Enhancing Faculty and Graduate Student Competencies for International Research and Teaching: A Case Study of Universidad Autónoma de Nuevo León, and Texas A&M University, a Mexico and United States Collaborative

James R. Lindner
Associate Professor
Texas A & M University
Agricultural Education Department
2116 TAMU
College Station, Texas 77843
979-845-2951 voice
979-458-2698 data
e-mail: j-lindner@tamu.edu

Amy Harder
Texas A & M University

Gary Wingenbach
Texas A & M University

Jeanie Long
Texas A & M University

Introduction
Stretching from sister cities, Tijuana, Mexico and San Diego, California to Matamoros, Mexico and Brownsville, Texas, the border region between Mexico and United States is both a geographically and a culturally diverse region with extensive and intensive agricultural industry. Liverman, Varady, Chávez, and Sánchez (1999) stated that “the border region is one of the most environmentally stressed areas in the world, posing many problems for both the United States and Mexico” (p. 609). These authors identified six issues contributing to the environmental degradation of the region, all of which affect agricultural production: groundwater availability, water quality, industrial hazardous wastes, agricultural hazardous wastes, air pollution, and drought and climate change.

Purpose
The purpose of this poster is to visually depict a case study of a research and teaching collaborative model between Universidad Autónoma de Nuevo León, Mexico and Texas A&M University, United States. The collaboratives were developed to address environmental issues affecting production agriculture along the Mexico/Texas border.
Major Points

- Four research projects from four Mexico/Texas collaboratives have been developed as a result of this project.
- With respect to collaboration and communications, participants had high levels of agreement with the statements: Participation in this project is beneficial to me; this project has helped me with my academic responsibilities; participation in this project facilitates exchange of ideas between universities.
- Participants had high levels of agreement with the statements, by working together with my project partners I am able to: Respond to people’s needs in the border region, implement strategies that are most likely to work in the border region; and identify new ways to solve problems.
- Project participants tended to highly agree with the statements: I believe collaborative international research is important; I appreciate my international partners’ work habits; I incorporate my international science and education curricula project experiences into other work at school; and I want to participate in future collaborative international research projects.
- All the participants agreed that: I recognize the importance of interacting with my partners’ university; I strive to understand the cultural differences at my partners’ university; I appreciate different points-of-view as a result of working with my project partners; I value the opportunity to work with my partners’ university; and I will pursue more research/academic opportunities with my partners’ university.

Conclusion and Educational Importance

To proactively address environmental issues related to production agriculture a concerted effort by both Mexico and the United States is needed. This project has demonstrated that a collaborative partnership between Universidad Autónoma de Nuevo León, Mexico and Texas A&M University could be formed that addresses environmental issues affecting production agriculture along the Mexico/Texas border. While the language barrier posed some communication problems, it did not inhibit, ultimately, the faculty and graduate students’ ability to carry out research and teaching projects.