

# Globalizing the Undergraduate Experience in Agricultural Leadership, Education, Extension, and Communication

Seth B. Heinert<sup>1</sup> and T. Grady Roberts<sup>2</sup>

## Abstract

*University graduates are entering a workforce where global competencies are important; yet, a vast majority graduate with limited international educational experience. The purpose of this basic qualitative study was to describe themes of international educational experiences currently being offered to students of agricultural leadership, education, extension, and communication. The study was guided by Roberts' (2006) model of experiential learning contexts. Interviews were conducted with twelve faculty representing diverse departments of agricultural leadership, education, extension, and communications geographically from the West, Southeast, Northeast, and Midwest. Participants indicated five major themes of international educational experiences: curricular experiences, seminars, interactions with international students, co-curricular and extracurricular activities, and international travel. Overall intended outcomes from cited international educational experiences were global awareness, applying theory to practice, providing on roads for students and recruitment, empathy, meeting demand for global learners from industry, and for them to be "life changing." Recommendations for practice and future research are addressed, as are possible implications for the discipline.*

Keywords: global education; undergraduate, agriculture, experiences

## Introduction

University graduates today face a world where knowledge and experience in a global context is increasingly important. The Food and Agriculture Organization of the United Nations states that the world's population is expected to reach 9.1 billion by 2050 with over 70 percent of that population living in urban areas (FAO, 2009). This increasing population places pressure on agriculturists to understand the complexities of how to meet the demands of producing and marketing agricultural products globally. Further, students are expected to prepare for an increasingly globalized agriculture industry. Employers are seeking individuals who have developed a global perspective and relevant competencies (National Research Council, 2009).

In response to industry demands for globalized employees, colleges of agriculture are seeking ways to better integrate international experiences (Irani, Place, & Friedel, 2005) and incorporating global experiences has gained increased emphasis (Elliot & Yanik, 2002; Etling & Barbuto, 2002). Perhaps as a result, colleges of agriculture nationwide are responding to the demands of the agriculture industry by creating relevant international experiences for undergraduate students (Foster, Rice, Foster, & Barrick, 2014). Yet, in spite of the emphasis placed on the internationalization of the undergraduate curriculum by many institutions, undergraduates nationwide are still graduating with inadequate global competencies.

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<sup>1</sup> Seth B. Heinert is a Ph.D. candidate of Agricultural Education in the Department of Agricultural Education and Communication at the University of Florida, 406 Rolfs Hall, Gainesville, FL 32611, sheinert@ufl.edu

<sup>2</sup> T. Grady Roberts is a Professor of Agricultural Education in the Department of Agricultural Education and Communication at the University of Florida, 117C Bryant Hall, Gainesville, FL 32611, groberts@ufl.edu

Evidence suggests many students from colleges of agriculture in universities across the United States graduate with limited international experience or knowledge (Irani et al., 2005; Wingenbach et al., 2003). Faculty in colleges of agriculture, ranging from administrators seeking to implement holistic change in the internationalization of the undergraduate experience to individual instructors seeking to enhance global thinking, are attempting to implement a variety of international experiences with their undergraduate students, with varying levels of success. Yet, despite myriad international experiences available to faculty and students in colleges of agriculture across the nation, numbers of globally prepared graduates from colleges of agriculture remain low (Irani et al., 2005; Wingenbach et al., 2003). Clarity on the issue may be found from scholars engaged in the integration process of international dimensions into their coursework.

### **Theoretical Framework**

Colleges of agriculture are well positioned to impact students' global competency. Moriba, Edwards, Robinson, Cartmell, and Henneberry (2012) found that attending an international dimensions course positively impacted students' views of aspects of enhanced international awareness. A possible implication of these findings is that international experiences, contextualized in a variety of ways, may influence a student's attitude and perception of globalization, resulting in a more global minded student. It is also of note that these findings emanate from a single course. One may conjecture that an integrated approach of several international experiences, offered in several ways, may improve students' global competencies even more.

The reality, however, in many colleges of agriculture nationwide is students are not engaged in international experiences (Institute of International Education, 2010; Irani et al., 2005). Students have different levels of motivation to participate in international educational experiences (Bunch, Lamm, Israel, & Edwards, 2013). Bunch et al. (2013) found significant differences in motivation and perceived barriers between two geographically diverse groups of university students when assessing students' choices to participate in international experiences. Further, involvement in more advanced programming is limited. Short-term study abroad trips, often lauded for their multiple benefits, are weakly attended. Wingenbach, Chmielewski, Smith, Piña Jr., and Hamilton (2006) cited four barriers to involvement in study abroad by undergraduate students in the college of agriculture: concerns about personal safety, language, financial, and being away from family and friends. Also, faculty may not even realize, or may be unable to prioritize, all the options for international experiences available to them.

Literature points to the wide variety of international experiences available to undergraduate students. A review of the literature base related to international agricultural and extension education reveals a variety of available experiences aimed at improved global education such as attending conferences (Rutherford, 2012); listening to presentations and talking with people who worked for long periods in the country; fieldtrips to observe agricultural practices and internships (Bruening & Shao, 2005); participation in online simulations (Boyd, Dooley, & Felton, 2005); viewing online videos (Harder & Bruening, 2008); long term service such as Peace Corps (Smith, Moore, Jayaratne, Kistler, & Smith, 2009); participation in study abroad programs (Sharp & Roberts, 2013); using technology (Krueger & Reese, 2002); and participating in youth exchange programs (Williams, Lawrence, Gartin, Smith, & Odell, 2002). Further, many universities offer seminars on international topics, as well as clubs and other extracurricular activities to engage students in international experiences. Interaction with international exchange students is also a recognized source of experience. While there is a vast scope of possible experiences, understanding of the contextual dimensions of these experiences is limited. Further, while the aforementioned list of experiences reflects what is possible, it does not shed light on what is actually happening with students in agricultural leadership, education, extension, and communication.

This study is best framed by the theory of experiential learning. Experiential learning, as defined by Kolb (1984), is the process of creating knowledge. Clark, Threton, and Ewing (2010)

further contextualize experiential learning from an educator’s perspective as “a series of pragmatic activities sequenced in such a way that it is thought to enhance the educational experience for the student learner” (p. 47). Experiential learning is rooted in constructivism which proposes that learning occurs as people construct their own meanings from their experiences (Schunk, 2012). Roberts (2006) synthesized a model of experiential learning contexts (see Figure 1) from Dale (1946), Joplin (1981), Etling (1993), and Steinaker and Bell (1979). This model frames the context of an experience on four dimensions: duration, level, setting and intended outcome. According to the model, the level of an experience may range along a continuum from abstract to concrete. The duration of an experience may range along a continuum from seconds to years. The intended outcome of an experience may be: exposure, participation, identification, internalization, or dissemination. The setting of an experience may range along a continuum from formal to non-formal to informal. As international experiences can vary widely in multiple dimensions, this model provides a theoretical foundation from which to categorize that variability.

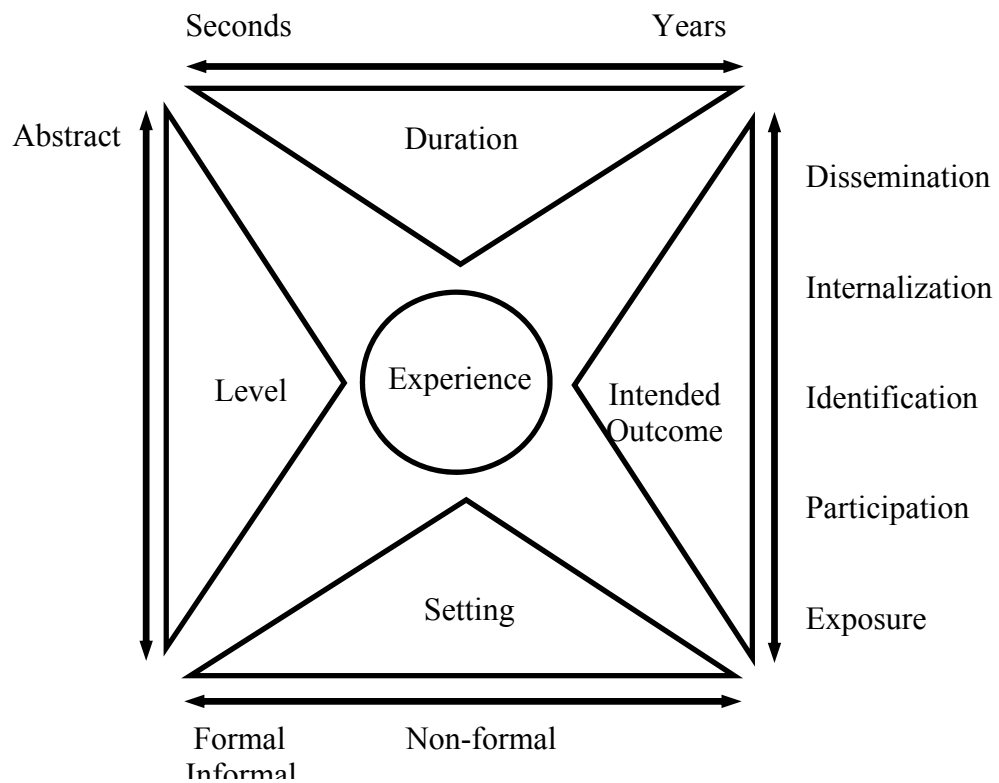


Figure 1. Model of Experiential Learning Contexts (Roberts, 2006)

**Purpose and Objectives**

The purpose of this study was to describe themes of international educational experiences currently being offered to students of agricultural leadership, education, extension, and communication. This research study addresses Research Priority 4, “Meaningful Engaged Learning,” of the American Association for Agricultural Education Research Agenda for 2011-2015 (Doerfert, 2011). The objectives of the study were as follows:

1. Describe the scope and type of international educational experiences that were being offered to students.

2. Describe the international educational experiences based on the context of their duration, setting, intended outcome and level of cognitive engagement.

### Methods

This was a basic interpretative qualitative study which provides rich descriptive account targeted at understanding a phenomenon, a process, or a particular point of view from the perspective of those involved (Ary, Jacobs, & Sorenson, 2010).

An initial seven faculty participants in agricultural leadership, education, extension, and communications were selected for interview based on their research in the *Journal of Agricultural Education* and *Journal of International Agricultural and Extension Education*. Snowball sampling was used to identify an additional five participants. Snowball sampling “occurs when the initially selected subjects suggest the name of others who would be appropriate for the sample. These next subjects might then suggest others and so on. Such sampling occurs when potential respondents are not centrally located but scattered in different sites” (Ary et al., 2010, p. 430).

Participants were interviewed via the telephone using a researcher developed interview guide based on the four dimensions of Roberts’ (2006) model. Interviews were conducted until saturation was met. Data saturation is “the point when no new information is forthcoming from new units” (Ary et al., 2010, p. 429). All interviews were digitally recorded and lasted approximately 45 minutes each.

Trustworthiness of the study was maintained through peer debriefing, an audit trail, and triangulation of the data (Ary et al., 2010; Dooley, 2007). The lead researcher met weekly with the second researcher to discuss the interviews and analysis that occurred that week and review the audit trail. Triangulation was established by collecting supporting documentation such as course syllabi which were reviewed to corroborate the nature and intended outcomes of the international experiences.

Data were transcribed verbatim. Transcribed data from the interviews were analyzed using the constant comparative method. This method

combines inductive category coding with simultaneous comparisons of all unites of meaning obtained. The researcher examines each new unit of meaning (topics or concept) to determine its distinctive characteristics and then compares categories and groups them with similar categories. (Ary et al., 2010, p. 489)

Creswell (2005) stated,

raw data are formed into indicators which are then grouped into several codes and then formed into more abstract categories. Throughout this process, the researcher is constantly comparing indicators to indicator, codes to code, and categories to categories which eliminates redundancy and develops evidence for categories. (p. 406)

Pseudonyms were given to all participants in order to protect the individual identify of participants and are used in this manuscript.

The first researcher of this study is a PhD student of agricultural education. His coursework focuses on teaching and learning and international dimensions of education. He is a former agriculture teacher and lived abroad for an extended period of time. The second researcher is a professor of agricultural education and an advocate for global education. He has led study abroad programs and regularly integrates international examples into his courses. He is a former agriculture teacher.

### Results

Interviews were conducted with twelve participants: three females and nine males; five held the rank of full professor, five associate professors, and two assistant professors. All participants were faculty members in agricultural leadership, education, extension, and communications. Seven participants were from the Southeast, two from the Northeast, two from the Midwest, and one from the West. None were from the Southwest, which was a limitation of this study. Faculty indicated five major themes of international educational experiences: (a) curricular experiences, (b) seminars, (c) interactions with international students, (d) co-curricular and extracurricular activities, and (e) international travel. Each theme had several sub-themes.

### Curricular Experiences

Experiences which generally fall within the traditional scope of teaching and learning on a college campus fit the theme of curricular experiences. The two subthemes which emerged were structure and in-class experiences.

*Structure* is the way a department, college, and/or institute was organized. The following examples are arranged from a shorter duration and less involvement to longer duration and more involvement: a certificate in international agriculture, an individual course focused on international content which may or may not be required for a particular major, a minor in international agriculture, a major in international agriculture, and a dual title degree program which involved adding an international agriculture degree onto an existing established bachelors or master's degree. Speaking of a course which was required by the department at a particular university, Charles said, "We adjusted our requirements for [omitted] so all of our students are required to complete international agriculture [omitted], a three credit course."

*In class experiences* are strategies described by participants which were used in one course, or a series of courses. It is important to note that the courses in question may or may not come with an international designation. Example in class experiences were: the use of pictures and videos, case studies which may have been student or instructor developed, scenarios, inviting a guest speaker or speakers, the use of a reusable learning object such as a video or picture slide show, and incorporating current world events. Often the participant would describe the instructor who was offering these experiences as a more "internationalized teacher" due to increased international travel. When discussing the use of current world events, Hugh said,

do you realize there is a soybean frost going on in Argentina?... students have to track the price of food [in food logs] and it helps students become more aware of how much their food costs because most students have no idea. And then we compare that with how much people pay for food in Sri Lanka or Belarus. Then they get a much better idea of, holy cow, here's what I made last year for an income and what if I had to spend 30 percent of it on food. It blows them away.

### Seminars

Experiences which involved a group of people coming together to listen to speakers address international issues and opportunities were classified as seminars. There were no subthemes for this theme, but a few distinguishing characteristics are provided. Seminars were designed for both staff and students. Often, speakers were traveling dignitaries, domestic teachers with significant international travel experience, or students who were presenting about their own international travel. Stephen, who had a robust seminar series, described it as,

[we had] what we called [an] international seminar series and basically every single speaker of the 12 speakers that I had, this is a couple years ago, all of them were either international or from a foreign country or Americans who have lived quite a bit international through teaching and extension, etc.

Nathan also saw the value in using seminars to incorporate international perspectives on campus. As he described it,

we established a couple of years ago as part of our strategic plan in this effort, a brown bag seminar for international. It is a seminar that's really designed to highlight activities, opportunities, personalities, that are things going on across the institute...

### **Interactions with International Students**

An informal experience around campus and in classrooms cited by many participants was the interaction between domestic and international students. There were no subthemes for this theme, but a few distinguishing characteristics are provided. International students may be graduate students who were teaching or serving as the assistant in the class. Intentional effort was being made at many institutions to increase the presence of international students on campus. While most interactions were described as random, some intentional socializing platforms were happening. Mary described an event on her campus which was designed as a platform for domestic and international students to interact. She said, "We have a full week event on campus that are hosted every October that allows students to integrate..."

### **Co-Curricular and Extracurricular Activities**

Several experiences fell within co-curricular and extracurricular activities. Co-curricular refers to activities, programs, and learning experiences that complement what students are learning in school (Great Schools Partnership, 2013). Extracurricular refers to activities, programs, and learning experiences conducted outside of school (Great Schools Partnership, 2013). Three subthemes emerged: Greek life, clubs, and hosting high school students.

*Greek life*, or the presence of sororities and fraternities, is active on many campuses nationwide. One participant described a program that connected an international dimension to Greek life on campus. Through a formal university classroom setting, students engaged in several topics which centered on Greek life. Then, the class culminated in a short term international trip which reinforced concepts central to Greek life. Another participant described work done with a specific sorority to broaden their cultural perspective. Speaking of her work with the sorority, Nancy said, "It's a professional sorority for women in agriculture so I talk to them about international perspectives of work."

Several participants mentioned *clubs* which brought together students interested in international agricultural topics. One specific club surfaced several times as a fast growing organization around the nation: the IAAS or International Research and Agricultural Development, International Association of Students in Agricultural and Related Sciences. Students used clubs as a platform to network and discuss international dimension to coursework, research and careers.

Finally, *hosting high school students* was a non-formal way for faculty to engage university students with international experiences. One specific example was the World Food Prize. Departments hosted high school students on their respective campuses as part of the statewide competition of the nationwide World Food Prize program. This typically lent itself to exposing the university faculty, staff, and students to international content as they prepared to lead the event. Another specific example was a statewide program which brought high school students on campus for a week to learn more about agriculture. The directors of the program decided to focus on global food security, a very international topic. Again, international agriculture content was taught by university staff and students. In addition to creating another avenue for an international educational experience, both programs were cited as excellent recruiting tools for the department.

### **International Travel**

Often, when participants spoke of international educational experiences, international travel was the first topic of conversation. Experiences cited by participants varied greatly based on the type, duration and intended outcome of the experience. The broadest subtheme of duration was used to delineate international travel and is: short and medium term travel or that ranging roughly from zero to six months; and long term travel, or that which ranges from 6 months to upwards of two years. Examples of short and medium term international travel included internships, service learning, study abroad, student exchanges, and student research.

*Short and medium term international travel* experiences offered many relevant details for practice. One example was international internships. Speaking of the internships offered at his program, Carl said,

it would be probably in three categories. One would be business - so you would go work for a company that has a branch in another country. Second type would be looking at being placed to the University partner that we may have and they would be typically involved in research. And then the third one would be for development type work - working with a nongovernmental organization in some kind of developing country.

These internships ranged from two weeks to six months. Another unique internship opportunity mentioned was conducting a portion of student teaching in an international setting. Another short or medium term international travel experience was service learning opportunities. These opportunities were often offered without academic credit. Several participants cited partnerships with nongovernmental organizations or U.S. based non-profit organizations. These experiences were often two to six weeks in duration. Another classic example of a short to mid-term international travel experience was studying abroad. A defining characteristic of study abroad programs was the presence of a formalized curriculum which students were to master in an international setting. Yet another example of short and medium term travel included student exchanges. These exchanges included a dimension of domestic students traveling abroad and vice versa. Eric, who had worked for several years with a student exchange program, said this about U.S. students traveling abroad, "It's not unusual for the [omitted] students to invite the American students home with them over a weekend or for their various holidays and have the American student come home with them to their village or whatever." He went on to say the following about international students coming to the U.S.,

this last fall we took them [international exchange students] up to [university] to recruit and we took them down to [university] to recruit. So they were here for it was a little over two weeks and you know they would get to see things inside out.

A final example of short to medium term international travel is student research and/or assessment. This could include graduate or undergraduate students. Hugh mentioned an undergraduate assessment program in which, "students are helping collect data, usually as part of a larger project, but they are not actually running the research." Often student travel was afforded by grant money. Charles described the involvement of students in international research as, "So, I've sent students to conduct research that are [omitted] majors to Brazil, Belize, ... Sweden and then Korea with those [research] dollars."

*Long-term international travel experiences* were far less frequently cited by participants. Beyond occasional comments about an individual student conducting long term research in an international setting, only one example could be found. The Peace Corps Masters International program was mentioned by participants as a way students could earn their master's degree while conducting their data collection in an international setting through the Peace Corps program. The typical duration for the international travel was over two years for these students.

A list of international educational experiences cited by participants, coupled with the four dimensions of the Roberts (2006) conceptual model of experiences, is provided below (see Table 1).

Table 1  
*Scope and Contextual Dimensions of International Educational Experiences Identified by Faculty*

Experience	Level	Duration	Intended Outcome	Setting
Using pictures and videos in class	Abstract	Minutes to Hours	Exposure	Formal
Using case studies in class	Abstract	Minutes to Hours	Exposure	Formal
Using scenarios in class	Abstract	Minutes to Hours	Exposure	Formal
Using guest speaker(s) in class	Abstract	Minutes to Hours	Exposure	Formal
Using reusable learning object (video or pictures) in class	Abstract	Minutes to Hours	Exposure	Formal
Using current world events in class	Abstract	Minutes to Hours	Exposure	Formal
Relevant examples from a more “internationalized” instructor’s perspective	Abstract	Minutes to Hours	Exposure	Formal
Seminars	Abstract	Minutes to Hours	Exposure	Non-formal
Individual international course	Abstract	Months	Exposure	Formal
Completing a certificate in international agriculture	Abstract	Years	Exposure	Formal
Completing a minor in international agriculture	Abstract	Years	Participation	Formal
Completing a major in international agriculture	Abstract- Concrete	Years	Internalization	Formal
Completing a dual title degree program with international agriculture	Abstract- Concrete	Years	Dissemination	Formal
Interacting with international students	Concrete	Minutes to hours	Participation	Informal
Clubs	Concrete	Days	Participation / Identification	Non-formal
World Food Prize	Concrete	Days	Participation / Identification	Non-formal
International Internships	Concrete	Weeks to Months	Identification	Formal and Non-formal



Table 1 (continued)  
*Scope and Contextual Dimensions of International Educational Experiences Identified by Faculty*

Experience	Level	Duration	Intended Outcome	Setting
International Service Learning	Concrete	Weeks to Months	Internalization	Formal, Non-formal and Informal
International Study Abroad	Concrete	Weeks to Months	Internalization	Formal, Non-formal, and Informal
International Student Exchanges	Concrete	Weeks to Months	Internalization	Formal, Non-formal, and Informal
International Research and / or assessment	Concrete	Weeks to Months	Internalization	Formal, Non-formal, and Informal
Master's Degree through Peace Corps International	Concrete	Years	Dissemination	Formal, Non-formal, and Informal

### Intended Outcomes

Participants were asked to speak of the intended outcomes of the collective international educational experiences offered at and through their respective universities. Responses fit well within the range indicated by the Roberts (2006) model and will be summarized as such.

*Exposure* is when learners would develop an awareness of the phenomenon (Steinaker & Bell, as cited in Roberts, 2006). The primary subtheme related to exposure was global awareness. Speaking of global awareness, Charles said, "I need them [students] to understand that agriculture is an integrated global system." Nancy added that, "More than anything it keeps them [students] helping them see how everything links to everything." Later, she added, "We bring a fresh set of eyes and minds too saying why do we do it this way? Why have we never done it this way? It's a way of looking at problems." Nathan viewed international educational experiences as a continuum. He said, "...this concept of international being a spectrum. There's places to get in and onramps onto that spectrum all along the spectrum. Every one of us I look at as being on a journey." Finally, Mary said, "Bringing international students into our classroom it provides an opportunity for students to begin to see exposure with the students who are bringing a different culture and different lifestyle and different perspective into the classroom."

Another intended outcome is *participation*. Participation is when learners would physically interact with the phenomenon (Steinaker & Bell, as cited in Roberts, 2006). Examples of participation level outcomes were applying theory to practice, providing on roads for students and recruitment. When speaking of applying theory to practice, Kevin said, "So, I try to give them [students] real experiences so when they graduate they can contribute if they chose to work

internationally.” Several examples of providing on roads for students to engage with international dimensions cropped up. One area of this was seen in an emphasis on a greater capacity for study abroad programs at many institutions. This appeared, in some instances, as an end in and of itself. Speaking about study abroad programs, Mary said, “...push at the college level is to have by 2020, 20 percent of our students who are graduating undergraduate participating in some type of international experience.” About the same topic, Carl added, “We’ve been investing in this for probably about 15 years very aggressively. We moved from 40 students a year to 400 so we’re making progress.” Finally, another area of participation is when participants spoke about providing more chances for more encounters with more global content. On the topic, Nathan said,

how do we provide as many and as varied on-ramps as possible for students as you know in [state]. Many who may come to campus from rural areas may have very limited experience or opportunities to be engaged in relationships with people from different races and different ethnicities.

A final participation level example intended outcome is recruitment. On recruitment, Charles said, “Global helps me recruit...[We help students see] you’re going to be in demand across the world.... And we’re going to give you an opportunity to change the world.”

If the intended outcome is *identification*, participants would become involved with the experience affectively (Steinaker & Bell, as cited in Roberts, 2006). One key example of an identification level intended outcome was empathy. About empathy, Charles said, “We’re developing empathy for English Language Learners.” Kevin added, “... to give the students some perspective outside of their tiny little fishbowl that they live in here in [town]. It’s all about perspective and giving students an opportunity to see the world.”

Moving up the continuum, if the intended outcome is *internalization*, the experience would change the life-style of the learner (Steinaker & Bell, as cited in Roberts, 2006). The primary example of this intended outcome came through participants talking about the demand for global learners from industry. When speaking of meeting industry demands, Kevin said,

I mean students need to do something that they can put on their vitae other than I graduated high school, went to college, and I got a degree in international development. You know I get e-mails, I had some yesterday, that people want students with experiences or internships or had spent time at another country. And you know if we’re trying to help students meet this goal, then we need to help give them these experiences.

On the same topic, Carl added,

... the student has to be better at working with diverse groups in the workplace so they’ve already been exposed to other cultures and maybe have the experience of being a minority in another country so then they interact differently with teams of diverse members.... They [students] tend to be better able to think outside of the box.

The final point on the continuum is *dissemination*. The intended outcome at the dissemination level is that the learner would share the phenomenon with others (Steinaker & Bell, as cited in Roberts, 2006). Several participants stated they wanted international educational experiences to be *life changing*. Mary said after her students participated in a medium term international travel experience, “They realize the world is not as big as they originally thought.” Later she added, “So, it’s very life changing for our students. Because many times when they travel when we take them abroad or they travel abroad it may be the first time that they’ve left the state let alone their country.”

### Conclusions / Recommendations / Implications

The scope and dimensions of international educational experiences currently being offered to students of agricultural leadership, education, extension, and communication vary widely. These

experiences were: curricular experiences which varied based on structure and in-class experiences; seminars; interactions with international students; co-curricular and extracurricular activities which varied based on Greek life, clubs, and hosting high school students; and international travel which had examples that varied widely and was loosely categorized as short and medium term travel and long term travel. Overall outcomes for students who are the intended audience for these international educational experiences, categorized into five domains framed by Roberts' (2006) conceptual model, were: global awareness at the exposure level; applying theory to practice, providing on roads for students and recruitment at the participation level; empathy at the identification level; meeting demand for global learners from industry at the internalization level; and *life changing* at the dissemination level.

Practitioners may begin incorporating international dimensions into programming at various levels. Instructors seeking a relatively easy way to begin offering an international perspective to curricula may find some of the more abstract, short duration experiences, such as inviting a guest speaker or introducing an article from an international journal, a good place to start. Seasoned practitioners may seek more advanced programming to offer students, such as offering short term research projects or internships abroad. Second, educators may consider seeking one of the myriad opportunities for professional development with an international focus. Instructors who are able to speak candidly about international dimensions in agriculture provide a relevancy and dimension to the classroom which students may demand. International travel or simply staying abreast of current world events may be a good place to start. Third, departments may consider organizing themselves in such a way so as to offer a strategic series of international educational experiences for their students, and not simply rely on the devotions of a few passionate faculty members to meet the ends of globalizing a student's experience. Irani et al. (2005) found the perception of barriers to be inversely related to intent to participate in international activities. Perhaps findings from this study may guide strategic and sequential programming focused on reducing perceived barriers which may yield greater participation in international activities. Finally, specific attention should be given to preservice teacher preparation. Foster et al. (2014) found preservice agriscience teachers had sustained changes in perceived knowledge, skills and dispositions related to global competencies following a short term international trip and corresponding coursework. Preservice teachers with globalized perspectives are well positioned to influence future school based agriscience classrooms with an international perspective, and will further perpetuate a globally competent society.

Future research should identify common antecedents to students who participated in short and medium term international travel. This may be done through focus group or personal interviews. Student antecedents have been found to affect students' willingness to engage with international experiences (Bunch et al., 2013). Understanding common antecedents to participating in study abroad programs may help guide early interventions beginning possibly as early as elementary school. Secondly, a study should be conducted using a causative-correlational or experimental design to measure the predictability of students choosing to become more involved with more advanced international programming, such as study abroad program, if less advanced programming, such as participation in a series of seminars, is a precursor. Finally, departments may consider incorporate a common scale to measure global mindedness and cultural awareness. Several scales currently exist such as the Cultural Intelligence Scale (Cultural Intelligence Center, 2014) and may be used to identify practices which individually, or used in tandem, may increase student's collective score.

Conceptualizing international educational experiences as existing on a continuum of less to greater involvement may prove useful. The Roberts' (2006) model serves as a framework for four possible contextual dimensions of an international educational experience. Offering a series of strategic interventions based on a continuum to students beginning in their freshman year, or earlier, may help departments of agricultural leadership, education, extension, and communication

across the nation meet the demands for developing students with an international perspective and meet industry demands as indicated in the National Research Council's (2009) report.

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