Barriers to International Experiential Participation

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Abstract
Does “preflection,” as proposed by Jones and Bjelland (2004), enhance student participation in international experiential activities? Students’ experiences and barriers to participation in international research settings was studied through multiple, natural resource, field day demonstrations in south Texas and northeastern Mexico. Students observed experts from Mexico and Texas demonstrate 1) soil and water conservation practices, 2) brush control, 3) grassland restoration, and 4) wildlife management techniques used on several border region ranches. Undergraduates also studied economic, social, and cultural issues in a border-region colonia. Prior to the field days, students participated in preflection exercises to benchmark their cultural awareness of Mexico, its agricultural and socioeconomic systems, and their own internal and external barriers that prohibited previous participation in international experiential situations. Following the field days, students participated in post-experience reflection exercises to compare their initial beliefs to actual experiences.

Respondents had primarily negative, stereotypical attitudes toward Mexico and Mexican agriculture prior to the field days. They expressed concerns about personal safety, language and financial barriers, and missing their families as reasons for not participating in international experiential activities. Following the Texas-Mexico field days, students’ initial attitudes were changed to positive, progressive beliefs about Mexico and its agricultural systems. Post-experience barriers remained largely unchanged; language and personal safety issues were primary reasons for not participating in future long-term international experiences. However, a few students noted a willingness to seek careers internationally. Identification of these beliefs and barriers helped administrators make programmatic changes to the Texas-Mexico experience.

Keywords: Barriers, Border Issues, Culture, Experiential Education, Students

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Introduction

The responsibility to internationalize educational curricula has become a recurring topic over the last 30 years. Before the early 1970s, no references to international study in agricultural education were found. However, since that time, agricultural education has recognized global networks and adopted international components in its educational programs. The primary reason for the existence of colleges of agriculture is to provide quality education as a foundation for lifelong learning (Acker & Scanes, 1998). The 1982 Florida Task Force (as cited in Ibezim & McCracken, 1994) found

Global education has been defined as a process that provides students and individuals with the knowledge, skills, and attitudes necessary for them to meet their responsibilities as citizens of their community, state, and nation in an increasingly interdependent and complex global society. (p. 44)

Navarro (2004) stated that university students need to learn about and experience the changing international environment to be prepared for living and competing in the dynamic workplace of an increasingly global and interdependent society.

Bruening and Frick (2004b) identified what companies want today: graduates with cross-cultural experiences and foreign language skills. Short- and long-term travel helps graduates achieve global experiences. Bruening and Frick supported the idea that learning in unfamiliar atmosphere produces clarity on global issues. Direct contact with foreign nationals balances the cultural, national, and global identifications among us. They concluded that understanding diversity helps bridge cultural gaps.

Students’ education should include development of broad thinking skills to initiate problem-solving skills. Students need to examine agriculture from a systems perspective, including social, biological and physical systems (Acker, 1999). In addition to incorporating international elements in educational curricula, Ludwig (1993) discussed the importance of including global components in extension. She found that extension personnel and faculty were positive about the addition of international perspectives in the Ohio Cooperative Extension Service.

Experiential Learning in Non-agricultural Settings

When international frameworks are adopted into educational curricula, how should they be taught? One method mentioned in past research pertains to experiential learning through global interaction and travel. The foundation for experiential learning includes becoming involved in specific experiences, reflecting on and conceptualizing those experiences, and taking active roles in experimenting with those experiences (Andreasen, 1999; Joplin, 1981; Kolb, 1984).

Hu and Kuh (2003) identified the importance of structuring both classroom and out-of-class experiences to promote diversity. They suggested more programs were needed at the undergraduate level to promote interactions and bring people together to talk and enhance the learning and personal development of those involved.

Suarez (2003) agreed that experiential learning through immersion would develop cultural sensitivity and awareness for diverse populations. Suarez recommended that educational institutions teach diversity and promote two-way exchanges. Howard, Sugarman, and Christian (2003) discussed two-way immersion as a teaching method. In their study, English and Spanish students were taught simultaneously in their own language and each other’s language. Students were encouraged to discuss their own experiences using both languages. Allowing students to use their background experiences to interact provided a positive learning environment to learn about bilingualism and multiculturalism.
Has the practice of cross-cultural interaction benefited those involved? Geelhoed, Abe, and Talbot (2003) found an unconscious need for guidance to become inter-culturally competent. According to the authors, increasing opportunities to study abroad increased students’ foreign language capabilities, cultural knowledge, international interests, concerns, and sensitivity, while they matured in their thought processes and developed unique individual characteristics.

Myles and Cheng (2003) promoted the importance of cultural mixing for critical learning. In their study, foreign nationals who embraced opportunities to communicate and interact with host nationals adapted more easily to their new environment. By making friends with host students, international students improved their foreign language skills, and their knowledge of the culture. Fewer problems arose with cultural, academic, and social adjustments after spending leisure time with host students.

**Experiential Learning in Agriculture**

Bruening and Shao (2005) supported the notion that experiential education is beneficial in international instruction. They identified five teaching methods suggested for an undergraduate international agriculture course as: a) experiential learning, b) interactions with professionals who have worked abroad, c) short-term field trips in diverse environments, d) internships, and e) long-term study abroad opportunities. Similarly, Boyd et al. (2001) explored the benefits of study abroad opportunities in the International 4-H Youth Exchange (IFYE). Participants of the IFYE reported that the program improved their language skills, helped them gain a new cultural perspective, developed meaningful relationships, changed stereotypes, and helped them make career and life decisions.

Bruening and Frick (2004b) studied the effects of an international agriculture undergraduate course on students’ abilities to interact socially and professionally. By participating in short-term field days, students increased their knowledge while learning about culture and language. Students involved in hands-on experiences in these international settings increased their problem-solving processes and critical thinking skills.

Agriculture students were positive about international learning situations (Bruening & Frick, 2004a). After their experiential learning opportunities, the students believed others should take advantage of outside classroom activities. They did, however, make it known that U.S. universities did not emphasize enough the importance of foreign language skill development. They reemphasized their beliefs that experiential opportunities retained value months after initial travel, more so than any classroom activity.

Connors (2004) investigated the educational value of international travel. FFA students reported changes in their skills, knowledge, and attitudes, and emphasized the importance of being initially prepared for the experience. The concerns of international travel, or lack of, were split evenly among participants. Overall, students were excited about increasing their knowledge through travel experiences and were not worried about traveling outside the U.S.

Williams, Lawrence, Gartin, and Smith (2002) identified the importance of international agricultural research opportunities. Such opportunities introduced students to experiences that helped shape and develop their global perspectives. The authors found that international experiences resulted in greater appreciation for the United States, strengthened awareness of world issues, improved communication skills, and alleviated misconceptions about participants’ host countries.
Barriers to Experiential Learning

Culture shock has been identified as a central barrier to participation in global opportunities (Geelhoed et al., 2003). It is important to identify other barriers that prohibit students from participating in such life-changing opportunities, considering what we know about the lasting benefits of hands-on experiences gained from international opportunities. Researchers have identified five recurrent barriers including: a) cost, b) lack of clarity, c) resistance to the unknown, d) leadership and management problems, and e) limited knowledge of opportunities (Boyd et al., 2001; Etling, Reaman, & Sawi, 1993). Zhai (2004) found that students identified academic stress, cultural differences, and language as the top three barriers preventing them from participating in global opportunities. Students mentioned other barriers such as cost, fear of social integration, homesickness, and role conflicts as factors causing their avoidance of studying internationally.

Bruening and Frick (2004a) discussed barriers to international education from the perspective of the instructor. Based on their findings, instructors in a college of agriculture cited a rigid curriculum, students’ attitudes, administrative policies, resources, and faculty knowledge and training as key barriers to implementing international content in undergraduate courses.

Role of Reflection in Experiential Learning

Reflection is an important process of experiential learning. Knowledge results from a combination of attaining experience and transforming it (Kolb, 1984). Reflection allows us to transform experiences into knowledge, forming relationships between previous and new experiences. Reflection is vital to experiential learning. It is a form of checks and balances; it is a checklist of progress.

All learning is experiential (Joplin, 1981). Anytime subject matter is learned, we form relationships between two schemas, normally connecting newly gained knowledge to previous knowledge. Hence, experience serves as a building block for new experiences. The impulse of experience gives ideas their moving force, and ideas give direction to impulse (Dewey, 1938). Lewin (Kolb, 1984) defined experiential learning as the Lewinian Experiential Theory. That is, learning occurs when concrete experience is expanded with reflection and observation, formed on abstract concepts and generalizations, and tested in new situations. This feedback loop is a continuous process occurring throughout life. Carver (1996) believed that experiential learning is holistic, encompassing thought, feeling, physical, emotional, and social aspects of individuals. It is these aspects that help define our experiences.

Educators must prepare students for international careers by teaching them about the interconnectedness we share worldwide. Education bridges communication gaps, and a diverse education encompassing global perspectives through experiential settings may create greater cultural awareness and understanding that is needed in a global community.

Purpose and Objectives

The purpose of this qualitative case study was to determine students’ experiences and barriers to participation in international research settings in south Texas and northeastern Mexico. The following objectives guided this inquiry.

1. Assess students’ pre-experience cultural awareness of Mexico, its agricultural and socioeconomic systems, and document students’ internal and external barriers that prohibited participation in international experiential situations.

2. Determine students’ post-experience cultural awareness of Mexico, its agricultural and socioeconomic systems, and record their internal and external barriers prohibiting long-
term participation in international experiential situations.

3. Compare pre- to post-experiences and reported barriers.

**Methods**

*Nature of the Field day Demonstration*

Field day demonstrations are a valuable component of the Texas-Mexico Initiative, a bi-national project designed for preparing food systems professionals to interact in dual cultures. Students self-selected to participate in one to three Texas-Mexico border field day demonstrations. Participation included ranch site discussions about key environmental issues affecting agriculturists in the border region. U.S. students observed natural resource experts from Mexico, as they demonstrated soil and water conservation practices, brush control methods, grassland restoration, and wildlife management techniques on sites near Diaz Ordaz and Piedras Negras, Mexico, and La Gloria, Eagle Pass, and McCook, Texas. Additionally, students participated in competitive field exercises (land surveying, plant identification, and beef cattle judging) with equal numbers of Mexican university students. They visited several colonias (unincorporated communities) to observe migrant living conditions in south Texas.

*Study Design*

A qualitative case study of students’ reactions and barriers to participation in international research settings was achieved by including Texas A&M University undergraduates in multiple field day demonstrations in south Texas and northeastern Mexico. Participating undergraduates (N = 50) were upper-level junior/senior class students, equal mix of females to males, predominantly Caucasian, and primarily experiencing their first trip to the border region. Due to the nature of the respondent group, caution should be exercised in generalizing the results of this study beyond similar comparative groups.

Kenny and Grotelueschen (1984) note that qualitative case studies may be characterized as detailed studies of separate cases intending to not only identify and describe phenomena, but also to contribute to the development of theory. Qualitative case studies must be looked at in their entirety to gain perspective into the subject matter. Case studies provide a rich, detailed, in-depth, and holistic description of the phenomena that has been studied, often using recognizable and non-technical language (Kenny & Grotelueschen).

Prior to field day demonstrations, students completed preflection exercises to benchmark their cultural awareness of Mexico, its agricultural and socioeconomic systems, and the internal and external barriers prohibiting previous participation in international experiential learning situations. Jones and Bjelland (2004) note that Preflection is a process of being consciously aware of the expectations associated with the learning experience…it increases the readiness capacity of students to learn from their experiences, thereby increasing their capacity to reflect upon the concrete experience and increasing the overall learning by the student. Preflection provides a bridge between thinking about an experience and actually learning from the experience. (p. 963)

Preflection exercises served to document students’ previous experiences so they could critically examine their beliefs about agricultural systems, socioeconomics, environment, and politics in an international setting.

Following the field day demonstrations, students completed post-experience reflection exercises to compare and contrast their initial beliefs with actual experiences. Brockbank and McGill (1998, as cited in Gamble, Davey, & Chan, 1999) noted that:

> Reflection may be defined as firstly, the process by which an experience is
brought into consideration, while it is happening or subsequently; and secondly, the creation of meaning and conceptualization from experience. Critical reflection may develop one’s potentiality to look at things as other than they are. (p. 2)

Post-experience reflections were used to solidify or refute the benchmarking data gathered during preflection exercises. Preflection and post-experience reflection instruments were used to collect data for this study. Both instruments contained four similar, open-ended questions, and the post-experience reflection instrument had two questions specific to measuring changes in attitude/belief. Each instrument was provided to students with the instructions that no incorrect or correct answers existed, but answers should be well thought and complete. Students had ample time (administered as take-home exercises) to complete each instrument. Preflection instruments were administered one-week prior to, and collected the morning of trip departure. Post-experience reflection instruments were administered immediately following trip return, and collected one-week later. The four similar open-ended and two post-experience reflection questions included ([ ] brackets indicate post-experience wording):

1. What are your initial [post-experience] attitudes/beliefs about visiting Mexico? Please describe your pre-trip [pre-trip] thoughts about Mexico in general, while concentrating on and describing your top five attitudes/beliefs.

2. What are your initial [post-experience] attitudes/beliefs about Mexican agricultural systems and/or practices? Please describe your thoughts in terms of your top five attitudes/beliefs about Mexican agricultural systems and/or practices.

3. What top three “internal barriers” [would] prevent you from participating in [long-term] international agricultural research or development activities [now that you have participated in the Texas-Mexico field day demonstrations]?

4. What top three “external barriers” [would] prevent you from participating in [long-term] international agricultural research or development activities [now that you have participated in the Texas-Mexico field day demonstrations]?

- [Post-experience only] Did the Texas-Mexico field day demonstrations change your initial attitudes/beliefs (about Mexico in general or Mexican agricultural systems) about participating in international agricultural development activities? Explain.

- [Post-experience only] Specifically, how did the Texas-Mexico field day demonstrations change your initial attitudes/beliefs?

Qualitative data were analyzed using inductive data analysis, specifically coding and categorizing. Coding (Spring 2005 students’ data were coded as S01, S02, etc.; Fall 2005 students’ data were coded as F01, F02, etc.) allows for the identification of information units or single pieces of stand-alone information and are interpretable in the absence of additional information. Categorizing is a process where previously coded data are organized into provisional categories based on “look alike” characteristics (Lincoln & Guba, 1985).

Results
The first objective was to assess students’ pre-experience cultural awareness of Mexico, its agricultural and socioeconomic systems, and document their internal and external barriers that prohibited participation in international experiential learning situations. Several issues surfaced from students’ preflection exercises. First, they believed they would not be accepted by
their Mexican counterparts since they were from the United States, acknowledging distinct social classes, language difficulties, and differing education levels. Most students had never traveled to the Texas-Mexico border region prior to participating in the field day demonstrations.

Second, students viewed Mexico as a place where lawlessness and corrupt government/police officials prospered. They noted issues such as poverty, a cheap labor pool, subsistence farming, substandard health/sanitary conditions, and lack of modern agricultural technologies. Third, they viewed Mexican agricultural practices as ‘old’ or ‘traditional’ compared to those in the U.S., noting inferior product quality and little or no agricultural regulations as common concerns. However, some students believed that Mexican families had stronger connections to each other, greater faith, and greater sense of community than what was evident in their own Texas hometowns. Comments indicative of the preflection exercises included:

- [Mexico] not technologically advanced; not enough research; old practices; cheap labor; and not as business savvy as American producers (F02).
- There are probably very few educationally informed farmers but rather many who simply do what’s been done all of their lives (S13).
- I don’t know much about Mexican agriculture practices. But, before going to Mexico I knew they would know a lot about farming because most of them have been farming their whole lives (F06).

Students were concerned not only about their safety, but also about their ability to communicate with the Mexican ranchers and students. They noted other barriers (lack of cultural knowledge, fear of the unknown, lifestyle changes, cost, lack of family support, and time) that prohibited them from participating in international experiences. A sample of their comments illustrating these barriers included:

- One must be able to overcome the barrier of a new culture and its general surroundings. Once must accept this new change and respect it (F17).
- A fear of the unknown. I am a little nervous about what I will experience and exactly where I will fit in the ‘big picture’ (S18).
- I wouldn’t want to be away from my family for extremely long periods of time (F13).

The second objective of the study was to determine students’ post-experience cultural awareness of Mexico, its agricultural and socioeconomic systems, and record internal and external barriers prohibiting long-term participation in international experiential learning situations. Students noted the Mexican producers and students they met were very hospitable and very willing to exchange knowledge on many levels. Students noted the collaborating universities from Mexico incorporated highly evolved technical research and had high levels of cooperation between ranchers and university student research, as indicated in the sampling of students’ comments.

- I believe that they truly have some outstanding universities who are doing highly evolved and technical research (F02).
- The field day was an eye-opener as to how business is run in the agricultural sector both in the U.S. and Mexico (F23).
- I had a great attitude about the trip initially and the great experience only reinforced my beliefs (S01).

Communication (language barriers) remained a hindrance, however, great effort from both parties helped overcome the barrier. Respondents also noted cross-cultural differences, safety concerns, health
standards, costs of participating in international experiences, and time as additional barriers prohibiting their long-term participation in international experiential learning situations.

- I still don’t believe that it is secure enough for me to ever live and raise a family there. The people we came into contact with were very generous and polite (F02).
- Adjusting to new cultures would be a barrier that may prevent me from participating in long term activities (F23).
- Being a college student, I am low on funds; my parents are uneasy about me traveling into what they would consider the unknown (S18).

The third objective was to compare pre- and post-experiences and reported barriers. Categorization of pre- and post-experience responses, augmented by analyses of the two specific post-experience only questions, produced several themes from this objective: 1) Attitudinal changes; 2) Lingering safety and language concerns; and 3) International career opportunities.

During spring and fall 2005, students’ initial beliefs of Mexico changed after crossing the border and interacting with Mexican agriculturists and students. The initial negative, stereotypical attitudes and beliefs about poverty, work ethic, and outdated agricultural practices were replaced by positive, progressive beliefs. Students viewed Mexican agriculturists and Mexicans in general, as industrious, collaborative people who maximized all available resources to improve their lives and livelihoods.

- Mexican and U.S. agriculture is VERY connected; we need Mexican products and they need U.S. products to sustain current production and demand (S22).
- I was happy with the reception of the U.S. students with the students from Mexico and the want to learn from each other and the patience to work on communicating with each other (F25).
- The program helped me change several stereotypes that I believed to be true (S15).
- They [Mexican agricultural producers] face many of same issues farmers and ranchers in the U.S. face. I also didn’t realize they had co-ops or that they don’t face the same legal restrictions we face when buying certain vaccines and medicines for livestock (F12).

Students’ initial internal and external barriers remained unchanged; however, they noted that such barriers could be easily remedied. Again, the primary focus rested on language and safety.

- I am still nervous about traveling internationally alone, and would especially be nervous to do it now while conditions are the way they are in certain countries. I would also like to learn the language and more about the culture I was visiting before traveling so I could better communicate and felt more comfortable while there (F12).
- The internal barriers that prevent me from international research is my lack of being able to speak other languages, fear of traveling to another country, and not knowing how to relate to other cultures (S07).
- I don’t know how safe I would feel for a longer period of time; standards for food and sanitation don’t seem to be the same so I would be worried about that; I probably couldn’t afford to go on a long-term trip (S05).
- I have fears about crime and disease, and my ignorance of the language/customs (S12).
A few students realized that international careers could become a reality, after having experienced the Texas-Mexico field day demonstrations. Although none made specific mention of a particular career track, some noted that they were thinking about exploring the possibility of an international career.

- *The country I would like to work for would be Brazil or I would like the Caribbean* (F23).
- *The TX-MX field day definitely made me more much more receptive to the thought of participating in international development activities* (F17).
- *I could see myself living/working there (or close to the border) someday* (S09).

**Conclusions and Implications**

What can educators do to promote cross-cultural exchanges and prepare students to live and work in a global community? Research suggests that current efforts in the internationalization of education are less than needed. More than a decade ago, Ibezim and McCracken (1994) advised educators to expand the base of interested students in study abroad opportunities. Many students in the Texas-Mexico Initiative participated in more than one field day demonstration. Their eagerness to participate was impressive, despite initial apprehension about internal barriers (primarily language and safety).

Acker (1999) discussed the importance of examining agriculture from social, biological and physical system perspectives. Participants in the Texas-Mexico Initiative received such an experience. Students discussed changes in perspectives and attitudes after having visited and experienced Mexico. Preflection exercises played a crucial role in helping students identify and later compare their perspectives, attitudes, and barriers to participation in international experiential activities. The authors recommend the continued use of preflection exercises for all international study programs.

Zhai (2004) identified cultural interaction as the underlying theme to creating cultural sensitivity and respect among students. Besides short- and long-term study abroad opportunities, academic and cultural orientation programs at host universities allow for host and foreign nationals to communicate in an informal environment. Sixty percent of the international students in Zhai’s study recommended interaction with U.S. students to remedy the discomfort and uncertainty felt in a foreign country. Likewise, students from both sides of the border took advantage of the informal settings in the field day demonstrations to lessen the communication difficulties they experienced upon initial contact.

Readers are reminded that although not necessarily representative of all college of agriculture students, those students who participated in this qualitative case study provide us with valuable insights into short-term international agricultural experiences. Students who participated in the Texas-Mexico field day demonstrations felt they were provided a quality experience that added to their foundations for lifelong learning, similar to the recommendations proposed by Acker and Scanes in 1998. Short-term travel abroad helps achieve global experience and aids students’ marketability after attaining cross-cultural experience (Bruening & Frick, 2004b). More programs, such as the Texas-Mexico Initiative, should be offered to help students gain cross-cultural experience and to challenge their stereotypical thinking that might prohibit them from future international experiential activities.
References


