

Students' Perceptions about Mexican Agricultural Practices Occurring in Chihuahua State

Don W. Edgar, University of Arkansas
Leslie D. Edgar, University of Arkansas

Abstract

Agricultural educators have an impact in shaping students' perceptions. Students involved in studying agricultural education will have an impact in shaping perceptions of people regarding the future of agriculture. As globalization of societies in the world continues and the United States continues to work with Mexico to develop import and export policies, it is important to understand perceptions of Mexico and its agricultural systems. The purpose of this study was to determine agricultural education graduate students' experience of Mexico's agricultural practices, people, and culture. Texas Tech University graduate students attended a six-day international experience in Chihuahua, Mexico. Their perceptions were recorded using pre-reflective and reflective instruments. The results indicated a need to decrease language barriers between students and Mexican nationals, increase scholarship and funding opportunities for students' international experiences, and increase student experiences and exposure to international practices, people, and culture. Earlier research (Wingenbach, et al., 2003) recognized the need to increase student knowledge of international agriculture through increased experiential learning using out-of-country experience, which was supported by the findings in this study.

Introduction

Since 1994, NAFTA (North American Free Trade Agreement) and CAFTA (Central American Free-Trade Agreement between North and South America), have produced issues relevant to effective agricultural production and policy for all countries located in the western hemisphere. Globalization and cultural diversity issues have gained increasing attention in higher education (Zhai & Scheer, 2004). For more than a decade, research has indicated a need to offer international agricultural experiences to students (Harbstreit & Welton, 1992; Wingenbach, et al, 2003; Irani, Place, Lundy, & Friedel, 2004).

NAFTA has altered the system of North American trade, and it has done much to expand agricultural trade (Knutson & Ochoa, 2004). It not only developed a free trade region between developed and developing countries but it also included agriculture as well as other industries. CAFTA encourages trade between the United States and five Central American countries: Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua. CAFTA is considered to be the first step to a larger Free Trade Area of the Americas (FTAA) that would include 34 countries. The initial target date for the agreement to go into force was January 1, 2006. By some estimates, the agreement, when fully implemented, could offer U.S. farmers and ranchers a chance to export nearly \$1.5 billion per year in agricultural products to the region (AgricultureOnline, 2006).

NAFTA and CAFTA are but two policies affecting the U.S., Canada, Mexico and other countries in South America. It is important to understand how these and other agricultural policies affect the U.S. and other countries.

In a recent publication regarding the World Trade Organization (WTO), it was noted “agriculture provides, or may provide, more than just food and fibre – such as national food security, food safety, environmental benefits (cultural landscape, land conservation, flood control, biodiversity, recreation), cultural heritage and viable rural areas” (Prestegard, 2004, p. 3). Agriculture is changing, not only in the United States but also in Mexico and throughout the world. Agriculturists should remain cognizant of the changes and the impacts of these changes on trade, policy, and production.

Why are international experiences important? The international community is moving towards greater interdependence and globalization is driving a revolution in educational institutions (Zhai & Scheer, 2004). Educational transformations are being shaped by the demands to prepare labor forces for participation in a global economy, and to prepare citizens for participation in the global economy (Torres, 2002). Zhai and Scheer studied global perspectives and attitudes among agriculture students. They discovered there was a need to develop programs in higher education to address globalization and diversity issues in colleges of agriculture. Zhai and Scheer recommended that colleges of agriculture enhance their global/multicultural educational programs through study abroad or other cultural exchange/immersion programs for students to gain both global and cross-cultural competencies.

Why do United States citizens need to achieve global awareness? As agriculture changes throughout the world and as policies continue to be created and carried out, it is important for all United States citizens to achieve global awareness. Nehrt (1993) indicated that the U.S. has

become involved in a global era and education is needed to prepare people for this responsibility. Today's agricultural educators must be able to adjust to the constant changes taking place in the agricultural industry, while developing and delivering educational materials that meet the needs of their diverse student population (Crunkilton & Krebs, 1982). One of the goals in higher education is the achievement of sound educational programs. This should be no different in agricultural education programs.

Social reconstructionist theory challenges that school system should show students the problems facing our world and that these troubles should be addressed throughout every discipline in our school systems. Educators can communicate social problems to students' ambitions to help discover solutions. Communities and its resources can be sought out in developing partnerships to engage students in practical learning opportunities (Agbaje, Martin, & Williams, 2001).

For more than a decade, agricultural educators have become increasingly aware of viewing their profession with a global perspective (Harbstreet & Welton, 1992). Harbstreet and Welton were among the first researchers to recommend 1) increasing the importance of international agriculture towards teaching secondary agricultural students and 2) developing student involvement in supervised experience programs in order to increase international agricultural consciousness.

In response to the call from the *National Research Agenda: Agricultural Education and Communication 2007-2010* Research Priority Area (RPA) of Domestic and International Settings: Extension & Outreach (Osborne, N.D.), RPA 1 stated "ascertain the public's knowledge, views, and openness regarding the agri-food and natural resource system". This research attempts to develop a basic understanding of a small sample's knowledge, views and openness of an international setting regarding agri-food and natural resource systems.

Irani, Place, Lundy, & Friedel (2004) discovered that today's students involved in agricultural sciences had little background in international settings. The study also showed that students were eager and had interest to travel and be engaged in international experiences.

Research has shown a need for students to gain experiences of other countries and cultures (Wingenbach, et al., 2003). Agricultural education students who study international agriculture policy, products, peoples, and culture may increase their experiential learning opportunities and understanding. Higher education must be prepared to assist students in understanding agriculture in its global arena of today educating them by, becoming more internationally minded and remaining informed about agriculture in the U.S., as well as agriculture at the international level.

This research study has the potential to help students obtain knowledge about international agricultural policy, practices, production and products, thereby allowing them to be further prepared internationally, and assisting them with enhanced out-of-country opportunities. Yet, it is impossible for us to understand whether agricultural students are prepared to meet the changing demands in both the United States and countries abroad until we determine their perceptions of international settings and its agricultural systems regarding international

agriculture. Master's students are more likely to be opinion leaders and change agents when compared to undergraduate students. Rogers (2003) stated that opinion leaders exert control of the social system they are members. Therefore, we should be focusing on the experiences, perceptions, and attitudes of students in the graduate setting. These students are/will be influential to those people in which they will be members of their social system.

Mexico maintains a diverse agricultural forum and Chihuahua State is one of Mexico's highest production areas. There has been an increased interdependence in Texas and Mexico due to improved communication and knowledge (Everett, Wingenbach, Piña, & Hamilton, 2004). Graduate students currently studying agricultural education at Texas Tech University will continue educating others about issues such as policy, globalization, cultural diversity, and import and export needs. Therefore, it is important to evaluate graduate students' experience of Mexico's agriculture practices, people, and culture.

Purpose

The purpose of this study was to determine Texas Tech University's agricultural education graduate students' perceptions and attitudes about Mexico's agricultural practices, people, and culture. The objectives were to:

1. Assess graduate students' experience of Mexico's agricultural practices, people, and culture,
2. Determine graduate students' perceptions and attitudes about Mexico's agricultural practices, people, and culture,
3. Describe graduate students' attitudes and perceptions about their experiences in Mexico, and
4. Determine if graduate students' experiences about Mexico's agricultural practices, people, and culture increased through an out-of-country experiential learning situation.

Methods and Procedures

Researchers used a convenience sample consisting of graduate students enrolled in the fall semester of the Texas Tech University AGED 5311 course. Participants took a six-day trip to visit Chihuahua City, Mexico, and surrounding areas; this experience served as the primary "treatment" in the research. Naturalistic inquiry guided this study of nine human subjects through purposive and directed sampling.

The research instruments were developed using modified versions of pre-reflective and post-reflective instruments from research by Jones and Bjelland (2004) and Gamble, Davey, and Chan (1999). The pre-reflective instrument contained seven questions measuring students' initial experience, perceptions, and attitudes about Mexico's agricultural practices, people, and culture before experiencing the international visit. Pre-reflection is a "process of being consciously aware of the expectations associated with the learning experience"...it increases the opportunity of students to gain knowledge from their experiences, which increases their faculty to reflect upon the experience and increases overall knowledge. "Pre-reflection provides a bridge between thinking about an experience and actually learning from the experience" (Jones & Bjelland, 2004, p. 963).

All seven questions in the pre-reflective instrument were short answer fill-in-the-blank. Some examples of the questions are as follows: “What are your initial attitudes/beliefs about visiting Mexico?”, “What top three “internal barriers” have prevented you from participating in international experiences prior to the current planned experience?”, and “Describe what you expect to gain, personally, from this Mexico experience?”

The post-reflective instrument contained seven questions measuring students’ experiences, perceptions, and attitudes about Mexico’s agricultural practices, people, and culture after experiencing the international travel. Reflection is the process by which an experience is being considered, during the experience or after the experience. It is also the creation of meaning and conceptualization from experience. Reflection allows the ability to analyze and create perceptions about experiences differently than one might have done without reflection (Brockbank & McGill, 1998, as cited in Gamble, Davey, & Chan, 1999, p. 2). Zhao has defined reflective practice as “ability to reflect on experiences, to employ conceptual frameworks, and to relate these to similar and dissimilar contexts to inform and improve future practice” (Zhao, 2003, p.2). All seven questions in the reflective instrument were short answer fill-in-the-blank and mirrored the pre-reflective instrument. Content and face validity were established through a panel of experts from Texas A&M and Texas Tech Universities. The panel consisted of faculty members who have taught international agricultural courses. Minor editing (wording) changes were made to final versions of the research instruments.

Data were collected over a five-day period in a natural setting. Prior to students’ leaving for the Mexico experience, researchers explained the assessment procedures to participants in the study. Verbal and written instructions about the instrumentation were provided. Researchers described the reason for the research and provided hard copies of the pre-reflective and post-reflective questionnaires at the appropriate times. After the initial instruction, students completed the pre-reflective questionnaire before crossing the U.S./Mexico border. Students were given brief oral qualitative questions following each day of the trip. These comments were recorded both written and orally and were coded to ensure study validity. Students participated in a post-reflective survey when they returned from Mexico.

Credibility was achieved through meetings and face-to-face interviews with participants. Researchers asked participants’ specific questions to gain a general feeling about the research. Furthermore, credibility was achieved through triangulation, member checking, and a reflective journal. Upon completion of the data compilation, the participants were given the data to review in order to correct errors and verify interpretations. Trustworthiness was established through transferability, purposive sampling, using thick description, and a reflective journal. Dependability was created using a dependability audit and a reflective journal. The constant comparative method was used for data analysis (Lincoln & Guba, 1985, pp. 339-344). Data sources were documented using an audit trail.

Nine students participated in both the pre-reflective and post-reflective surveys and in the daily brief oral questioning. Similar numbers of males and females participated in this study. All participants were graduate students in the department of agricultural education and communication and represented each of the three major focus areas of graduate degree programs in the agricultural education and communications department (education, extension, and

communications). Each respondent was specified a number (e.g. P1, P2) on the pre-reflective instrumentation and maintained the same code for the post-reflective instrument and the daily questions. Responses were as P1-D1, P1-D2, etc.

The researchers used the constant comparative method for each question. This technique was used for the pre-reflective and post-reflective instruments as well as the daily directed brief oral questions.

Research Findings and Conclusions

Prereflection Responses

Participants' pre-reflective attitudes and beliefs about Mexico were best described as "apprehensive," in that statements about being nervous and excited about visiting Mexico surfaced. Participants were cognizant of language barriers that would be present, but they were attending the trip to gain as much experience as they could through the experience. One sample statement best exemplified this concern, as being "*Concerned about traveling internationally and not being able to communicate or understand them*" (P7).

Pre-reflective attitudes and beliefs about Mexican culture were described in socioeconomic terms as a "poor economy" in Mexico. Students perceived that there would be political problems present for the peoples of Mexico. "*Mainly I feel their government is chaotic and a little corrupt*" (P3).

The students were asked to list their top three internal barriers which had prevented them from participating in an international experience prior to the Mexico trip. Most occurring responses were nervousness, time, and a lack of desire for an international experience. "*I have a distinct fear of crossing the border; customs and identification primarily*" (P2). Most participants were nervous about going into another country with which they were not familiar, and about which they had no previous first-hand knowledge. Time was perceived as a barrier because of the time it would take to make the trip, and the time it would take out of their work schedules and lives. Another barrier, a lack of desire for an international experience, indicated that most were taking the trip because it was a course requirement and not because they wanted to go for the experience. "*I am sure I will be ready to get back [home] when it's over*" (P1).

Students were asked to list their top three external barriers that had prevented them from taking part in an international experience prior to the Mexico trip. The most common answers were money, language barriers, and an opportunity to be a part of an international trip. "*My parents have been hesitant to support international travel. Money also tends to play into this, as well as time*" (P 5). Money was an external barrier because of the perception of cost of the travel, daily expenses, and not being at their regular employment to receive wages.

Students were questioned about their knowledge of opportunities offered by Texas Tech University to attend international experiences. Most students had limited knowledge of where they could obtain support to participate in international educational endeavors. Some students knew the university had monies for international educational experiences, but had almost no

knowledge on how to seek those funds. Most students knew the university offered opportunities to study abroad, but they had limited knowledge about the process.

Graduate students responded that they hoped to gain knowledge of the political system, trade, government programs, the culture and customs, social and economical issues facing the country. They also responded wanting to gain experience through the agricultural production systems, practices, and issues, an appreciation of the Mexican culture, and an experience in Mexico. *“I hope to gain a broader more developed understanding of the agriculture and policy in Mexico as well as trade policy, government programs and agricultural issues”* (P4). The students wanted to gain experience so that they could relate more to the Mexican people and to their situations. They also felt an appreciation for the Mexican culture would help them understand Mexico’s needs. Furthermore, it was stated the experience in Mexico could help them understand how people of Mexico lived.

Post-reflection Responses

Post-experience attitudes and beliefs about visiting Mexico were that agriculture technology was more advanced than they had perceived before this experience. *“Advanced in technology on the educational level”* (P9). *“Overall we in the United States do not realize the great things happening in Mexico”* (P8). Graduate students felt that the experience was a good experience for them. *“A very good experience as far as an overall educational experience and expecting the unexpected”* (P6). It was seen by the graduate students that political corruption was prevalent and hindering agriculture. Furthermore, students felt that research and education were advanced at the university level. *“Country is not as advanced as the university...it did not seem that many people were using the research of the university in their agricultural practices”* (P1)

Post-experience attitudes and beliefs about Mexican culture changed, especially their views of how strong family values were held by Mexican families. *“The people in Mexico exhibited strong religious and family values”* (P7). It was noted that religious values were strong in the Mexican culture. Participants noted that poverty was prevalent in the Mexican society. *“I feel lucky to live in the United States because the majority of the people in Mexico are living in poverty conditions”* (P3).

Students were asked in post-experience reflective questions what internal barriers would keep them from participating in additional international experiences. The main barriers noted were language, money, and being away from home. Language was a barrier that students’ felt hindered them from gaining experience. Money was another barrier because of the cost of travel and being away from their regular occupations. Being away from home was a barrier because of ties with their own family, friends, and experiencing an environment where they felt alone and without an accessible tie to their culture.

Daily oral interviews were conducted and provided additional detail and depth into the questions asked on the pre-reflective and post-reflective instruments. Daily questions assessed students’ experiences, perceptions, and attitudes after attending daily activities. The interviews support the findings of the instruments with the exception of the degree of change in attitudes and perceptions toward the practices, people, and culture of Mexico. When presented with questions about international opportunities, students’ showed an interest. They perceived benefits

to be gained by themselves in the experience and towards those with whom they might interact.

Students were asked to express any external barriers they perceived after experiencing an international trip to Mexico. The most often occurring answers were money, language, and family. This, again, showed that the students perceived international experiences as being costly. As one participant stated “*work, money, and language*” (P7) were main external barriers present in their situation. They also perceived an inability to speak the language as prohibitive. Additionally, being away from family was noted as a barrier from gaining additional experiences via international travel.

During the post-experience reflective phase, students were asked if there were any changes in attitudes and beliefs after participating in an international experience. The most often occurring answer was that there were no changes in beliefs and attitudes. However, in the daily oral questions, students exhibited how their impressions of the people, government, education, agricultural practices, and procedures changed. The second most common change was the perception of technology in agriculture. The students felt there was more use of technology in agriculture than they had originally perceived. The third most oft-occurring change in beliefs and attitudes was the lack of funding for agriculture in Mexico. Students felt that agriculture had minimal support in terms of funds from government to both producers and those teaching agricultural practices at the university level.

Challenges identified from participants included:

- Financial, family, and time constraints were determined as limiting factors to participating in other international experiences.
- There was difficulty with language barriers. This challenge could potentially limit respondents from participating in future travels internationally.

Three distinct trends were discovered through this research. *A need exists to decrease the language barrier between “host country nationals” and students participating in an international experience.* One of the strongest trends discovered among the respondents was the need to decrease language barriers. A participant indicated that, “*There is a large language barrier*” (P2). Another respondent noted, “*Language is by far the largest barrier, it would be very challenging without a fluent translator. It is hard to accomplish anything without good communication*” (P4).

Another strong trend derived from the research was the need to decrease costs of having an experience. *A need exists for scholarships and other funding opportunities for students wishing to participate in international experiences.* Since jobs or educational situations did not readily allow students time off without a reduction in pay, alternative funding sources are needed. One participant remarked, “*Money, scholarships, internships, etc... would make it worth the lost opportunity cost for me*” (P1).

There was an intermediary trend derived from the participants’ comments. *A need exists to educate participants about international experiences with regard to people, culture, agricultural practices, products, and policies of the country* There was a need for an experience of the people, culture, agricultural practices, products, and policies of the country so the students

could more readily understand those issues influencing a foreign country. A participant indicated a *“lack of knowledge regarding Mexico’s political system (internal barrier) ... it would take a lot of time and effort to serve a purpose internationally due to money, language, and knowledge”* (P1).

Conclusions

There is a need to offer international experiences for students in agriculture. Agriculturalists need to be aware of the impact of agricultural policy, issues and experiences and its effects towards the U.S. and other countries. Programs need to be developed to address these global issues, globalization, and diversity in colleges of agriculture. This research agrees with previous research that agriculture students have limited international background and experience. It also concurs that there is a need for students to have knowledge and experiences of other countries and culture.

The research determined there was a need to decrease the language barrier, provide scholarship and funding opportunities, and educate participants regarding agricultural practices, people, and culture. This will allow students the opportunity to become more aware of barriers facing the countries they will be visiting and learning about. This was a qualitative study; one that was not representative of all graduate students in agricultural education, but could be used to focus future research in international agricultural education. The results of this study will help assess students’ experiences, perceptions, attitudes and beliefs regarding agricultural practices within a selected geographic area of Mexico.

Implications and Recommendations

Earlier research (Wingenbach, et al., 2003) recommended increasing students’ experiences of international agriculture through real life experiences by students in international settings. This research supports that recommendation and offers recommendations for further research in this area. It is recommended educators’ form classes that address international agricultural issues. It is also recommended classes offer an international experience component. Classes should create a forum where students gain international experience and enhanced understanding about international agricultural issues.

Additionally, it is recommended to educate students about the people, culture, agricultural practices, products, and policies of the host country visited. As stated by one participant *“overall we in the United States do not realize the great things happening in Mexico”* (P8). This experience allows students to understand more readily the dynamics of Mexico’s agricultural practices, people, and culture. This information will assist in alleviating barriers the students may face when traveling internationally.

Understanding customs, values, and beliefs of the country visited by participants is beneficial. This will allow more perceptive reflection when participating in an international experience. Considering other cultures from their perspectives allows a more thorough knowledge about those people which may change their attitudes and beliefs and have an

understanding of what people internationally face in their daily lives. This will allow students to look for solutions which may help the people of the host country.

Further research on perceptions and attitudes of graduate students can show more insight into the needs of those students wishing to participate in international experiences. Through addressing trends found in this study, barriers will be lessened and a more full understanding and greater experience for students can be obtained. Understanding of an international setting is paramount to gaining experience and addressing perceptions and attitudes by outsiders regarding another country.

It is recommended that students enroll in classes and spend time engaged in conversational language study. Language study should not be in-depth, but cover basic skills needed in everyday conversations. Participants should understand basic phrases to alleviate some language barriers between participants and those individuals they may converse with during their experience. As noted by one participant “*better communication among all participants*” (P1) would increase information and understanding gained through international experiences. Furthermore, it is also recommended that funding for international travel in universities be increased so students can more readily participate. It is further recommended that if funding is available at the university level, students be educated regarding those possibilities. Students should be aware of the times and costs anticipated for any international travel so they understand possible barriers.

As found in the findings, there is a need to prepare participants more fully for international experiences. This study showed that participants had definite needs to be addressed prior to their international experience in Mexico. As one participant stated they were “*concerned about traveling internationally and not being able to communicate or understand them*” (P7). Main trends from the research indicated that students needed to rectify language barriers and find money for international travels. There is a need to develop experiences about the anticipated culture, language, and environment where the international experience will take place. This may benefit students engaging in an international experience. It is recommended that classes preparing students for international travel be more involved with the above defined areas. This may alleviate both problems and hesitation felt by the students.

In recent research Irani, Place, Lundy, & Friedel (2004) showed that students with little or small prior international experiences and awareness can cause barriers to be formed towards international experiences. That research also showed that educational efforts can aid by transcending those barriers if done gradually to gain trust through the student(s). The findings of this study support that research, and it is recommended that further research be completed in this area.

Additional research needs to be conducted to determine students’ perceptions about agricultural practices in an international setting. Further research is needed to understand students’ perceptions and to investigate the barriers outlined in this research. Such studies would provide a basis to understand barriers faced by students to foster international experiences. Changes in perception and attitude may allow for a more active participation in international agriculture experiences and a more global perspective of agriculture.

References

- Agbaje, K. A. A., & Martin, R. A., & Williams, D. L. (2001). Impact of sustainable agriculture on secondary school agricultural education teachers and programs in the north central region. *Journal of Agricultural Education*, 33(2), 38-45.
- AgricultureOnline (2006). CAFTA-DR implementation could get rolling in early February. Retrieved January 4, 2006, from: <http://www.agriculture.com/ag/story.jhtml?storyid=/templatedata/ag/story/data/1136396768806.xml&catref=ag1001>
- Everett, C., Wingenbach, G. J., Piña, M. Jr., & Hamilton, W. T. (2004). Information technology use and effectiveness in the Texas-Mexico Initiative. *Proceedings from the 20th Annual Association for International Agricultural and Extension Education Conference*, 418-422.
- Gamble, J., Davey, H., & Chan, P. (1999). Student experiences of reflection in learning graduate professional education. *HERDSA Annual International Conference Proceedings, Melbourne, July 12-15, 1999*, 1-8. Retrieved February 23, 2005, from <http://www.herdsa.org.au/branches/vic/Cornerstones/pdf/Gamble.PDF>
- Harbstreet, S. R., & Welton, R. F. (1992). Secondary agriculture student awareness of international agriculture and factors influencing student awareness. *Journal of Agricultural Education*, 33(1), 10-16.
- Irani, T., Place, N. T., Lundy, L., & Friedel, C. (2004). Experience, perceptions, and likelihood of participation in international opportunities among college of agricultural and life science students. *Proceedings from the 20th Annual Association for International Agricultural and Extension Education Conference*, 273-283.
- Jones, L., & Bjelland, D. (2004). International Experiential Learning in Agriculture. *Proceedings of the 20th Annual Conference, Association for International Agricultural and Extension Education, Dublin, Ireland*, 963-964. Retrieved November, 19, 2004, from <http://www.aiaee.org/2004/Carousels/jones-carousel-NEW.pdf>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage Publications.
- Knutson, R. D., & Ochoa, R. (2004). Achieving market integration. *AgExporter*, 14(1), 9.
- Nehrt, L. C. (1993). Business school curriculum and faculty: Historical perspectives and future imperatives. In S. Tamer Cavusgil (Ed.). *Internationalizing business education: Meeting the challenge*. East Lansing: Michigan State University Press.
- Osborne, E. W. (n.d.). *National research agenda: Agricultural education and communication, 2007-2010*. Gainesville: University of Florida, Department of Agricultural Education and Communication.

- Prestegard, S.S. (2004). Multifunctional agriculture and the design of policy instruments: Application to the WTO negotiations on agriculture. *Multifunctionality of Agriculture*, 3-18.
- Rogers, E.M. (2003). Diffusion of innovations. 5th Edition, New York, NY: The Free Press.
- Torres, C. A. (2002). Globalization, education, and citizenship: Solidarity versus market? *American Educational Research Journal*, 39(2), 363-373.
- Wingenbach, G. J., Boyd, B. L., & Lindner, J. R. (2003). Students' knowledge and attitudes about international agricultural issues. *Journal of International Agricultural and Extension Education*, 10(3), 25-35.
- Zhai, L. & Scheer, S. D. (2004). Global perspectives and attitudes towards cultural diversity among summer agriculture students at the Ohio State University. *Journal of Agricultural Education*, 45(2), 39-51.
- Zhao, F. (2003). Enhancing the effectiveness of research and research supervision through reflective practice. *UltiBASE*. Retrieved January 6, 2006, from <http://ultibase.rmit.edu.au/Articles/july03/zhao2.htm>, 1-13.