

AN EXAMINATION OF PRE-SERVICE AND
IN-SERVICE SCHOOL-BASED AGRICULTURAL
EDUCATORS INTERNATIONAL PROFESSIONAL
DEVELOPMENT EXPERIENCE IN MALAYSIA

By

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Abstract: Globally competent educators and learners are needed to develop a globally competent workforce and society. To address this need, pre-service and in-service school-based agricultural education teachers from Indiana, Iowa, Michigan, Ohio, Pennsylvania, and Wisconsin embarked on a four-week international professional development experience in Malaysia (i.e. #AgEd2Malaysia) learning and interacting with Malaysian life skills pre-service educators. Three institutions: Pennsylvania State University, Universiti Teknologi Malaysia, and Hawkeye Community College engaged six pre-service and six in-service school-based agricultural education teachers from the United States with their counterparts in Malaysia. #AgEd2Malaysia participants were exposed to agricultural education, production agriculture, policy, religion, and culture in Malaysia. While experiences are important, reflection on those experiences is when true growth occurs. United States pre-service and in-service school-based agricultural education teachers utilized the TIPS (*Thing, Idea, People, and Self*) reflective journaling method to gain insight into the theme of each day. Journal entries were coded and themes were analyzed. The primary purpose of this study was to describe daily experiences of pre-service and in-service SBAE teachers from the United States participating in a four-week professional development experience in Malaysia. United States pre-service and in-service school-based agricultural education teachers identified growth in pedagogy, curriculum content, cultural awareness, self-awareness, and more as a result of the international professional development experience.

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CHAPTER I

INTRODUCTION

Currently, there is sufficient capacity in the world to produce enough food to feed everyone adequately. However, there are still 821 million people who suffer from chronic hunger. A challenge expected to increase as the population grows to over nine billion by 2050 (Food and Agriculture Organization [FAO], 2018). This challenge is compounded by increasing global instability, conflict, and migration which is being challenged further by climate change. In addition, urbanization, diet transformation from income growth, and demographics exacerbate the challenge to provide an adequate global food supply (The Chicago Council on Global Affairs, 2018).

The challenge to feed the world's growing population is far more complicated than simply producing food and putting it on tables around the world (World Food Prize [WFP], 2019). Educating individuals about these complex issues can be challenging, however, the benefits of providing a global perspective to food systems begins to address the challenges (Schroeder-Moreno, Clark, Byker, & Zhao, 2012). Understanding agricultural issues and feeding the world is a complex interconnected web of challenges involving: climate volatility, spoilage and waste, water and sanitation, infectious diseases,

conflict, human rights, education, politics, trade, and infrastructure around the globe (WFP, 2019). A report titled *Monitoring Food Security in Countries with Conflict Situations*, the Food and Agriculture Organization and World Food Programme (2019) found increased food insecurity in regions where conflict is present as further proof of this complex interconnected web. Individual understanding of global trade can help feed the world (Winders, 2009). More than 20 percent of farm and food products from the United States are exported, while exports support more than one million jobs in the United States and generate economic activity across the nation (United States Department of Agriculture [USDA], 2018). The global world impacts agriculture, food security, and every one daily (WFP, 2019).

In order to address the issues of hunger, malnutrition, global security, and trade barriers; think tanks, politicians, and agriculture advocates could look to the over 1,000,000 students participating in formal agricultural education across the United States and its territories for potential solutions (The Council, 2019). Of these 1,000,000 students 669,989 of them are enrolled in the National FFA Organization (National FFA Organization, 2018). An education via school-based agricultural education (SBAE) and the National FFA Organization has the potential to develop globally competent learners. Globally competent learners have the ability to investigate the world, recognize perspectives, communicate ideas, and take action (Asia Society, 2018). Specifically, globally competent learners develop: 1) attitudes, values, and skills that reflect an openness, interest, and positive disposition towards diverse cultures; 2) foreign language skills; and 3) academic knowledge in comparative fields i.e. comparative history, political science, trade, agriculture, etc. (Reimers, 2009). In a global economy a workforce is

needed that will be able to form effective working relationships with individuals, groups and institutions from other cultural backgrounds (Lokkesmoe, Kuchinke, & Ardichvili, 2016)

To educate and inspire students, SBAE in-service teachers and FFA Advisors must have similar competence. There is no question educators are primarily responsible for providing the education necessary to succeed in the global world (Zhao, 2010). School-based agricultural education in-service teachers prove to be influential to students by being a role model and demonstrating a positive attitude (Park & Rudd, 2005). Much has been reported regarding the impact and influence SBAE in-service teachers have had and currently have on current and former students. Students crave personal connections with their teachers and this is often found in SBAE settings versus core curriculum courses (De Lay & Swan, 2014). Students respect the time and effort SBAE in-service teachers provide for their education. According to De Lay and Swan (2014) students “understood their agriculture teachers are busy yet were able to track them down outside of class time for additional help” (p. 116). School-based agricultural education in-service teachers have a strong ability to influence and impact SBAE students (De Lay & Swan, 2014), but they must first be globally competent and have the ability to pass along their skills and knowledge to their students before they can produce globally competent students (Zhao, 2010).

School-based agricultural education in-service teachers may become globally competent in a variety of ways. Conner and Roberts (2013) suggested interacting with people working in the international agricultural field, complete a training on how to use a globalized curriculum, take a virtual field trip, or study/travel abroad themselves. While

global competency can be attained without international travel experiences those who travel outside the country discover an increase in global competency that can be shared with students (Foster, Rice, Sankey, Foster, & Barrick, 2014). Nineteen students enrolled in a Global SBAE course to South Korea discovered spending ten days in another country gave them a greater appreciation of different cultures, an ongoing willingness to accept new perspectives, and self-improvement (Rice, Foster, Miller-Foster, & Barrick, 2014). While a study abroad experience can provide an opportunity to learn more about another country and its culture, a study abroad experience does not guarantee an increase in global competence. Individuals must reflect on their own experience to truly grow global competency. According to researchers, the more positive the experience the better (Lokkesmoe et al., 2016). To that end, the research team identified the TIPS reflective journaling method.

TIPS Reflective Journaling

TIPS is a reflective journaling method that was first developed by Dr. Anu Taranath from the University of Washington (University of Washington, 2014). TIPS is an acronym for *Thing, Idea, People, and Self* (Taranath, 2014). The researcher team adapted Dr. Taranath's TIPS method to meet the needs of daily reflection and this study. Each day of the international professional development experience participants were asked to reflect on a thing, idea, person, and themselves as a result of their experiences. An example of the TIPS reflective journaling template utilized can be found in Appendix A.

Statement of the Problem

Most of the research around global competency focuses on students and their global competency; there is little research on pre-service and in-service teachers' (Asia Society, 2018; NAFSA, 2019; Szolosi, 2012). If educators are going to teach global competence to their students they must first engage in activities that increase their own global competence (Asia Society, 2018). To further examine the potential for professional development to impact global competence for educators, a group of pre-service and in-service SBAE teachers embarked on an international experience to Malaysia and purposefully reflected on their experience. In an effort to determine the impact of an international professional development experience, researchers implemented the *TIPS to Study Abroad* method of reflection as a way to capture participants' experiences (University of Washington, 2014).

Purpose

The primary purpose of this study was to describe daily reflections of pre-service and in-service SBAE teachers from the United States participating in a four-week professional development experience in Malaysia.

Objectives

Three objectives guided this study:

1. Describe daily reflections, utilizing the TIPS model, of pre-service SBAE teachers collected during the Malaysian professional development experience.
2. Describe daily reflections, utilizing the TIPS model, of in-service SBAE teachers collected during the Malaysian professional development experience.

3. Compare daily reflections, utilizing the TIPS model, between pre-service and in-service SBAE teachers during the Malaysian professional development experience.

Scope of the Study

This study included participants of a Fulbright-Hayes Group Project Abroad (*#AgEd2Malaysia*) conducted by Pennsylvania State University, Universiti Teknologi Malaysia (UTM), and Hawkeye Community College. The group was comprised of six pre-services SBAE teachers and six in-service SBAE teachers. Participants were first recruited from Iowa and Pennsylvania, before an open call to the rest of the United States was utilized to fill the remaining slots.

Assumptions

The following assumptions were made in conducting this study:

1. All participants were current SBAE teachers or were studying to become SBAE teachers.
2. Participant's provided appropriate and accurate responses to the TIPS reflective journaling format.

Limitations of the Study

The following were limitations of the study:

1. The study was limited to the pre-service and in-service SBAE teachers who applied and were selected for the *#AgEd2Malaysia* project as part of the Fulbright-Hayes Group Project Abroad.
2. Due to the structure of the Fulbright-Hayes Group Project Abroad this study was limited to twelve participants from the United States.

3. Only the data provided to the principal researcher can be utilized for this study.
4. Participants were actively engaged in a full schedule. There was risk that for some of the 26 sessions collected, they were not done in the most conducive environment for deep learner reflection due to participant fatigue.

Significance of the Study

Eighty-three percent of the United States population agrees our nation is better off when more of our students are internationally educated and understand other cultures (NAFSA, 2017). Study abroad programs bring value-added engagement to participants' intercultural and global competencies that often meet or surpass outcomes of other international travel opportunities (Stebbleton, Soria, & Cherney, 2013). Study abroad international experiences offer educators the opportunity to grow and expand their knowledge and skills by developing 1) global perspectives of diversity and cultural differences; 2) cultural competencies such as open mindedness; 3) sense of importance of critically examining one's own culture; and 4) prepare teacher candidates to meet the increasing demands of a global society (Phillion & Malewski, 2011). This study shares a reflection format and the results from a four-week international experience that can be replicated by others in the education field in multiple content areas.

Definition of Terms

Content Analysis – Systematic coding and categorizing approach used for investigating large amounts of text information to determine trends and patterns of words used, their frequency, their relationships, and the structures and discourses of communication (Mayring, 2000).

Fulbright-Hays Group Project Abroad - This program provides grants to support overseas projects in training, research, and curriculum development in modern foreign languages and area studies for teachers, students, and faculty engaged in a common endeavor. Projects may include short-term seminars, curriculum development, group research or study, or advanced intensive language programs (United States Department of Education [USDE], 2018).

Global Competency - Global competence is the knowledge, skills, and dispositions needed to function successfully in the globalized world (Foster et al., 2014)

International Experience – Experiences at home or abroad that effects one’s global awareness including: intercultural awareness, personal growth, awareness of global interdependence, functional knowledge of world geography, etc. (Bunch, Rambold, Cater, & Blackburn 2018)

Life Skills Student – A student at a university in Malaysia studying to be a life skills educator (i.e. agricultural education) (Universiti Teknologi Malaysia, 2019).

National FFA Organization - FFA is a dynamic youth organization that changes lives and prepares members for premier leadership, personal growth and career success through agricultural education (National FFA Organization, 2018).

Reflective Journaling – Participants provide written responses to their experiences given prompts to provide personal growth. Reflective journaling is often used in qualitative research (LaBelle & Belknap, 2016).

School-based Agricultural Education - A systematic program of instruction available to students desiring to learn about the science, business, and technology of plant and animal production and/or about the environmental and natural resources systems (The Council, 2019).

School-based Agricultural Education In-service Teacher - A person teaching agriculture and natural resources and related topics to youth in formal settings (Phipps, Osborne, Dyer, & Ball, 2008).

School-based Agricultural Education Pre-service Teacher - A person preparing and training to teach agriculture and natural resources and related topics to youth in formal settings (Phipps et al., 2008).

Short-term Study Abroad – Travel to a city, country, or multiple locations outside one’s home country for a one to eight-week time period (Spencer & Tuma, 2007).

CHAPTER II

REVIEW OF LITERATURE

Introduction

Chapter II is a review of relevant literature related to this study. The chapter is organized into the following topic areas: global competency, international experiences, Fulbright-Hays Group Program, school-based agricultural education, reflective journaling, and qualitative analysis.

Global Competency

In general, ordinary citizens do not understand the nature of global challenges (Reimers, 2009). This is alarming due to the growing interdependence of nations (Reimers, 2009). Rapid economic, technological, and social changes are creating a world that is ever more interconnected (Monthey, Singmaster, Manise, & Blosveren Kreamer, 2016). One in ten Americans are foreign born and local communities are becoming more diverse (Monthey et al., 2016). Today's world seems smaller due to interconnectedness; however, it is more complex than ever before (Slimbach, 2010). These factors create an educational challenge for both secondary and post-secondary institutions when trying to help students better understand and value individuals' differences and commonalities and separateness and togetherness in terms of cultural and global competence (Slimbach,

2010).

There are numerous definitions of global competency (Foster et al., 2014; Reimers, 2019; Slimbach, 2010). Educators, scholars, governmental entities, and advocacy groups have their own definitions of global competency (Organization for Economic Co-operation and Development [OECD] & Asia Society, 2018). According to Foster et al. (2014) global competency is the knowledge, skills, and dispositions needed to function successfully in the globalized world. Literature regarding building capacity in the area of global competency features four main areas: 1) investigate the world beyond their immediate environment by examining issues of local, global, and cultural significance; 2) recognize, understand, and appreciate the perspectives and world views of others; 3) communicate ideas effectively with diverse audiences by engaging in open, appropriate, and effective interactions across cultures; and 4) take action for collective well-being and sustainable development both locally and globally (Organization for Economic Co-operation and Development [OECD] & Asia Society, 2018). While similar in concept both the Asia Society and OECD (2018) have developed diagrams to illustrate their definitions of global competency to assist educators and students. These diagrams are showcased in figures 1 and 2 to follow.

Global competence is defined by the Center for Global Education at Asia Society as the combination of four domains (investigate the world, recognize perspectives, communicate ideas, and take action).



Figure 1. Asia Society's illustration four domains of global competence. Taken from OECD & Asia Society (2018). Copyright 2005 by the Asia Society.

Global competence is defined in the PISA framework as the combination of four dimensions (examining issues, understanding perspectives, interacting, and acting), each of which necessitates a combination of knowledge, skills, attitudes, and values.



Figure 2. Organization for Economic Co-operation and Development illustration of four dimensions of global competence. Taken from OECD & Asia Society (2018). Copyright by OECD 2018.

According to the former president and CEO of the Asia Society, “global competence starts with the capacity to investigate and connect to the world: that is, to be aware of and interested in the world and its workings,” (Loveland, 2010, p. 12).

In addition to competence, Hunt (2018) identified five global concepts to consider when thinking globally. Specifically, global thinking concepts include: change, interdependence, culture, scarcity, and power. If global competence requires the ability to investigate and connect with the world, how do educators become globally competent and “think globally?”

International Experiences

Differing approaches on how educators and students may become globally competent are shared by many (Conner & Roberts, 2013; Hunt, 2018; OECD & Asia Society, 2018). International experiences can provide participants an increase in global competency (Foster et al., 2014). An international experience helps create an awareness of international perspectives and prepares students for a global workforce (Ekiri, Aceng, Khaitsa, Ejobi, & Kabasa, 2013). Over time educational institutions have increased efforts to develop and promote opportunities for education abroad (international experiences) to produce globally competent individuals (Bunch et al., 2018). In the United States 332,727 (1.6%) post-secondary students studied abroad for credit in 2016-2017; up from 325,339 the previous year (NASFA, 2019). In addition, 36,975 post-secondary students from the United States participated in non-credit international experiences (Open Doors, 2018). The most popular region for study abroad is Europe with over fifty percent of participants, while Asia saw 11.6 percent of all participants (NAFSA, 2019). The Institute of International Education has three study abroad and international experience categories. Short-term, a summer or less than eight weeks; mid-length, one semester or one or two quarters; and long-term, academic or calendar year. The majority (65%) of U.S. students who study abroad select the short-term experience, one third of the experiences are considered mid-length, and the remaining two percent opt for the long-term study abroad opportunity (Open Doors, 2018).

Originally, education abroad was designed to provide participants a full immersion experience for a semester to a year abroad, but over time short-term international experiences have been developed and became more popular (Bunch et al.,

2018). In a one-week international experience in Nicaragua, undergraduate agricultural education students demonstrated growth in all areas of cultural competency (cultural awareness, cultural knowledge, and cultural sensitivity) to a certain degree (Bunch et al., 2018). A similar study featuring faculty found a study abroad experience made an impact on participants both personally and professionally two years after the experience. Faculty expressed an impact on attitudes and aspirations in the following areas: the importance of international experiences, the benefits of meeting new colleagues, the value of learning from the other participants, the importance of multidisciplinary interactions, credibility, the importance of authentic interactions, and a desire to learn more. This international experience was designed so participants could learn about their respective discipline in Ecuador and they found themselves learning about their discipline in another context as well as pedagogy. In regards to behavior, participants found themselves considering the cultural context, focusing more of their work on Latin America, emphasizing study abroad programs, interacting with new people, and teaching others about what they learned in Ecuador (Roberts et al., 2016). The international experience of individuals is an important foundation of globalized student learning environments (Acker & Taylor, 2000).

Fulbright-Hays Group Program

“The essence of intercultural education is the acquisition of empathy—the ability to see the world as others see it, and to allow for the possibility that others may see something we have failed to see, or may see it more accurately. The simple purpose of the exchange program...is to erode the culturally rooted mistrust that sets nations against one another. The exchange program is not a panacea but an avenue of hope....” Senator J. William Fulbright (J. William Fulbright Foreign Scholarship Board, 2016). (p. 23)

There are many ways that pre-service and in-service SBAE teachers can gain international experiences (NAFSA, 2019; Open Doors, 2018; USDE, 2018). The Fulbright Hays Group Program is one of the programs that pre-service and in-service SBAE teachers can engage with to participate in an international experience (USDE, 2018). The Fulbright Teacher Exchange Program Handbook (2011) shares the Fulbright program is the United States flagship program for international education exchange. The program was proposed to the United States Congress by Senator J. William Fulbright in 1945, with the purpose of promoting “mutual understanding between the people of the United States and the people of the other countries of the world” (p. 5). Since its inception over 380,000 have participated in Fulbright programming and today operates in 160 countries around the world providing 8,000 grants a year (United States Department of State [USDS], 2019). Today there are twenty-one different Fulbright programs for students, scholars, teachers, professionals, and groups (USDS, 2019).

A program featuring group travel is the Fulbright-Hays Group Project.

Specifically, the project abroad program provides:

Support for overseas projects in training, research, and curriculum development in modern foreign languages and area studies for U.S. teachers, students, and faculty engaged in a common endeavor. Projects may include short-term seminars, curriculum development, group research or study, or advanced intensive language programs. (USDS, 2019).

School-Based Agricultural Education

Global competency is an area that can be taught by educators in all curricular areas (Asia Society, 2018). The importance of global competency to SBAE can be found throughout the content standards for Agriculture, Food and Natural Resources (AFNR) career cluster that guide curriculum for the classroom component of SBAE (The National

Council for Agricultural Education [NCAE], 2015). This includes, but is not limited to, “CRP.12. Work productively in teams while using cultural/global competency” (p. 25) and “AS.01.03. Analyze and apply laws and sustainable practices to animal agriculture from a global perspective” (p. 50) (NCAE, 2015). SBAE teachers have the ability to connect and build relationships with students in ways that core curriculum teachers are sometimes unable to accomplish (De Lay & Swan, 2014). School-based agricultural education engages students in agriculture, food, and natural resources. Through these topics students gain a variety of skills including science, math, communications, leadership, management, and technology (National Association of Agricultural Educators [NAAE], 2019). School-based agricultural education became part of public education in the United States when Congress passed the Smith-Hughes Act (1917). The Smith-Hughes Act provided funding for vocational training in the areas of agriculture, home economics, and trade and industrial education (Association of Career and Technical Education [ACTE], 2017). Today there are around one million SBAE students across the United States taught by roughly twelve thousand secondary and two-year postsecondary SBAE in-service teachers (NAAE, 2019). School-based agricultural education at the secondary level is rooted in three closely related and interconnected components: classroom and laboratory instruction, experiential learning, and leadership development (NAAE, 2019) (Figure 3).

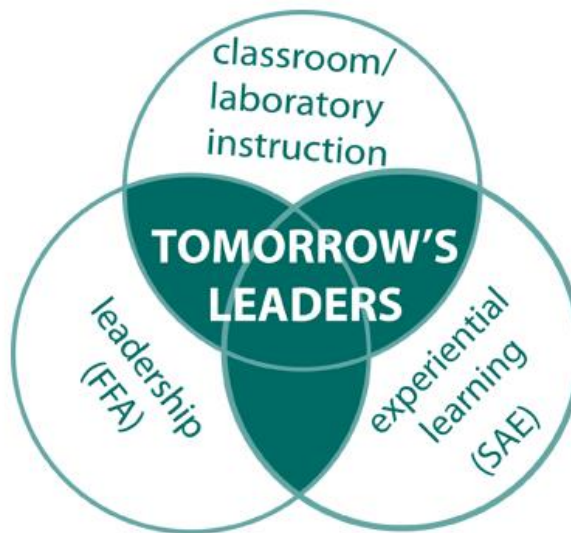


Figure 3. Agricultural education model from the National Association of Agricultural Educators (2019).

The classroom and laboratory instruction component offers organized instruction that takes place in a classroom, laboratory, greenhouse, and/or outdoor setting (NAAE, 2019). Students are challenged through contextual, inquiry-based instruction and learning via an interactive classroom and laboratory (National FFA Organization, 2019). Students engaged in the classroom and laboratory setting have the unique opportunity to apply core content concepts in an agriculturally related context (NAAE, 2019).

The leadership component is integrated with the National FFA Organization. Today there are 669,989 FFA members, ranging in age twelve to twenty-one, in all fifty states across the nation, Puerto Rico, and the U.S. Virgin Islands (National FFA Organization, 2019). The National FFA Organization was founded in 1928 in Kansas City, Missouri as the Future Farmers of America. The Future Farmers of America has evolved and changed into what is known as the National FFA Organization. Today FFA is a dynamic youth organization that prepares members for premier leadership, personal

growth, and career success through agricultural education (National FFA Organization, 2019).

Supervised Agricultural Experiences (SAE) offer students contextual, hands-on learning experiences outside of the classroom (Roberts & Robinson, 2018). Supervised Agricultural Experiences should provide reinforcement of concepts learned in the classroom as well as provide an opportunity to learn and discover new concepts (Smith & Rayfield, 2016). Supervised Agricultural Experiences allow SBAE students to further develop skills through placement (work setting) and entrepreneurial (ownership) projects (Talbert, Vaughn, Croom, & Lee, 2007). Educators and agricultural industry leaders expect students to develop many entry level skills through SAE ranging from overall knowledge in agriculture to basic math (Ramsey & Edwards, 2011; Ramsey & Edwards 2012).

Experiential learning is identified as SAE in the SBAE model by many (NAAE, 2019; National FFA Organization, 2019; The Council, 2019), however, according to Baker, Robinson, and Kolb (2012) experiential learning can be found in all three components of the SBAE model. Kolb (1984) defines experiential learning theory as “the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience” (p. 41). Experiential learning involves concrete experience (CE), reflective observation (RO), abstract conceptualization (AC), and active experimentation (AE) (Kolb & Kolb, 2009) and translates to a cycle of experiencing, reflecting, thinking, and acting (Kolb & Kolb, 2005). Baker, Robinson, and Kolb (2012) overlaid the experiential learning theory

to the SBAE model. Figure 3 below showcases the comprehensive model for secondary agricultural education (Baker et al., 2012).

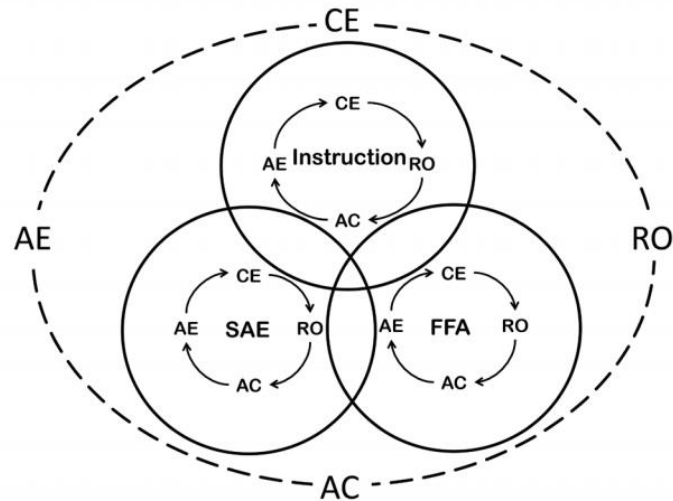


Figure 4. Comprehensive Model for Secondary Agricultural Education by Baker, Robinson, & Kolb, 2012, *Aligning Kolb’s Experiential Learning Theory with a Comprehensive Agricultural Education Model* p. 9. Copyright 2012 by the Journal of Agricultural Education.

Experiential learning is a key component to SBAE (Baker et al., 2012) and can also be utilized to develop global competency (Cathro, 2018). Participants engaged in an international experience can grow through experiential learning when reflection is included as part of the experience (Lamm et al., 2011). International experiences should be based on learning experiences before, during, and after travel (Conner & Roberts, 2015). Time for reflection and generalization should be allowed for true experiential learning during international experiences (Roberts, 2006).

Reflective Journaling

“We do not learn from experience, we learn from reflecting on experience.” John

Dewey

The opportunity for acquiring a global education has never been greater, however, actually achieving the education requires more than simply, “being there” (Slimbach, 2010). Reflective journaling is utilized in higher education as a means of facilitating and/or accessing learning (Liuoliene & Metiuniene, 2011). Journaling encourages individuals to engage and analyze situations critically while reflection fosters thinking that changes practices (Schuessler, Wilder, & Byrd, 2012). When reflective thinking is combined with journaling individuals are able to develop self-analysis and an increased awareness of their environment (Schuessler et al., 2012).

Reflective journaling is time intensive, to be effective the following are recommended: set aside time daily for reflective journaling (just like you would for group reflection), provide participants structured support for reflection, and provide prompts for reflection (Lamm et al., 2011). In addition, the following techniques can assist the journaling process (Ary, Jacobs, and Sorensen, 2010):

- Write information or jot notes as soon as you can to help jog your memory later.
- Set aside time each day to write and review and to expand the detail.
- Use prompts to jumpstart your writing.
- Include information about the context.
- Document actions you might consider taking or outcomes you might like to see.
- Review the journal regularly to help you see themes and patterns (p. 522).

In an effort to provide such guidance, study abroad groups have utilized the *TIPS to Study Abroad* method of reflection. Developed by Dr. Anu Taranath from the University of Washington; TIPS represent *Thing, Idea, People, and Self* (University of Washington, 2014). Dr. Taranath designed this reflective journaling procedure by tasking her students on study abroad experiences to hand write weekly letters focusing on a

Thing, Idea, Person, and Self (Taranath, 2014). As a result, TIPS letter writing brought out students' curiosity, questions, frustrations, joys, and insights that were otherwise left untouched. *TIPS to Study Abroad* offers guidance to help “travelers reflect on how moving from one context to another invites questions about identity, society, and the meaning of travel itself” (p. 3).

Qualitative Analysis

In order to sort through and analyze text, i.e. reflective journaling, researchers turn to qualitative research methods (Ary et al. 2010). “Qualitative research focuses on understanding social phenomena from the perspective of the human participants in natural settings” (Ary et al., 2010, p. 22).

As researchers analyze qualitative data there are numerous approaches (Elo & Kyngas, 2008). Different qualitative approaches have a similar goal to arrive at an understanding of a particular phenomenon from the perspective of those experiencing it, therefore researchers must choose an approach to best achieve this goal (Vaismoradi, Turunen, & Bondas, 2013). These approaches include but are not limited to case studies, document and content analysis, ethnography, grounded theory, historical research, narrative inquiry, and phenomenological studies (Ary et al., 2010).

Content analysis is a general term for a systematic, replicable technique for compressing, categorizing, and coding large amounts of data into fewer words and content categories from text, verbal, or visual communication tools (Elo & Kyngas, 2008; Stemler, 2001; Vaismoradi et al., 2013). According to Saldana (2016) content analysis utilizes coding to break down large amounts of data. “A code in qualitative inquiry is most often a word or short phrase that symbolically assigns a summative, salient,

essence-capturing, and/or evocative attribute for a portion of language-based or visual data” (p. 4). When coding within content analysis an inductive or deductive method may be used. Per inductive coding the categories and codes are derived from the data when there is not enough former knowledge about the phenomenon or if the knowledge is fragmented, whereas, with deductive coding the categories and codes are pre-determined on the basis of previous knowledge and the purpose of the study is testing a theory (Elo & Kyngas, 2008). Coding can be carried out both manually and/or electronically (Saldana, 2016).

Summary

The world needs globally competent learners and citizens (OECD & Asia Society, 2018; Reimers, 2009) to meet the challenge of feeding the expanding population (FAO, 2018). School-based agricultural education teachers have the potential to empower and engage students to become globally competent learners (Park & Rudd, 2005) by developing their own global competency through international experiences funded by the United States government (USDS, 2019). School-based agricultural educators may develop their global competency through reflection and experiential learning as part of international experiences (Kolb & Kolb 2005; Lamm et al., 2011; Taranath, 2014).

CHAPTER III

METHODOLOGY

Institutional Review Board

Federal regulations and Oklahoma State University policy require review and approval of all research studies that involve human subjects before investigators can begin their research. The Office of University Research and the Institutional Review Board at Oklahoma State University conducted the aforementioned review to protect the rights and welfare of human subjects involved in biomedical and behavioral research. In compliance with this policy, this study received proper surveillance and was granted permission to be executed. The institutional review board protocol number for this study was AG-18-55 and a copy of the approval form is presented in Appendix B. A similar process was executed by the research team members at The Pennsylvania State University through their Office of University Research and Institutional Review Board (IRB Number: STUDY00010037) and proper approval was granted. A copy of this approval can be found in Appendix C.

Research Design

Content analysis was utilized to investigate pre-service and in-service SBAE teachers' daily reflections during a professional development experience in Malaysia

(Ary et al., 2010). Initially, studies featuring content analysis were popular in the health sciences (Vaismoradi et al. 2013), however, other disciplines, e.g. agricultural education, have recently utilized the approach (Meyer, Holt-Day, Steede, & Meyers, 2017). A review of the *Journal of Agricultural Education* found at least nineteen studies employing content analysis as the research design from 2001 to 2018. This study was carried out utilizing a qualitative nonexperimental inductive content analysis design as categories and coding were derived from the data (Ary et al., 2010; Elo & Kyngas, 2008). It is important to develop a method where results can be duplicated with different researchers (Leggette et al., 2012). Ary et al. (2010) suggests qualitative content analysis involves a set of systematic steps to carry out the study.

1. Specifying the phenomenon
2. Selecting the media from which the observations are to be made
3. Formulating exhaustive and mutually exclusive coding categories
4. Deciding on the sampling plan to be used
5. Training the coders
6. Analyzing the data (p. 458)

Specifying the phenomenon:

The daily codes/themes recorded by pre-service and in-service SBAE teachers from a professional development experience in Malaysia.

Selecting the media from which the observations are to be made:

All TIPS reflective journaling documents from pre-service and in-service SBAE teachers participating in #AgEd2Malaysia over a 26-day period. TIPS reflective

journaling was completed daily by participants. There was a possibility of 312 entries for each construct (*Thing, Idea, People, and Self*).

Formulating exhaustive and mutually exclusive coding categories:

The coding categories were developed inductively after reading through all TIPS data. To begin, the principal researcher created a codebook and the research team worked together to make sure that the codes were appropriate for the study. The codebook created for the study can be found in Appendix D.

Deciding on the sampling plan to be used:

All TIPS daily reflective journal entries from pre-service and in-service SBAE teachers who participated in *#AgEd2Malaysia* that completed 90% of TIPS reflective journaling sessions throughout the experience (at least 24 of the 26 total days when TIPS reflective journaling was conducted). All 12 participants of the population met this 90% requirement and therefore the entire population participating in *#AgEd2Malaysia* was utilized in this study. For this study a total of 1,236 entries were coded (309 for each construct).

Training the coders:

The principal researcher in this study worked with two experienced coders to ensure inter-coder reliability. It is important that other coders are able to code the entries utilizing the codebook developed and obtain consistent results (Ary et al., 2010). To ensure inter-coder reliability a random sample of roughly 10% of records, from each construct (*Thing, Idea, Person, and Self*) were generated by means of a random number generator. The numbers were then matched with the record numbers on the spreadsheet by the principal researcher. All coders received the same TIPS text entries to code for

each round and each construct. The process below describes the steps to insure inter-coder reliability:

Step One: The principal researcher read through all 1,236 TIPS (309 per construct, i.e. *Thing, Idea, Person, Self*) journal reflections and identified codes for each construct separately. A codebook was created and codes defined within the codebook along with rules for coding.

Step two: All three members of the research team read through the 10% randomly selected records (30 entries), for each construct of TIPS (*Thing, Idea, People, and Self*), and coded each construct separately guided by the codebook.

Step three: The research team compared coding notes and discussed any discrepancies or concerns discovered while coding each construct. Inter-coder reliability meeting notes were kept by the principal researcher and adjustments/improvements made to the codebook suggested by the research team, after each round of coding. These inter-coder reliability meeting notes can be found in Appendix E. Stake (1995) shares the importance of this step as “Good research is not about good methods as it is about good thinking” (p.19).

Step four: The research team checked reliability of coding after each round of coding with a goal of 90% or higher agreement. There is no standard or base percentage of agreement for qualitative research, but an 80-90% range has often been the minimal benchmark for studies (Saldana, 2016).

If the reliability was not found acceptable for a construct for this study (at least 90%) another 30 entries were randomly selected for the specific construct and steps two through four above were repeated. Once reliability of coding was confirmed (90% or

greater) all entries for the specific construct were coded by the research team utilizing Microsoft Excel.

Table 1

Inter-coder Reliability Meeting Record

Rounds	Thing	Idea	People	Self-Reflection
Round 1 Coding Date	3/15/2019	3/15/2019	3/15/2019	3/15/2019
Percentage of Agreement	67%	40%	83%	30%
Meeting to Discuss	3/25/2019	3/27/2019	3/16/2019	3/29/2019
Round 2 Coding Date	3/28/2019	3/30/2019	3/27/2019	3/31/2019
Percentage of Agreement	77%	87%	70%	53%
Meeting to Discuss	3/29/2019	3/30/2019	3/27/2019	4/1/2019
Round 3 Coding Date	3/31/2019	3/31/2019	3/30/2019	4/2/2019
Percentage of Agreement	77%	57%	87%	70%
Meeting to Discuss	3/31/2019	3/31/2019	3/30/2019	4/2/2019
Round 4 Coding Date	4/1/2019	4/1/2019	3/31/2019	4/6/2019
Percentage of Agreement	90%	90%	80%	73%
Meeting to Discuss	4/1/2019	4/1/2019	3/31/2019	4/6/2019
Round 5 Coding Date			4/1/2019	4/7/2019
Percentage of Agreement			90%	93%
Meeting to Discuss			4/1/2019	4/7/2019

Self-entries recorded by participants inter-coder reliability was further developed after the initial coding due to the difficulty of coding another’s self-reflection. Following the first round of coding, a method to determine if the entry was a self-reflection was developed and then self-reflection entries were coded further via the codebook (Appendix D). First responses were read and the coder determined if the response was a true self-reflection. If it was determined the response was indeed a self-reflection the entry was

then coded into one of the four codes within *Self*, which reflected the objectives of the Fulbright grant. Table 2 shares the inter-coder reliability log for this process.

Table 2

Self-Coding Error Record

Round	Total Errors	Self-Reflection Yes/No Error	Coding Error
1	21	NA	NA
2	14	4	10
3	9	1	8
4	8	1	7
5	2	0	2

Analyzing the data:

Utilizing the codebook all TIPS data was coded by construct (*Thing, Idea, People,* and *Self*). The principal researcher coded the constructs of *Idea* and *Self*, while the two remaining members of the research team coded *Thing* and *People*. All data was compiled and analyzed utilizing Microsoft Excel software.

Census

Qualitative studies often use small population and/or sample sizes (Ary et al. 2010), as a result of funding from the Fulbright-Hays Group Project award, the #AgEd2Malaysia program was limited to 12 participants. Of the 12, six represented pre-service SBAE teachers and six were in-service SBAE teachers. Data from all 12 participants were included in this study. Initial recruitment of participants focused on Pennsylvania and Iowa. However, all slots were not filled by the deadline, therefore an open call across the United States was utilized to fill the remaining vacancies. This small group of pre-service and in-service SBAE teachers is not meant to represent all pre-service and in-service SBAE teachers. Due to the qualitative nature of the study results

are transferable and not intended to be used to draw inferences from a sample regarding a population. This will be a census study utilizing all data.

Fulbright-Hays Group Program

The participants who were a part of *#AgEd2Malaysia* were involved in a Fulbright-Hays Group Program. This was a four-week international professional development experience for pre-service and in-service SBAE teachers. The program was a collaborative project organized by Penn State University, Universiti Teknologi Malaysia, and Hawkeye Community College. The experience was designed around study of agricultural practices and structures (i.e. farm tours, Ministry of Agriculture meeting, etc.), skill development (i.e. lesson creation, lesson planning, teaching experiences, etc.), and educational site visits/meetings (i.e. university visits, high school visits, elementary visits, Ministry of Education meeting, etc.). The objectives of this international professional development experience as defined in the grant application were:

- 1) Increase the global competence of pre-service and current agricultural educators;
- 2) Focus on the intersection of culture and the agriculture systems in Malaysia and
- 3) Promote the integration of international studies into the secondary agriculture classroom.

The itinerary for this international professional development experience can be found in Appendix F.

TIPS Reflective Journaling

Participants of *#AgEd2Malaysia* utilized a modified TIPS reflective journaling technique originally developed by Dr. Anu Taranath from the University of Washington. The TIPS (i.e. *Thing, Idea, People, and Self*) method involves students writing letters to things, ideas, people, and themselves each week on a study abroad experience to

encourage and increase engagement and reflection (Taranath, 2014). For this study, TIPS theory was modified to reflect a shorter daily reflective journaling technique. Each day participants in #AgEd2Malaysia were tasked with reflecting on a thing that impacted them or that they learned about; an idea they generated from the day (or an “aha” moment), a person who impacted them, and a self-reflection. Participants were encouraged to reflective journal at the end of each day. Participants provided their completed TIPS reflections to the experience leads each morning, from the previous day, as they boarded transportation or met to begin their day. TIPS reflections were hand written by participants. To help organize this reflective journaling activity students divided a piece of paper into four quadrants in order to address a *Thing*, *Idea*, *People*, and *Self*-reflection each day (Appendix A). Utilization of this template supported concise and direct reflections.

Data Collection

Original data in the form of the TIPS reflection was collected in-country by other members of the research team. The other researchers obtained participant consent, collected data, and managed the data under the rules of governance from the Office of University Research and the Institutional Review Board at The Pennsylvania State University (IRB Number: STUDY00010037) (see Appendix C). The principal researcher received the raw data via a secure file transfer and entered the data into a protected spreadsheet file to prepare for data analysis.

Data Analysis

The unit of analysis reflects each record falling under the construct of *Thing*, *Idea*, *People*, and *Self* for each pre-service and in-service SBAE teacher each day. Each record

was coded whether it was a word, combination of words, phrase, sentence, paragraph, or left blank. The principal researcher did not travel to Malaysia to participate in the international professional development experience. Manual coding was utilized as described earlier via Microsoft Excel. After all data were coded by the research team the principal researcher compiled all data utilizing sort and filter tools within Microsoft Excel.

CHAPTER IV

FINDINGS

Source of Data

Data were collected from twelve *#AgEd2Malaysia* participants using the TIPS model and shared with the principal researcher. Of the twelve United States participants 50% were pre-service SBAE teachers and 50% were in-service SBAE teachers.

Regarding gender, nine participants were females (four pre-service SBAE teachers, five in-service SBAE teachers) and three males (two pre-service SBAE teacher, one in-service SBAE teacher) (Table 3).

Table 3

Personal and Professional Characteristics of #AgEd2Malaysia Participants

SBAE Teacher	Home State	Number	Grade Level for Pre-service	Number
Pre-Service	Iowa	3	Freshman	1
	Pennsylvania	3	Sophomore	0
			Junior	2
			Senior	3
In-service	Indiana	1		
	Michigan	1		
	Ohio	1		
	Pennsylvania	2		
	Wisconsin	1		

Thing Findings

Thing was defined as a physical item or interaction with a physical item or concept. Each participant of #AgEd2Malaysia was asked to reflect daily on a thing they encountered or that impacted them. Each *Thing* entry was read and fourteen codes were developed through an inductive coding process and analysis from the research team (Ary et al., 2010; Saldana, 2016). See Appendix D.

Pre-Service SBAE Teachers:

One hundred and fifty-three *Thing* entries were coded for pre-service SBAE teachers as part of the #AgEd2Malaysia program. Agriculture was the most identified code with 40 entries, followed by Environment and Conservation (20 entries) and Education (15 entries). As a result of this international professional development event, pre-service SBAE teachers identified content and pedagogy themes for the top three codes in the *Thing* construct. These were experiences that can be incorporated into their

curriculum based on their observations and activities in the codes Agriculture, Environment and Conservation, and Education. Global competency themed codes were of less emphasis in the *Thing* construct (i.e. Music and Arts, Clothing, and Geography).

Pre-service SBAE teachers' *Thing* entries coming from the top Agriculture theme included:

Pineapples are multi-purpose. The leaves can be made into string, silage, pepper, etc. The amount of impacts pineapples have on the environment.

Cows in Malaysia Sabah are Holsteins.

Gene editing being classified as GMO.

In-service SBAE teachers:

One hundred and fifty-six *Thing* entries were coded for in-service SBAE teachers as part of the #AgEd2Malaysia program. Agriculture was the code identified most frequently with 39 entries coded. Two codes: Education and Environment and Conservation were found to be reported the next most frequent with 16 entries each respectively. Geography, Music and Arts, and Infrastructure and Transportation were found to have little focus in this study as reported by in-service SBAE teachers. Content and education related topics were identified more frequently, while global competency items unrelated to agriculture and teaching were identified less frequently.

In-service SBAE teachers' *Thing* entries identifying with the theme of Agriculture included:

Ornamental pineapple is very pretty - didn't know there were so many different varieties.

Agritourism at DESA dairy Farm was a great example of diversified Ag production and involve customers.

Over 3,000 species of herbs grown on the herb farm, but only 8 are commercially cultivated.

Both pre-service and in-service SBAE teachers had similar reflection focuses within the *Thing* construct. The top three codes that emerged for both groups were Agriculture, Environment and Conservation, and Education, while both had the codes of Unknown and Geography reflected on the least.

Idea Findings

Idea was defined as an action item, “aha” moment, or thought. Each day, participants of #AgEd2Malaysia, were asked to reflect on an idea or thought. Each *Idea* entry was read and nine codes were developed through an inductive coding process and analysis from the research team (Ary et al., 2010; Saldana, 2016). See Appendix D.

Pre-Service SBAE Teachers:

One hundred and fifty-three *Idea* entries were coded for pre-service SBAE teachers as part of the #AgEd2Malaysia program. Teach Ag Best Practices was the code identified most frequently (64 entries), followed by Community and Culture (28 entries) and Agriculture (20 entries). When reflecting on an *Idea* as an action item, an “aha” moment, or thought, pre-service SBAE teachers turned to methods, procedures, and pedagogy to teach food, fiber, and natural resources across all contexts (formal, informal, etc.) and levels as defined in the codebook (Appendix D). Entries focusing on the codes of Health, Food and Beverage, and Religion were reported less frequently.

The *Idea* construct showcased many Teach Ag Best Practices for pre-service SBAE teachers including:

Idea of having all students participate in some sort of cooking class.

We performed service learning in the national park, it would be a great tool to do the same thing with students at a park back in the US.

*Have a program for special needs students to give them hands on experience.
Make curriculum about agriculture in other countries.*

In-service SBAE teachers:

One hundred and fifty-six *Idea* entries were coded for in-service SBAE teachers as part of the #AgEd2Malaysia program. In-service SBAE teachers identified Teach Ag Best Practices as the top code with 70 entries focused in this area, followed by Community and Culture (39 entries) and Agriculture (15 entries). The code Health had zero responses with Food and Beverage reflecting the second fewest entries identified.

In-service SBAE top entries for *Idea* revolved around Teach Ag Best Practices including:

Hands on learning takes a lot of pre-preparation, but is worth it in the end when students learn and have fun.

*Always remember to think "How will this experience help me as a teacher?"
Continued importance of leading by example.*

I am so excited about the relay race for the nitrogen in aquaponics lesson. I cannot wait to do this in the US.

Pre-service and in-service SBAE teachers had an identical rank for most frequent codes for the *Idea* construct of Teach Ag Best Practices, Community and Culture, and Agriculture. While percentages of each theme differed in small increments the overall rank was similar.

People Findings

People was defined as individuals or groups of people who have been encountered as part of #AgEd2Malaysia. Each participant of #AgEd2Malaysia, was asked to reflect daily on a person they encountered or that made an impact on them. Each

People entry was reviewed and fifteen codes were developed through an inductive coding process and analysis from the research team (Ary et al., 2010; Saldana, 2016). See Appendix D. It was deemed by the research team that codes be based on what category people who impacted participants fell within (e.g. Malaysian Life Skills Student, U.S. In-service Agricultural Educator, etc.).

Pre-Service SBAE Teachers:

One hundred-and fifty-three-*People* entries were coded for pre-service SBAE teachers as part of the #AgEd2Malaysia program. When pre-service SBAE teachers were asked to reflect on people who impacted them each day of an international professional development experience in Malaysia their reflections focused on the host Malaysian Life Skills Students and UTM Personnel. Malaysian Life Skills Student was identified most frequently with 30 entries focusing on this code, followed by UTM Personnel (20 entries) and Agricultural Personnel (18 entries). Their U.S. colleagues (i.e. U.S. In-service Agricultural Educator, U.S. Pre-service Agricultural Educator, total U.S. Participants, and U.S. Leads) were reflected on less than their Malaysian hosts.

Pre-service *People* entries showcased the impact the Malaysian hosts had on them and included the following comments:

The international coordinator. They invited us to join prayer in the morning if we'd like. I admire that they are willing to share that part of their life with us.

UTM student commanded the classroom when necessary and really connected with students.

UTM student has a positive outlook on coming to the place her brother passed away.

In-service SBAE teachers:

One hundred-and fifty-six-People entries were coded for in-service SBAE teachers. In-service SBAE teachers' reflections featured the hosts from Malaysia more frequently when compared to other individuals or groups they encountered. The theme, Malaysian Life Skills Student, was identified the most with 45 entries focused on this code, followed by UTM Personnel (23 entries) and Host Families (13 entries). Participants from the United States were not reflected on often. The United States participants (i.e. U.S. Pre-service Educators, U.S. In-service Educators, Total U.S. Participants, and U.S. Leads) were not mentioned as often when compared to their counterpart hosts in Malaysia.

In-service SBAE teachers shared how the Malaysian hosts influenced them through the following comments:

I appreciate that the UTM student tried communicating with us in regards to our collaborative lesson.

UTM student was pushed outside of their comfort zone by flying and boating and they never complained once.

UTM student really stepped up during our lesson planning session. I am excited to see them teach on Monday.

While there were many similarities reported in the *People* construct this was the construct that had the greatest difference between pre-service and in-service SBAE teachers. While both groups reported two codes, Malaysian Life Skills Student and UTM Personnel the most often they differed in their third most popular group reflected on. Pre-service SBAE teachers were impacted by Agricultural Personnel the third most, whereas, Host Families were the third focus of in-service SBAE teachers' reflections.

Self Findings

Self was defined as an explicit or implied “I statement” or first-person reference and was to represent the learning experience as part of #AgEd2Malaysia. A definition of reflection provided by Costa and Kallick (2008) can be found in the codebook (Appendix D) that was used to guide the research team. Each participant was asked to reflect daily on themselves. Each *Self* entry was analyzed and the codes were developed through an inductive coding process and analysis from the research team (Ary et al., 2010; Saldana, 2016). See Appendix D. Due to the difficulty of coding another’s self-reflection, a multiple step coding system was developed. First responses were read and the coder determined if the response was a true self-reflection utilizing the process in the codebook. If it was determined the response was indeed a self-reflection the entry was then coded into one of the four codes within *Self*, which reflected the objectives of the Fulbright grant.

Pre-service SBAE Teachers

One hundred and fifty-three *Self* entries were coded for pre-service SBAE teachers. One hundred and forty-seven of the one hundred and fifty-three entries were deemed self-reflections (96%). Of the self-reflection responses coded, over half for pre-service SBAE teacher reflections were coded to the theme of Global Competency (75 entries) defined by the Asia Society’s (2005) four domains of global competence. In addition, nearly one fourth of the responses reflected educational aspects (34 entries).

Pre-service SBAE teachers’ *Self* entries often reflected a theme of global competency. Some examples are shared below:

I need to become more involved in the news and what’s going on in the world. I sat down and watched a video about a huge ship accident releasing mill/billions

of plastic pellets into the ocean. It hit me because it affected people here and they have become my friends. Lastly, I have become so sensitive to this culture and care so much for them and did not fully realize it. I had posted a picture of my host family and I on snapchat and one of my friends had commented and said "Why are you with those towel heads?"...it made me tear up and I was very affected by it.

There is a lot about religion around the world I didn't know. The Sikh temple is amazing in what they do for the community. The community also treats them great.

After seeing how everyone meshes so well here, it will be hard going home to an out-of-sync community.

In-service SBAE teachers:

One hundred and fifty-six *Self* entries were coded for in-service SBAE teachers. One hundred and forty-three of the one hundred and fifty-six entries were deemed self-reflections (92%). Of the entries deemed self-reflections the majority fell within the theme of Global Competency (77 entries).

In-service SBAE teachers' *Self* reflections turned to a theme of global competency the majority of the time. For example:

I want to become more aware and knowledgeable about other religions. They tend to have the same theme of helping others and being a good person while having different beginnings and way of teaching that.

I REALLY need to learn some praise statements in Malay. How dumb would it be if someone told me "nice job" in Russian? It needs to be authentic.

The party last night was so humbling to me. The entire town came out to feed us and show us their culture. I am so glad that we took the time to share with them our dancing.

Pre-service and in-service SBAE teachers found similar results within the construct of *Self* as part of the TIPS reflective journaling process. Global competency topped both groups followed by Educational Aspects, Other, and Agricultural Aspects respectively.

CHAPTER V

SUMMARY, CONCLUSIONS, RECOMMENDATIONS, IMPLICATIONS AND DISCUSSION

Summary of Findings

Overall, data from six pre-service SBAE teachers (153 entries) and six in-service SBAE teachers (156 entries) were collected and analyzed for the four constructs of the TIPS model of reflection (i.e. *Thing*, *Idea*, *People*, and *Self*). While some discrepancies between pre-service and in-service SBAE teachers' reflections were discovered, findings revealed both groups focused on similar codes and themes as a result of their reflections using the TIPS reflection model.

For the construct of *Thing* both pre-service and in-service SBAE teachers had the same top themes emerge from their TIPS reflections. The code of Agriculture had the highest frequency for both pre-service and in-service SBAE teachers. The code of Agriculture was followed by Environment and Conservation and Education for both pre-service and in-service SBAE teachers.

The construct *Idea* featured the same themes emerging for both pre-service and in-service SBAE teachers. The code of Teach Ag Best Practices was identified most frequently for both pre-service and in-service SBAE teachers. Additionally, all

participants identified Community and Culture followed by Agriculture in that order.

Regarding *People*, two common codes emerged for this construct. While both groups identified the same codes initially i.e. Malaysian Life Skills Student and UTM Personnel, a different code was identified as the third most frequently identified code by each group. Pre-service SBAE teachers third highest coded reflection entries focused on Agricultural Personnel, while in-service SBAE teachers reported Host Families.

Similar results were identified for the construct *Self*. When analyzing data to determine if reflections were indeed self-reflections, 96% of pre-service SBAE teachers' entries were determined to be self-reflections while 92% of in-service SBAE teachers' reflections were deemed self-reflections. All entries determined to be self-reflections were coded into four codes with the same rank order for pre-service and in-service SBAE teachers. Global Competency was the top code identified followed by Educational Aspects, Other, and Agricultural Aspects.

Conclusions

International professional development experiences can provide development of global competence, pedagogy, and agriculture knowledge (Conner & Roberts, 2013; Foster et al., 2014; Rice et al., 2014). Per the experiences of U.S. pre-service and in-service SBAE teachers who participated in a four-week professional development experience in Malaysia, global competence began to develop.

This study discovered through concrete experiences, thinking, reflecting, and action (Kolb & Kolb, 2005; Kolb & Kolb, 2009) pre-service and in-service SBAE teachers further developed their agriculture knowledge, pedagogy, and global

competence while participating in an international professional development experience. It is important for pre-service and in-service SBAE teachers to participate in an international professional development experience to engage and challenge their future and current students to become globally competent learners. Through the experiential learning process and TIPS reflective journaling method participants were challenged to experience, reflect, think, and act.

Pre-service and in-service SBAE teacher's growth in agriculture knowledge was evident in the *Thing* construct of TIPS reflective journaling. Along with agriculture knowledge being developed, pre-service and in-service SBAE teachers also gained teaching tools and grew professionally to improve their classrooms for their students and themselves. The *Idea* construct provided many examples of this with the code Teach Ag Best Practices. Global competence was a reoccurring theme throughout #AgEd2Malaysia that was strongly emphasized by both pre-service and in-service SBAE teachers. Global competence was emphasized in the *People* and *Self* construct of TIPS reflective journaling. Through the *People* construct it was relationships with the hosts (i.e. students, faculty, staff, etc.) from Malaysia and in the *Self* construct it was highlighted in the self-reflections from the Malaysia experience.

Through the reflections shared in findings it is evident that both groups of pre-service and in-service SBAE teachers developed global competency according to the Asia Society and OECD (2018) by investigating the world, recognizing perspectives, taking action, and communicating ideas. Educators are primarily responsible for providing the education necessary to succeed in a global world (Zhao, 2010). Pre-service and in-service SBAE teachers participating in #AgEd2Malaysia found similar daily

themes and benefits from their experiences. Whether they were an incoming freshman or an experienced educator all grew professionally and personally through their four weeks in Malaysia. Through their TIPS reflective journaling it was evident they became more globally competent themselves by investigating and connecting with the world, which in turn, increased their global competence and encouraged them to “think globally” as an educator. Furthermore, they grew professionally by building content knowledge and pedagogy. While TIPS reflective journaling was an effective reflection model it was noted that around week three of the four-week international professional development experience TIPS became a platform for frustration. It could be concluded that a 26-day international experience does increase agriculture knowledge, pedagogy, and global competency. Both pre-service and in-service SBAE teachers found growth in these areas.

Implications

If educators are going to educate future leaders enrolled in agricultural education to feed, clothe, and fuel the expanding population (FAO, 2018) there is a need for globally competent SBAE teachers. Those who study abroad can find an increase in global competency (Foster et al., 2014). Due to the results of this study and others (Bunch et al., 2018; Foster et al., 2014; Rice et al., 2014; Roberts et al, 2016) it is vital pre-service and in-service SBAE teachers have the opportunity for international professional development experiences to develop global competencies. School based agricultural education teachers have the ability to impact some of the students that need it most. They have a connection to rural America that many others do not. School-based agricultural education teachers can have influences on their students that most others in education cannot achieve (De Lay & Swan, 2014).

It is imperative that Fulbright (and similar programs) continue to be funded and provide opportunities to educators. The results of this study highlight the objectives for this professional development experience were achieved. It is important that content based international opportunities are available to pre-service and in-service SBAE teachers in order to grow their cultural competencies, agriculture knowledge, and pedagogy.

Those who plan international professional development experiences must be mindful of scheduling and be purposeful in the design of the experience. There is a lot of pre-planning that needs to be executed. It is essential that those organizing and leading international professional development experiences allow a structure and method for journaling and reflecting that allows participants to analyze situations critically and think in ways that change habits and practices. The TIPS reflective journaling format, that was developed and utilized for *#AgEd2Malaysia*, is one technique that can serve as a reflective journaling tool to assist pre-service and in-service SBAE teachers develop self-analysis and an increased awareness of their environment (Schuessler et al., 2012).

Recommendations

Recommendations for Further Research

There is need for further research on the development of global competency, particularly with regards to pre-service and in-service SBAE teachers (Asia Society, 2018; NAFSA, 2019; Szolosi, 2012). This study was qualitative in nature (Ary et al., 2010) therefore, the results are transferable and cannot be generalized to a larger population. It is suggested to further analyze reflective journaling methods and the daily themes that emerge to determine if objectives of the international professional

development experience are achieved. Studies similar to this, but conducted with diverse groups (non SBAE teachers, international hosts, international visitors to the United States, community college students, farmers, etc.) are recommended. As themes emerge and the codebook (Appendix D) is adjusted and refined (possibility of creating an universal code book for all international experiences and groups) it is recommended that a tool be created and utilized for quantitative research to measure the impact of an international professional development experience on global competency and other stated objectives. This could include a “then and now” Likert scoring tool.

A deeper dive into the background of the in-service SBAE teachers’ demographics and teaching history is warranted. There is need to determine if SBAE teachers are impacted differently depending on their years of experience or geographical location (e.g. rural versus urban). Additional research could include optimum length of experiences and/or number of experiences as related to the impact on participants.

In addition, it is recommended that research be conducted to determine if daily themes align with the professional development itinerary. There needs to be further investigation on why themes emerge from a day. Are the objectives of the day being met as expected or do results emerge that were unexpected? Planners of international professional development experiences need to determine if their purposeful planning is achieving the desired goals.

It is further suggested that coding be developed and carried out for the theme (codes) of global competency. To further examine in what ways global competency is achieved, it is suggested utilizing the *Four Domains of Global Competence* from the Asia Society (2018). Each global competency code (theme) should be coded to the four

domains of investigating the world, recognizing perspectives, taking action, and/or communicating ideas (Asia Society, 2018).

Recommendations for Further Practice

This was the first international professional development experience to utilize the TIPS reflective journaling process in this form (Appendix A). To that end, the following recommendations focus on implementation of the TIPS process.

- Proper training, and greater emphasis on the importance of the process, before departure.
- Create a TIPS workbook that includes directions, an example, and enough blank templates for the entire experience. It is suggested this is a bound workbook to help with organization and emphasize the importance of the process.

As *#AgEd2Malaysia* progressed the researchers discovered that TIPS reflective journaling became a sounding board of frustrations for several of the participants. Some of the frustrations could be deemed self-reflections, but for the majority of the cases this was an outlet for negativity. In order to keep TIPS reflective journaling focused on reflections from the experience it is suggested that a place to voice concerns and frustrations of participants, that can be shared with leaders, be developed. It is important that concerns and frustrations be addressed while engaged in the experience to improve situations when needed. Frustrations analyzed by the researchers after the experience can be helpful in planning future experiences, but unfortunately do nothing for the past experience.

It is recommended that this research be shared with pre-service and in-service SBAE teachers, the international education community, international professional development experience leads, and the Fulbright office.

Summary

#AgEd2Malaysia, a four-week international professional development experience, provided evidence of development in global competence, pedagogy, agriculture knowledge, and various other themes. While experiences are meaningful, purposeful reflection on these experiences provide growth and development of participants that would otherwise go unrealized. The TIPS journaling model provided a valuable platform for reflection for pre-service and in-service SBAE teachers from the United States participating in *#AgEd2Malaysia*.

REFERENCES

- Acker, D., & Taylor, S. (2000). Globalization of the learning environment: Results of a baseline study of selected indicators of globalization at north central colleges of agriculture. *NACTA Journal*, 44(1), 17-22. Retrieved from https://www.nactateachers.org/attachments/article/608/David_Acker_NACTA_Journal_March_2000-2.pdf
- Ary, D., Jacobs, L. C., & Sorensen, C. (2010). *Introduction to Research in Education* (8th ed.). Belmont, CA: Wadsworth, Cengage Learning.
- Asia Society, (2018). What is Global Competence. Retrieved from <https://asiasociety.org/education/what-global-competence>
- Association of Career and Technical Education, (2017). 100 Years of the Smith-Hughes Act. Retrieved from <https://www.acteonline.org/celebrate-the-future-of-cte-with-100-years-of-the-smith-hughes-act/>
- Baker, M. A., Robinson, J. S., & Kolb, D. A. (2012). Aligning Kolb's experiential learning theory with a comprehensive agricultural education model. *Journal of Agricultural Education*, 53(4), 1-16. doi: 10.5032/jae.2016.03129
- Bird, W. A., Martin, M. J., Simonsen, J. C. (2013). Student motivation for involvement in supervised agricultural experiences: an historical perspective. *Journal of Agricultural Education*, 54(1), 31-46. doi: 10.5032/jae.2013.01031
- Bunch, J. C., Rampold, S. D., Cater, M., & Blackburn, J. J. (2018). The impact of a short-term international experience on undergraduate students' cultural competency. *Journal of Agricultural Education*, 59(4), 120-136. doi: 10.5032/jae.2018.04120

- Cathro, V. (2018). An odyssey of virtual global team activity in the experiential learning environment of the Global Enterprise Experience (GEE). *Computers in Human Behavior*, *Computers in Human Behavior*.
- Conner, N. & Roberts, T. G. (2013). Competencies and experiences needed by pre-service agricultural educators to teach globalized curricula: a modified delphi study. *Journal of Agricultural Education*, *54*(1), 8-17. doi: 10.5032/jae.2013.01008
- Conner, N.W. & Roberts, T.G. (2015). The cultural adaptation process during a short-term study abroad experience in Swaziland. *Journal of Agricultural Education*. *56*(1), 155-171. doi: 10.5032/jae.2015.01155
- De Lay, A. M., & Swan, B. G. (2014). Student apathy as defined by secondary agricultural education students. *Journal of Agricultural Education*, *55*(1), 106-119. doi: 10.5032/jae.2014.01106
- Ekiri, A.B., Aceng, L. F., Khaita, M. L., Ejobi, F., Kabasa, D. (2013). An international experimental learning program: a study abroad experience in Uganda. *NACTA Journal*, *57*(3a), 104-110. Retrieved from <https://www.nactateachers.org/attachments/article/2110/22.%20Ekiri%20NACTA%20Special%20Issue%20Sept%202013.pdf>
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, *62*(1), 107-15. doi: 10.1111/j.1365-2648.2007.04569.x
- Food and Agriculture Organization, (2018). *About the FAO*. Retrieved from <http://www.fao.org/about/what-we-do/en/>
- Food and Agriculture Organization & World Food Programme. (2019). Monitoring food security in countries with conflict situations (Issue No. 5). Retrieved from <http://www.fao.org/3/CA3113EN/ca3113en.pdf>
- Foster, D. D., Rice, 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. doi: 10.5032/jae.2014.01051

- Fulbright Teacher Exchange Program Handbook (2011). Fulbright Classroom Teacher Exchange Program. Retrieved from https://permanent.access.gpo.gov/gpo15923/Fulbright_CTE_handbook%202012-13%20FHI360.pdf
- Horn, F., & Breeze, R. (1999). Agriculture and food security. *Annals of the New York Academy of Sciences*, 894, 9-17.
- Hunt, B. (2018). *Global Concepts for Young People*. New York, NY: Routledge.
- J. William Fulbright Foreign Scholarship Board. (2016). 2016 Annual Report. Retrieved from https://eca.state.gov/files/bureau/ffsb_annual_report_2016_gps__hi_res_20170824fl.pdf
- Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education*, 4(2), 193– 212. Retrieved from <http://www.jstor.org/argo.library.okstate.edu/stable/40214287>
- Kolb, A. Y., & Kolb, D. A. (2009). The learning way: Meta-cognitive aspects of experiential learning. *Simulation & Gaming*, 40(3), 297-327. doi: 10.1177/1046878108325713
- Kolb, D. (1984). *Experiential learning: Experience as a source of learning and development*. Upper Saddle River, NJ: Prentice Hall.
- LaBelle, J. T., & Belknap, G. (2016). Reflective journaling: Fostering dispositional development in preservice teachers. *Reflective Practice*, 17(2), 125-142. doi: 10.1080/14623943.2015.1134473
- Lamm, A. J., Cannon, K. J., Roberts, T. G., Irani, T. A., Snyder, L. J. Unruh, Brendemuhl, J., & Rodriguez, M. T. (2011). An exploration of reflection: expression of learning style in an international experiential learning context. *Journal of Agricultural Education*, 52(3), 122-135. doi: 10.5032/jae.2011.03122
- Leggette, H. R., Witt, C., Dooley, K. E., Rutherford, T., Murphrey, T. P., Doerfert, D., & Edgar, L. D. (2012). Experiential learning using second life: A content analysis of student reflective writing. *Journal of Agricultural Education*, 53(3), 124-136. doi: 10.5032/jae.2012.03124

- Liuolienė, A. & Metiūnienė, R. (2011). Students' learning through reflective journaling. *Coactivity: Philology, Educology*, 17(4), 32-37. doi: 10.3846/1822-430X.2009.17.4.32-37
- Lokkesmoe, K. J., Kuchinke, K. P., & Ardichvili, A. (2016). Developing cross-cultural awareness through foreign immersion programs: Implications of university study abroad research for global competency development. *European Journal of Training and Development*, 40(3), 155-170. doi: 10.1108/EJTD-07-2014-0048
- Loveland, E. (2010). Championing Global Competence: An interview with Asia Society President and CEO Vishakha Desai. *International Educator*, Sept+Oct 2010, 12-20.
- Mayring, P. (2000). Qualitative Content Analysis. *Forum: Qualitative Social Research*, 1(2). Retrieved from <http://www.qualitative-research.net/index.php/fqs/article/view/1089/2386>
- Meyer, D. C., Holt-Day, J., Steede, G. M., & Meyers, C. (2017). A content analysis of the 2016 National Teach Ag Day's Facebook posts. *Journal of Agricultural Education*, 58(3), 120-133. doi: 10.5032/jae.2017.03120
- Monthey, W., Singmaster, H., Manise, J., & Bloversen Kreamer, K. (2016). Preparing a Globally Competent Workforce through High-Quality Career and Technical Education. Asia Society and Longview Foundation for Education in World Affairs and International Understanding. Retrieved from <https://careertech.org/sites/default/files/GlobalCompetencyCTE-FINAL.pdf>
- NAFSA, (2017). Important Facts about International Education. Retrieved from https://www.nafsa.org/Policy_and_Advocacy/Policy_Resources/Policy_Recommendations/Seven_Important_Facts_about_International_Education/
- NAFSA, (2019). Trends in U.S. Study Abroad. Retrieved from https://www.nafsa.org/Policy_and_Advocacy/Policy_Resources/Policy_Trends_and_Data/Trends_in_U_S__Study_Abroad/
- National Association of Agricultural Educators, (2019). What is Agricultural Education?. Retrieved from <https://www.naae.org/whatisaged/>

- National FFA Organization, (2018). National FFA Organization. Retrieved from <https://www.ffa.org>
- NVIVO, (2019). Powerful Research Made Easier. Retrieved from <https://www.qsrinternational.com/nvivo/home>
- Organization for Economic Co-operation and Development & Asia Society, (2018). Teaching for Global Competence in a Rapidly Changing World. Retrieved from <https://asiasociety.org/sites/default/files/inline-files/teaching-for-global-competence-in-a-rapidly-changing-world-edu.pdf>
- Open Doors, (2018). Institute of International Education. Retrieved from <https://www.iie.org/Research-and-Insights/Open-Doors/Open-Doors-2018-Media-Information>
- Park, T. D., & Rudd, R. (2005). A description of the characteristics attributed to students' decisions to teach agriscience. *Journal of Agricultural Education*, 46(3), 82-94. doi: 10.5032/jae.2005.03082
- Phillion, J., & Malewski, E. (2011). Study abroad in teacher education: Delving into cultural diversity and developing cultural competence. *Action in Teacher Education*, 33(5-6), 643-657. doi: 10.1080/01626620.2011.627310
- Phipps, L. J., Osborne, E. W., Dyer, J. E., & Ball, A. (2008). Handbook on agricultural education in public schools (6th ed.). Clifton Park, NY: Thomson Delmar Learning.
- Ramsey, J. W., & Edwards, M. C. (2011). Entry-level technical skills that agricultural industry experts expected students to learn through their Supervised Agricultural Experiences: A modified delphi study. *Journal of Agricultural Education*, 52(2), 82-94. doi: 10.5032/jae.2011.02082
- Ramsey, J. W., & Edwards, M. C. (2012). Entry-level technical skills that teachers expected students to learn through Supervised Agricultural Experiences (SAEs): A modified delphi study. *Journal of Agricultural Education*, 53(3), 42-55. doi: 10.5032/jae.2012.03042
- Reimers, F. (2009). Global Competency. *Harvard International Review*, 30(4), 24-27. Retrieved from <http://argo.library.okstate.edu/login?url=https://search-proquest-com.argo.library.okstate.edu/docview/230905037?accountid=4117>

- Rice, L., Foster, D., Miller-Foster, M., & Barrick, K. (2014). Discovering global competencies of agriculture education students through reflective journaling. *NACTA Journal*, 58(4), 324-329. Retrieved from https://www.nactateachers.org/attachments/article/2246/10%20Sankey%20Rice_NACTA%20Journal.pdf
- Roberts, R. & Robinson, J. S. (2018). The motivational changes pre-service agricultural education teachers endure while facilitating quality Supervised Agricultural Experiences: A six week project-based learning experience. *Journal of Agricultural Education*, 59(1), 255-270. doi: 10.5032/jae.2018.01255
- Roberts, T. G. (2006). A philosophical examination of experiential learning theory for agricultural educators. *Journal of Agricultural Education*, 47(1), 17-29. doi: 10.5032/jae.2006.01017
- Roberts, T. G., Rodriguez, M. T., Gouldthorpe, J. L., Stedman, N. L. P., Harder, A., & Hartmann, M. (2016). Exploring outcomes two years after an international faculty abroad experience. *Journal of Agricultural Education*, 57(1), 30-41. doi: 10.5032/jae.2016.01030
- Saldana, J. (Ed. 3). (2016). *The Coding Manual for Qualitative Researchers*. Los Angeles: Sage.
- Sankey, L. L. & Foster, D. D. (2012). A content analysis of teaching philosophy statements of award winning colleges of agriculture professors. *Journal of Agricultural Education*, 53(4), 124-140. doi: 10.5032/jae.2012.04124
- Schroeder-Moreno, M., Clark, S. F., Byker, C. J., & Zhao, X. (2012). Internationalizing sustainable agriculture education. *Journal of Agriculture, Food Systems, and Community Development*, 2(3), 55-68. doi: 10.5304/jafscd.2012.023.006
- Schuessler, J. B., Wilder, B. W., & Byrd, L. (2012). Reflective journaling and development of cultural humility in students. *Nursing Education Perspective*, 33(2), 96-99. Retrieved from <http://web.a.ebscohost.com/argo.library.okstate.edu/ehost/pdfviewer/pdfviewer?vid=1&sid=40906360-062e-4cec-a9e6-35e1558e0b44%40sessionmgr4006>
- Slimbach, R. (2010). *Becoming World Wise: A Guide to Global Learning*. Sterling, Virginia: Stylus Publishing, LLC.

- Smith, K. S. & Rayfield, J. (2016). An early historical examination of the educational intent of Supervised Agricultural Experiences (SAEs) and project-based learning in agricultural education. *Journal of Agricultural Education*, 57(2), 146-160. doi: 10.5032/jae.2016.02146
- Smith Hughes Act, U.S.C. (1917).
- Spencer, S.E. & Tuma, K. (2007). *The Guide to Successful Short-Term Programs Abroad* (2nd ed.). Introduction (pp. ix-xi). NAFSA Publications.
- Stake, R. E. (1995). *The Art of Case Study Research*. Thousand Oaks, CA: Sage.
- Stebleton, M. J., Soria, K. M., & Cherney, B. T. (2013). The high impact of education abroad: College students' engagement in international experiences and the development of intercultural competencies. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 22, 1-24. Retrieved from <https://frontiersjournal.org/wp-content/uploads/2015/09/STEBLETON-CHERNEY-SORIA-FrontiersXXII-GoingGlobal.pdf>
- Stemler, S. (2001). An overview of content analysis. *Practical Assessment, Research & Evaluation*, 7(17), 1-6. Retrieved from <https://pareonline.net/getvn.asp?v=7%26n=17>
- Szolosi, A. (2012). Going global: Utilizing instructional geocaching to enhance students' global competency. *Scholar: A Journal of Leisure Studies and Recreation Education*, 27(2), 36-42. doi: 10.1080/1937156X.2012.11949688
- Talbart, B. A., Vaughn, R., Croom, B. D., & Lee, J. S. (2007). *Foundations of Agricultural Education* (2nd ed.). Danville, IL: Professional Educators Publications.
- Taranath, A. (2014). *T.I.P.S. to Study Abroad: Simple Letters for Complex Engagement*. Seattle, Washington: Flying Chickadee.
- The Chicago Council on Global Affairs, (2018). *Global Food and Agriculture*. Retrieved from <https://www.thechicagocouncil.org/globalagdevelopment>
- The Council, (2019). *Agricultural Education*. Retrieved from <https://thecouncil.ffa.org/ageducation/>

- Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & Health Sciences, 15*(3), 398-405. doi: 10.1111/nhs.12048
- Winders, B. (2009). *The Politics of Food Supply: U.S. Agricultural Policy in the World Economy*. Yale University Press.
- World Food Prize, (2019). Youth Programs. Retrieved from https://www.worldfoodprize.org/en/youth_programs/state_youth_institutes/
- United States Department of Agriculture, (2018). Benefits of Trade. Retrieved from <https://www.fas.usda.gov/topics/benefits-trade>
- United States Department of Education, (2018). Fulbright-Hays. Retrieved from <https://www2.ed.gov/programs/iegpsgpa/index.html?exp=0>
- United States Department of State, (2019). The Fulbright Program. Retrieved from <https://eca.state.gov/fulbright>
- Universiti Teknologi Malaysia, (2019). Find a Programme. Retrieved from <https://www.utm.my/>
- University of Washington, (2014). Comparative History of Ideas: TIPS to Study Abroad. Retrieved from <https://chid.washington.edu/news/2014/10/08/tips-study-abroad-accessible-model-critical-global-engagement>
- Zhao, Y. (2010). Preparing globally competent teachers: A new imperative for teacher education. *Journal of Teacher Education, 61*(5), 422–431. doi: 10.1177/0022487110375802

APPENDICES

APPENDIX A

TIPS REFLECTIVE JOURNALING TEMPLATE

TIPS

Last Name: _____ First Name: _____ Date: _____

T = Thing

I = Idea

P = Person

S = Self Reflection

APPENDIX B

OKLAHOMA STATE UNIVERSITY INSTITUTIONAL REVIEW BOARD APPROVAL
LETTER



Oklahoma State University Institutional Review Board

Date: 11/08/2018
Application Number: AG-18-55
Proposal Title: Shared Global Professional Development in Malaysia

Principal Investigator: Brad Kinsinger
Co-Investigator(s):
Faculty Adviser: Jon Ramsey
Project Coordinator:
Research Assistant(s):

Processed as: Exempt

Status Recommended by Reviewer(s): Approved

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

The final versions of any recruitment, consent and assent documents bearing the IRB approval stamp are available for download from IRBManager. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be approved by the IRB. Protocol modifications requiring approval may include changes to the title, PI, adviser, other research personnel, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms.
2. Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.
3. Report any unanticipated and/or adverse events to the IRB Office promptly.
4. Notify the IRB office when your research project is complete or when you are no longer affiliated with Oklahoma State University.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact the IRB Office at 223 Scott Hall (phone: 405-744-3377, irb@okstate.edu).

Sincerely,
Oklahoma State University IRB

APPENDIX C

PENNSYLVANIA STATE UNIVERSITY INSTITUTIONAL REVIEW BOARD APPROVAL
LETTER



PennState

Office for Research Protections
Vice President for Research
The Pennsylvania State University
205 The 330 Building
University Park, PA 16802

814-865-1775
Fax: 814-865-8699
orp@psu.edu
research.psu.edu/orp

EXEMPTION DETERMINATION

Date: September 10, 2018

From: Jodi Mathieu, IRB Analyst

To: Melanie Miller Foster

Type of Submission:	Initial Study
Title of Study:	Shared Global Professional Development in Malaysia
Principal Investigator:	Melanie Miller Foster
Study ID:	STUDY00010037
Submission ID:	STUDY00010037
Funding:	Not Applicable
Documents Approved:	<ul style="list-style-type: none"> • AgEd2Malaysia Accountability Acts IRB.docx (1), Category: Other • Final Workshop Writing Prompts.docx (2), Category: Data Collection Instrument • HRP-591 - Protocol for Human Subject Research-Malaysia - draft 3.pdf (3), Category: IRB Protocol • TIPS Protocol.docx (1), Category: Data Collection Instrument

The Office for Research Protections determined that the proposed activity, as described in the above-referenced submission, does not require formal IRB review because the research met the criteria for exempt research according to the policies of this institution and the provisions of applicable federal regulations.

Continuing Progress Reports are **not** required for exempt research. Record of this research determined to be exempt will be maintained for five years from the date of this notification. If your research will continue beyond five years, please contact the Office for Research Protections closer to the determination end date.

Changes to exempt research only need to be submitted to the Office for Research Protections in limited circumstances described in the below-referenced Investigator Manual. If changes are being considered and there are questions about whether IRB review is needed, please contact the Office for Research Protections.

Penn State researchers are required to follow the requirements listed in the Investigator Manual ([HRP-103](#)), which can be found by navigating to the IRB Library within CATS IRB (<http://irb.psu.edu>).

We would like to know how the IRB Program can better serve you. Please fill out our survey; it should take about a minute: <https://www.research.psu.edu/irb/feedback>.

ID27

APPENDIX D

KINSINGER'S CONTENT ANALYSIS CODEBOOK

Kinsinger's Content Analysis Codebook (2019)

This codebook was developed to help in the process of coding TIPS daily reflections from individuals participating in *#AgEd2Malaysia*, a four-week professional development experience in Malaysia. Each theme that originated from this study is defined within this codebook. You are to refer to these definitions as you code the TIPS daily reflections. You may or may not be a veteran researcher and/or coder, however, remember that every study is different and you are to refer to this codebook and follow the instructions below as you code TIPS daily reflections.

Instructions:

This is a study to identify themes found in TIPS (Thing, Idea, Person, and Self) reflective journals from a professional development experience in Malaysia. The study is looking to identify daily themes that may emerge from the TIPS reflective journals. You are tasked to read each journal entry under its respective heading and identify the theme and code the entry utilizing the attached form with themes and definitions for each entry falling under the headings of Things, Idea, Person, and Self. This can be done electronically (Excel spreadsheet) or manually (printed Excel spreadsheet).

In the codebook you will find a list of words and code abbreviations with definitions. These words (and abbreviations) are the themes in the study that were identified by the principle researcher. The principle researcher read through the TIPS journal entries numerous times to develop this list and definitions. You are asked to familiarize yourself with the themes and definitions to follow. Do this by reading through the list and definitions multiple times. If you have questions consult the principle researcher for clarification.

Basic Instructions:

1. Read each journal entry completely. A journal entry may be a word, abbreviation, phrase, sentence, or paragraph.
2. Read each journal entry a second time. As you read a second time think about the list of themes.
3. Code with appropriate theme utilizing definitions. You may need to read the entry a couple more times to determine correct theme.
4. If multiple themes emerge in a single entry chose the theme that first emerged in the entry. To assist with this read for a third time just the first part of the entry.
 - a. For example if someone noted the following: "I loved the food! The fresh fruit tasted delicious. The way they drove was crazy." You would code the entry on the first two sentences (I loved the food! The fresh fruit tasted delicious.) as they are related in thought and discard the third sentence since it is unrelated to the original thought. Also, if someone recorded: "Soybeans. Dogs. Pizza." You would only focus on the first word (Soybeans), as the latter two are not related to the first.
 - b. Address the theme that applies to the category that appears first. For example: if in the category Self the entry mentions at outside group and it does not mention anything about self until the second part code the portion where the theme first appears. i.e. "The other students struggled with the food today. I need to be more confident in my abilities as an educator." Since this is in the Self category you would focus on "I need to be more confident in my abilities as an educator" as this is the first time the participant self-reflected.
5. If you are unsure of what an item is or a word means due to the international component of the professional development experience you may need to research a word or phrase.
6. If you are struggling to decipher between two codes reread the two codes descriptions in conflict before coding.
7. Process: Read statement, code, re-read statement, confirm code.

Things:

A thing is a physical item or interaction with a physical item or concept.

1. **Agriculture (AG)** – Policies, practices, processing, and tools related to animal or plant production for food, fuel, and fiber. Includes ornamental production, unprocessed agriculture products, preparation of food, and government (i.e. divisions, programs, laws, and regulations). Excludes food and beverage.
2. **Clothing (CL)** – Items that are worn including shirts, pants, hats, shoes, scarfs, shawl, and more. This includes size, style, and color of clothing, along with material that is ready to be made into clothing.
3. **Education (ED)** – Individuals, facilities, laboratories, teaching practices, and policies related to schools and universities. This includes administration, teachers, items which support education, and government (i.e. divisions, programs, laws, and regulations).
4. **Environment and Conservation (EC)** - Natural surroundings (trees, mountains, streams, etc.), weather/climate, and wildlife. Includes preserving native areas, all forms of environmental pollution, and health of the earth and world.
5. **Experience Design (EX)** – Design elements incorporated into #AgEd2Malaysia including concepts, items, approaches, and Teach Ag Best Practices (i.e. scheduling, reflection, co-teaching, etc.).
6. **Food and Beverage (FB)** – Consumption of food and beverage at home, abroad, or restaurants. May include taste, texture, smell, etc. Excludes raw agriculture products, unprocessed agricultural products, and food preparation.
7. **Infrastructure and Transportation (IT)** – Man-made structures such as signs, roads, bridges, buildings, towers, homes, living spaces, etc. Includes modes and means of transportation including bikes, planes, trains, automobiles, boats, etc.
8. **Geography (GE)** - Physical location including countries, states, and cities. Excludes landscapes.
9. **Hospitality and Human Behavior (HO)** – Presence or absence of welcoming behaviors from an individual, family, group, or organization. Can include gifts and special events in the spirit of hospitality. Includes behavioral characteristics of people (i.e. concept of time, live, talk, and act). Excludes infrastructure and transportation.
10. **Hygiene and Health (HH)** – Related to cleanliness and uncleanliness (i.e. personal care items, food sanitation, and reference to bathroom/shower). One's health or dealing with one's health including health facilities (hospitals, doctors' office, etc.), medication, sleep patterns, etc.
11. **Music and Arts (MA)** – Dancing, performing arts, singing, painting, etc. (i.e. Listening, viewing, playing, participating).
12. **Recreation and Relaxation (RR)** – Activities with limited educational intent. Examples include movies, parasailing, swimming, shopping, mall, show, spa, etc.
13. **Religion (RE)** – Physical place of worship, religious ceremonies, and general religious concepts encompassing of all beliefs and practices.
14. **Unknown (UK)** – Not a thing or does not fit into any codes above.

Idea:

An idea is an action item, an “aha” moment, or thought.

1. **Agriculture (AG)** - Practice or technique utilized in the agriculture value chain including production, processing, and food preparation. Excludes food consumption.
2. **Community and Culture (CC)** - How any community around the globe is impacted (or could be impacted) as a whole. Includes the way people live their lives (i.e. perceptions of time), reference to history, actions to impact others, and how a culture is developed through group and individual growth. Excludes Teach Ag Best Practices.
3. **Education Related (ED)** - Education system, referring to how it functions and is structured as a whole and non-agriculture content areas. Can include environment of school setting. Excludes Teach Ag Best Practices.
4. **Food and Beverage (FB)** - Food and beverage consumption. Excludes raw agricultural products, food processing, and food preparation.
5. **Health (HE)** - Health of one’s self or others and how health can be impacted.
6. **Host and Hospitality (HO)** – The act, thought, or desire to provide or receive accommodations or hospitality.
7. **Religion (RE)** - Religion and how we think about and/or look at religion.
8. **Teach Ag Best Practices (TA)** – Methods, procedures, and pedagogy to teach food, fiber, and natural resources across all contexts (formal, informal, etc.) and levels. Can be an implicit reference to a concept, reference of individual professional growth, and design elements of *#AgEd2Malaysia* (i.e. pace of itinerary).
9. **Unknown (UK)** - Not an idea, action item, thought, or aha moment. Does not fit into any codes above.

People:

Individuals or groups of people who have been encountered as part of *#AgEd2Malaysia*.

In order to code have participant roster and up to date itinerary available.

1. **Agricultural Personnel (AG)** – Individual or group engaging any place within the agriculture value chain. Excludes UTM personnel and all students.
2. **Auxiliary Actors (AA)** – Individuals encountered by participants because of *#AgEd2Malaysia* programming including actors, musicians, guides, drivers, artists and those working in environmental, conservation, and/or wildlife management. Excludes agriculture personnel or agriculture guides.
3. **Host Families (HF)** - Families and family members who hosted *#AgEd2Malaysia* participants.
4. **Malaysian Education (ME)** – Faculty, staff, and administration within the Malaysian education system. Could be a teacher, administrator, custodian, etc. Excludes UTM personnel.
5. **Malaysian Life Skills Student (UTM)** – Individually referenced UTM students, studying to be life skills educators, who are *#AgEd2Malaysia* participants (individually or named in a list).
6. **Malaysian Student (Non-Life Skills) (MS)** – Malaysian students including pre-school, elementary, middle, secondary, or postsecondary students from Malaysia. Excludes UTM Malaysian Life Skills students who are *#AgEd2Malaysia* participants.
7. **Participant Group (PG)** – Refers to *#AgEd2Malaysia* as a collective. Collective refers to leads and participants from both Malaysia and the United States.
8. **Religious Figure (RE)** - A religious figure by career or encountered in a religious setting, excluding other codes.
9. **Total Malaysian Participants (TM)** – Malaysian educators, students and leads when referred to as a group or any subset who are *#AgEd2Malaysia* participants.
10. **Total U.S. Participants (TU)** – United States educators, students, and leads when referred to as a group or any subset who are *#AgEd2Malaysia* participants.
11. **U.S. In-service Agricultural Educator (UI)** – Individually referenced *#AgEd2Malaysia* participant/participants who is/are a school-based agricultural educator in the United States.
12. **U.S. Leads (UL)** - *#AgEd2Malaysia* faculty organizers from the United States.
13. **U.S. Pre-service Agricultural Educator (UP)** – Individually referenced *#AgEd2Malaysia* participant/participants at the pre-service stage of professional development.
14. **Unknown (UK)** – Groups or individuals who do not fit in any other code or are not identifiable. Includes ambiguous reference to groups.
15. **UTM Personnel (UT)** – UTM personnel, listed individually (could be multiple listing), involved in *#AgEd2Malaysia* programming.

Self:

Before coding an entry in this category, the researcher should determine if the entry is a self-reflection. To define reflection, we turn to Costa and Kallick (2008); “Reflection involves linking a current experience to previous learnings (a process called scaffolding). Reflection also involves drawing forth cognitive and emotional information from several sources: visual, auditory, kinesthetic, and tactile.”

- Self-reflections can be explicit or implied “I statements” or first-person references.
- Self-reflections should represent the learning experience.

Due to the difficulty of coding another’s self-reflection, the following coding system was developed:

1. Determine if the entry is a self-reflection by coding yes (Y) or no (N), utilizing the criteria above.
2. If determined to be a self-reflection code in one of the four categories developed from the learning objectives from #AgEd2Malaysia which are:
 - 1) Increase the global competence of pre-service and current agricultural educators;
 - 2) Focus on the intersection of culture and the agriculture systems in Malaysia and
 - 3) Promote the integration of international studies into the secondary agriculture classroom.

Self-reflection codes developed to reflect the above learning objectives of #AgEd2Malaysia:

Remember to read the entire self-reflection entry to determine if the entire entry or partial entry should be analyzed and coded.

1. **Global Competency (GC)** – Self-reflection relates to global competency as defined by the four domains of global competence by the Asia Society (2005): investigate the world, recognize perspectives, communicate ideas, and take action (Figure 1. Asia Society’s four domains of global competence, 2005).
2. **Agricultural Aspects (AA)** – Agriculture including production, practices, food preparation, and natural resources (environment, wildlife, etc.). Excludes consumption of food.
3. **Educational Aspects (EA)** – Educating including pedagogy, practice, and education structure. Can include design elements of #AgEd2Malaysia.
4. **Other (OT)** – Self-reflection did not fall within the learning objectives of #AgEd2Malaysia. Can include individual emotions without proposed action. Excludes comparisons to the way others live.

Figure 1



APPENDIX E

INTER-CODER RELIABILITY MEETING NOTES

Inter-coder Reliability Meetings

*For all constructs adjust margins and text so that each construct fits on one page for coding. Add page numbering and #AgEd2Malaysia in footer.

Each round we analyzed where we did not all three match and discussed how to clarify and improve coding.

Discussion on 3-30-19 to look at codes across constructs and make sure consistency is had with codes and definitions. This was executed on this date.

Per discussions on 3-31-19 add numbers to each code in each category to reference.

Per discussion on 4-6-19 add revised and date at the top of each page in the header. Also provide a one sentence description for each construct.

Thing 1st Round

- Worked on rewording and reformatting of all definitions minus Geography.
- Add the code Hygiene.
- Lots of discussion on definitions and time spent cleaning them up.
- See hard copy for full notes.

Things 2nd Round

- Add Unknown code to be consistent across constructs
- Agriculture Production (AP) strike Production and just have Agriculture (AG) to encompass all agriculture. In definition strike raw commodities and replace with unprocessed agriculture products.
- Add to Environment and Conservation (EC) “includes all forms of environmental pollution.
- For Food and Beverage (FB) add and unprocessed agriculture products to the exclusion.
- Creation of new category: Program Design Elements (PD) – Including reflection and co-teaching. Excludes agriculture and education.

Things 3rd Round

- For Agriculture (AG) strike out for the before production. Change of to for before food.
- For Education (ED) add the word laboratories.
- For Environment and Conservation (EC) add climate with the term weather.
- For the code Hygiene (HY) add reference to bathroom/shower.
- For Experience Design (EX) add Teach Ag Best Practices.
- For Recreation and Relaxation (RR) strike out “free time” and add “/mall” with shopping.

Things 4th Round (Reached 90%)

- For the code Agriculture (AG) Add “Policies” at the beginning and strike out for and insert “related to.”
- For the code Education (ED) insert “and policies related to” between practices and schools.
- For the code Geography (GE) add “Excludes landscapes” to the end of the definition.
- Under the code Policy and Government (PG) add “Excludes agriculture and education.”

Idea 1st Round

- Before meeting I worked to reword definitions in accordance to what we did as a group for Things and People first round. This saved a substantial amount of time when we meet and the group agreed was accurate and worthwhile. Will do the same with Self before we meet.
- Great discussion was had on what is an idea. Originally, I had it stated that it must be an action item. After further discussion as a group we came to the consensus that it can be an action item, aha moment, or thought.
- Add “food preparation” to the Agriculture code and then Food and Beverage code will only deal with consumption.
- Add the code “Environment.”
- Change the Non-Idea code to Unknown for consistency across constructs.
- Combine Community (CO) and Way of Living (WL) to create new code of Community and Culture (CC).
- Change Education Structure (ES) to Education Related (ED) and redefine.
- Eliminate the code Teaching and Learning (TL) and replace with the code Teach Ag Best Practices (TA) focusing on teaching across all contexts and levels.

Idea 2nd Round

- For Community and Culture (CC) add reference to history.
- Education Related (ED) add could include environment of school setting.
- Update Teach Ag Best Practices (TA) – Methods, procedures, and pedagogy and add can be implicit reference to a concept.
- Add the code Experience Design (EX) - Design elements incorporated into #AgEd2Malaysia including concepts, items, and approaches (i.e. reflection, co-teaching, etc.).

Idea 3rd Round

- Three codes were eliminated and implemented into other existing codes.
 - o Experience Design (EX) was eliminated and incorporated into Teach Ag Best Practices (TA).
 - o Others (OT) was eliminated and incorporated into Community and Culture (CC).
 - o Personal and Professional Growth (PP) was eliminated and split into two other codes. Personal Growth was incorporated into Community and

Culture (CC) and Professional Growth was incorporated into Teach Ag Best Practices (TA).

- Host (HO) was amended by adding hospitality to be labeled Host and Hospitality (HO). Add receiving and giving to the code definition.
- To the code Unknown (UK) add the wording or does not fit other codes.

Idea 4th Round (Reached 90%)

- For the code Community and Culture (CC) following Includes the way people live..., insert "(i.e. perceptions of time)."
- For the code Teach Ag Best Practices (TA) add "(i.e. pace of itinerary)" to the end of the code definition.

People 1st Round

- Worked on rewording all definitions to be more concise and consistent in format. Make sure all exclusions are at the end of each definition.
- Combine Artist and Entertainers (AE) and Tour Guide/Driver (TG) into one category Auxiliary Actors (AA).
- Add the following categories
 - o Total US Participants
 - o Total Malaysian Participants
 - o Change Malaysian Leads (ML) to UTM Leads (UT) and clarify definition.
- Refine and rename Agriculture Producer (AG) to Agriculture Personnel (AG)
- See written notes for further details for each specific code and rewording of definition.

People 2nd Round

- For Auxiliary Actors (AA) add "Excludes agriculture personnel or agriculture guides." This is to fix the dairy guide issue code that came up 3 times randomly.
- Under ME change faculty to personnel for "Excludes UTM personnel."
- Change Malaysian Life Skills Student code to UTMS from LS to eliminate coding confusion.
- For TM and TU add "when referred to as a group."
- Change UTM Leads to UTM Personnel and in the definition strike out faculty and insert personnel.

People 3rd Round

- Auxiliary Actors (AA) strike out during and insert because of and insert programming between #AgEd2Malaysia and including. Both for clarification.
- Under Malaysian Life Skills Students (UTMS) code strike the S so it reads UTM. At the beginning of the definition insert "Individually referenced."
- For TUM Personnel (UT) add must include specific reference to UTM personnel or UTM.

People 4th Round

- Add under the heading "People," In order to code have participant roster and up to date itinerary available

- For Agriculture Personnel (AG) add “Excludes UTM personnel and students.
- For Auxiliary Actors (AA) incorporate the wording “and those working in environmental conservation and/or wildlife management.
- For Malaysian Life Skills Student (UTM) move “studying to be a life skills educator up in the definition and strike from the end.
- For Malaysian Students (MS) exclusion add UTM Malaysian Life Skills students who are participating in *#AgEd2Malaysia*.
- For both Total Malaysian Participants (TM) and Total U.S. Participants (TU) strike out “in this category” and add “who are *#AgEd2Malaysia* participants.”
- Rename U.S. Citizens (US) to U.S. Residents (US) and adjust definition accordingly.
- Add to Unknown (UK) “or are not identifiable. Could include ambiguous reference to groups.”
- From UTM Personnel (UT) strike out “must include specific reference to UTM.”

People 5th Round (Reached 90%)

- At the beginning of both U.S. In-service Agricultural Educator (UI) and U.S. Pre-service Agricultural Educator (UP) add the word “Individually” to the beginning of the code definition.
- For the code UTM Personnel (UT) insert “listed individually (could be multiple listing),” between personnel and involved.

Self 1st Round

It was determined to eliminate the 13 original codes developed after lengthy discussion of the research team. It was discussed that coding another’s self-reflection is extremely difficult. For this reason, the following approach was taken:

1. Determine if the entry is a self-reflection.
2. If it is a self-reflection code it in one of the four categories below derived from the learning objectives from *#AgEd2Malaysia*.
 - 1) Increase the global competence of pre-service and current agricultural educators;
 - 2) Focus on the intersection of culture and the agriculture systems in Malaysia and
 - 3) Promote the integration of international studies into the secondary agriculture classroom.

Here are the codes created to reflect these learning objectives:

- Global Competency (GC)
- Culture and Agriculture (CA)
- Educational Aspects (EA)
- Other (OT)
- Utilize Asia Society’s four domains of global competence to help define Global Competency (GC)

Self 2nd Round

- Add definition of reflection.

- Moved image of 4 domains of global competence to the bottom right of the page.
- Add to the rules of self: Can be explicit or implied “I statements” or first person references.
- Add below codes: *Remember to only code the first distinct self-reflection when multiple codes appear in an entry. *
- Adjust Culture and Agriculture (CA) code to include food preparation and natural resources (environment, wildlife, etc.).
- Adjust Educational Aspects (EA) code by stating “Educating others...” at the beginning and add “Can include design elements of #AgEd2Malaysia.”
- Adjust code Other (OT) by adding “Can include individual emotions.”

Self 3rd Round

- For the code Global Competency (GC) insert the four domains of global competence from the Asia Society at the end of the definition in parentheses.
- Culture and Agriculture (CA) was confusing coders due to cultures close relationship to global competency. The code Culture and Agriculture (CA) was suggested to be changed to Agricultural Aspects (AA).
- For the code Agricultural Aspects (AA) “excludes consumption of food” was added.

Self 4th Round

- Rewording and reformatting of section before the codes.
 - o Underneath reflection definition add a second bullet point stating “Self-reflections should represent the learning experience.”
 - o Wordsmith.
- Before the list of four codes add a reminder to read all of the entry to determine if entire entry or only the first part should be coded per the first page of the codebook. Combine this with the reminder to only code the first distinct self-reflection when multiple codes appear in an entry (delete the reminder below the codes as now covered in this reminder).
- For Global Competency (GC) add the date of 2015 after Asia Society and move the picture so it is beside the definition and note to see “figure.”
- For the code Other (OT) amend the last sentence so it reads, “Can include individual emotions without proposed action.”
- For the code Other (OT) add the sentence Excludes comparisons to the way others live.
- Talked through discrepancies in coded information for clarification and reasoning of coding with the team.

Self 5th Round

- Eliminate the word others from the Educational Aspects (EA) code.
- Keep updating version as part of the header with each change/adjustment.

Final Meeting to Revise Codebook

After 90% was met for all constructs and all constructs coded the research team convened to analyze results. Any code/theme that showed up less than five percent of the time in a

construct was evaluated to see if it needed to be eliminated, combined, or kept as is. For codes that were eliminated or combined the entries that originally were assigned to these codes were re-coded and data updated. The following changes were made:

- Thing
 - The code Time (TI) was eliminated. To accommodate this, add the word “scheduling” to Experience Design (EX) and “concept of time” to Human Behavior and Characteristics (HB).
 - Health (HE) and Hygiene (HY) were combined to create Hygiene and Health (HH).
 - Human Behavior and Characteristics (HB) was combined with Hospitality (HO) to create Hospitality and Human Behavior (HO).
 - General Infrastructure (GI) and Transportation (TR) were combined to create Infrastructure and Transportation (IT). Housing (HU) was also incorporate into this code and eliminated as a stand-alone theme.
 - Policy and Government (PG) was eliminated and policy and government wording were added to the codes of Agriculture (AG) and Education (ED).
 - Went from 20 codes to 14.
- Idea
 - No changes made.
- People
 - Eliminate the code U.S. Residents (US) and re-code the one entry.
 - Add the word “participants” following participant in the code U.S. In-service Agricultural Educator (UI) and U.S. Pre-service Agricultural Educator (UP).
 - For the code Malaysian Life Skills Student (UTM) and “(individually or individually listed)” to the end of the definition.
 - Went from 16 codes to 15.
- Self
 - No changes made.

APPENDIX F

#AGED2MALAYSIA ITINERARY

2018 #AgEd2Malaysia Itinerary

Contextually-relevant global engagement in culturally diverse settings: Bridging differences with shared content;

Date	Activities
July 6/Friday	Depart U.S.
July 7/ Sat	Arrive at Kuala Lumpur International Airport Travel to Johor Bahru at (6.35 PM) PIC: Buddy Husna Dr. Yusri Dr.Fadila
July 8/Sun	9.00 AM: Orientation, general UTM campus tour 9.00-10.00: Vice Chancellor's Office (UTM Admin Building) 10.30-12.00: UTM International office After Lunch: 2.00-5.00 PM Shopping at Aeon Taman Universiti Dr. Mahyudin, Dr. Fadila, Dr.Nad, Dr. Husna

<p>July 9/Mon</p>	<p>9am: Meet with Faculty of Education Staff (opening ceremony)</p> <p>10.00 AM: Tour UTM agriculture facilities, CCSI (Ladang & N30)</p> <p>2.00 PM: Kolloquium Session (Dr.Mahyudin, Dr.Nabil, Dr Fadila (chai))</p> <p>8.00 PM: Dinner with UTM agriculture students</p>
<p>July 10/Tues</p>	<p>8.00 AM: Site Visit to local agriculture program in Pontian [Telok Kerang National High School] Dr. Husna, Dr.Hanifah,Dr Rasidi</p> <p>2.30 PM: Visit Johor Agriculture Department in Nusajaya</p>
<p>July 11/Wed</p>	<p>9.00 AM: Tour Pineapple Development Center -Pekan Nanas Dr.Husna Dr.Fadilla Dr.Mahyuddin</p> <p>2.30 PM: Teaching and Learning Workshop I with Malaysian agricultural educator partners on UTM campus Dr.Husna Dr. Nornazira</p>

<p>July 12 /Thurs</p>	<p>8.00 AM: Teaching and Learning Workshop II with Malaysian agricultural educator partners on UTM campus (half day)</p> <p>2.30 PM: Site visit to Malaysia National School [Taman Sri Pulai Perdana National High School] Dr.Husna Dr. Nornazira</p>
<p>July 13/ Friday</p>	<p>9.00 AM: Mangrove replanting program at Tanjung Piai National Park Dr.Husna Dr.Rasidi</p> <p>7.30 PM: Explore Local Night Market</p>
<p>July 14/Sat</p>	<p>Cooking Class Dr. Nornazira Pn Erna Rabiha</p>
<p>July 15/Sun</p>	<p>9.00 AM: JB City Tour -Sultan Palace -Sultan Abu Bakar Mosque -Tan Hiok Nee heritage Street</p> <p>2.00 PM: Cultural program with Yayasan Warisan Johor Tentatif: 2.00 ptg</p>

	<p>Taklimat ringkas</p> <p>2.30 ptg</p> <p>Lawatan ke Galeri Seni</p> <p>Lawatan ke Galeri Tenun</p> <p>3.30ptg hingga 4.30ptg</p> <p>Bengkel Zapin</p> <p>Dr.Husna</p> <p>Dr.Zol</p> <p>Dr.Nornazira</p> <p>Dr. Hazirah</p> <p>Dr.Zakiah</p> <p>Dr.Mahyudin</p>
July 16/Mon	<p>Teaching and Learning Workshop III with Malaysian agricultural educator partners on UTM campus (half day)</p> <p>8.00-10.00 PM:</p> <p>Program with Cultural Unit UTM: Gendang & Gamelan</p>
July 17/Tues	<p>Teaching and Learning Workshop IV with Malaysian agricultural educator partners on UTM campus (half day)</p> <p>2.00 PM:</p> <p>Lecture on Malaysia Local Herbs at UTM Institute of Bio Product Development Lab</p>

<p>July 18/Wed</p>	<p>1.00 PM:</p> <p>Transfer to FELDA Air Hitam community – stay with host families</p> <p>Dr.Mahyudin</p> <p>Dr. Rasidi</p> <p>Dr.Zakiah</p> <p>Dr.Husna</p>
<p>July 19/Thurs</p>	<p>9.00 AM:</p> <p>1. Veterinary Institute Malaysia</p> <p>2. Agriculture Institute of Ayer Hitam</p> <p>3. UK Farm</p> <p>Evening with Host family (kenduri blok)</p>
<p>July 20/Friday</p>	<p>Visit Local</p> <p>1. Food Industry</p> <p>2.Tour Kluang Coffee Powder Factory</p> <p>(half day)</p> <p>Finalize co-teaching plans with UTM Agriculture Education partners</p> <p>(half day)</p> <p>Evening: Cultural Show by FELDA community</p> <p>(Kuda Kepang and Barongan)</p>
<p>July 21/Sat</p>	<p>Activity with FELDA Community</p> <p>1.ZUMBA</p> <p>2. Tour palm oil plantation</p> <p>3. Traditional games</p> <p>Evening: Cultural Show by FELDA community and Closing Ceremony</p> <p>(Zapin Dance)</p>

July 22/Sun	<p>Co-host “Agriculture Day”</p> <p>SMK Seri Lalang</p> <p>Return to UTM</p>
July 23/Mon	<p>Transfer to Sabah (air)</p> <p>Visit Universiti Malaysia Sabah</p> <p>-Aquarium & Marine Museum</p> <p>-BORNEENSIS Gallery</p> <p>Dr. Zulkifli</p> <p>Dr. Nabil</p> <p>Dr. Husna</p>
July 24/Tues	<p>Visit rural agriculture education program</p> <p>[Taman Tun Fuad National High School]</p> <p>Island Hopping</p> <p>Night Market around Kota Kinabalu</p>
July 25/Wed	<p>Leave for Kundasang at 7.30 AM:</p> <p>Visit rural agriculture education program</p> <p>[Mat Salleh National High School]</p> <p>Visit Desa Cattle Farm</p> <p>Visit Local Organic Vegetable Farm</p>

<p>July 26/Thurs</p>	<p>Visit Kinabalu National Park</p> <p>2.00 PM:</p> <p>Mari-Mari Cultural Village</p> <p>Return to Kota Kinabalu</p>
<p>July 27/Friday</p>	<p>Return to Johor Bahru (7.35 PM)</p>
<p>July 28/Sat</p>	<p>[Paddy Field] Inspirasi Peladang Jaya AgroFarm, Muar Johor</p> <p>Continue to Malacca</p> <p>Malacca City Tour</p> <p>Free time to explore cultural sites</p> <p>8.00 PM:</p> <p>Jonker street</p> <p>Dr. Hazirah</p> <p>Dr. Zulkifli</p> <p>Dr. Yusri</p> <p>Dr. Fadilla</p> <p>Dr. Mahyuddin</p> <p>Dr. Nazirah</p>
<p>July 29/Sun</p>	<p>8.00 AM:</p> <p>Tour Melaka</p> <p>8.00 PM:</p> <p>Boat ride on Malacca River</p> <p>Dr.Hazirah</p>

<p>July 30/Mon</p>	<p>Visit agriculture education program At Kolej Vokasional Dato'Lela Maharaja, Rembau</p> <p>Travel to KL</p> <p>Dr. Husna</p> <p>Dr. Yusri</p>
<p>July 31/Tues</p>	<p>Visit Universiti Putra Malaysia</p> <p>Malaysian Agricultural Research and Development Institute (MARDI)- Half day</p> <p>Ministry of Education/ Curriculum Department</p> <p>Putrajaya Mosque and Prime Minister's Office</p>
<p>Aug 1/Wed</p>	<p>Visit Malaysia Rubber Board</p> <p>Research Station in Sungai Buloh</p> <p>Kuala Lumpur City Tour/ US Embassy</p> <p>Central Market,</p> <p>Petaling Street</p>
<p>Aug 2/Thurs</p>	<p>Batu Caves Hindu Shrine</p> <p>Istana Negara</p> <p>Islamic art Museum</p> <p>5.30 PM: Journey Airport</p> <p>Depart for U.S at 11.20 PM</p>

VITA

Bradley Robert Kinsinger

Candidate for the Degree of

Master of Science

Thesis: AN EXAMINATION OF PRE-SERVICE AND IN-SERVICE SCHOOL-BASED AGRICULTURAL EDUCATORS INTERNATIONAL PROFESSIONAL DEVELOPMENT EXPERIENCE IN MALAYSIA

Major Field: International Agriculture

Biographical:

Personal Data: Son of Bob and Sue Kinsinger, Married to Jillana Kinsinger, Father of Shay, Macy, and Ainsley Kinsinger.

Education:

Completed the requirements for the Master of Science in International Agriculture at Oklahoma State University, Stillwater, Oklahoma in July, 2019.

Completed the requirements for the Bachelor of Science in Agricultural Education at Iowa State University, Ames, Iowa in May, 2005.

Completed the requirements for the Associates of Applied Sciences in Agricultural Business Management at Kirkwood Community College, Cedar Rapids, Iowa in May, 2003.

Experience:

Agricultural Education Instructor at West Branch Public Schools, Agricultural Business/Precision Agriculture Instructor at Hawkeye Community College, Director of the Global Agriculture Learning Center at Hawkeye Community College

Professional Memberships:

Association for Career and Technical Education (ACTE), Iowa Association of Agricultural Educators (IAAE), Iowa Association of Career and Technical Education (IACTE), Iowa State Education Association (ISEA), National Association of Agricultural Educators (NAAE), National Education Association (NEA), North American Colleges and Teachers of Agriculture (NACTA)