., pre-service teacher, in-service teacher, and other) and are presented in the following three sections.

4.6.1 Pre-Service Rationale for Self-Rating

This section provides the qualitative findings of the fifteen pre-service study participants' rationale for self-rating on the Globally Competent Teaching and Learning Continuum for empathy and valuing multiple perspectives. For the purpose of this study pre-service is defined as those study participants pursuing a teaching license. Pre-service participant responses were broadly categorized into themes of both internal and external factors. Pre-service teachers identified two internal (i.e., lack of knowledge/confidence and mindfulness of others) and three external factors (i.e., hypervisibility in Jamaica, family expectations/upbringing, and

transformative experiences) within their rationale for self-rating on the Globally Competent Teaching and Learning Continuum.

Internal Factors

In this study, the researcher identified two internal factors representing pre-service teachers' self-rating within the element of empathy and valuing multiple perspectives. Table 4.13 displays the internal factors influencing pre-service study abroad participants' rationale for self-rating within the element of empathy and valuing multiple perspectives. The first theme to emerge was related to the lack of knowledge and confidence for global competency elements and the inability to discuss international concepts within a classroom setting. Pre-service teachers expressed their lack of knowledge and confidence as a factor for their lower self-rating on the Globally Competent Teaching and Learning Continuum. Often their lack of knowledge and confidence was related to the restrictions put into place as undergraduate pre-service teachers (i.e., minimal experience with students and not having a classroom of their own). However, several preservice participants confirmed their improved knowledge and confidence for the global competency element of empathy and valuing multiple perspectives following the Jamaica study abroad experience.

The second theme emerging from the post-experience questionnaire and pre-service follow-up focus groups was the mindfulness of others. For many of the pre-service study participants, it was because they participated in the Jamaica study abroad program that they were able to "…visualize where people may be coming from" and be "…more mindful of what minorities are experiencing."

Table 4.13 Internal factors influencing pre-service study abroad participants' (n=15) rationale for self-rating on the Globally Competent Teaching and Learning Continuum.

Lack of Knowledge/Confidence	Mindfulness of Others
"I started out and never thought of these things [global competency elements]."	"I've been able to visualize where people may be coming from."
"I don't feel confident discussing global concepts in class. I feel like I am uncomfortable doing so because I don't have that background."	"I believe it [Jamaica study abroad] allowed me to put myself in their [current students] shoes and have empathy for them."
"Prior to Jamaica, I have never really thought	"I am now more mindful of what minorities
outside of my hometown bubble."	are experiencing."

External Factors

Through the inductive coding process, the researcher identified three external factors representing pre-service teachers' self-rating within the element of empathy and valuing multiple perspectives (Table 4.14). Within their rationale, several pre-service participants identified external factors. The most frequently mentioned external factor was the feeling of hypervisibility for participants during the Maymester study abroad to Jamaica. Buchanan & Settles (2019) simply define hypervisibility as "the state of being extremely visible." For many white study participants, Jamaica was undoubtedly the first time they felt like the racial minority. For example, Melanie, a pre-service teacher, explained her feelings of hypervisibility as a "fish in a fishbowl and everybody's looking at me. I felt like I stuck out like a sore thumb." For Melanie, hypervisibility influenced her decision to self-select the developmental level of proficient as she detailed in her rationale that she "feels confident in providing empathy as she now understands the perspectives of others."

In addition to the feeling of being hypervisible in Jamaica, study participants also detailed family expectations and upbringing as a factor for their self-selection along the Globally Competent Teaching and Learning Continuum. Participants identified various family expectations, which fueled their motives to express empathy and value the multiple perspectives of others. Dianna explains within her rationale, "my family weighs heavily on me because they are not very open." She credits her open mindfulness to the fact that she has had the opportunity to travel more than others in her family. Along with Dianna, other pre-service participants can attest to their social upbringing as an external instrumental factor in their ability to provide empathy and value those beliefs and viewpoints that differ from their own. When reflecting on the influences that shape their personal view of the world, another participant explains, "... the majority of my bias comes from the religion I was raised in as well as the community where I grew up."

Finally, pre-service study participants were influenced by the transformative experiences that developed during their undergraduate time at Purdue University. For example, one pre-service study participant shared that "the study abroad to Jamaica makes me want to travel more and see what other people experience compared to my little Indiana bubble." Another participant was thankful for her time at Purdue and for the "…opportunity to see the world through a different lens." Through these transformative experiences, study participants challenge their assumptions and misconceptions to understand the value of empathy.

Hypervisibility in Jamaica	Family Expectations & Upbringing	Transformative Experiences
"Jamaica was the first time in which I felt like the minority."	"My family weighs heavily on me because they are not very open. I am the most open- minded because I've traveled the most."	"I am thankful Purdue allowed me the opportunity to see the world through a different lens."
"I felt like a fish in a fishbowl and everybody's looking at me. I felt like I stuck out like a sore thumb."	"It is fascinating to me that a small-town mindset can really influence the way you grow."	"The study abroad to Jamaica makes me want to travel more and see what other people experience compared to my little Indiana bubble."
"Being the minority in Jamaica has once again become apparent, most of my current students are either African American or LatinX. I feel left out."	"I recognize that the majority of my bias comes from the religion I was raised in as well as the community where I grew up."	
"We exited the bus, and always heard white people being shouted at us."	"I know the major influencers that we have shape the way we view the world."	

Table 4.14 External factors influencing pre-service study abroad participants' (n=15) rationale for self-rating on the Globally Competent Teaching and Learning Continuum.

4.6.2 In-Service Rationale for Self-Rating

The findings of the thirteen in-service study participants' rationale for self-rating on the Globally Competent Teaching and Learning Continuum for empathy and valuing multiple perspectives are provided within this section. For the purpose of this study, in-service is defined as those actively in the PreK-12 classroom that hold a current teaching license. The responses of those study participants designated as in-service teachers were broadly categorized into themes of both internal and external factors. In-service teachers identified one internal (i.e., personal recognition) and four external factors (i.e., seeing is believing, family expectations/upbringing, transformative experiences, and current school corporation) within their rationale for self-rating.

Internal Factors

The researcher identified one internal factor representing in-service teachers' self-rating within the element of empathy and valuing multiple perspectives. Table 4.15 displays the internal factor influencing in-service study abroad participants' rationale for self-rating within the selected dispositions element. Through the inductive coding process, personal recognition emerged as a significant theme within in-service agricultural educators' rationale for selecting the appropriate developmental level on the Globally Competent Teaching and Learning Continuum. For example, one in-service study participant found it challenging to self-assess her developmental level as progressing because she "...struggles to fully and consistently explore experiences and perspectives of people who challenge her own beliefs". In addition, another in-service teacher recognized her own implicit bias as a contributing factor for not self-assessing at a higher developmental level. As study participants reflected on the professional and personal experiences that justified their selection within the Globally Competent Teaching and Learning Continuum, personal recognition was the primary theme.

Table 4.15 Internal factor influencing in-service study abroad participants' (n=13) rationale for self-rating on the Globally Competent Teaching and Learning Continuum.

Personal Recognition

"I struggle to fully and consistently explore experiences and perspectives of people whole challenge my beliefs. Especially when I start to gather that I might be on the wrong side of history."

"I have my implicit biases but try to respect other points of view."

External Factors

Four external factors emerged as in-service study participants were asked to describe their reasoning for self-rating on the Globally Competent Teaching and Learning Continuum. Table 4.16 displays the external factors influencing in-service study abroad participants' rationale for self-rating within the element of empathy and valuing multiple perspectives. The external factor titled "seeing is believing" was identified through the inductive coding process. In-service teachers expressed the importance of seeing first-hand that their personal beliefs and values were not universally shared when traveling abroad. This was undoubtedly so for those traveling out of the country for the first time. Kathryn, an in-service study participant who had never traveled internationally before Jamaica, states, "I obviously knew not everyone has the exact same life as me but seeing it first-hand changes your whole perspective on the differences between people."

Similar to those external factors identified for pre-service and other study abroad participants, family expectations and upbringing emerged for in-service study participants. Inservice study participants shared within their rationale that their family was influential in their commitment to valuing multiple perspectives. For example, Shelby, a secondary agriculture educator, mentioned in her reasoning that she found it challenging to explore other beliefs, cultures, and values. She writes, "I came from a cookie-cutter town and was always in the accelerated programs at my school. Because of this, I was always in class with the same people who came from the same background." While Shelby found it difficult early on to explore the perspectives of people who challenge her beliefs, another in-service teacher credits her parents for teaching her to be empathetic to others. She writes, "my parents taught me to be empathetic and sympathetic and to know that other people are different."

The third external factor to emerge within in-service agricultural educators was related to the development of transformative experiences. Differing from the transformative experiences listed by those in the pre-service and other demographic categories, in-service participants only referenced the study abroad experience to Jamaica. Within their rationale, in-service participants credited the Jamaica study abroad for helping them to recognize diversity and shape their personal beliefs. In particular, Brittany, an in-service agricultural educator states, "Jamaica opened me up to realize there's tons of diversity and that we all bring something different to the table." Another in-service participant shares the transformative experience from Jamaica "…has made me realize that they [current students] need to get out of this little bubble that we live in and experience other things."

Finally, in-service study participants were influenced by the current school corporation in which they were employed during this research study. In-service agricultural educators expressed their empathy towards students from countries in the same demographic region as Jamaica. One study participant states, "I currently have a student from Jamaica in my horticulture class. It's easier to empathize with him because I've seen the environment where he comes from." Another in-service teacher explains, "a lot of my students come from countries in that region. I always think back to my Jamaica experience and recognize what they've all gone through and where they are coming from." For those in-service study participants that do not currently have students from the geographic area surrounding Jamaica, they described the importance of utilizing other professionals within the school corporation to understand the perspectives of those students within their classes. As a beginning educator, Lilly struggles to understand her students' backgrounds and beliefs. Within her rationale, she states, "I feel that I reach out to other professionals in my school to help empathize and understand the ways in which students' backgrounds impact their education."

Seeing is Believing	Family Expectations & Upbringing	Transformative Experiences	Current School Corporation
"While I knew things [differences] were out there, just seeing it and experiencing it has definitely opened my eyes."	"My parents taught me to be empathetic and sympathetic and to know that other people are different."	"Jamaica opened me up to realize there's tons of diversity and that we all bring something different to the table."	"I currently have a student from Jamaica in my horticulture class. It's easier to empathize with him because I've seen the environment where he comes from."
"I obviously knew not everyone has the exact same life as me, but seeing it first-hand changes your whole perspective on the differences between people."	"Realizing where you come from, the environment you are raised in, and what values are there affects how you do things."	"I understand that I have had experiences like Jamaica that have helped shape my beliefs."	"A lot of my students come from countries in that region. I always think back to my Jamaica experience and recognize what they've all gone through and where they are coming from."
"I've always known the United States is pretty fortunate. You've read stories, you see it on the news, read it in articles, but until you're really there you don't understand it."	"I came from a cookie-cutter town and was always in the accelerated programs at my school. Because of this, I was always in class with the same people who came from the same background."	"The Jamaica experience makes me want to reach out to my students to let them know I'm there for them."	"As a teacher in a heavily racially and economically diverse school, I understand that each of my students' backgrounds are different and most likely different from my own."
		"Jamaica has made me realize that they [current students] need to get out of this little bubble that we live in and experience other things."	"I feel that I reach out to other professionals in my school to help empathize and understand the ways in which students' backgrounds impact their education."

Table 4.16 External factors influencing in-service study abroad participants' (n=13) rationale for self-rating on the Globally Competent Teaching and Learning Continuum.

4.6.3 Other Rationale for Self-Rating

This section includes the eight other study participants' qualitative findings for self-rating on the Globally Competent Teaching and Learning Continuum for empathy and valuing multiple perspectives. For the purpose of this study other is defined as those participants who are current graduate students, extension educators, non-formal educators, or those no longer in education. Their responses were broadly categorized into themes of both internal and external factors. Other study participants identified three internal (i.e., personal recognition, mindfulness of others, and reflection) and two external factors (i.e., family expectations/upbringing and transformative experiences) within their rationale for self-rating on the Globally Competent Teaching and Learning Continuum.

Internal Factors

Three internal factors were identified to represent other study participants' self-rating within the element of empathy and valuing multiple perspectives. Table 4.17 displays the internal factors influencing other study abroad participants' self-rating within the disposition's element. Similar to the findings of the in-service study participants, personal recognition emerged as an internal factor influencing those other study participants who traveled to Jamaica. For one other study participant, it was through her self-reflection on multiple perspectives that she detailed her personal "...struggles with understanding how some people view things in this world and how they can possibly justify those beliefs."

The second internal factor to emerge through the inductive coding process was a mindfulness for others. Similar to the findings of the pre-service study participants, mindfulness of others emerged as an internal factor influencing those other study participants. Within her rationale, Kendall, an extension educator, explained that she felt confident in her abilities to self-assess along the Globally Competent Teaching and Learning Continuum at a developmental level of proficient because "I understand that everyone has their own beliefs, but I still need to explore and learn about other beliefs that challenge my own."

The third and final internal factor to emerge through the rationale of those other study participants was titled "reflection". Other study participants identified reflection as an internal factor influencing their rationale for self-rating on the Globally Competent Teaching and Learning Continuum. Often, participants realized that the first step to developing empathy and seeking multiple perspectives through the reflective process is to first identify their personal beliefs and values. Following their initial identification, participants were then ready to trace the origins of those beliefs and values through a reflective process within the self-assessment instrument. Other study participants detailed their ability to reflect, provided them the opportunity to "...think about other cultures and differing perspectives" and "... reflect more about how my personal culture can influence how I view others who are different from me".

Taking on the Globarry Competent Teaching and Learning Continuum.			
Personal Recognition	Mindfulness of Others	Reflection	
"I know that I am not always right, and different perspectives allow us to see all sides of a situation that we might not have seen before."	"I like to understand what other people are going through and will do anything to see things from their viewpoint."	"I have spent the last year or so learning and reflecting more about how my personal culture can influence how I view others who are different from me."	
"I understand that my thinking and rationale isn't always the right way of viewing life."	"I try to understand the values and reasons people believe differently than me. And then put my original belief given to me from childhood to the test."	"I think it helped that [our professor] has us reflect in a journal. If I hadn't reflected, I honestly wouldn't have even thought about the other culture or differing perspectives."	
"I do struggle with understanding how some people view things in this world and how they can possibly justify those beliefs."	"I understand that everyone has their own beliefs, but I still need to explore and learn about other beliefs that challenge my own."		

Table 4.17 Internal factors influencing other study abroad participants' (n=8) rationale for selfrating on the Globally Competent Teaching and Learning Continuum.

External Factors

In addition to the above internal factors, the researcher also identified two external factors representing other study participants' self-rating within the element of empathy and valuing multiple perspectives. The two external factors identified were similar to those of both pre-service and in-service teachers. Table 4.18 displays the external factors influencing other study participants' rationale for self-rating within the element of empathy and valuing multiple

perspectives. As mentioned in the previous demographic categories, family expectations and upbringing were frequently cited as factors influencing the rationale for study participants' self-assessment along the Globally Competent Teaching and Learning Continuum. Because one other study participant grew up near the Purdue University campus, she detailed in her rationale that she "… had a little bit of experience with international groups on campus." However, others referenced their ties to agriculture as a deterrent for valuing diverse perspectives and interacting with populations different from their own. For example, Greg, a current graduate student stated, "I came from a background where I didn't have a lot of interaction with diverse people, especially being in agriculture." Another participant acknowledged she held a "… particular set of bias and beliefs that typically are associated with agriculture."

The final external factor to emerge through the inductive coding process was the development of transformative experiences. Other study participants mentioned several transformative experiences within their reasoning for self-selecting a particular developmental level within the element of empathy and valuing multiple perspectives. For example, a current graduate student stated, "the whole social justice movement last year really got me invested in providing empathy towards others." Study participants also credited their intercultural and multicultural courses at Purdue University for igniting the conversation about multiple perspectives worldwide. Others also believed their "international experiences like Jamaica helped you realize that there are different perspectives than my own."

Family Expectations & Upbringing	Transformative Experiences
"I'm from [town near Purdue] so I had a little bit of experience with international groups on campus, but I had never really left my hometown before the Jamaica study abroad experience."	"Through my intercultural and multicultural courses at Purdue I have spent a lot of time thinking about multiple perspectives."
"I came from a background where I didn't have a lot of interaction with diverse people, especially being in agriculture."	"The whole social justice movement last year really got me invested in providing empathy towards others."
"I was in classes with a lot of people from the same exact or very similar backgrounds."	"International experiences like Jamaica helped you realize that there's different perspectives than my own."
"I know that I hold a particular set of bias and beliefs that are typically associated with agriculture."	

Table 4.18 External factors influencing other study abroad participants' (n=8) rationale for selfrating on the Globally Competent Teaching and Learning Continuum.

4.7 Research Objective 4

The fourth and final research objective was "Explore themes pertaining to empathy within study participants' response concerning the steps necessary for movement along the Globally Competent Teaching and Learning Continuum." This objective sought to understand participants' desire for growth in developing empathy and valuing multiple perspectives. To address this research objective, participants were asked to identify two actionable steps for continual growth along the Globally Competent Teaching and Learning and Learning Continuum. Data from the online questionnaire and virtual follow-up focus groups were triangulated to ensure evidence of an emergent code or theme. The findings revealed that study participants included internal and external factors within their explanation for desired growth along the continuum. Internal factors were broadly defined by the researcher as those personal attributes that influence one's behavior and actions, while external factors were those influences or situations by outside motives. The qualitative results are displayed by three distinct demographic categories (i.e., pre-service teacher, in-service teacher, and other) and are presented in the following three sections.

4.7.1 **Pre-Service Strategies for Continual Growth**

This section provides the qualitative findings of the fifteen pre-service study participants' description of continual growth on the Globally Competent Teaching and Learning Continuum for empathy and valuing multiple perspectives. For this study, pre-service is defined as those study participants pursuing a teaching license. The responses by pre-service study participants were broadly categorized into themes of both internal and external factors. Pre-service teachers identified two internal (i.e., introspection and a desire to change) and two external factors (i.e., seeking help from others and resources from alternative perspectives) within their description of continual growth for the dispositions element of empathy and valuing multiple perspectives.

Internal Factors

In this study, the researcher identified two internal factors within pre-service teachers' descriptions for continual growth along the Globally Competent Teaching and Learning Continuum. Table 4.19 displays the internal factors outlined for pre-service study abroad participants' continual growth within the disposition's element. The first theme to emerge was related to participants' introspection. For continual growth, pre-service teachers detailed the importance of analyzing their thoughts and feelings regarding empathy and perspective recognition. For example, Mary, a pre-service participant shares, "... I know I need to work on my own bias and how I teach because of my own beliefs."

In addition to introspection, the second theme emerging from the post-experience questionnaire and pre-service follow-up focus groups was the desire to change. For many preservice study participants, it was through the self-reflection process and the transformational experiences in Jamaica that pre-service study participants recognized a need for change. In particular, Melanie, a pre-service teacher details her desire to change following the Maymester study abroad to Jamaica:

After the eye-opening experience [Jamaica study abroad], I knew in my heart that I had to change and reach out for resources to become more educated, more wellrounded in racial diversity, and in different cultures. I know that I want to be more understanding of other races, and it's just taking those steps to become more educated. I know I now have the want; it is just the continuation to make sure I do. But, most importantly, it is not graduating and stopping where I am at right now. For other pre-service teachers within the demographic category, their lack of knowledge for their students' cultures prompted their need to change. One study participant states, "I only know a little bit about my students and their cultures. For that, I feel like I come from the stance that I could always learn more."

Introspection	Desire to Change
"To be advanced, I know I need to work on my own bias and how I teach because of my own beliefs."	"I only know a little bit about my students and their cultures. For that, I feel like I come from the stance that I could always learn more."
"I want to be able to truly understand the rationale behind why people think or behave the way that they do as well as justify the thoughts and actions that I have every day."	"After the eye-opening experience [Jamaica study abroad], I knew in my heart that I had to change and reach out for resources to become more educated, more well-rounded in racial diversity, and in different cultures. I know that I want to be more understanding of other races, and it's just taking those steps to become more educated. I know I now have the want; it is just the continuation to make sure I do. But most importantly, it is not graduating and stopping where I am at right now."

Table 4.19 Internal factors for pre-service study abroad participants' (n=15) continual growth on
the Globally Competent Teaching and Learning Continuum.

External Factors

Through the inductive coding process, the researcher identified two external factors within the actionable steps listed by pre-service teachers for continual growth along the continuum. Table 4.20 displays the external factors described by pre-service study abroad participants for growth within the element of empathy and valuing multiple perspectives. Within the actionable steps listed, several pre-service participants identified external factors that would help in their ability to develop empathy and value perspectives that challenge their current beliefs. The most frequently mentioned external factor was the need to seek out help from others. For instance, one pre-service participant shared, "To continue my growth, I would like to talk with others about topics that I might have different views on and understand their thought process. This will give me the opportunity to open my mind to a new way of thinking." While many pre-service participants listed their desire to seek out help from those with differing viewpoints, one participant commented that they would prefer to ask for help from someone they were comfortable with. She details within her actionable steps, "I think a step I should take is to ask someone I am comfortable with questions about things that I did not grow up understanding."

In addition to the need for seeking help from others, pre-service participants also detailed resources from alternative perspectives as a factor for their continual growth along the Globally Competent Teaching and Learning Continuum. Participants identified various resources which would allow for movement; these include traveling to a different country, attending a cultural presentation, listening to a podcast from a differing perspective, or even selecting news sources that contradict their current beliefs. Justine, a pre-service participant, details several actionable steps within her quest for improvement:

"By seeking to truly understand and not just tolerate a perspective that opposes my own, I hope to move along the continuum by demonstrating a foundation of living and working in a diverse, interconnected world. My plan to select a variation of online news sources that I wouldn't typically gravitate towards allows for the opportunity to expand my viewpoint and to seek perspectives that differ from my own. I also plan to not shy away from conversations with individuals that have differing opinions from my own. I will listen to their side fully instead of blocking it out."

the Globarty Competent Teaching and Dearning Continuam.		
Seeking Help from Others	Resources from Alternative Perspectives	
"I think a step I should take is to ask someone I am comfortable with questions about things that I did not grow up understanding."	"By seeking to truly understand and not just tolerate a perspective that opposes my own, I hope to move along the continuum by demonstrating a foundation of living and working in a diverse, interconnected world. My plan to select a variation of online news sources that I wouldn't typically gravitate towards allows for the opportunity to expand my viewpoint and to seek perspectives that differ from my own. I also plan to not shy away from conversations with individuals that have differing opinions from my own. I will listen to their side fully instead of blocking it out."	
"I hope to continue to seek out individuals that hold different viewpoints and actively engage in conversations about our views and why they may be similar and/or different."	"Broaden my views by experiencing different cultures, whether it be through going to a different country, attending a cultural celebration, or simply listening to a podcast of a different perspective."	
"To continue my growth, I would like to talk with others about topics that I might have different views on and understand their thought process. This will give me the opportunity to open my mind to a new way of thinking."	"I will be intentional in selecting readings that have differing perspectives, maybe not to change my own perspectives, but to learn more about others."	

Table 4.20 External factors for pre-service study abroad participants' (n=15) continual growth on the Globally Competent Teaching and Learning Continuum.

4.7.2 In-Service Strategies for Continual Growth

The findings of the thirteen in-service study participants' desired steps for continual growth within the element of empathy and valuing multiple perspectives are provided within this section. For this study, in-service is defined as those active in the PreK-12 classroom that hold a current teaching license. The responses of those study participants defined as in-service teachers were broadly categorized into themes of both internal and external factors. As a result, in-service teachers identified three internal (i.e., assistance needed, listening to understand, and a desire to change) and two external factors (i.e., seeking help from others and resources from alternative

perspectives) within their actionable steps for continual growth on the Globally Competent Teaching and Learning Continuum.

Internal Factors

Three internal factors were identified as in-service teachers detailed necessary steps for improvement along the Globally Competent Teaching and Learning Continuum. Table 4.21 displays the identified internal factors by in-service study abroad participants for continual growth within the element of empathy and valuing multiple perspectives. Through the qualitative analysis, the internal factor titled "assistance needed" was the first to emerge. Several in-service teachers described the feeling of being unsure when asked to describe actionable steps that would assist them in the growth of the global competency element for empathy and valuing multiple perspectives. For example, one in-service teacher responds, "I am unsure of the steps I need to take for continual growth of this element. I know there are things I need to do to change my mindset; however, it is difficult to know what to do or where to turn to find these resources in the world we are currently living in."

The second internal factor to emerge through the inductive coding process was listening to understand. For those in-service and other study participants listening to understand was a common internal factor as participants detailed their desired steps for movement along the Globally Competent Teaching and Learning Continuum. In-service teachers expressed the components of listening to understand as having an open mind, minimizing distractions when having conversations, and most importantly, making a conscious effort to truly understand the influences that shape how others view the world. For example, one secondary agriculture teacher reported, "In conversing with individuals different from myself, I will seek to not only listen but to ask questions in an attempt to gain a greater understanding for their rationale..."

The third and final internal factor to emerge for in-service study participants was the desire to change. Similar to the findings of the pre-service study participants, a desire to change emerged as an internal factor within the actionable steps outlined by those in-service study participants as well. For example, Kathryn, an in-service study participant, detailed her desired steps to move along the continuum; she writes, "I would like to educate myself on tips and guidelines for having tough conversations that will allow me to talk to others with different cultural backgrounds."

Table 4.21 Internal factors for in-service study abroad participants' (n=13) continual growth on
the Globally Competent Teaching and Learning Continuum.

"I am unsure of the steps I need to take for continual growth of this element. I know there are things I need to do to change my mindset; however, it is difficult to know what to do or where to turn to find these resources in the world we are currently living in.""In conversing with individuals different from myself, I will seek to not only listen but to ask questions in an attempt to gain a greater understanding for their rationale. I will seek to compare various reasoning to my own in a critical reflection of my own personal values and beliefs.""I would like to educate myself on tips and guidelines for having tough conversations that will allow me to talk to others with different cultural backgrounds."

External Factors

Two external factors emerged as in-service study participants were asked to report actionable steps for continual growth along the Globally Competent Teaching and Learning Continuum. Table 4.22 displays the external factors in-service study abroad participants reported for continual growth. The external factor titled "seeking help from others" was identified through the analysis process. Consistent with actionable steps detailed from pre-service study participants, in-service educators also expressed their desire to seek help from others as they recognize their need for improvement. A majority of in-service participants mentioned the need to ask more questions and encourage free discussions with people whose viewpoints differ from their own. Shelby described needing to seek help from others as a specific professional development goal to help her students who speak English as a second language (ESL) at her school. She stated, "My goal is to participate in various forms of professional development in the areas of working with diversified student bodies. Many of these are offered through my school organization. I plan to attend a seminar about teaching agriculture to ESL students and to join an organization within my school that educates teachers on this matter."

Similar to those external factors identified for pre-service and other study abroad participants, resources from alternative perspectives emerged for in-service study participants. Inservice study participants identified various resources thought to allow for their continual growth along the Globally Competent Teaching and Learning Continuum. The listed resources from alternative perspectives include Instagram advocates, podcasts, and news sources. For example, one study participant writes, "...If I am going to be scrolling anyways, I might as well use it as a time to learn and become more aware of others' experiences.

the Globally Competent Teaching and Learning Continuum.	
Seek Help from Others	Resources from Alternative Perspectives
"In order to continue growing I will ask more questions and encourage more free discussion when I interact with people whose viewpoints different from my own. I will ask them to help me better understand their viewpoint, which in turn will help me to question and evaluate my own."	"I plan to find Instagram advocates that might express different or modified views from my own. If I am going to be scrolling anyways, I might as well use it as a time to learn and become more aware of others' experiences."
"My goal is to participate in various forms of professional development in the areas of working with diversified student bodies.Many of these are offered through my school organization. I plan to attend a seminar about teaching agriculture to ESL students and to join an organization within my school that educates teachers on this matter."	"I would like to consistently follow podcasts that allow me to dive into and explore new perspectives."
	"In an effort to be a more well-rounded and a better empathetic individual and teacher, I will work to diversify my news sources. This will allow me to see how both sides of the U.S. political isle view situations as well as how different countries are reacting and viewing

Table 4.22 External factors for in-service study abroad participants' (n=13) continual growth on
the Globally Competent Teaching and Learning Continuum.

4.7.3 Other Strategies for Continual Growth

Within this section, the qualitative findings of the eight other study participants' desired steps for continual growth within the element of empathy and valuing multiple perspectives are presented. For this study, other is defined as those study participants who are current graduate students, extension educators, non-formal educators, or those no longer in education. The responses of those study participants defined as other were broadly categorized into themes of both internal and external factors. As a result, other study participants identified two internal (i.e., introspection and listening to understand) and one external factor (i.e., resources from alternative

global issues."

perspectives) within their actionable steps for growth on the Globally Competent Teaching and Learning Continuum.

Internal Factors

The researcher identified two internal factors within the actionable steps of those categorized as other study participants. Table 4.23 presents the internal factors that other study abroad participants identified within the dispositions element of empathy and valuing multiple perspectives. Comparable with the internal factors identified by pre-service study participants, introspection also emerged as an internal factor influencing other study participants. Kendall, a current extension educator, details within her actionable steps a path to internal self-awareness and her need to "... continue to understand the reasoning why other people believe differently...". Kelsey identified the influences that shape her worldview and explains the desire to learn about her "own culture and ancestral path...".

The second theme to emerge from the post-experience questionnaire and other study participant follow-up focus groups was the internal factor titled "listening to understand." For several other study participants, the idea of listening to understand was a consistent factor for those wanting to improve upon their developmental level within the Globally Competent Teaching and Learning Continuum. Several other study participants detailed the need to "listen to different perspectives" within their actionable steps. One participant shared, "I don't believe things just by being told that I need to believe them but by listening to different perspectives and assessing all of the information."

Introspection	Listening to Understand
"I can continue to ask myself why I believe certain things and continue to understand the reasoning why other people believe differently."	"Have frequent conversations with people who come from diverse backgrounds and truly listening to understand their perspective."
"Taking more time to learn about my own culture and the ancestral path that has led us to where we are. That could mean visiting countries that we immigrated from or going to an event with cultural significance to my family."	"I don't believe things just by being told that I need to believe them but by listening to different perspectives and assessing all of the information."
	"I truly try to understand people's different perspectives while I will most likely stick with my own it is good to know their why to make since of their decisions."

Table 4.23 Internal factors for other study abroad participants' (n=8) continual growth on the Globally Competent Teaching and Learning Continuum.

External Factors

Similar to the external factors identified for continual growth among pre-service and inservice teachers, resources from alternative perspectives emerged for other study participants as well. Table 4.24 presents the external factor for other study abroad participants' growth on the Globally Competent Teaching and Learning Continuum. Research participants identified various resources which would allow for an increased developmental level along the continuum; these were traveling internationally, finding reliable information, and even completing their own personal research. Table 4.24 External factor for other study abroad participants' (n=8) continual growth on the Globally Competent Teaching and Learning Continuum.

Resources from Alternative Perspectives

"Finding reliable sources of information to help craft my opinions is critical to my overall unbiased understanding of the world."

"I hope to continue traveling internationally to experience many more cultures and gain knowledge on how I can recognize different perspectives to better understand why they influence our decisions as educators and people."

"I would like to push myself to gain a better understanding of other beliefs by looking for individuals who believe differently than I do and discussing things with them."

"By completing my own personal research on opposing beliefs and viewpoints, I am able to better grasp how and why people think the way they do."

CHAPTER 5. DISCUSSION

5.1 Overview

This chapter presents the results and main findings identified within this study. Each conclusion is followed by a discussion that contributes to the knowledge base regarding teachers' empathetic dispositions following a study abroad experience in Jamaica. This chapter will also discuss the implications for theory, research, and practice. Finally, recommendations for future research will follow and conclude this chapter.

5.2 **Purpose of the Study**

The purpose of this study was to examine how the participation in a short-term study abroad can impact teachers' empathetic dispositions as they relate to globally competent teaching practices.

5.3 Research Objectives

The four research objectives that guided this study were:

- 1. Describe the demographics of the study participants, including employment status/educational status, race, and additional international experiences.
- Identify study abroad participants' self-rated stage of empathy development utilizing the Globally Competent Teaching and Learning Continuum.
- 3. Explore themes pertaining to empathy within study abroad participants' rationale for selfrating on the Globally Competent Teaching and Learning Continuum.
- Explore themes pertaining to empathy within study participants' response concerning the steps necessary for movement along the Globally Competent Teaching and Learning Continuum.

5.4 Conclusions

The conclusions of this study will be presented in this section. Four significant findings were associated with this study that addressed study participants' demographics and empathetic dispositions related to globally competent teaching practices. The four major findings of this study have been divided by their respective research objectives and are presented in the following section.

5.4.1 Demographic Analysis

Conclusion 1: Agricultural education undergraduates who participated in the short-term study abroad to Jamaica from 2015-2019 were representative of three demographic categories based on their current employment/educational status (i.e., pre-service teacher, in-service teacher, and other). Most participants identified as white and had little to no international experience before the short-term study abroad to Jamaica.

The first identifiable research objective was "Describe the demographics of the study participants, including employment/educational status, race, and additional international experiences." Of the thirty-six participants who met the study criteria and fully completed the online questionnaire, at least half of the participants (52.8%) classified their current educational status as Purdue University Alumni and two-fifths (41.7%) as current Purdue University Undergraduates. The remaining study participants selected "Other" and indicated that they were pursuing a graduate degree at Purdue University. Through further demographic analysis, participants' employment status was identified. Of those determined to be current Purdue University alumni, two participants were extension educators, three were current graduate students, two no longer in education, and one identified as a non-formal educator. As anticipated, the greatest percentage of participants were teacher candidates (41.7%) and the lowest participation (22.2%) from those in the demographic category categorized as other. The clear delineation of study participants' current educational/employment status led the researcher to identify three distinct categories for the virtual follow-up focus groups (i.e., pre-service teacher, in-service teacher).

Because the researcher knew several pre-service study participants due to her role as a graduate teaching assistant, she verbally reminded those teacher candidates that she encountered about the online questionnaire and follow-up focus groups. This gentle reminder could have easily influenced teacher candidates to participate and is potentially why the participation from preservice teachers was slightly higher than those represented in the other demographic categories.

However, unsurprising to the researcher, study participants were nearly homogenous in their racial identifies. Of the thirty-six study participants, thirty-four (94.4%) identified as White, one (2.8%) as Bi-racial, and one (2.8%) preferred not the answer. As we are aware, the enrollment and employment statistics within United States public schools display a gap in cultural diversity between teachers and students enrolled within their classrooms. This is certainly no different in teacher preparation programs and, more specifically, in school-based agricultural education (Lawver et al., 2018). Similar statistics from Rocca and Washburn (2008) are consistent with those demographics found within this study. Within their descriptive study, pre-service agriculture teachers in selected collegiate preparation programs. Of the two hundred and sixty-two teacher candidates selected, 93.4% identified as White, 2.4% Hispanic, 1.9% Native American/Alaskan, 1.4% African American, and 0.9% Asian.

In addition to employment/educational status and race demographics, study participants were asked to share their involvement with other international experiences before and after the Maymester study abroad to Jamaica. Of the thirty-six study participants, twenty-eight (77.8%) had no prior international travel experience, and several participants even shared that traveling to Jamaica was their first time on an airplane. The remaining eight participants (22.2%) reported traveling internationally before the Maymester study abroad to Jamaica. For those study participants that did have prior international experience, the majority spent one week or less traveling to one country for either an educational or leisure experience. Ireland, Canada, and Costa Rica were the most common countries visited by study participants prior to the Maymester study abroad to Jamaica.

The number of study participants who had not traveled internationally before Jamaica was unsurprising, as the short-term study abroad is targeted to first-year undergraduates studying agriculture education. As such, unless students had the opportunity to travel internationally through a high school language immersion program or with family and friends, this opportunity would not have been presented to them. In addition, funding is readily available at Purdue University to support study abroad experiences for those wanting to participate (i.e., Purdue Moves Summer Study Abroad Scholarships, International Programs in Agriculture Scholarship, etc.). These funding supports truly make the experience possible for some that would have not otherwise been able to attend. Of the thirty-six study participants, twenty identified that they had traveled internationally following the Jamaica study abroad experience. This was a significant increase from the original eight that had traveled before the Maymester study abroad to Jamaica. This increase suggests that the short-term study abroad to Jamaica is a pivotal experience for future international experiences, whether for educational, leisure, or service purposes.

Consistent with those who traveled before Jamaica, most study participants identified that their international travel following the study abroad consisted of an educational experience that was one week or less in duration. Ireland, Haiti, Greece, Canada, Mexico, and the Dominican Republic were the most common countries visited by study participants following the Maymester to Jamaica. Countries visited both prior to and following the short-term study abroad experience contrasts with those leading destinations listed within the 2020 Open Doors Report by the Institute of International Education. The report suggests that the majority of United States students studying abroad during the 2018-2019 academic year were in Europe.

5.4.2 Self-Rated Stage of Empathy Development

Conclusion 2: Study participants reported a relatively high level of confidence within their selfrated stage of development for empathy and valuing multiple perspectives.

The second identifiable research objective was "Identify study abroad participants' selfrated stage of empathy development utilizing the Globally Competent Teaching and Learning Continuum." Study participant selection, regardless of demographic category, suggests that participants overall reported a relatively high level of confidence within their self-rated stage of development for empathy and valuing multiple perspectives. With five developmental levels ranging from nascent (1) to advanced (5), thirty-six study participants reported a measure of central tendency of 3.58. Thirteen (36.1%) study participants self-rated their stage of development as progressing, while twelve (33.3%) identified their developmental level as proficient. As a result, nearly seventy percent of participants rated their developmental level between progressing (3) and proficient (4).

Consistent with the overall mean, each demographic category of participants also displayed an average developmental level between progressing (3) and proficient (4). The discussion regarding study participants' self-rated stage of empathy development for the three demographic categories of those study participants within this study (i.e., pre-service teacher, in-service teacher, and other) are presented below.

Pre-Service Self-Rated Stage of Empathy Development

Of the three demographic categories identified within this study, nearly half (46.7%) of pre-service teachers reported a progressing (3) developmental level for the dispositions element of empathy and valuing multiple perspectives. The central tendency noted for pre-service teachers' empathetic dispositions was M=3.47, the lowest among those demographic categories within this study. This developmental level suggests that pre-service teachers understand their beliefs and experiences are not universally shared, can identify the influences that shape how others view the world, and have a desire to explore the experiences and perspectives of people who challenge their own beliefs (Tichnor-Wagner et al., 2019).

These results compare slightly higher to those identified in Crawford et al.'s (2020) case study, which sought to understand an instructional design course's outcomes and effective strategies with a focus on globally competent teaching practices for pre-service teachers. With the use of the Globally Competent Teaching and Learning Continuum at the beginning and end of the instructional design course, researchers could determine if students moved along the path towards global competence. Crawford et al.'s (2019) study reported pre-service teachers perceived sense of empathetic dispositions related to empathy and valuing multiple perspectives at M=2.33 prior to and M=2.96 following the completion of the instructional design course.

The lower self-rated stage of empathy development among pre-service teachers within this study might suggest that teacher candidates are still at a place of self-discovery and reinvention, typical for undergraduates as they transition to and from university. In addition, they might also be hesitant to self-rate their empathetic dispositions along the Globally Competent Teaching and Learning Continuum as proficient (4) because they are unaware of how their personal beliefs will influence their decisions as a teacher. This hesitation might stem from the unknown because teacher candidates have minimal experience in a classroom setting and cannot implement these practices.

In-Service Self-Rated Stage of Empathy Development

Similar to pre-service teachers' self-rated stage of empathy development, in-service teachers reported a central tendency of M=3.54. This is consistent with each of the three demographic categories as it falls between progressing (3) and proficient (4). However, the developmental level of in-service teachers is slightly higher than pre-service teachers, yet lower than study participants categorized as other. Results from in-service teachers self-rated stage of empathy development did however provide a larger standard deviation (SD=1.127) than anticipated. The larger standard deviation suggests that the perceived distribution along the Globally Competent Teaching and Learning Continuum is more spread out than those of the differing demographic categories (i.e., pre-service teacher SD= .990 and other SD= .835).

This dispersion implies that in-service teachers' empathetic dispositions vary across the continuum. Such variations could imply that opportunities to work with a diverse student body are limited in the agriculture classroom and teachers' personal beliefs might be similar to those of their students. Thus, making it hard to explore the experiences and perspectives of students who have differing beliefs.

Other Self-Rated Stage of Empathy Development

The final demographic category includes those other study participants who are classified as current graduate students, extension educators, non-formal educators, or those no longer in education. The findings of those other study participants indicated the highest central tendency (M=3.88) of the three demographic categories within this study. No other study participants indicated a nascent (1) or beginning (2) developmental level for the dispositions element of empathy and valuing multiple perspectives. However, twenty-five percent of the other study participants indicated an advanced (5) self-rated stage of empathy development. This developmental level suggests that participants can challenge their personal assumptions to understand diverse viewpoints and perspectives that differ from their own (Tichnor-Wagner et al., 2019).

The higher self-rated stage of empathy development among other study participants might suggest that working outside the PreK-12 classroom provides more opportunities to interact with those that have different perspectives or allow for opportunities to work with a more diverse range

of people. In addition, other study participants may have occupations that offer additional time for experiences that cultivate empathy. In contrast, other study participants might be experiencing the Dunning-Kruger effect when asked to rate their perceived developmental level along the Globally Competent Teaching and Learning Continuum. The Dunning-Kruger effect can be explained as a cognitive bias in which "the scope of people's ignorance is often invisible to them" (Dunning, 2011). This is common in many social and intellectual domains and can be a factor as study participants self-rated their own developmental level within the online questionnaire. In essence, other student participants may genuinely be unaware of how deficient their expertise is.

5.4.3 Rationale for Self-Rating

Conclusion 3: Various internal and external factors exist within study participants' rationale for self-rating along the Globally Competent Teaching and Learning Continuum. Consistent across all demographic categories however was the external factors of family expectations/upbringing and transformative experiences.

The third identifiable research objective was "Explore themes pertaining to empathy within study abroad participants' rationale for self-rating on the Globally Competent Teaching and Learning Continuum." Study participants' rationale identified various internal and external factors that influenced their self-rated stage of empathy development along the continuum. Moving beyond descriptive statistics to the open-ended portion of the questionnaire, the researcher found that study participants from all three demographic categories identified "family expectations/upbringing" and "transformative experiences" as those external factors influencing their self-rated stage of empathy development.

Study abroad participants felt that their family expectations and upbringing were instrumental in providing empathy and valuing multiple perspectives. Participants detailed that their religion, family mindset, location in which they grew up, and personal ties to agriculture contributed to their perceived developmental level along the Globally Competent Teaching and Learning Continuum. In addition to family expectations/upbringing, transformative experiences also played a role in how study participants rated their empathy development. Participants capitalized on the short-term study abroad experience to Jamaica as a transformative experience that allowed them to empathize with those that have different beliefs and perspectives. As for many

participants, this was their first time traveling internationally, and several detailed the gratifying experience of exploring just a small but significantly different part of the world.

Furthermore, study participants also mentioned several other transformative experiences within their rationale for self-rating along the continuum. These transformative experiences include intercultural and multicultural courses at Purdue University, the recent social justice movement, and other international experiences. This data suggests that transformative experiences like those in Jamaica play a pivotal role in creating empathetic dispositions for pre-service, inservice, and other study participants. In addition to family expectations/upbringing and transformative experiences, study participants identified several other internal and external factors. The following three sections discuss study participants' rationale for self-rating within the dispositions elements of empathy and valuing multiple perspectives.

Pre-Service Rationale for Self-Rating

The data suggest that two internal (i.e., lack of knowledge/confidence and mindfulness of others) and three external factors (i.e., hypervisibility in Jamaica, family expectations/upbringing, and transformative experiences) were identified within pre-service teachers' rationale for self-rating on the Globally Competent Teaching and Learning Continuum. The internal factor titled "lack of knowledge/confidence" was, not surprisingly, only listed among those in the pre-service demographic category. This suggests that teacher candidates still require frequent opportunities to develop their empathetic competencies even after an immersive study abroad experience. In addition, this lack of knowledge and confidence for empathetic dispositions could explain the need for necessary long-term development practices for pre-service teachers.

However, the external factor of "hypervisibility in Jamaica" was surprisingly only listed among pre-service teachers. This was a surprising emergent external factor because all participants traveled to Jamaica on a short-term study abroad experience, not just those in the pre-service demographic category. In addition, thirty-four of the thirty-six study participants identified as white (94.4%). This would imply that nearly all the participants were of the ethnoracial minority while traveling abroad to Jamaica and could have easily been categorized as 'the other'. Similar experiences of hypervisibility are outlined in Bento's (2020) content analysis of African American women who traveled to Japan or South Korea as English teachers or study abroad students. Descriptions of feeling uncomfortable due to the attention their race attracts were very similar to pre-service teachers' experiences while traveling to Jamaica.

In-Service Rationale for Self-Rating

In-service teachers identified one internal (i.e., personal recognition) and four external factors (i.e., seeing is believing, family expectations/upbringing, transformative experiences, and current school corporation) within their rationale for self-rating. As the data suggests, in-service teachers' rationale for self-rating within the dispositions element of empathy and valuing multiple perspectives was heavily influenced by external factors. Consistent with other demographic categories were the external factors identified as "family expectations/upbringing" and "transformative experiences". However, two external factors were not representative in pre-service and other study abroad participants' rationale for self-rating; these were identified as "seeing is believing" and "current school corporation".

Not surprising for in-service teachers was the influence their current school corporation had on their empathetic dispositions. This is specific to those in-service teachers who shared within their rationale that they currently have students either from Jamaica or from countries in that region. In-service teachers shared that it is because of their transformative experience in Jamaica that they feel they can show empathy for students who share diverse perspectives and challenge their beliefs.

Other Rationale for Self-Rating

Other study participants identified three internal (i.e., personal recognition, mindfulness of others, and reflection) and two external factors (i.e., family expectations/upbringing and transformative experiences) within their rationale for self-rating on the Globally Competent Teaching and Learning Continuum. Differing from the other demographic categories was the emergent external factor of reflection. Reflective practices required in Jamaica as well as personal self-reflection following the experience were detailed as instrumental within other study participants rationale for self-rating within the dispositions element of empathy and valuing multiple perspectives.

5.4.4 Strategies for Continual Growth

Conclusion 4: Various internal and external factors exist within study participants' response concerning the steps necessary for movement along the Globally Competent Teaching and Learning Continuum. Consistent across all three demographic categories, however, was the external factor of resources from alternative perspectives.

The final identifiable research objective was "Explore themes pertaining to empathy within study participants' response concerning the steps necessary for movement along the Globally Competent Teaching and Learning Continuum." Study participants identified several internal and external factors influencing their continual growth along the continuum. However, representative of all three demographic categories was the external factor of "resources from alternative perspectives."

Overall, study participants felt that finding resources from alternative perspectives was instrumental for their continual growth in the dispositions element of empathy and valuing multiple perspectives. Participants detailed their desire to seek news sources, attend cultural celebrations, travel internationally, follow Instagram advocates, and select readings from those sources in which they would have typically not gravitated towards to improve upon their empathetic dispositions. In addition to the number of alternative resources listed, study participants expressed their desire to find unbiased and credible sources when exploring those perspectives who may challenge their personal beliefs. Apart from the similarity in the identifiable external factor titled "resources from alternative perspectives," study participants also identified various other internal and external factors. The following three sections are categorized by study participants' demographics and detail the desired actionable steps for continual growth within the dispositions element of empathy and valuing multiple perspectives.

Pre-Service Strategies for Continual Growth

Pre-service teachers identified two internal (i.e., introspection and a desire to change) and two external factors (i.e., seeking help from others and resources from alternative perspectives) within their description of continual growth for the dispositions element of empathy and valuing multiple perspectives. The internal factor titled "desire to change" was, not surprisingly, listed among those in the pre-service demographic category. This factor was not surprising to see within pre-service teachers' actionable steps because of their low self-rated stage of empathy development (M=3.47). However, it does suggest that even though pre-service study participants are among those with the lowest self-rated stage of empathy development, they recognize and have a desire to change moving forward.

In addition to a desire to change, "introspection" was an internal factor influencing preservice teachers' empathetic dispositions. Pre-service participants detailed that to move along the continuum, they needed to confront a personal or professional weakness and work to understand the cognitive bias within themselves. They recognize this as a daunting task, but to understand the perspectives of others, one needs first to examine their personal beliefs and values and identify current biases (Tichnor-Wagner et al., 2019).

In-Service Strategies for Continual Growth

In-service teachers identified three internal (i.e., assistance needed, listening to understand, and a desire to change) and two external factors (i.e., seeking help from others and resources from alternative perspectives) within their actionable steps for continual growth on the Globally Competent Teaching and Learning Continuum. Similar to pre-service teachers, a desire to change emerged within the qualitative portions of this study. However, even though several in-service teachers recognized a desire to change within their strategies for continual growth, a handful of participants also detailed the need for assistance. In-service teachers described that they were unsure of actionable steps to take for continual growth and noted that within their open-ended response in the online questionnaire. This was unsurprising to see as an emergent internal factor because this study could have been the first time in-service teachers were asked to think about their global teaching practices, and more specifically, those actionable steps to improve. It was only through the Globally Competent Teaching and Learning Continuum that they had a chance to self-assess their developmental level and provide actionable steps for continual growth.

Similar to the external factor identified within pre-service teachers' strategies for continual growth, in-service teachers also identified the external factor titled "seek help from others." Within this factor, participants explained the importance of reaching out to those more educated within the topic. Study participants described the importance of seeking out help from others in the form of professional development opportunities at their current school and by simply asking more questions when speaking to those with opposing views.

Other Strategies for Continual Growth

Other study participants identified two internal (i.e., introspection and listening to understand) and one external factor (i.e., resources from alternative perspectives) within their actionable steps for continual growth along the Globally Competent Teaching and Learning Continuum. Similar to those emergent internal factors of pre-service and in-service teachers, "introspection" and "listening to understand" were the two factors identified. However, other study participants did not specify a desire to change within their actionable steps for continual growth. This could suggest that other study participants are comfortable with their developmental level on the Globally Competent Teaching and Learning Continuum or struggle to see the value in change.

5.5 Implications for Theory and Research

The Transformative Learning Theory (TLT) served as the theoretical framework for this study and was utilized to interpret the meaning of how adult learners process and change their personal views of the world. Through a lived experience, learners begin to process and change their perspectives of the world and can ultimately form new beliefs. Results from this study suggest the importance of a short-term study abroad on teachers' empathetic dispositions related to globally competent teaching practices. Furthermore, these results support the necessity of an experiential learning activity, such as a study abroad, in improving the empathetic dispositions of pre-service, in-service, and other study participants.

According to the Transformative Learning Theory, a critical component exists through the self-examination of one's feelings. With the use of Tichnor-Wagner et al.'s Globally Competent Teaching and Learning Continuum, participants were asked to self-assess their perceived development level for the dispositions element of empathy and valuing multiple perspectives. Participants noted several internal factors influencing their empathetic dispositions following the short-term study abroad to Jamaica through this self-reflection. With similar emergent internal factors (i.e., personal recognition and reflection), the results appear to support the Transformative Learning Theory's claim of the importance of self-evaluation within a transformative experience.

Another central premise of the Transformative Learning Theory is planning a course of action. As a part of the self-assessment tool, participants identified two actionable steps for continual growth along the continuum. These actionable steps included several internal and

external factors, but the need to seek resources from alternative perspectives was consistent among all three demographic categories. However, even though a course of action was identified, it is unclear if study participants implemented those identifiable strategies for continual growth. To further the development of empathetic dispositions early on, the creation of an action plan during the Jamaica study abroad might make for a more transformative experience

5.6 Implications for Practice

Advancing curriculum within globally competent teaching practices and professional development for teacher candidates and in-service agricultural educators were two major areas in which this study was significant. Based on the findings, study participants from all three demographic categories acknowledged that transformative experiences, such as those from the short-term study abroad to Jamaica, impacted their empathetic dispositions. However, pre-service and in-service teachers still struggled with their confidence and knowledge on implementing these globally competent teaching practices within their curriculum. As such, the results from this study can inform slight curriculum changes within teacher preparation programs across the United States.

Even with the findings of this study suggesting that transformative experiences impact teachers' empathetic dispositions, this cannot be the only contributing factor for teachers to prepare the next generation of globally competent students. Unfortunately, study abroad opportunities are not feasible for every teacher candidate, and as Phillion et al. (2009) suggested, other options besides study abroad need to be available through coursework and different experiences within teacher preparation programs.

To better support an advancing curriculum that includes a knowledge base of globally competent teaching practices, faculty need to ensure opportunities exist for teacher candidates to develop their own understanding. Expanding the curriculum to include these teaching practices can include several changes in the coursework of education majors. For example, the Globally Competent Teaching and Learning Continuum would be an excellent self-assessment tool to introduce to undergraduates early on in their plan of study, followed by periodic re-evaluations in their capstone course or following a student teaching experience. In addition, requirements could be made to prepare a lesson plan that values multiple perspectives or provides an opportunity for content-aligned global investigations. This could be a requirement in a capstone teaching methodology course or listed as a requirement within the student-teacher handbook. Lesson plan topics specific to agriculture could include more controversial issues such as organic farming practices, rBST in dairy cattle, or animal rights/welfare. Through these agriculture-specific lesson plans, both teachers and students are encouraged to explore different perspectives and acknowledge how others may have opposing beliefs. These opportunities early on will provide a low-stakes atmosphere to build knowledge and confidence in implementing globally competent teaching practices later in their classroom.

Finally, stakeholders within Indiana agriculture education can also inform PreK-12 teachers about globally competent teaching practices. The results of this study indicated that assistance was needed for in-service educators, as they identified strategies for continual growth within the element of empathy and valuing multiple perspectives. In addition, a lack of confidence and knowledge was an obstacle among some pre-service study participants. One participant, in particular, explained their frustration with limited ongoing education efforts following the short-term study abroad experience and argued for more professional development in globally competent teaching practices, specifically within the agriscience context. Therefore, one practical application for this study is increased professional development opportunities for pre-service and in-service educators. Suggestions might include offering a workshop session at the annual IAAE Summer/Winter Ag Teachers Workshop or creating agriculture-specific lesson plan resources that can be shared via the Listserv or on the Indiana Ag Ed Discussion Lab Facebook page. It is important to note that participants requested pathway-specific resources to implement within their classes. One example could be a discipline-specific choice board that would share considerations and implementation practices that could lead to the development of globally competent educators.

5.7 Future Research

To our knowledge, this study is the first to administer the Globally Competent Teaching and Learning Continuum to in-service educators, specifically those in agricultural education following an immersive short-term study abroad experience to Jamaica. Furthermore, no other studies have been found that explore the use of the instrument in those who pursued an agriculture education undergraduate degree but are not currently in the PreK-12 classroom. However, because of the limited research of those utilizing the Globally Competent Teaching and Learning Continuum, there are several additional opportunities to pursue future research. Therefore, the following recommendations for future research are suggested.

- 1. Future research leading to an increased number of teacher preparation programs and PreK-12 educators utilizing the Globally Competent Teaching and Learning Continuum would allow for greater generalizability of the results and validity of the self-assessment instrument. Due to the small number of undergraduate participants who took part in the Maymester study abroad to Jamaica each year (i.e., 9-22 participants), the convenience sample of those participants from 2015-2019 was small. Unfortunately, this limited the statistical power of the research. Future studies should consider conducting similar research utilizing the Globally Competent Teaching and Learning Continuum with larger groups of participants and including those with various years of teaching experience. Studies should include novice, early career, expert, and late-career teachers to determine if age or teaching experience makes a difference in their ability to implement globally competent teaching practices.
- 2. Another way to increase generalizability through future research is studying the influence of academic discipline selection on teachers' ability to incorporate globally competent teaching practices. This study examined teachers' empathetic dispositions in undergraduates who chose agriculture education as a major, and therefore, the results are not generalizable to educators with differing disciplines. For example, future research could examine the ease of incorporating the twelve elements of globally competent teaching in various content-specific areas such as social studies, math, literature, science, etc. This would allow researchers to explore how globally competent teaching practices best fit within the existing curriculum.
- 3. Future research could also increase generalizability by utilizing the Globally Competent Teaching and Learning Continuum for those who participate in study abroad programs of different lengths and destinations. Specific to this study, participants traveled to Jamaica for a Maymester study abroad experience, which limited the generalizability to undergraduates who traveled to that country and for that specific length of time. Because study abroad programs are heavily concentrated with host countries that traditionally have the same cultural, political, and religious ties as those in the United States, it may be possible that the development of teachers'

empathetic dispositions following a study abroad vary dependent upon the length of time in the host country and/or whether the destination has homologous views as those participating from the United States.

- 4. Unfortunately, due to the timeframe available for this study, the follow-up focus groups took place three to four months after completing the online questionnaire. This timeframe varied and was dependent upon the study participants' demographic characteristics. During these follow-up focus groups, participants were asked to provide more in-depth reasoning about their previous international experiences, selfrated stage of empathy development, self-assessment reasoning, and two actionable steps for continual improvement within the dispositions element of empathy and valuing multiple perspectives. However, the perceived developmental level during the questionnaire may not have been the same as that discussed within the follow-up focus groups. The change in empathetic dispositions may have been specific to those preservice study participants that began their student teaching experience in January of 2021 and were impacted by having a classroom and students of their own. Therefore, future studies should include a pre and post test study design during the short-term study abroad program or include more longitudinal data points. This would allow researchers to study the participants' perceived level of empathetic dispositions at various points and would provide researchers with the opportunity to determine whether the specific short-term study abroad to Jamaica had any long-term effects on participants' interest in becoming a globally competent educator.
- 5. While utilizing the Globally Competent Teaching and Learning Continuum as a selfreflection tool, study participants were asked to provide two actionable steps for continual growth within the dispositions element of empathy and valuing multiple perspectives. As such, future research should implement a follow-up study to detail if the actionable steps identified were or were not implemented by study participants.
- 6. While the initial response rate for the online questionnaire was high, those that completed the survey in its entirety were minimal. And in addition, those participating within the virtual follow-up focus groups were even lower. In future research, providing an incentive to those who participate in both components of the research study could increase participation. For example, participants could be informed that

they will receive a professional development voucher, gift card, university apparel, classroom supplies, or something small but significant if they choose to participate in the various components of the research study.

- 7. This research examined how participation in a short-term study abroad can impact teachers' empathetic dispositions related to globally competent teaching practices. However, empathetic dispositions are only one of the many elements which encompass Tichnor-Wagner et al.'s (2019) Globally Competent Teaching and Learning Continuum. Future research should explore the additional eleven elements which encompass the knowledge and skills necessary to becoming a globally competent educator.
- 8. Lastly, future studies should continue beyond the educators and examine student's perceived level of global competence. As global competence is a core component of our globalized society, knowing whether or not teachers are aiding in the development is significant. Although studies would not suggest whether one specific teacher is personally guiding their global competence development overall, pre and post studies could be administered to determine teacher influence on global competency development. As a result, this could lead to intervention practices or support professional development for both pre-service and in-service educators.

APPENDIX A. IRB APPROVAL LETTER



This Memo is Generated From the Purdue University Human Research Protection Program System, Cayuse IRB.

THIS LETTER IS BEING ISSUED DURING THE FACE TO FACE RESTRICTION ON HUMAN SUBJECTS RESEARCH STUDIES RELATED TO COVID-19. THIS DOCUMENT SERVES AS PROTOCOL APPROVAL FROM THE HRPP/IRB, BUT DOES NOT PERMIT FACE TO FACE RESEARCH UNTIL AN APPROVED UNIVERSITY COVID-19 RESEARCH SPACE SOP PERMITS RESEARCH OPERATIONS. *

Date: October 6, 2020 PI: Sarah LaRose Re: Initial - IRB-2020-449 *M. Grant- Globally Competent Teaching*

The Purdue University Human Research Protection Program (HRPP) has determined that the research project identified above qualifies as exempt from IRB review, under federal human subjects research regulations 45 CFR 46.104. The Category for this Exemption is listed below . Protocols exempted by the Purdue HRPP do not require regular renewal. However, the administrative check-in date is October 6, 2023. The IRB must be notified when this study is closed. If a study closure request has not been initiated by this date, the HRPP will request study status update for the record.

Specific notes related to your study are found below. Decision: Exempt Category: Category 2.(ii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording). Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at

risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation.

Findings: NA Research Notes: NA

Any modifications to the approved study must be submitted for review through Cayuse IRB. All approval letters and study documents are located within the Study Details in Cayuse IRB.

What are your responsibilities now, as you move forward with your research?

Document Retention: The PI is responsible for keeping all regulated documents, including IRB correspondence such as this letter, approved study documents, and signed consent forms for at least three (3) years following protocol

closure for audit purposes. Documents regulated by HIPAA, such as Release Authorizations, must be maintained for six (6) years.

Site Permission: If your research is conducted at locations outside of Purdue University (such as schools, hospitals, or businesses), you must obtain written permission from all sites to recruit, consent, study, or observe participants. Generally, such permission comes in the form of a letter from the school superintendent, director, or manager. You must maintain a copy of this permission with study records.

Training: All researchers collecting or analyzing data from this study must renew training in human subjects research via the CITI Program (<u>www.citiprogram.org</u>) every 4 years. New personnel must complete training and be added to the protocol before beginning research with human participants or their data.

Modifications: Change to any aspect of this protocol or research personnel must be approved by the IRB before implementation, except when necessary to eliminate apparent immediate hazards to subjects or others. In such situations, the IRB should still be notified immediately.

Unanticipated Problems/Adverse Events: Unanticipated problems involving risks to subjects or others, serious adverse events, and

noncompliance with the approved protocol must be reported to the IRB immediately through an incident report. When in doubt, consult with the HRPP/IRB.

Monitoring: The HRPP reminds researchers that this study is subject to monitoring at any time by Purdue's HRPP staff, Institutional Review Board, Research Quality Assurance unit, or authorized external entities. Timely cooperation with monitoring procedures is an expectation of IRB approval.

Change of Institutions: If the PI leaves Purdue, the study must be closed or the PI must be replaced on the study or transferred to a new IRB. Studies without a Purdue University PI will be closed.

Other Approvals: This Purdue IRB approval covers only regulations related to human subjects research protections (e.g. 45 CFR 46). This determination does not constitute approval from any other Purdue campus departments, research sites, or outside agencies. The Principal Investigator and all researchers are required to affirm that the research meets all applicable local/state/ federal laws and university policies that may apply.

If you have questions about this determination or your responsibilities when conducting human subjects research on this project or any other, please do not hesitate to contact Purdue's HRPP at <u>irb@purdue.edu</u> or 765-494-5942. We are here to help!

Sincerely,

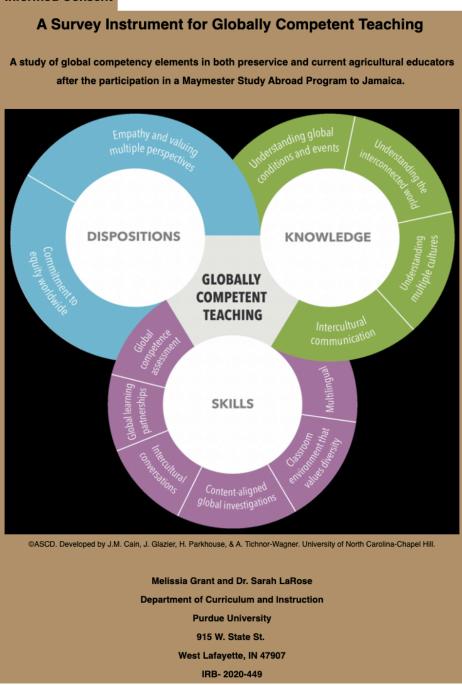
Purdue University Human Research Protection Program/ Institutional Review Board Login to Cayuse IRB

See Purdue HRPP/IRB Measures in Response to COVID-19 https://www.irb.purdue.edu/docs/IRB%20Covid-19%20Recommendations.pdf

APPENDIX B. STUDY INSTRUMENT: QUESTIONNAIRE



Informed Consent



Documentation of Informed Consent

I have had the opportunity to read the consent form above and have the research study explained. I have had the opportunity to ask questions about the research study, and my questions have been answered. I am prepared to participate in the research study described above.

- I consent and agree to participate in this study
- I do not consent; I do not wish to participate in this study

Section 1. International Travel Experience

Thank you for your willingness to participate in this survey about the development of globally competent teaching elements. This particular inventory will take approximately 25 minutes to finish and is best completed on a computer, rather than a mobile device. It is imperative to make note that your participation with this survey will not affect any current student grades or progress through the Agriculture Education program at Purdue University.

As a past participant of the Jamaica Study Abroad Program for Agriculture Education majors at Purdue University, your feedback is valuable to helping future international programs within the Department of Agricultural Sciences, Education, and Communication. Through your active participation in this survey, your input will help immensely as I plan to look at the development of educators' global competencies as part of their involvement within the Jamaica study abroad experience.

The following questions will give you an opportunity to tell us more about your experience.

Section 1. International Travel Experience

The first few questions are related to your experiences traveling internationally.

What year did you participate in the Jamaica study abroad program?

- 0 2015
- 0 2016
- 0 2017
- 0 2018
- 0 2019

Was the Jamaica study abroad program your <u>first</u> international travel experience?

- O Yes
- O No

For the next question you will be asked to categorize your travel experiences by three distinct categories: Educational, Leisure, and Service. Please list the countries you have traveled to **before** the Jamaica study abroad experience. To type, click on the text box and start typing in your answer. In addition, specify the duration of your travel experience in each country listed by utilizing the drop-down menu choice.

EDUCATIONAL

(As part of a study abroad experience)

Country Name:	►
Country Name:	~

LEISURE

(For personal travel)

Country Name:	►
Country Name:	✓
Country Name:	♥
Country Name:	✓
Country Name:	~

SERVICE

(As part of a volunteer organization or religious event)

Country Name:	~
Country Name:	~

Additinoal Box: Please only fill this question out if the above text lines are filled meaning you have traveled **before** the Jamaica study abroad experience to more than 5 countries in a given category. To type, click on the text box and start typing in your answers. In addition, specify if the experience is categorized into Educational, Leisure, or Service as well as the duration of your travel experience.

<u>After</u> your participation in the Jamaica study abroad program, have you traveled internationally?

- O Yes
- O No

For the next question you will be asked to categorize your travel experiences by three distinct categories: Educational, Leisure, and Service. Please list the countries you have traveled to <u>after</u> the Jamaica study abroad experience. To type, click on the text box and start typing in your answer. In addition, specify the duration of your travel experience in each country listed by utilizing the drop-down menu choice.

EDUCATIONAL

(As part of a study abroad experience)

Country Name:	✓
Country Name:	~

LEISURE

(For p	ersona	l travel)
--------	--------	----------	---

Country Name:	▶
Country Name:	▼
Country Name:	✓
Country Name:	· · · · · · · · · · · · · · · · · · ·
Country Name:	▶

SERVICE

(As part of a volunteer organization or religious event)

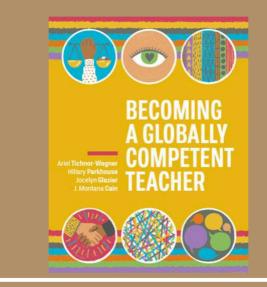
Country Name:	~
Country Name:	~

Additinoal Box: Please only fill this question out if the above text lines are filled meaning you have traveled <u>after</u> the Jamaica study abroad experience to more than 5 countries in a given category. To type, click on the text box and start typing in your answers. In addition, specify if the experience is categorized into Educational, Leisure, or Service as well as the duration of your travel experience.

Section 2. Self-Rated Stage of Development

Section 2. Self-Rated Stage of Development

The next set of questions will introduce *The Globally Competent Learning Continuum Self-Reflection Tool* found within the Association for Supervision and Curriculum Development (ASCD) book titled *Becoming a Globally Competent Teacher.* This validated tool is utilized for educators' professional growth and is composed of 12 distinct yet interrelated elements that consists of five developmental levels: nascent, beginning, progressing, proficient, and advanced. As educators progress from nascent to advanced, the continuum moves from a local to a more global perspective. In early developmental levels educators recognize their own culture, language, and context before extending outward to recognize the culture, language, and context of others (Tichnor-Wagner et al., 2019).



Carefully read the **knowledge** global competency elements and the five corresponding levels (nascent, beginning, progressing, proficient, advanced) on *The Globally Competent Learning Continuum Self- Reflection Tool.* Rate yourself nascent, beginning, progressing, proficient, or advanced for each of the elements that best describes your current level. Please check **one** box per element.

Knowledge Element 1: Understanding global conditions and events What does it mean to understand global conditions and current events?

Educators do not need to know a set of facts or figures to have an understanding of global conditions or events. Rather, seek to comprehend the complexity of today's events in light of the historical past, and consider implications of today's current events on the future- be it local, national, or global (Tichnor-Wagner et al., 2019).

ľ	NASCENT	BEGINNING	PROGRESSING	PROFICIENT	ADVANCED
	l do not yet have knowledge of world conditions and current events.	I have a basic understanding of world geography. I have a basic understanding of current local and/or global events.	l can articulate geographical, historical political, economic, social and/or cultural influences on current events. I can access multiple resources that portray current events.	I seek out multiple sources to understand contrasting perspectives on an issue. I stay informed on current local and global issues.	I regularly seek resources from varied perspectives and opportunities to stay informed on local and global issues. I think critically about the potential impact of current events on future conditions, both locally and globally.
	NASCENT	BEGINNING	PROGRESSING	PROFICIENT	ADVANCED

Knowledge Element 2: Understanding the interconnected world What does it mean to understand global interconnectedness?

When we come to understand how the world is interconnected, we see ourselves as a part of this web of interdependence and understand that the actions we take affect and are affected by people and places around the globe: past, present, and future (Pike & Shelby, 2000.)

F						
	NASCENT	BEGINNING	PROGRESSING	PROFICIENT	ADVANCED	
	NASCENT I have not yet considered the ways the world is interconnected.	BEGINNING I recognize that our world is interconnected and interdependent (e.g., economically, socially, culturally, and environmentally). I recognize that the ways in which	PROGRESSING I understand ways that a global issue impacts my local context (including myself, my students, and my local community). I understand ways that a global issue impacts cultures or nations aside from my own.	PROFICIENT I can explain ways that global issues impact my local context and individuals in other nations. I can explain global influences on local issues and local influences on global issues	ADVANCED I can critically analyze ways that global interconnectedness contributes to inequities within and between nations. I can explain how actions I take at the local, national, or international level address inequities	
		the world is interconnected are constantly changing.	iny own.	Biopai izzacz	related to our interconnected world.	
	NASCENT					
			104			

Knowledge Element 3: Understanding multiple cultures

What does it mean to develop an experiential understanding of multiple cultures? Every individual is complete with their own 'identity kit' that shapes their everyday actions including cultural practices, beliefs, and values. In order to teach for global competence, educators must reflect on how different cultures compare to their own and to one another (Tichnor-Wagner et al., 2019).

NAS	ENT	BEGINNING	PROGRESSING	PROFICIENT	ADVANCED
I have f reflected own co value nor I have f consist experisother co	d on my ultural s and ms. not yet dered encing	I am aware of my own cultural practices, values, and norms in relation to other cultures. I am interested in experiencing other cultures.	l understand differences in practices, values, and norms across cultures. I understand that multiple perspectives exist within and across cultures. I seek opportunities to experience other cultures.	I demonstrate knowledge of various cultures through cultural immersion experiences (e.g., study abroad and local immersion). I reflect upon the immersion experience in relation to my own cultural constructs, perspectives, and educational practices.	I critically relate multiple cultural immersion experiences to each other and to my own perspectives and practices. I modify my educational practices and/or advocate for changing educational policies and practices based upon immersion experiences and understanding of multiple perspectives.
NA	SCENT	BEGINNING	PROGRESSING	PROFICIENT	ADVANCED

Knowledge Element 4: Intercultural communication

What does it mean to understand intercultural communication?

Intercultural communication, also referred to as cross-cultural communication, is concerned with how we communicate when we interact with people from different cultures, whether that be people from different countries or those who identify with different cultural groups (regional, ethnic, religious, or otherwise) within the same county (Kutthoff & Spenser-Oatey, 2008). Understanding an awareness of intercultural communication through the relationship between language and identity of both verbal and non-verbal communication forms allows for educators to communicate effectively.

NASCENT	BEGINNING	PROGRESSING	PROFICIENT	ADVANCED
l am not yet familiar with cultural differences in communication.	I am aware that different cultures may have different ways of communicating (e.g., differences in language, gestures, and norms for communicating).	I can identify strategies that enhance intercultural communication. I can explain the relationship between language, communication, and identity.	I can use strategies to effectively navigate intercultural interactions. I understand that learning languages has social, emotional, and cognitive aspects	I critically reflect on how particular languages and modes of communication are valued more than others and the effect that this has on identity. I can help others navigate the social, emotional, and cognitive aspects of intercultural communication.
NASCENT	BEGINNING	PROGRESSING	PROFICIENT	ADVANCED

Carefully read the **skill** global competency elements and the five corresponding levels (nascent, beginning, progressing, proficient, advanced) on *The Globally Competent Learning Continuum Self- Reflection Tool.* Rate yourself nascent, beginning, progressing, proficient, or advanced for each of the elements that best describes your current level. Please check **one** box per element.

Skill Element 5: Multilingual

What are the benefits of learning to communicate in another language?

Bilingual education programs promote the importance of speaking multiple languages in a globalized world and can serve as vehicles to communicate with students who speak a language other than English at home (Tichnor-Wagner et al., 2019).

	NASCENT	BEGINNING	PROGRESSING	PROFICIENT	ADVANCED
	I speak one language and have not yet pursued learning another.	I am pursuing or have pursued learning a language other than my own.	I can have basic conversations in two languages (including my own).	I am proficient in at least two languages (including my own). I can effectively communicate with students and families in at least two languages.	I am fluent in at least two languages and seek opportunities to use them in schools and communities.
l	NASCENT	BEGINNING	PROGRESSING	PROFICIENT	ADVANCED

Skill Element 6: Classroom environment that values diversity

What does a classroom that values diversity and global engagement look like?

Educators can model culturally responsive and sustaining teaching practices, fill their classrooms with resources that represent the diversity of places and people around the world, and guide students to collaborate with those who hold different ideas and worldviews (Tichnor-Wagner et al., 2019).

NASCENT	BEGINNING	PROGRESSING	PROFICIENT	ADVANCED
I do not yet consider global issues or diverse perspectives and cultures in my classroom.	I discuss global engagement and valuing of diverse perspectives and cultures in my classroom.	l engage students in learning about other cultures by emphasizing the relevance of global issues to students' lives. I teach my students to respect diverse perspectives and cultures. My classroom contains resources that represent multiple global perspectives.	I teach my students to respect and learn from diverse perspectives and cultures. I provide opportunities for students to collaboratively discuss global issues. I consistently encourage students to use resources in my classroom for global learning.	I help my students develop a concern for global issues, an interest in learning more about diverse cultures, and a desire to take action.
NASCENT	BEGINNING	PROGRESSING	PROFICIENT	ADVANCED

Skill Element 7: Content-aligned global investigations

What does it mean to integrate global learning experiences?

When integrating global learning experiences, educators align global connections, content, and perspectives to rigorous content-area standards and use a constructivist approach to learning that allows students to explore the world beyond their school, community, and county (Tichnor-Wagner et al., 2019).

NASCENT	BEGINNING	PROGRESSING	PROFICIENT	ADVANCED
I do not yet include global learning experiences aligned with content standards.	l can identify global learning experiences that align with content standards.	l integrate into my instruction global learning experiences aligned with my students' interests and content standards.	l regularly integrate real- world and challenging global learning experiences aligned with my students' interests and content standards.	I reflect on my students' global learning experiences and revise my teaching accordingly. I support the school community in integrating global learning experiences.
NASCENT	BEGINNING	PROGRESSING	PROFICIENT	ADVANCED

Skill Element 8: Intercultural conversations

What does it mean to facilitate intercultural conversations in the classroom?

There is no better way to foster understanding, appreciation, and respect for those with different

cultures, beliefs, and perspectives from our own than by engaging with them in real world

conversations (Tichnor-Wagner et al., 2019).

NASCENT	BEGINNING	PROGRESSING	PROFICIENT	ADVANCED
I do not yet provide opportunities for students to converse with individuals from other cultures or nations.	I provide opportunities during the school year for students to converse with individuals from other cultures or nations.	l provide opportunities for students to converse with individuals from other cultures or nations, in which students demonstrate active listening, critical thinking, and/or perspective recognition.	I provide ongoing opportunities for students to converse with individuals from other cultures or nations, in which students demonstrate active listening, critical thinking, and perspective recognition.	My students initiate communication with individuals from across cultures and nations, in which they demonstrate active listening, critical thinking, and perspective recognition
NASCENT	BEGINNING	PROGRESSING	PROFICIENT	ADVANCED

Skill Element 9: Global learning partnerships

What is the value of global partnerships?

Partnerships provide students with firsthand involvement as global citizens who assume responsibility for and actively participate in the global community by taking individual and collective action on behalf of humanity and the planet (Tichnor-Wagner et al., 2019).

NASCENT	BEGINNING	PROFESSING	PROFICIENT	ADVANCED
l do not yet create opportunities for my students to communicate with local, national, or international organizations or individuals.	l present students with an opportunity to participate in a global learning experience with local, national, or international organizations or individuals.	l present students with opportunities for short-term collaboration with local, national, or international organizations to learn about the world.	I develop local, national, and/or international long- term partnerships that allow my students to learn about the world with diverse communities.	I guide my students to develop local, national, and international partnerships, direct their own communication with these partners, and develop their own global learning opportunities.
NASCENT	BEGINNING	PROGRESSING	PROFICIENT	ADVANCED

Skill Element 10: Global competent assessment

What does assessing students' global competence look like?

To assess students' progress in developing global competence, globally competent teachers regularly use a mixture of formative and summative assessment to provide students with feedback and inform their own globally oriented instruction (Tichnor-Wagner et al., 2019).

NASCENT	BEGINNING	PROGRESSING	PROFICIENT	ADVANCED
l am not yet familiar with how to assess students' global competence development.	l am familiar with resources to assess students' global competence development.	I develop and use appropriate assessments of students' global competence development. I can provide students feedback and analyze students' global competence development.	I develop and use frequent, authentic, and differentiated assessments of students' global competence development. I can provide students with constructive feedback and analyze students' performance to inform subsequent instruction.	l guide students to evaluate their own global competence development.
NASCENT	BEGINNING			

Carefully read the <u>disposition</u> global competency element and the five corresponding levels (nascent, beginning, progressing, proficient, advanced) on *The Globally Competent Learning Continuum Self- Reflection Tool.* Rate yourself nascent, beginning, progressing, proficient, or advanced for the element that best describes your current level. Please check **one** box. **In addition**, plan to elaborate on your decision for the final 2 global competency elements listed.

Disposition Element 11: Empathy and valuing multiple perspectives What does it mean to express empathy and value multiple perspectives?

Because every individual holds certain stereotypes the first step in understanding someone else's perspectives is to fully understand your own. Genuinely valuing multiple perspectives means being willing to consider viewpoints that directly challenge our own and being open to changing our minds (Tichnor-Wagner et al., 2019).

NASCENT	BEGINNING	PROGRESSING	PROFICIENT	ADVANCED
I have not yet explored how my personal beliefs have shaped my worldview.	I can identify my personal beliefs and experiences and recognize how they shape my view of the world. I recognize that I might hold stereotypes.	I understand that my beliefs and experiences are not universally shared. I can identify the influences that shape how others and I view the world. I am willing to explore the experiences and perspectives of people who challenge my beliefs.	I recognize biases and limitations of my own perspective and those of others' perspectives. I recognize how my personal beliefs influence my decisions as a teacher. I empathize by seeking to understand the perspectives of others.	I challenge my personal assumptions to understand viewpoints that differ from my own. I value diverse perspectives, including those that challenge my own.
NASCENT	BEGINNING	PROGRESSING	PROFICIENT	ADVANCED
()	()	()	()	()

Using the space below, please provide a brief rationale to explain why you rated yourself at the above level you chose. Provide evidence from your professional and/or personal experience. To type, click on the text box and start typing in your answer.

For example: I have rated myself at the developmental level of <u>PROGRESSING</u> for the disposition element #11 Empathy and Valuing Multiple Perspectives. I feel confident that I have identified my own personal beliefs and know that I hold biases, but struggle to trace the origin of my biases. I know that my beliefs are not universally shared but find that at times tune out viewpoints that do not correlate with my own.

Using the space below, outline at least <u>two</u> actionable steps for continual growth that you would like to implement as you move forward along the continuum. If unsure, please explain why. To type, click on the text box and start typing in your answer.

For example: By seeking to truly understand and not just tolerate a perspective that opposes my own, I hope to move along the continuum by demonstrating a foundation of living and working in a diverse, interconnected world. My plan to select a variation of podcasts, radio shows, and news channels that I wouldn't typically gravitate towards allows for the opportunity to expand my viewpoint and to seek perspectives that differ from my own.

Carefully read the <u>disposition</u> global competency element and the five corresponding levels (nascent, beginning, progressing, proficient, advanced) on The Globally Competent Learning Continuum Self- Reflection Tool. Rate yourself nascent, beginning, progressing, proficient, or advanced for the element that best describes your current level. Please check **one** box. **In addition**, plan to elaborate on your decision for the final global competency element listed.

/,

Disposition Element 12: Commitment to equity worldwide What does it mean to have a commitment to equity?

To cultivate global citizens who seek to shape a more just and sustainable world, it is important for teachers and students to acknowledge and appreciate diversity of people and perspectives in their local communities and around the world (Tichnor-Wagner et al., 2019).

Г	NASCENT	BEGINNING	PROGRESSING	PROFICIENT	ADVANCED
	I have not yet considered local and global inequities.	I care about the well-being of others. I recognize that inequities exist locally and globally (e.g., poverty and discrimination)	l understand that there are barriers to equity locally and globally. I seek opportunities to contribute to efforts to address inequities.	l engage in opportunities that address particular issues of local and/or global inequity (e.g., poverty and discrimination). I take responsibility for helping my students and others in my school to recognize inequities.	I actively seek to understand why inequities exist and challenge those underlying causes. I lead students and others in my school to act on issues of equity locally and globally.
		BEGINNING			

Using the space below, please provide a brief rationale to explain why you rated yourself at the above level you chose. Provide evidence from your professional and/or personal experience. To type, click on the text box and start typing in your answer.

For example: I have rated myself at the developmental level of <u>PROGRESSING</u> for the disposition element #12 Commitment to Equity Worldwide. I am familiar with disparities at my local and global level and follow current events that address inequalities. From my personal experience of volunteering at the campus food pantry it has brought food scarcity and inequalities to light. This is one way that I find an opportunity to contribute locally and address food insecurities to promote a more civic life. Using the space below, outline at least <u>two</u> actionable steps for continual growth that you would like to implement as you move forward along the continuum. If unsure, please explain why. To type, click on the text box and start typing in your answer.

For example: In hopes to moving along the continuum I plan to identify local concerns via a community exploration and review local statistics to understand inequalities that my students, families, and surrounding school community are grappling with in regard to food scarcity. By completing these actionable steps, I hope to expand my own awareness of inequitable conditions among students and colleagues, and ultimately lead them to take action themselves.

Section 3. Demographics

Section 3. Demographics

The next few questions are related to basic demographics that will help to understand the identity of you as a participant.

What is your racial identity? Please check all that apply.

- Asian and/or Pacific Islander
- Black
- Indigenous
- LatinX
- Middle Eastern or North African
- White
- Prefer Not to Answer

What best describes your current educational status? Please check one box.

- O Purdue University Alumni
- O Purdue University Undergraduate Student
- O Other (Please Specify):

What best describes your current major at Purdue University? Please check one box.
 Agriculture Education Agriculture Education with Double Major (Please Specify): Other (Please Specify):
What best describes your current occupation? Please check one box.
 Extension Educator Graduate Student No Longer in Education Not Currently Employed Part-Time Employement PreK-12 Educator Non Formal Educator (Please Specify): Other (Please Specify):
What grade levels do you currently teach? Please select all that apply. PreK Kindergarten Ist Grade Sth Grade Sth Grade Sth Grade Sth Grade Sth Grade Inth Grade Int

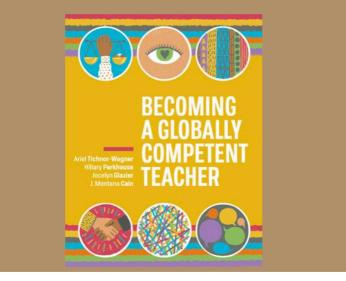
12th Grade

What Agriculture CTE courses do you currently teach? If you teach outside of Indiana select courses that are comparable. Please select **all** that apply. If you do not currently teach Agriculture CTE courses, please select the option titled *Not Applicable*.

- Middle School Exploring Agriculture
- Advanced Life Science: Animals
- Advanced Life Science: Foods
- Advanced Life Science: Plants and Soils
- Agribusiness Management
- Agriculture Power, Structure, and Technology
- Animal Science
- Food Science
- Horticulture Science
- Introduction to Agriculture, Food, and Natural Resources
- Landscape Management
- Landscape Management II
- Natural Resources
- Plant and Soil Science
- Supervised Agricultural Experience (SAE)
- Sustainable Energy Alternatives
- Other (Please Specify):
- Not Applicable

Conclusion

Thank you for completing this survey and your interest in promoting global competency within Purdue Agriculture Education! If you are interested in learning more about global competency and further implementation tips to support your growth as a globally competent educator, please reference the book *Becoming a Globally Competent Teacher*.



Would you be interested in participating in a virtual follow up focus group with other Jamaica study abroad participants through Purdue Agriculture Education?

• Yes (Provide Email):

O No

Would you like a copy of your survey responses emailed to you? \${m://Email1}

O Yes

🔘 No

If you have any additional thoughts about your experiences during the Jamaica study abroad program or how the Department of Agricultural Sciences, Education, and Communication at Purdue University can better serve you as a globally competent educator, please share them here. To type, click on the text box and start typing in your answer.

If you have any additional thoughts about any of the above topics or the format of this survey, please share them here. To type, click on the text box and start typing in your answer.

APPENDIX C. STUDY INSTRUMENT: SEMI-STRUCTURED INTERVIEW GUIDE

A study of global competency elements in both preservice and current agricultural educators after the participation in a Maymester Study Abroad Program to Jamaica.

Thank you for joining us today as we explore pertinent themes that arose during the initial survey regarding the development of globally competent teaching elements following a Maymester study abroad program to Jamaica. Your feedback in today's follow-up focus group is just as valuable in helping the Department of Agricultural Sciences, Education, and Communication at Purdue University develop study abroad experiences that heighten practices in which educators continue to use in their own classrooms and careers surrounding the dispositions, knowledge, and skills of becoming globally competent educators.

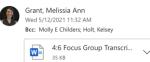
Please note that this session is being recorded and will be stored on *Purdue Box,* a secure cloud storage service made available by Purdue University. Your participation in this focus group is completely voluntary and we can ensure that the recording itself will be kept confidential. However, please keep in mind that since other participants are present within the focus group today, we cannot ensure complete confidentiality. We can however simply encourage all participants to keep information shared within todays focus group confidential.

For those that do not know me, my name is Melissia Grant. I am also a past participant of the Agriculture Education Study Abroad to Jamaica and completed my undergraduate degree here at Purdue in Agricultural Education. Following my graduation in 2014 I accepted a teaching position at Western High School in Russiaville, Indiana teaching 8-12th grade AgriScience courses. After my fourth-year teaching, I was blessed to have the opportunity to come back to Purdue to pursue my master's degree in the Department of Curriculum and Instruction. Working predominately with Dr. Sarah LaRose in the Department of Agriculture Sciences, Education, and Communication I have had the opportunity to deliver instruction and provide feedback to undergraduate students pursuing their degree in Agricultural Education. I can't wait to hear about your experiences in Jamaica and beyond, let's get started with today's discussion.

- 1. Introduction of participants.
- 2. Tell me about your experiences with study abroad at Purdue University.
- 3. How has the Jamaica study abroad experience influenced your own global perspectives?
- 4. Did your time in Jamaica help in your ability to empathize with others that are different from you?
 - a. Empathy- the ability to step into another person's shoes and understand that person's thoughts and feelings from his or her point of view, rather than your own (Tichnor-Wagner, 2019). Open-mindedness, perspective consciousness
- 5. You have each completed The Globally Competent Learning Continuum Self-Reflection Tool did your results surprise you? (Both as a whole and specifically Empathy and Valuing Multiple Perspectives).
- 6. As a result of the Jamaica study abroad experience and through interactions with others, explain how you do/don't value more diverse perspectives?
- 7. What can Purdue Agriculture Education do to continue your growth in areas that support empathy practices within the classroom?
 - a. Examples of Empathetic Practices- examine your own biases, explore the heart not just the head, get out of your usual environment, walk in others' shoes, cultivate your sense of curiosity, etc.

Melissia Grant and Dr. Sarah LaRose Department of Curriculum and Instruction Purdue University 915 W. State St. West Lafayette, IN 47907 IRB#-2020-449

APPENDIX D. INTERVIEWEE TRANSCRIPT REVIEW EMAIL



 $\Box \land \land \land \land \rightarrow \cdots$

Good afternoon all,

I again want to personally thank each of you for joining our focus group discussion regarding your experiences during the Jamaica study abroad. In hopes of validating our discussion together I have created an audio transcript of our ZOOM meeting from **April 6, 2021**.

A common technique used in qualitative research is an interviewee transcript review (ITR). As the name suggests an ITR is used to improve upon the validity of the research and to ensure the interviewee has the opportunity to correct errors and/or inaccuracies within the audio transcript. Within the next couple of days, please review the attached audio transcript to confirm the accuracy of your own interview responses. If you are confident with the accuracy of the interview transcript, please complete the one question Qualtrics survey below that will officially validate your responses.

https://purdue.ca1.qualtrics.com/jfe/form/SV_af6xikUcRwX1CPI

If you find any potential errors or inaccuracies, please respond to this email directly and we will work to get them corrected.

Thank you again for your willingness to serve Agricultural Education at Purdue University! Melissia Grant

Melissia A. Grant

APPENDIX E. INTERVIEWEE TRANSCRIPT REVIEW QUALTRICS SURVEY



A common technique used in qualitative research is an interviewee transcript review (ITR). As the name suggests an ITR is used to improve upon the validity of the research and to ensure the interviewee has the opportunity to correct errors and/or inaccuracies within the audio transcript. Within the next couple of days, please review the audio transcript within your email to confirm the accuracy of your own interview responses. If you are confident with the accuracy of the interview transcript, please complete the question below that will officially validate your responses.

 I have reviewed the provided audio transcript and validate my interview responses.

I do not validate my responses.

APPENDIX F. PRE-NOTICE EMAIL: QUESTIONNAIRE

September 7, 2020

Study Abroad Participant 123 Any Street Anytown, IN 47907

Dear Study Abroad Participant,

I am writing to ask for your help in an important study I am conducting at Purdue University that will help the Department of Agriculture Sciences, Education, and Communication improve their understanding of the development of global competency elements following an undergraduate study abroad experience to Jamaica. After participating in the Maymester study abroad experience myself and having worked as a high school Agricultural Education teacher in Indiana for several years, I am completing this study as part of my master's research in the Department of Curriculum and Instruction at Purdue University. As a graduate of Purdue Agricultural Education, I hope to be able to give back to the Ag Ed community through this research. Identifying the developmental elements that influence educators' curriculum decision making while in the classroom can help us not only tell the story of Indiana Agriculture Education better, but also help us improve the quality of programming we offer in future study abroad experiences.

In the next few days you will receive a request to participate in this project by answering questions regarding your development as a globally competent educator. I would like to do everything possible to make it easy and enjoyable for you to participate in the study. I am writing in advance because many people like to know ahead of time that they will be asked to fill out a questionnaire. This research can only be successful with the generous help of people like you. Please anticipate an email regarding study number IRB-2020-449 titled 'A study of global competency elements in both preservice and current agricultural educators after the participation in a Maymester Study Abroad Program to Jamaica'.

I hope you will take about 20 minutes of your time to help the Department of Agriculture Sciences, Education, and Communication at Purdue University. By taking a few minutes to share your thoughts and opinions about your experiences during the Jamaica study abroad and the impact that experience has made on your curricula decisions as an educator you will be helping Indiana Agricultural Education a great deal.

I hope you enjoy completing the questionnaire and voice your thoughts and opinions regarding globally competent teaching.

Best Wishes,

Melissia Grant

Melissia Grant Primary Contact Master's Candidate Purdue University

Sarah E. Sahan

Dr. Sarah E. LaRose Principal Investigator Assistant Professor Purdue University

APPENDIX G. INVITATION EMAIL: QUESTIONNAIRE

September 9, 2020

Study Abroad Participant 123 Any Street Anytown, IN 47907

Dear Study Abroad Participant,

I am writing to ask for your help in an important study I am conducting at Purdue University that will help the Department of Agriculture Sciences, Education, and Communication improve their understanding of the development of global competency elements following an undergraduate study abroad experience to Jamaica. After participating in the Maymester study abroad experience myself and having worked as a high school Agricultural Education teacher in Indiana for several years, I am completing this study as part of my master's research in the Department of Curriculum and Instruction at Purdue University.

Because you are a recent participant of the Agriculture Education Study Abroad to Jamaica, we are asking you to share your thoughts and opinions with us. To share your feedback please follow the personalized link below:

https://qualtrics.com/purdue/hfjryy4444

The questions should only take about 20 minutes to complete. Your responses are voluntary and will be kept confidential at all times. If you have any questions about the survey you can reach me by telephone at (765) 494-8430 or email me at grant8@purdue.edu. This study has been reviewed and approved by the Human Research Protection Program at Purdue University. If you have any questions about your rights as a participant in this study, you may contact them by telephone at (765) 494-5842 regarding study number IRB-2020-449 titled 'A study of global competency elements in both preservice and current agricultural educators after the participation in a Maymester Study Abroad Program to Jamaica'.

By taking a few minutes to complete this survey, you will be adding to our understanding of global competency elements following an undergraduate study abroad experience to Jamaica. I hope you enjoy completing the questionnaire and I look forward to receiving your responses.

Many Thanks,

Melissia Grant

Melissia Grant Primary Contact Master's Candidate Purdue University

Sarah E. Sahan

Dr. Sarah E. LaRose Principal Investigator Assistant Professor Purdue University

APPENDIX H. REMINDER EMAILS #1 AND #3: QUESTIONNAIRE

September 7, 2020

Study Abroad Participant 123 Any Street Anytown, IN 47907

Dear Study Abroad Participant,

In late September, you received an email that asked for you to complete a questionnaire about your understanding of global competency elements following an undergraduate study abroad experience to Jamaica. To the best of our knowledge, the questionnaire has not yet been completed.

I am writing again because of the importance that your response has on helping to obtain accurate results for this study. It is only by hearing from nearly everyone in the sample that we can be sure that the results truly represent participants from the Agriculture Education Study Abroad to Jamaica. Therefore, I hope that you will fill out the questionnaire soon.

As mentioned before, the questions should only take about 20 minutes to complete. Your responses are voluntary and will be kept confidential at all times. If you have any questions about the survey you can reach me by telephone at (765) 494-8430 or email me at grant8@purdue.edu. This study has been reviewed and approved by the Human Research Protection Program at Purdue University. If you have any questions about your rights as a participant in this study, you may contact them by telephone at (765) 494-5842 regarding study number IRB-2020-449 titled 'A study of global competency elements in both preservice and current agricultural educators after the participation in a Maymester Study Abroad Program to Jamaica'.

I hope you enjoy completing the questionnaire and voice your thoughts and opinions regarding globally competent teaching.

Sincerely,

Melissia Grant

Melissia Grant Primary Contact Master's Candidate Purdue University

Sarah E. Sahler

Dr. Sarah R. LaRose Principal Investigator Assistant Professor Purdue University

APPENDIX I. REMINDER EMAIL #2: QUESTIONNAIRE



Talbert, Brian Allen 📮 🖒



To: gbitterling@kv.k12.in.us; gossh@ncp.k12.in.us; lbedel@decaturco.k12.in.us +17 others Cc: Grant, Melissia Ann; LaRose, Sarah E

Howdy!

I hope your Thanksgiving was nice and you're on the slope toward Christmas break!

I'm asking you to complete the Jamaica survey that you would have received from a Qualtrics email address a few weeks ago. Melissia Grant is collecting data from previous Jamaica participants and it would help her complete her research and make the Jamaica experience better to have your completed response.

Please do this as soon as you can.

Thanks!

Allen Talbert

Allen Talbert, Professor He, Him, His Agricultural Sciences Education and Communication

Lilly Hall of Life Sciences (LILY), RM 3-234 915 W. State Street West Lafayette, IN 47907-2054 o: 765-494-8433 f: 765-496-1152 ASEC Home Page: https://www.asec.purdue.edu/

APPENDIX J. INVITATION EMAIL TO RSVP: FOLLOW-UP FOCUS GROUPS



Grant, Melissia Ann Mon 3/22/2021 3:35 PM Bcc: wyattaged@gmail.com; Holt, Kelsey; carre162@umn.edu; court.kelley.ck@gmail.com; Molly E Childers; gthood@uark.edu

Jamaica Study Abroad Participant,

Thank you so much for completing the survey instrument regarding globally competent teaching elements in both preservice and current agricultural educators. Within the Qualtrics survey you indicated that you would be interested in participating in a virtual follow-up focus group with other Jamaica study abroad participants.

 $\Box \land \land \land \rightarrow \cdots$

Your feedback during the virtual follow-up focus group is valuable in helping the Department of Agricultural Sciences, Education, and Communication at Purdue University develop study abroad experiences that heighten practices in which educators continue to use their own classrooms surrounding the dispositions, knowledge, and skills of becoming globally competent educators.

I would like to invite you to take part in this virtual follow-up focus group. To accommodate everyone's busy schedule, I have proposed two separate dates and times below. Please RSVP to this email no later than Friday, March 26th, 2021 by providing your availability for the listed times below. Once I receive responses, I will select the time that can best accommodate everyone and send out a finalized date along with the ZOOM meeting link.

1. Tuesday, April 6th 4-5pm

2. Thursday, April 15th 5-6pm

During the virtual meeting, you will have the opportunity to share your experiences with and thoughts about the Jamaica study abroad program, global perspectives, empathetic dispositions, and finally your results from the completed *Globally Competent Teaching and Learning Continuum*. Please be assured that anything you say during the virtual focus group will be kept strictly confidential and information directly linked to you personally will not be released.

I hope that you will be able to join us for this important discussion! I look forward to your RSVP response.

Melissia A. Grant

APPENDIX K. REMINDER EMAIL #1: FOLLOW-UP FOCUS GROUPS



Grant, Melissia Ann Fri 3/26/2021 10:19 AM Bcc: blammers@gjcs.k12.in.us; Sheridan R Elswick; kstull@nws.k12.in.us; williamsl@leb.k12.in.us



Jamaica Study Abroad Participant,

Thank you so much for completing the survey instrument regarding globally competent teaching elements in both preservice and current agricultural educators. Within the Qualtrics survey you indicated that you would be interested in participating in a virtual follow-up focus group with other Jamaica study abroad participants.

Reminder: Please RSVP to this email no later than Friday, March 26th, 2021 by providing your availability for the listed times below. Once I receive responses, I will select the time that can best accommodate everyone and send out a finalized date along with the ZOOM meeting link.

1. Thursday, April 8th 4-5pm

2. Wednesday, April 14th 6-7pm

During the virtual meeting, you will have the opportunity to share your experiences with and thoughts about the Jamaica study abroad program, global perspectives, empathetic dispositions, and finally your results from the completed *Globally Competent Teaching and Learning Continuum*. Please be assured that anything you say during the virtual focus group will be kept strictly confidential and information directly linked to you personally will not be released.

I hope that you will be able to join us for this important discussion! I look forward to your RSVP response.

Melissia A. Grant

APPENDIX L. FINAL REMINDER EMAIL: FOLLOW-UP FOCUS GROUPS



 $\Box \land \land \land \land \rightarrow \cdots$

Tue 3/30/2021 10:47 AM Bcc: Wyatt Lucas <wyattaged@gmail.com>; carre162@umn.edu

Jamaica Study Abroad Participant,

Thank you so much for completing the survey instrument regarding globally competent teaching elements in both preservice and current agricultural educators. Within the Qualtrics survey you indicated that you would be interested in participating in a virtual follow-up focus group with other Jamaica study abroad participants.

Final Reminder: Please RSVP to this email by providing your availability for the listed times below. Once I receive responses, I will select the time that can best accommodate everyone and send out a finalized date along with the ZOOM meeting link.

1. Tuesday, April 6th 4-5pm

2. Thursday, April 15th 5-6pm

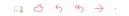
During the virtual meeting, you will have the opportunity to share your experiences with and thoughts about the Jamaica study abroad program, global perspectives, empathetic dispositions, and finally your results from the completed *Globally Competent Teaching and Learning Continuum*. Please be assured that anything you say during the virtual focus group will be kept strictly confidential and information directly linked to you personally will not be released.

I hope that you will be able to join us for this important discussion! I look forward to your RSVP response.

Melissia A. Grant

FINAL DATE AND TIME OF FOCUS GROUPS APPENDIX M.

Grant, Melissia Ann Thu 4/1/2021 4:53 PM Bcc: Molly E Childers; Holt, Kelsey



Jamaica Study Abroad Participant.

Thank you so much for agreeing to participate in the virtual follow-up focus group regarding globally competent teaching elements in both preservice and current agricultural educators. I truly appreciate your willingness to share your Jamaica study abroad experience and to actively participate within research surrounding study abroad opportunities for those in the Department of Agricultural Sciences, Education, and Communication at Purdue University.

Below are the details regarding our virtual follow-up focus group session:

- 1. The virtual follow-up focus group will take place on Tuesday, April 6th from 4-5pm via ZOOM. I plan to send a calendar invite following this email as well
- I respect and value your time and that of the other participants. As such we will start on time and end on time, if not earlier.
 I will serve as the moderator for this focus group discussion. Please be assured that anything you say during the virtual focus group will be kept the serve as the industrial of this focus group discussion. Flease deasarder and any ling you say during the virtual focus group will be strictly confidential and information directly linked to you personally will not be released.
 The ZOOM session will be recorded to allow for data analysis. The recording will be stored through Purdue Box, a secure storage service.
- If a last-minute emergency prevents you from attending your session, please let me know immediately.
 Again, thank you for your generosity in agreeing to share your experiences with and thoughts about the Jamaica study abroad program, global perspectives, empathetic dispositions, and finally your results from the completed Globally Competent Teaching and Learning Continuum.
- 7. The Zoom link for our session is below:

Melissia Grant is inviting you to a scheduled Zoom meeting.

Topic: 4/6 Virtual Follow-Up Focus Group (Other) Time: Apr 6, 2021 04:00 PM Indiana (East)

Join Zoom Meeting https://purdue-edu.zoom.us/j/96926391822?pwd=OWdsM0VtcU5xcm56RnpmVDduR0ZEZz09

Meeting ID: 969 2639 1822 Passcode: 305862 One tap mobile +13017158592,,96926391822#,,,,*305862# US (Washington DC) +13126266799,,96926391822#,,,,*305862# US (Chicago)

Dial by your location

+1 301 715 8592 US (Washington DC) +1 312 626 6799 US (Chicago) +1 646 558 8656 US (New York) +1 253 215 8782 US (Tacoma) +1 346 248 7799 US (Houston) +1 669 900 6833 US (San Jose) Meeting ID: 969 2639 1822 Passcode: 305862 Find your local number: https://purdue-edu.zoom.us/u/ajTWViz1j

Melissia A. Grant

APPENDIX N. DAY OF EVENT REMINDER EMAIL: FOLLOW-UP FOCUS GROUPS



Grant, Melissia Ann Wed 4/14/2021 10:00 AM

Bcc: Stull, Katie <kstull@nws.k12.in.us>; Sheridan Elswick <elswicks@scsc.k12.in.us>; Brianna Lammers <blammers@gjcs.k12.in.us>

Good morning all,

I look forward to seeing you tonight for our virtual follow-up focus group! Below are the details regarding our session tonight from 6-7pm EST:

- 1. The virtual follow-up focus group will take place via ZOOM. Please join me using the meeting invitation below.
- 2. I respect and value your time and that of the other participants. As such we will start on time and end on time, if not earlier. 3. I will serve as the moderator for this focus group discussion. Please be assured that anything you say during the virtual

- focus group will be kept strictly confidential and information directly linked to you personally will not be released.
- The ZOOM session will be recorded to allow for data analysis. The recording will be stored through Purdue Box, a secure storage service.
- 5. If a last-minute emergency prevents you from attending your session, please let me know immediately.
- 6. Again, thank you for your generosity in agreeing to share your experiences with and thoughts about the Jamaica study abroad program, global perspectives, empathetic dispositions, and finally your results from the completed *Globally Competent Teaching and Learning Continuum*.
- 7. The Zoom link for our session is below:

Melissia Grant is inviting you to a scheduled Zoom meeting.

Topic: 4/14 Virtual Follow-Up Focus Group (Ag Educators) Time: Apr 14, 2021 06:00 PM Indiana (East)

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REFERENCES

- Anderson, P. H., Lawton, L., Rexeisen, R. J., & Hubbard, A. C. (2006). Short-term study abroad and intercultural sensitivity: A pilot study. *International Journal of Intercultural Relations*, 30(4), 457-469. https://doi.org/10.1016/j.ijintrel.2005.10.004
- Anderson, C. L., Lorenz, K., & White, M. (2016). Instructor influence on student intercultural gains and learning during instructor-led, short-term study abroad. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 28, 1-23. https://doi.org/10.36366/frontiers.v28i1.377
- Asia Society. (2011). Educating for global competence: Preparing our youth to engage the world. Center for Global Education. https://asiasociety.org/files/book-globalcompetence.pdf
- Asia Society/OECD. (2018). Teaching for Global Competence in a Rapidly Changing World. OECD Publishing. https://doi.org/10.1787/9789264289024-en
- Batson, C. D. (2009). These things called empathy: Eight related but distinct phenomena. In J. Decety & W. Ickes (Eds.), *The social neuroscience of empathy* (pp. 3–15). MIT Press. https://doi.org/10.7551/mitpress/9780262012973.003.0002
- Bento, A. (2020) How African American women experience hypervisibility in Japan and South Korea, *Social Identities*, *26*(4), 550-569. https://doi.org/10.1080/13504630.2020.1783224
- Bloom, M., & Miranda, A. (2015). Intercultural sensitivity through short-term study abroad. Language and Intercultural Communication, 15(4), 567-580. https://doi.org/10.1080/14708477.2015.1056795
- Blumenthal, P., & Grothus, U. (2008). Developing global competence in engineering students: U.S. and German approaches. *Online Journal for Global Engineering Education*, 3(2), 1-12.
- Bourke, B. (2014). Positionality: reflecting on the research process. *The Qualitative Report*, 19(33), 1-9. https://doi.org/10.46743/2160-3715/2014.1026
- Bradley, E. H., Curry, L. A., Ramanadhan, S., Rowe, L., Nembhard, I. M., & Krumholz, H. M. (2009). Research in action: Using positive deviance to improve quality of health care. *Implementation Science*, 4(25), 1-11. https://doi.org/10.1186/1748-5908-4-25

- Buchanan, N. T. & Settles, I. H. (2019). Managing (in)visibility and hypervisibility in the workplace. *Journal of Vocational Behavior*, 113, 1-5. https://doi.org/10.1016/j.jvb.2018.11.001
- Carkhuff, R. R., & Berenson, B. G. (1967). *Beyond Counseling and Therapy*. Holt, Rinehart and Winston.
- Carter, A. (2020). In search of the ideal tool for international school teachers to increase their global competency: An action research analysis of the global competency learning Continuum. *Journal of Research in International Education*, 19(1), 23– 37. https://doi.org/10.1177/1475240920916045
- Cogan, J. J., & Grossman, D. L. (2009). Characteristics of globally minded teachers: A twenty first century view. In T. F. Kirkwood-Tucker (Ed.), Visions in global education: The globalization of curriculum and pedagogy in teacher education and schools: Perspectives from Canada, Russia, and the United States (pp. 240–255). Peter Lang Publishing.
- Cook, C., Heath, F., & Thompson, R. L. (2000). A meta-analysis of response rates in web or internet-based surveys. *Educational and Psychology Measurement*, 60(6), 821-836. https://doi.org/10.1177/00131640021970934
- Cranton, P. (1996). Professional development as transformative learning: New perspectives for teachers of adults. Jossey-Bass.
- Crawford, E. O., Higgins, H. J., & Hilburn, J. (2020). Using a global competence model in an instructional design course before social studies methods: A developmental approach to global teacher education. *The Journal of Social Studies Research*, 44, 367-381. https://doi.org/10.1016/j.jssr.2020.04.002
- Creswell, J.W., & Clark, V.L. (2018). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications Ltd.
- Cunico, L., Sartori, R., Marognolli, O., & Meneghini, A. (2012). Developing empathy in nursing students: A cohort longitudinal study. *Journal of Clinical Nursing*. 21(13-14), 2016-2025. https://doi.org/10.1111/j.1365-2702.2012.04105.x
- Cushner, K. (2014). Development and Assessment of Intercultural Competence. In M. Hayden, J. Levy, & J. Thompson (Eds.), The SAGE Handbook of Research in International Education (2nd ed., pp. 200-216). SAGE Publications Ltd.

- Cushner, K., & Brennan, S. (2007). The value of learning to teach in another culture. In K. Cushner & S. Brennan (Eds.), *Intercultural student teaching: A bridge to global competence* (pp. 1–11). Rowman & Littlefield Education.
- Cushner, K., & Mahon, J. (2002). Overseas student teaching: Affecting personal, professional, and global competencies in an age of globalization. *Journal of Studies in International Education*, *6*, 44–58. https://doi.org/10.1177/1028315302006001004
- Danielewicz, J. (2001). *Teaching Selves: Identity, pedagogy, and teacher education*. Albany: State University of New York Press. https://doi.org/10.25073/2525-2445/vnufs.4290
- Deardorff, D. K. (2006). Identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of Studies in International Education*, 10, 241–266. https://doi.org/10.1177/1028315306287002
- Deardorff, D. K. (2011). Assessing intercultural competence. *New Directions for Institutional Research*, 149, 65–79. https://doi.org/10.1002/ir.381
- Demetriou, C., Ozer, B. U., & Essau, C. (2015). Self-report questionnaires. In R. L. Cautin, & S. O. Lilienfield (Eds.), *The encyclopedia of clinical psychology* (pp. 1-6). John Wiley & Sons. https://doi.org/10.1002/9781118625392.wbecp507
- Dillman, D. A., Smyth, J. D. & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design method* (4th ed.). Wiley.
- Dixson, D., & Worrell, F. (2016). Formative and summative assessment in the classroom. *Theory* Into Practice, 55 (2), 153-159. https://doi.org/ 10.1080/00405841.2016.1148989
- Dobbins, C. E., Dooley, K., & Edgar, L. D. (2019). If pictures could talk: Using photo novella in international service learning to capture visual meaning and interpretive engagement. *NACTA Journal*, 63(1a), 72–80.
- Donnelly-Smith, L. (2009). Global learning through short-term study abroad. *Peer Review, 11*(4), 12-15. https://www.proquest.com/scholarly-journals/global-learningthrough-short-term-study-abroad/docview/216603083/se-2?accountid=13360
- Dunning, D. (2011). The Dunning-Kruger effect: On being ignorant of one's own ignorance. *Advances in Experimental Social Psychology*, 44, 247-296. https://doi.org/10.1016/B978-0-12-385522-0.00005-6
- Empathetics. (2021). Why empathy training? Empathetics Neuroscience of Emotions. https://empathetics.com/

- Engle, L., & Engle, J. (2004). Assessing language acquisition and intercultural sensitivity development in relation to study abroad program design. *Frontiers: The Interdisciplinary Journal of Study Abroad. 10*, 219-236. https://doi.org/10.36366/frontiers.v10i1.142
- Ference, R. A., & Bell, S. (2004). A cross-cultural immersion in the US: Changing preservice teacher attitudes toward Latino ESOL students. *Equity & Excellence in Education*, 37(4), 343–350. https://doi.org/10.1080/10665680490518605
- Freire, P. (1970). Pedagogy of the oppressed. Herter and Herter.
- Freire, P., & Faundez, A. (1989). Learning to question: A pedagogy of liberation. Continuum.
- Frey, B. B. (2018) *The SAGE encyclopedia of educational research, measurement, and evaluation.* SAGE Publications Ltd. https://dx.doi.org/10.4135/9781506326139
- Foster, D. D., Rice, L. L. S., Foster, M. J., & Barrick, R. K. (2014). Preparing agricultural educators for the world: Describing global competency in agricultural teacher candidates. *Journal of Agricultural Education*, 55(1), 51-65. https://doi.org/10.5032/jae.2014.01051
- Gaia, A. C. (2015). Short-term faculty-led study abroad programs enhance cultural exchange and self-awareness. *International Education Journal: Comparative Perspectives*, 14(1), 21-31.
- Galesic, M. (2006). Dropouts on the web: Effects of interest and burden experienced during an online survey. *Journal of Official Statistics*, 22(2), 313-328.
- Global Competence Associates. (2018). *Worldwide leaders in global competence*. https://globallycompetent.com
- Grant, J., Acheson, K., & Karcher, E. (2021). Using the BEVI to assess individual experience to enhance international programming. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 33(1), 129-147. https://doi.org/10.36366/frontiers.v33i1.491
- Grossman, D., & Yuen, Y.M. (2006). Beyond the rhetoric: A study of the intercultural sensitivity of Hong Kong secondary school teachers. *Pacific-Asian Education Journal*, 18(1), 70-87.
- Habermas, J. (1971). Knowledge of human interests. Beacon Press.
- Habermas, J. (1984). *The theory of communicative action, vol. 1: Reason and the rationalization of society.* Beacon Press.

- Hammer, M. R. (2011). Additional cross-cultural validity testing of the Intercultural Development Inventory. *International Journal of Intercultural Relations*, 35(4), 474-487. https://doi.org/10.1016/j.ijintrel.2011.02.014
- Hammer, M. R. & Bennett, M. J. (2002). *The Intercultural Development Inventory (IDI) Manual*. Intercultural Communication Institute.
- Hammer, M. R., Bennett, M. J., & Wiseman, R. (2003). Measuring intercultural sensitivity: The Intercultural Development Inventory. *International Journal of Intercultural Relations*, 27, 421-443. https://doi.org/10.1016/S0147-1767(03)00032-4
- He, Y., Lundgren, K., & Pynes, P. (2017). Impact of short-term study abroad program: Inservice teachers' development of intercultural competence and pedagogical beliefs. *Teaching and Teacher Education*, 66, 147-157. https://doi.org/10.1016/j.tate.2017.04.012
- Hojat, M., Gonnella, J. S., Mangione, S., Nasca, T. J., Veloski, J. J., Erdmann, J. B., Callahan, C. A., & Magee, M. (2002). Empathy in medical students as related to academic performance, clinical competence and gender. *Medical Education*, *36*(6), 522–527. https://doi.org/10.1046/j.1365-2923.2002.01234.x
- Hollins, E., & Guzman, M. T. (2005). Research on preparing teachers for diverse populations. In M. Cohran-Smith & K. M. Zeichner (Eds.) *Studying teacher education: The report of AREA panel on research in teacher education*, (pp. 477-548). Lawrence Erlbaum Associates Publishers; American Educational Research Association.
- Hoshmand, L.T. (2003). Can lessons of history and logical analysis ensure progress in psychological science? *Theory and Psychology*, 13(1), 39-44. https://doi.org/10.1177/0959354303131003
- Hull, G. A., & Hellmich, E. A. (2018). Locating the global: Schooling in an interconnected world. *Teachers College Record*, *120*(3), 1-36.
- Hunter, B., White, G.P., & Godbey, G. (2006). What does it mean to be globally competent? *Journal of Studies in International Education*, *10*(3), 267–285. https://doi.org/10.1177/1028315306286930
- Hurtado, S., Milem, J. M., Clayton-Pedersen, A. R., & Allen, W. R. (1998). Enhancing campus climates for racial/ethnic diversity: Educational policy and practice. *Review of Higher Education*, 21(3), 279–302.

- InTASC. (2013). Model core teaching standards and learning progressions for teachers 1.0. Council of Chief State School Officers. https://ccsso.org/sites/default/files/2017-12/2013_INTASC_Learning_Progressions_for_Teachers.pdf
- Intercultural Development Inventory. (2021). *IDI Products and Pricing*. IDI Assessment Website. https://idiinventory.com/products/idi-products-services-pricing/
- Institute of International Education. (2020). *Top 25 Destinations of U.S Study Abroad Students*. Open Doors Report on International Educational Exchange. https://opendoorsdata.org/data/us-study-abroad/leading-destinations/
- Jackson, J. (2009). Intercultural learning on short-term sojourns. *Intercultural Education*, 20(s1), 59-71. https://doi.org10.1080/14675980903370870
- Jayakumar, U. M. (2008). Can higher education meet the needs of an increasingly diverse and global society? Campus diversity and cross-cultural workforce competencies. *Harvard Educational Review*, 78(4), 615–651. https://doi.org/10.17763/haer.78.4.b60031p350276699
- Jiang, B., & DeVillar, R. A. (2011). Effects of school and cultural contexts on student teaching abroad outcomes: Insights from US student teachers in Belize, China, and Mexico. Action in Teacher Education, 33(1), 47–62. https://doi.org/10.1080/01626620.2011.559437
- Kaushik, R., Raisinghani, M. S., Gibson, S., & Assis, N. (2017). The Global Aptitude Assessment model: A critical perspective. *American Journal of Management*, 17(5), 81-86.
- Kerkhoff S. N., Dimitrieska V., Woerner J., Alsup J. (2019). Global teaching in Indiana: A quantitative case study of K-12 public school teachers. *Journal of Comparative Studies* and International Education, 1(1), 5–31.
- Kopish, M. (2017). Global citizenship education and the development of globally competent teacher candidates. *Journal of International Social Studies*, 7(2), 20-59.
- Kuhn, T. (1962). *The structure of scientific revolutions* (2nd ed.). The University of Chicago Press.
- LaBoskey, V. K. (1994). *Development of reflective practice: A study of preservice teacher*. Teachers College Press

- Lam, T. C. M., Kolomitro, K., & Alamparambil, F. C. (2011). Empathy training: Methods, Evaluation practices, and validity. *Journal of Multidisciplinary Evaluation*, 7(16), 162-200.
- Larrivee, B. (2000). Transforming teaching practice: becoming the critically reflective teacher. *Reflective Practice*, *1*(3), 293–307. https://doi.org/10.1080/713693162
- Lawver, R. G, Foster, D. D., & Smith, A. R. (2018). Status of the U.S supply and demand for teachers of agricultural education, 2014-2016. American Association for Agricultural Education. http://aaaeonline.org/Teacher-Supply-and-Demand
- Lee, J. F. K. (2011). International field experience what do student teachers learn? *Australian Journal of Teacher Education*, 36(1), 1–22. https://doi.org/ 10.14221/ajte.2011v36n10.4
- Liston, D. P., & Zeichner, K. M. (1990). Reflective teaching and action research in preservice teacher education. *Journal of Education for Teaching*, 16(3), 235–254. https://doi.org/10.1080/0260747900160304
- Lohmann, J., Gordon, J., Harwell, K., McLaughlin, S., & Paraska, S. (2005). Strengthening the global competence and research experiences of undergraduate students. Georgia Institute of Technology. https://oie.gatech.edu/sites/default/files/qepmarch2005.pdf
- Longview Report. (2009). *Teacher preparation for a global age: The imperative for change*. Longview Foundation. http://www.longviewfdn.org/files/44.pdf
- Machorro, K. R. (2009). The quest for global competence-effects of study abroad literature on Oregon state university students (Undergraduate thesis, Oregon State University).
 ScholarsArchive@OSU.
 https://ir.library.oregonstate.edu/concern/undergraduate_thesis_or_projects/h989r406g
- Mahon, J. (2006). Under the invisibility cloak? Teacher understanding of cultural difference. *Intercultural Education*, *17*(4), 391-405. https://doi.org/10.1080/14675980600971426
- Mahon, J. & Cushner, K. (2010) The overseas student teaching experience: Creating optimal culture learning. *Multicultural Perspectives*, 4(3), 3-8, https://doi.org/10.1207/S15327892
 MCP0403 2
- Marklein, M. B. (2008). Record number of US students study abroad, in diverse locations. USA Today. http://usatoday30.usatoday.com/news/education/2008-11-16-study-abroad_N.htm

- McClellan-Kirksey, R. (2020). Attitudes, beliefs, and self-efficacy of elementary teachers towards inclusive and equitable education in a diverse suburban school (Dissertation, Arcadia University). https://scholarworks.arcadia.edu/cgi/viewcontent.cgi?article=1031&context=grad_etd
- Merryfield, M. (2008). Scaffolding social studies for global awareness. *Social Education*, 72(7), 363-364.
- Meyers, S., Rowell, K., Wells M., & Smith, B. C. (2019) Teacher empathy: A model of empathy for teaching for student success. *College Teaching*, *67*(3), 160-168, https://doi.org/ 10.1080/87567555.2019.1579699
- Mezirow, J. (1978a). Education for perspective transformation: Women's re-entry programs in community colleges. Teachers College, Columbia University.
- Mezirow, J. (1978b). Perspective Transformation. *Adult Education Quarterly*, 28(2), 100–110. https://doi.org/10.1177/074171367802800202
- Mezirow, J. (1991). *Transformative dimensions in adult learning*. Jossey-Bass. https://doi.org/10.1177/074171369204200309
- Mezirow, J. (2000). *Learning as transformation: Critical perspectives on a theory in progress*. Jossey-Bass.
- Morgan, D. L. (1998). Practical strategies for combining qualitative and quantitiave methods: Appications to health research. *Qualitative Health Research*, 8(3), 362-376. https://doi.org/10.1177/104973239800800307
- Morgan, D. L. (2014). *Intergrating qualitative and quantitative methods: A pragmatic approach*. SAGE Publications Ltd. doi:10.4135/9781544304533
- Morse, J. M. (1991). Approaches to qualitative-quantitative methodological triangulation. *Nursing Research*, 40(2), 120-123.
- National Center for Education Statistics. (1999). *Teacher quality: A report on the preparation and qualifications of public-school teachers*. Government Publishing Office. https://nces.ed.gov/pubs99/1999080.pdf
- National Center for Education Statistics. (2021). *Racial/Ethnic Enrollment in Public Schools*. Government Publishing Office. https://nces.ed.gov/programs/coe/indicator/cge

- National Council for the Accreditation of Teacher Education (NCATE). (2008). *Professional* standards for the accreditation of teacher preparation institutes. Council for the Accreditation of Educator Preparation. http://caepnet.org/~/media/Files/caep/accreditation-resources/ncate-standards-2008.pdf?la=en
- Niehaus, E. K. (2012). Global leadership development plans: Engaging students as agents in their own development. *Journal of Leadership Studies*, 6(2), 116-122.
- O'Connor, K., & Zeichner, K. (2011). Preparing U.S. teachers for critical global education. *Globalisation, Societies and Education*, 9(3-4), 521-536. https://doi.org/10.1080/14767724.2011.605333
- Olson, C., Green, M., & Hill, B. (2005). *Building a strategic framework for comprehensive internationalization*. American Council on Education.
- O'Malley, A. M., Roberts, R., Stair, K. S., & Blackburn, J. J. (2019). The forms of dissonance experienced by U.S. university agriculture students during a study abroad to Nicaragua. *Journal of Agricultural Education*, 60(3), 191-205. https://doi.org/10.5032/jae.2019.03191
- Organization for Economic Co-operation and Development (OECD). (2018). Preparing our youth for an inclusive and sustainable world: The OECD PISA global competence framework. www.oecd.org/pisa/Handbook-PISA-2018-Global-Competence.pdf
- Palmer, D. K., & Menard–Warwick, J. (2012). Short-term study abroad for Texas preservice teachers: On the road from empathy to critical awareness. *Multicultural Education*, 19(3), 17-26.
- Parchomiuk, M. (2019) Teacher empathy and attitudes towards individuals with disabilities. International Journal of Disability, Development and Education, 66(1), 56-69, https://doi.org10.1080/1034912X.2018.1460654
- Pence, H. M., & MacGilivray, I. K. (2008). The impact of an international field experience on preservice teachers. *Teaching and Teacher Education*, 24(1). 14-25. https://doi.org/10.1016/j.tate.2007.01.003
- Perry, L. (2011). A naturalistic inquiry of service-learning in New Zealand classrooms: Determining and illuminating the influence on student engagement. (Ph.D. Thesis, University of Canterbury). UC Research Repository.

- Phillion, J., Malewski, E. L., Sharma, S., & Wang, Y. (2009). Reimagining the curriculum: Future teachers and study abroad. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 18(1), 323–339. https://doi.org/10.36366/frontiers.v18i1.269
- Pigg, J., Richardson, M. A., Roberts, R., & Stair, K. S. (2020). Awakening transformative learning: A comparison of the dissonance experienced by agriculture majors during study abroad courses to Costa Rica and Thailand. *Journal of International Agricultural and Extension Education*, 27(3), 132–147. https://doi.org/10.5191/jiaee.2020.273132
- Purdue University. (2021). Office of Registrar: Archived Program Agricultural Education, BS. University Catalog. https://catalog.purdue.edu/preview_program.php?catoid=13&poid=16062&_ga=2.21244 4503.2109118644.1621392309-449223652.1588019234
- Quezada, R. L. (2004) Beyond educational tourism: Lessons learned while student teaching abroad. *International Education Journal*, *5*(4), 458-465.
- Quezada, R. L., & Cordeiro, P. A. (2016). Internationalization in teacher education in the US: Innovative programs and practices to meet the global challenges of tomorrow's schools. In C. Day & J. Sachs (Eds.), *Quality and change in teacher education* (pp. 195-212). Springer International Publishing. https://doi.org/10.1007/978-3-319-24139-5
- Rahm, E. & Do, H.H. (2000). Data Cleaning: Problems and Current Approaches. *IEEE Data Engineering Bulletin*, 23(4), 3-13. https://doi.org/10.5120/13259-0737
- Rapoport, A. (2009). A forgotten concept: Global citizenship education and state social studies standards. *The Journal of Social Studies Research*, 33(1), 91-112.
- Rapoport, A. (2010). We cannot teach what we do not know: Indiana teachers talk about global citizenship education. *Education, Citizenship, and Social Justice*, 5(3), 179-190. https://doi.org/10.1177/1746197910382256
- Reimers, F. (2009). Educating for global competency. In J. E. Cohen & M. B. Malin (Eds.), *International perspectives on the goals of universal basic and secondary education* (pp. 183–202). Routledge Press.
- Rocca, S. J., & Washburn, S. G. (2008). Preservice agriculture teachers' perceptions of career barriers and support. *Journal of Agricultural Education*, 49(2), 38-49. https://doi.org/10.5032/jae.2008.02038
- Rogers, C., & Freiberg, H. J. (1969). Freedom to Learn. C. E. Merrill Publishing.

- Roy, P., Wandschneider, E., and Steglitz, I. (2014). Assessing education abroad outcomes: A review of the BEVI, IDI, and GPI. Michigan State University Office of Study Abroad. https://educationabroad.isp.msu.edu/files/2914/9486/1612/Assessing_EA_Outcomes_Wh itePaper.pdf
- Sahin, M. (2012). An investigation into the efficiency of empathy training program on preventing bullying in primary schools. *Children and Youth Services Review*, 34(7), 1325-1330. https://doi.org/10.1016/j.childyouth.2012.03.013
- Saldaña, J. (2013). The coding manual for qualitative researchers (3rd ed.). SAGE Publications Ltd.
- Schenker, T. (2019). Fostering global competence through short-term study abroad. Frontiers: The Interdisciplinary Journal of Study Abroad, 31(2), 139-157. https://doi.org/10.36366/frontiers.v31i2.459
- Segal, E. (2011). Social empathy: A model built on empathy, contextual understanding, and social responsibility that promotes social justice. *Journal of Social Service Research*, 37(3), 266–277. https://doi.org/10.1080/01488376.2011.564040
- Selman, R. L. (1975). Level of social perspective taking and the development of empathy in children: Speculations from a social-cognitive viewpoint. *Journal of Moral Education*, 5(1), 35-43, https://doi.org/10.1080/0305724750050105
- Shams, A., & George, C. (2006). Global competency: An interdisciplinary approach. *Academic Exchange Quarterly*, *10*(4), 249–256.
- Shealy, C. N. (2004) A model and method for "making" a combined-integrated psychologist: Equilintegration (EI) theory and Beliefs, Events, and Values Inventory (BEVI). *Journal* of Clinical Psychology, 60(10), 1065-1090. https://doi.org/10.1002/jclp.20035
- Shealy, C. N. (2015). *Making Sense of Beliefs and Values: Theory, Research, and Practice.* Springer Publishing Company.
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, *15*(2), 4-14. https://doi.org/10.3102/0013189X015002004
- Singh, D. K., & Stoloff, D. L. (2008). Assessment of teacher dispositions. *College Student Journal*, 42(4), 1169-1180.
- Stachowski, L. L. (2001). Enhancing international student teaching experiences. *Education*, *112*(3), 347-351.

- Streiner, S. C., Vila-Parrish, A. R., & Warnick, G. M. (2015). An exploratory study of global cometencies considered by multinatinal companies: A hiring perspective. *International Journal of Engineering Education*, 31(5), 1239-1254.
- Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches* (1st ed.). SAGE Publications Ltd.
- Tashakkori, A., & Teddlie, C. (2010). *SAGE handbook of mixed methods in social & behavioral research* (2nd ed.). SAGE Publications Ltd. doi:10.4135/9781506335193
- Terzuolo, E. R. (2018). Intercultural development in study abroad: Influence of student and program characteristics. *International Journal of Intercultural Relations*, 65, 86-95. https://doi.org/10.1016/j.ijintrel.2018.05.001
- Throne, R., & Bourke, B. (2019). Online Research Supervisor Engagement: Fostering Graduate Student Research Positionality." In K. Walters & P. Henry (Eds.), *Fostering multiple levels of engagement in higher education*. IGI Global. doi:10.4018/978-1-5225-7470-5
- Tichnor-Wagner, A., Parkhouse, H., Glazier, J., & Cain, J.M. (2019). *Becoming a globally competent teacher*. ASCD.
- UNESCO. (2015). *Global citizenship education: Topics and learning objectives*. United Nations Educational, Scientific, and Cultural Organization.
- Vande Berg, M., Paige, M., & Lou, K. (2012). Student learning abroad: What our students are learning, what they're not, and what can we do about it. Stylus Publishing.
- Walters, L. M., Garii, B., & Walters, T. (2009). Learning globally, teaching locally: Incorporating international exchange and intercultural learning into pre-service teacher training. *Intercultural Education*, 20(1), 151-158. https://doi.org/10.1080/14675980903371050
- Watson, J. R., & Wolfel, R. L. (2015). The intersection of language and culture in study abroad: Assessment and analysis of study abroad outcomes. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 25, 57-72. https://doi.org/10.36366/frontiers.v25i1.345
- West C. NAFSA: Association of International Educators. (2012). Toward globally competent pedagogy. https://www.nafsa.org/uploadedfiles/chez_nafsa/find_resources/publications/periodicals/e publications/epub_toward_globally.pdf

Wiggins, G. & McTighe, J. (2017). Understanding by Design (2nd ed.). ASCD.

- Willard, J. (2011). What is global competency? Binghamton University Career Development Center. http://www.2.binghamton.edu/career-development-center/quick-referenceguides/global-competency.pdf
- Willard-Holt, C. (2001). The impact of a short-term international experience for preservice teachers. *Teaching and Teacher Education*, 17(4). 505-517. https://doi.org/10.1016/S0742-051X(01)00009-9
- Yemini M., Tibbitts F., Goren H. (2019). Trends and caveats: Review of literature on global citizenship education in teacher training. *Teaching and Teacher Education*, 77(1), 77– 89. https://doi.org/10.1016/j.tate.2018.09.014
- Zeichner, K. M., & Liston, D. P. (2014). *Reflective teaching: An introduction* (2nd ed.). Routledge Press.
- Zhao, Y. (2010). Preparing globally competent teachers: A new imperative for teacher education. *Journal of Teacher Education*, *61*, 422–431. https://doi.org/10.1177/0022487110375802