# Impacts of a Faculty Abroad Experience on Teaching Style and Technology Use in a College of Agriculture and Life Sciences

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## Abstract

*Faculty abroad programs are becoming a popular method to provide faculty in colleges of agriculture with international experiences so they may internationalize their curricula. These programs also serve to provide experiential faculty development opportunities. Eight faculty members from Texas A&M University participated in a faculty abroad experience in Trinidad and Tobago and developed instructional materials using technology. Pre-reflective and reflective interview responses were qualitatively analyzed to determine the impact of this experience on participants' teaching style and technology usage. The comparison of the pre-reflective and reflective data sets indicated participants perceived impact on teaching style, specifically in relation to their curriculum content and use of global connections as it pertained to their discipline and global relationships with native counterparts. Many participants were already using technology in the classroom prior to the international experience. As a result of the experience, the level of their technology usage increased as they incorporated media, such as audio and video, to communicate their experiences and create context for their lessons. It was concluded that teaching style, technology usage, and excitement for teaching were renewed as a result of an international experience. Future studies should be conducted to compare these findings with similar faculty abroad experiences.*

Keywords: reusable learning objects, faculty abroad, teaching style, technology use

International experiences have become an integral component of high impact educational practices (Kuh, 2008). Higher education institutions are encouraging professors to internationalize their curricula and provide study abroad opportunities for their students so they will be more knowledgeable and marketable when entering the workforce (NAFSA: Association of International Educators, 2011). Zhai and Scheer (2004) found a "strong relationship between global perspectives and attitudes toward diversity" (p. 49) and stressed the importance of the incorporation of these aspects into student development. Moore, Ingram, and Dhital (1996) conducted a study with both agriculture and non-agriculture students regarding knowledge of international agriculture; they concluded that "future curriculum internationalizing thrusts should give greater attention to world agriculture and

related issues" (p. 22).

Acker and Taylor (2000) wrote, "The international experience of faculty is an important cornerstone of globalized student learning environments" (p. 18). While it would be ideal for every faculty member to have an international experience to aid in the globalization of the student learning environment, that is not possible in many situations. In fact, Navarro and Edwards (2008) found that "faculty view internationalization as a mutually exclusive alternative to other efforts" (p. 79) and, "because of this, it is important to present internationalization as…a *process* embedded in all programs and a necessary ingredient in everything faculty do…" (p. 79). Faculty abroad experiences prepare faculty to share their experiences with students and various audiences; they provide a means for the discovery of multicultural and content-related issues

that can be incorporated into their curriculum (Dooley & Rouse, 2009).

In addition to globalizing curricula, Hand, Ricketts, and Bruening (2007) indicated that faculty abroad experiences are an increasingly common option for faculty professional development. Faculty abroad experiences are designed to "improve professional development and increase international perspectives of faculty" (Hand et al., 2007, p. 399). These experiences also provide a means for transnational collaboration and relationship building for research projects (Dooley, Dooley, & Carranza, 2008). While some faculty abroad experiences have been specifically targeted toward new faculty members, others have provided opportunities for distinguished faculty members.

Research has been conducted to identify the characteristics of distinguished faculty members; for the purpose of this study, the following studies were used to identify and characterize the participating faculty members. Wilson, Dienst, and Watson (1973) completed a quantitative study on colleague perceptions of effective faculty members based on five scales: (a) research activity and recognition, (b) participation in the academic community, (c) intellectual breadth, (d) relations with students, and (e) concern for teaching. Students were also polled based on five components that centered on the faculty member's teaching and interpersonal relation skills. Similar studies have been conducted to identify the characteristics of distinguished faculty (Skelton, 2009; Stephenson, 2001; Subkoviak & Levin, 1974), and a consensus was found, in varying degrees, in exemplary research, teaching, and service to the university. Skelton (2009) argued that exemplary teaching also includes the educator's ability to execute educational values in the face of adversity, recast excellence, generate an open culture, and integrate different aspects of academic practice. Regardless of the definition used to define distinguished faculty or the characteristics that are associated with that definition, concern for developing students and continuous improvement in teaching was reported.

Excellent teachers are often also excellent learners. Participation in professional development workshops provides opportunities for renewal and innovation. Most university faculty members have no pedagogy or instructional technology training. Traditional teaching methods (e.g., lecture using the chalk board) are still prevalent approaches (Borich, 1980; Kirby, Waldvogel, & Overton, 1998; Rocca, 2010), and Rocca (2010) found that there are developmental strides that can be taken with faculty members in both instructional activities and educational technology. Areas for improvement included: (a) using alternative teaching methods, (b) creating and editing digital videos, (c) using interactive teaching tools, (d) using multimedia tools, (e) using Internet discussion groups, and (f) utilizing video conferencing technology. Professionals in andragogy advocate experiential learning techniques to acquire such knowledge. Knowles (1994), an andragogy professional, identified four main principles in knowledge acquisition: (a) adults need to be active participants in all aspects of their learning activities, (b) experience is the best teacher for adults, (c) immediate relevance is the key driving force for an adult's need to know, and (d) adults are more interested in problem-based education rather than traditional, content-based education.

Faculty members teach and advise students while conducting research and seeking funding for their programs. In addition to these, there are other identified intellectual and personal characteristics that may impede a faculty member's participation in professional development programs, such as "reluctance and/or active resistance to change," and "feelings of exhaustion or burnout" (Caffarella & Zinn, 1999, p. 248). Seldin (2008) discussed the epidemic of "tired" faculty, faculty that have lost motivation due to redundancy and complacency. He found that, among other things, successful institutions teach faculty new skills, facilitate classroom innovation, stimulate interdisciplinary or team teaching, and support faculty exchanges to combat complacency and promote classroom and personal invigoration. In combining the aspects of faculty development needs and adult education, a seemingly perfect faculty development program is an international experience in the form of a faculty abroad.

Dooley et al. (2008) found that faculty who participated in a faculty abroad experience in Mexico believed that transnational collaboration was much easier, personal relationships make

research collaboration and future abroad programs less difficult, and a greater sense of appreciation was gained for diversity and culture as a result of the international experience. The faculty participating in the abroad experience in Mexico noted that they found "personal growth and renewal" and "use their international experiences to expand their curriculum through incorporating their own stories and experiences into their lessons" (Dooley & Rouse, 2009, p. 55). Participants also reported impact of their international experience on their research; they were much more open in their funding searches, grant writing, collaboration choices, publishing opportunities, and efforts to involve graduate students in international experiences.

Professional development for distinguished faculty that participate in international experiences may also be seen through the use of technologies and teaching methods that they may not typically use to prepare a lecture to communicate their experiences with students and peers (Dooley & Rouse, 2009; Gouldthorpe, Harder, Roberts, & Stedman, 2012). Participants on a faculty abroad program in Ecuador were found to be interested in incorporating their experience into the classroom by creating case studies and RLOs (Gouldthorpe et al., 2012). By definition, reusable learning objects (RLOs) are self-contained, digital learning activities that contain a learning objective, media, and an assessment (Laverde, Cifuentes, & Rodriguez, 2007; Gouldthorpe et al., 2012). Media may include "text, web sites, charts, maps, models, PowerPoint presentations, photos, case studies, simulations, video clips, and audio clips" (Gouldthorpe et al., 2012, p. 18). The use of international experiences to create classroom content provides many opportunities for faculty members to use new and unique technologies and teaching methods.

This study supports three research priorities of the National Research Agenda for the American Association for Agricultural Education (Doerfert, 2011): "Priority 3: Sufficient Scientific and Professional Workforce That Addresses the Challenges of the 21$^{st}$ Century" (p. 9); "Priority 4: Meaningful, Engaged Learning in All Environments" (p. 9); and "Priority 5: Efficient and Effective Agricultural Education Programs" (p.10). Studying the distinguished faculty's

knowledge gain and their creation of globalized course materials allowed for the identification of strategies for educators to create meaningful, integrated, and global learning environments so that agricultural education programs may be made more efficient and effective. These strategies will allow educators to create a workforce that can address global challenges.

## Background for the Study and Theoretical Framework

The international experience under investigation in this study was made possible through a USDA Higher Education Challenge Grant that was awarded to faculty at the University of Florida, the University of Georgia, and Texas A&M University. Three faculty abroad experiences were funded as a part of this grant and each was led by a separate university. The purpose of the grant was to allow the participating faculty to develop reusable learning objects (RLOs) to internationalize their undergraduate curricula. An open access repository for the RLOs was created and the materials were then added. The purpose of the repository for the RLOs was to allow the material collected to be used by any educator that felt the content was applicable to their instruction.

The project under investigation purposely included distinguished faculty who are known for their contributions to their respective content area, dedication to their students, and effort to stay current with teaching methods. Faculty participants were exposed to their own areas of expertise and similar experts in Trinidad and Tobago during their visit. Participants were able to observe classes, discuss research, participate in field trips, and experience the local culture.

The theoretical framework for this study was based upon Kolb's Experiential Learning Model (1984). The notion that university faculty members are part of a learning community was an important dimension. Each faculty participant has expertise in a particular discipline, but may not personally take the time for reflection and metacognition within a learning community. An experiential activity (Lamm et al., 2011) in which faculty are provided a structured learning experience away from their daily schedule can encourage reflection and metacognition. Faculty

participants in the Trinidad and Tobago Faculty Abroad Program were provided concrete experiences with reflective observation in a new and diverse setting. Agricultural field trips and interaction with faculty at a foreign university allowed for active experimentation. As a result, audio, video, graphic, and textual information was gathered. After this experience, the faculty created instructional materials using technology to create stand-alone lessons that were contextually and culturally rich to bring back to the classroom (abstract conceptualization).

Knobloch (2003) further described that in authentic learning, disciplined inquiry (i.e., the engagement in a prior knowledge base through substantive conversation) may be attained through experiential learning techniques. These techniques could include "learning in context, learning by doing, learning through projects, and learning by using knowledge through solving problems and explaining the knowledge" (p. 30). The faculty participants were provided the opportunity to be engaged with their prior knowledge base of information from their discipline area; they were also able to learn international and cross-cultural aspects of their discipline area by engaging with the faculty in Trinidad and Tobago, working with them on field trips, and explaining differences in discipline practices to both faculty and students at University of the West Indies, St. Augustine. In turn, faculty were able to learn teaching techniques and technology use techniques from University of the West Indies, St. Augustine faculty and from other participating faculty during the Trinidad and Tobago Faculty Abroad Program. This variety of observation, experience, reflection, and conceptualization opportunities culminated in a rich, experientially-based program for the faculty participants.

## Purpose and Objectives

The purpose of this study was to gain an understanding of how distinguished faculty interpreted their knowledge gain during an experientially-based faculty abroad program where they created globalized course materials in the form of reusable learning objects. The research objective was to identify changes in the participants' teaching style and technology use after the international experience based on differences in pre-reflective and reflective responses.

## Methodology

The methodology that facilitated this study was qualitative and utilized the reflection process as an integral part of data collection. Pre-reflection, or preflection, as indicated by Jones and Bjelland (2004), is the process by which individuals critically think about an experience they are to have, thereby increasing their awareness to the expectations of the experience and their ability to critically reflect on the experience

> After the experience there occurs a processing phase: this is the area of reflection. Reflection is an important human activity in which people recapture their experience, think about it, mull it over and evaluate it. Reflection in the context of learning is a generic term for those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to new understandings and appreciations. (Boud, Keogh, & Walker, 1985, p. 19)

A qualitative interview protocol was designed to guide the researchers in the collection of the perceptions and opinions of distinguished faculty regarding their teaching style and technology usage. It was used to collect data in the pre-reflection interview, before the faculty participated in the experience, and in the reflection interview when they returned. The questions were framed from information found in the literature review. The interview protocol developed for this design was based on a semistructured interview model (Merriam, 2009). This model indicated that there are a guided set of questions and issues to be explored, but the exact wording and the order of the questions were not predetermined. The interview protocol consisted of open-ended questions about reusable learning objects, teaching, global impact, technology usage, and teamwork. This paper was focused on the findings related to teaching and technology usage. Data were compiled into respective domains and subareas were created as they emerged from the data. Due to the naturalistic nature of this study, the researchers were al-

lowed to ask follow-up and probing questions to clarify information that was provided by the participants; time was allowed for participants to make additional comments in order to record thoughts each participant viewed as important that may not have been asked directly. The duration of each interview was dependent on the length and depth of each participant's responses; in general, the duration was between 45 minutes and 90 minutes.

The respondents represented a criterion-type purposive sample. A criterion-type purposive sample is attained by selecting individuals that meet an indicated criterion (Patton, 2002). The participants were selected based upon five of the identified characteristics of distinguished faculty identified in the literature: participants utilized inquiry-based teaching approaches, were active participants in their students' educational endeavors, were active researchers, attended workshops to become better educators, and were recognized as excellent educators by their peers. These criterions were documented in each faculty participant through teaching and advising recognition, attendance and participation at conferences in their respective fields, involvement in cross-disciplinary research and/or conferences, and reputation with students and faculty.

Participants were initially approached to participate in the study during one of the participant pre-departure meetings. All eight individuals were contacted and chose to participate. The pre-reflective interviews were conducted in person; field notes were taken by two researchers. In an effort to ensure confidentiality, participants were coded as R2-R9. One of the researchers accompanied the faculty participants to Trinidad and Tobago. The researcher traveled with the faculty, assisted them with information/media collection, and kept a daily observation and reflexive journal. Reflective interviews were conducted by the researchers one week after the return of the participants. The researchers conducted a debriefing session following each pre-reflection and reflection interview to compare notes, thoughts, and ideas and verify the accuracy of the original data. Interview notes were then combined by the researchers into one working set of data, removing any duplicate notes to create a final data set.

To meet the specified objectives of the study, the data were analyzed using the constant comparative method. Glaser and Strauss (1967) described the constant comparative method in four stages: (a) comparing incidents applicable to each category, (b) integrating categories and their properties, (c) delimiting the theory, and (d) writing the theory. In accordance with this theory, we explored the data and discovered common themes among the transcriptions. The data were unitized into meaningful words and/or phrases. As the units created common ideas and concepts emerged as major themes, they were categorized and reported as the impacts of the international experience on the teaching style and technology usage of distinguished faculty members.

The rigor of qualitative inquiry is established through trustworthiness (Lincoln & Guba, 1985). Trustworthiness of the findings is created through the concepts of credibility, transferability, dependability, and confirmability. To ensure trustworthiness, credibility was established through persistent observation, referential adequacy, and peer debriefing by the researchers (Erlandson, Harris, Skipper & Allen, 1993); transferability was established through the use of purposive sampling and participant quotes (Erlandson et al., 1993); and dependability was established through the use of a dependability audit and a reflexive journal (Erlandson et al., 1993). The data were coded before the reporting process began and the codes were included in parentheses after their respective quotations in an effort to ensure dependability and confirmability as part of an audit trail.

## Results

### Pre-reflective categories

Three themes emerged from the pre-reflective question regarding participants' self-perceived teaching styles. The themes included traditional style, interactive style, and a hybrid style. Half of the respondents acknowledged that their teaching style was currently centered in a *traditional* lecture-type presentation (R2, R3, R4, R8). The respondents indicated that the course content, many times, dictates what style will be used. "I am basically more of a lecturer because most my courses are based on infor-

mation delivery. [My style is] traditional, even though I know it is not the best" (R3). The level and maturity of the students is a factor in the teaching style that may be used. "I use lectures with my undergraduates and discussion with my graduates" (R6). Lack of familiarity and lack of experience with a course are also reasons that a more traditional teaching style may be used. Respondents expressed that familiarity and experience with a course "helps in the anticipation of students' needs and questions" (R8) and has resulted in "progressively removing text from PowerPoint" (R2) and utilizing more interactive styles of teaching.

Some participants reported that they were in the process of changing to an *interactive style* of teaching, a style that is more discussion-based and allows the students to have a voice and opinions in the course content. Some respondents reported already consistently utilizing it in the classroom (R5, R6, R7). Traditional presentation software was reported as leaving "students uninspired" (R8). Through the use of discussions, "provoking" (R6), and the Socratic Method, the respondents shared that they are becoming more creative in the classroom to get the students to process information at a higher level. "I like discussion and I like arguing with my students. It is challenging to the students and to me" (R7). This type of teaching style allows the students to "share various views and opinions and receive formative feedback" (R5).

The third teaching style that emerged was a *hybrid* style of teaching (R2-R9). This style was identified as a combination of the traditional and interactive styles and included teaching concepts such as gaming, activities, and Internet usage for both educational platforms and media sources. The responses in this style indicated engagement in a multitude of learning styles in the learning process. All of the respondents revealed signs of inclusion of this style and some even indicated a dominant migration to this style. "I hope my teaching style is for a multitude of learning styles. I use lecture, collaborative learning, active learning, reading, writing, kinesthetic, and visual aspects" (R9).

Seven themes emerged regarding the participants' use of technology in the classroom. Each of the participants use, or have used, a *presentation software* (R2-R9), such as elements of Pow-

erPoint, Camtasia, and Adobe to facilitate their course lectures, or even to provide supplemental instructional materials for difficult tasks. "I have the teaching assistant use Camtasia to voiceover a computer display to explain how to use our lab software" (R4). The incorporation of *media* (R2, R3, R5, R6, R7, R9), such as audio, video, and pictures, was reported as a popular option to exemplify a subject matter, and/or provide a topic of discussion to a classroom. "My teaching style is dynamic because I use pictures and videos" (R2). Although it is "hard to create your own video" (R3), media can "put things into context" (R6) for the intended audience.

The use of the *Internet* (R2, R3, R5, R6, R7, R8, R9) and the available informational websites and social media tools was reported as "absolutely powerful, and engaging students in searching for their questions is powerful" (R8). Many classes were reported to have individual websites for their students. "Even for a face-to-face class, you need a comprehensive website; it is a place for the archival of photos, ePortfolios, etc." (R3). Five of the respondents (R2, R5, R6, R7, R9) directly mentioned the use of the Internet to tap into social media sites, such as YouTube, Twitter, Facebook, and Second Life. YouTube was reported to be used for its wealth of video clips of movies and television shows, and instructional and educational videos. Twitter and Facebook were reported to be useful for the ability to communicate with the students. Second Life was reported to be useful for the ability to have a virtual classroom and/or virtual experience. The social media aspect of the Internet was shared as being extremely popular and growing in use, making it an easy means to engage students.

Another aspect of technology usage shared related to *distance education platforms and conferencing techniques*, such as learning management systems (i. e., Blackboard and Moodle) and Centra. "I have designed and taught web based or web assisted classes and have routinely stuck with it" (R3). Six of the respondents (R2, R3, R4, R5, R7, R8) reported using some type of distance education platform "to deliver content, turn in papers, return grades," (R5) "administer quizzes, and hold discussions" (R7).

Additional technologies that were reported as being used by respondents included *student*

*response clickers* (R2, R3, R7), *eTextbooks* (R5), and, depending on the nature of the course being taught, *technical lab technologies* (R4). Student response clickers were shared as an easy way for professors to get an immediate assessment of the students' understanding or opinions on a subject, while providing the students with some level of anonymity. "Clickers in the ethics class were very powerful" (R3). However, they were reported as not being used regularly by the respondents because they are "labor intensive to get into the classroom and get set up" (R7). One respondent reported recently moving to an eTextbook this year, and another respondent shared that they instruct technical labs where discipline related technologies are used.

### Reflective categories

Once the participants returned from the experiential international experience, they were asked if and how the experience had impacted their teaching style. Four themes emerged: no direct change, change in their curriculum content, direct change, and study-related global connections. Respondents R2, R3, R5, R6, R7, and R8 indicated that the experience made *no direct change* to their teaching style. Respondents R3 elaborated that the international experience and RLO creation process did not change their teaching style, but their teaching style was evident in their RLO materials. "My teaching style will not be affected, but my teaching style is reflected in my RLO" (R3). Although no direct change may have been made to their teaching styles, R2, R4, and R7 indicated that the experience made a *direct impact* on their curriculum content. "I am going to incorporate a new section on immigrant issues into my curriculum" (R6). Respondent R2 stated, "It would be ideal if I could use more RLOs with my [regular] content." Although the RLOs were found to be beneficial by the respondents, the role of the RLO (as the lesson versus a lesson enhancement) in course content is uncertain. "If I were to use it cold, I don't know how it would help in my class. Is it the cake or the icing?" (R6).

In contrast, respondents R5 and R9 said that the experience had *changed* their teaching style. "When I try to convey what I learned about in Trinidad and Tobago, my teaching style will

change to address the topic" (R9). Respondent R5 indicated that media will now play a larger role when teaching. "[The experience] will impact my teaching style. I will have more pictures, videos, and audio. Action speaks louder than words" (R5). One major theme that emerged was that, as a result of this experience, five of the respondents (R2, R4, R6, R7, R8) were going to make an effort to make *global connections* when teaching. "I am always trying to bring my [international] experiences to my classes" (R6). Respondent R7 further explained, "It will provide students with a different perception" (R7). Respondent R7 also spoke to making global connections by showing students the impact that a policy could have in the United States versus another nation. Global connections were further described by respondent R4 in terms of involving graduate students in research. "A graduate student is interested in mangrove forests in Texas; she is now [after we discussed my experience] interested in doing a comparison of biomass research project" (R4).

In review of the responses related to the perceived impact of the international experience on the participants' technology usage, two themes emerged. Participants indicated that they will more readily use media as context and use media in a more formal and intentional manner. The incorporation of *media as context* into lessons was indicated by every respondent. "I keep coming back to the idea of context; video clips and pictures provide context. [RLOs] bring some salience, vividness, context, and a frame of reference for the learner" (R6). All of the respondents were using various media options before the international experience, but after the experience, the respondents indicated an intention to use more advanced or a combination of multiple media options in order to provide their students with the context of their lessons in Trinidad and Tobago. Respondent R4 interviewed professionals in remote sensing, forest ecology, life sciences, and a graduate student studying life sciences. He intends to "combine concept slides with images and the video interviews" to provide context for the students. Respondent R7 communicated that interviews could come from multiple sources and the RLO could contain a variety of media types (i.e., video, audio, and photographs) to engage the students in critical

thinking.

The second theme that emerged in response to technology usage was the idea that the usage of their acquired media would be more *formal and intentional* (R2-R9) than the media they used before. Each of the respondents spoke about sharing their experiences with their classes and how "the students will appreciate that it is something that I experienced" (R2). It was shared that many times, pictures and videos clips that are used in classes are found on websites or borrowed from someone else; there is no personal experience or passion associated with the content. "I will be more organized and intentional in the use of the examples. I feel more comfortable presenting the information to students because it is a genuine experience" (R5). "The impacts [the RLOs] have will be largely dictated by the passion I show. Now that I have seen it and been there, it will be better" (R3). Sharing personal experiences "makes stories come alive; it adds the adrenaline and the color to the stories" (R6). Respondent R2 elaborated that this experience provided "an awareness of the [RLO creation] process and what else I could gain out of international trips. It will change the way I collect materials when I travel."

## Conclusions, Recommendations, and Implications

Faculty participants engaged in the Trinidad and Tobago Faculty Abroad experience were asked to describe their teaching style and technology usage before the experience. They were observed by a researcher during the experience and when they returned, they were asked to identify the impacts the experience made on both their teaching style and technology usage. The participants initially identified themselves as having one of three styles: a traditional, lecture-based style; an interactive, discussion-based style; or a combination of the two styles. The faculty that identified with the traditional style acknowledged that this style was not the best, and indicated they were either progressively changing to a more interactive style, or were more inclined to use it as a result of the nature of the content they deliver. After the international experience, two of the participants felt that the experience impacted their teaching style while

the remaining six felt that it had not. The participants indicated the experience impacted their curricula content and their desire to make global connections in their discipline areas; the faculty members engaged in the four learning styles as described by Kolb (1984) to process their experiences.

Considering the results of the data, it can be concluded that, although distinguished faculty may need training with educational technology (Borich, 1980; Kirby et al., 1998; Rocca, 2010), they continue to have a desire to engage the increasingly technologically savvy students (Skelton, 2009; Stephenson, 2001). The participants' technology usage in the classroom included presentation software, media, the Internet and social media, distance education programs, student assessment clickers, and more technical technologies, such as discipline-dependent laboratory technologies and eTextbooks. The very nature and expectations of this experientially-based program had an impact on the technology usage of the participants. In an effort to improve global connections, the participants reflected the four stages of Kolb's (1984) experiential learning model as they reported using their acquired media from the international experience to create context in their lessons (abstract conceptualization and active experimentation), and also using it in a more formal and intentional way as to share their experiences and passions from the program (concrete experience, reflective observation, abstract conceptualization, and active experimentation).

Due to the purposive sampling criteria, one would expect distinguished faculty to be accomplished in their teaching methods (Wilson et al., 1973; Subkoviak & Levin, 1974; Skelton, 2009; Stephenson, 2001) and thus not have a major change in teaching style. However, the results of this study indicate that the faculty abroad experience did cause faculty to reflect about their teaching (abstract conceptualization; Kolb, 1984). It can be concluded that the Trinidad and Tobago Faculty Abroad experience, due to the experiential nature of the program and the distinguished level of the faculty, had an impact on the overall quality of the participants' curricula with the inclusion of global dimensions and the quality of technology usage in the classroom.

It is critical that professional development

programs target the needs of specific faculty groups (Bland & Risbey, 2006). As a result of this faculty abroad experience, it is recommended that distinguished faculty be sought out as a specific faculty group (Bland & Risbey, 2006) and included in faculty abroad and similar programs to rejuvenate and globalize their classroom curricula (Dooley et al., 2008; Dooley & Rouse, 2009). Distinguished faculty are usually tenured and promoted and thus have different demands on their time. This group may also resist change (Caffarella & Zinn, 1999) in professional development because it is assumed that they are already accomplished in teaching and research (Skelton, 2009; Stephenson, 2001; Subkoviak & Levin, 1974; Wilson et al., 1973). Results of this research revealed that an international experience that is captured using technology can allow distinguished faculty to use a new lens for their content delivery, a global lens. This type of experience also provides participants with more meaningful and relevant technology opportunities for their content delivery.

The impact of an international experience on the teaching style and technology usage of distinguished faculty in agriculture has implications for faculty development techniques and faculty abroad programs. The findings of Seldin (2008) suggested that successful institutions support faculty exchanges to combat complacency and promote classroom and personal invigoration. The findings of this study suggested the same in that the faculty participants gained technological skills, ideas for content delivery in the classroom, and were excited about the information and context they are now able to provide to their students. The findings of this study also aligned with the findings of Dooley et al. (2008) and Dooley and Rouse (2009) as the faculty were excited to share their experience with their students, and made intra-institutional and international connections for future research collaboration. In the area of educational technology, the five areas that need to be targeted, as per Rocca (2010), were: (a) creating and editing digital videos, (b) using interactive teaching tools, (c) using multimedia tools, (d) using Internet discussion groups, and (e) utilizing video conferencing technology. As a result of the experi-

ence, faculty participants created interactive teaching tools and increased their skills in creating and editing of digital videos, and using multimedia tools. It is suggested that follow-up discussions with the international faculty and students be held using Internet discussion groups and video conferencing technology to fulfill the last of the five educational technology areas for improvement identified by Rocca (2010). Institutions and programs that support activities for more experienced faculty, such as this faculty abroad experience, can generate a positive impact on the curricula that is being presented to students while simultaneously decreasing faculty complacency.

Considering the results of this study, there are implications for agricultural education in the context of the broad area of professional development and curricula development. Professional development programs for faculty can be unorthodox and rich in nature, but should also be intentional in their programming. Programs for the faculty were identified based on their individual fields of study, networking within their fields of study, and interest areas. Thus, individuation of programming efforts is critical to bring about the results articulated in this study. Another implication revealed by one respondent combined professional development programs (or even personal travel) with curricula development. One of the respondents expanded on the idea that this experience gave him/her ideas as to how to better collect educational content for his/her curricula during travels. Educational content can be gathered in most any context and RLOs are merely a method to organize and deliver a lesson and an experience to others; there may be other ways to take advantage of travel opportunities to incorporate relevant issues into course curricula.

This study was limited to the Texas A&M University participants engaged in the 2011 Trinidad and Tobago Faculty Abroad experience. Given that this experience was part of a larger grant project; a comparison of all three international experiences supported by the grant would be beneficial in order to provide further evidence in regard to impact on teaching style and technology usage among participants.

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