

4-1-2013

Selected Students' Perspectives on International Service-Learning: A Case Study in Chajul, Guatemala

Caroline Black

Texas A&M University, caroline.black@agnet.tamu.edu

Lori Moore

Texas A&M University, llmoore@tamu.edu

Gary Wingenbach

Texas A&M University, g-wingenbach@tamu.edu

See next page for additional authors

Follow this and additional works at: <https://newprairiepress.org/jiaee>

Recommended Citation

Black, C., Moore, L., Wingenbach, G., & Rutherford, T. (2013). Selected Students' Perspectives on International Service-Learning: A Case Study in Chajul, Guatemala. *Journal of International Agricultural and Extension Education*, 20(2), 6-18. DOI: <https://doi.org/10.5191/jiaee.2013.20201>

This Research Article is brought to you for free and open access by New Prairie Press. It has been accepted for inclusion in Journal of International Agricultural and Extension Education by an authorized administrator of New Prairie Press. For more information, please contact cad@k-state.edu.

Selected Students' Perspectives on International Service-Learning: A Case Study in Chajul, Guatemala

Abstract

The purpose of this study was to investigate a unique international service-learning experience between two non-governmental organizations (NGOs) and a college of agriculture. This case study focused on a 25-day international service-learning study abroad program to Guatemala for Texas A&M University students. Ash and Clayton's (2009a) service-learning model was used for Texas A&M University students to complete service-learning projects in the highlands of Guatemala. The study abroad group, working with two NGOs, completed multiple service-learning projects in three rural communities. Nine undergraduate students documented their experiences through field logs and reflection papers. Five major themes were revealed in students' written artifacts: adaptation, culture, collaboration, communication, and value of knowledge. This international service-learning opportunity empowered students to embrace different cultures and languages while applying academic knowledge gained through study abroad coursework in Guatemala. The results are useful for informing the policies and practices of future international service-learning opportunities through Texas A&M University. Future research should expand our understanding of interaction between land-grant universities and NGOs to maximize practical impacts of international service-learning projects in college of agriculture study abroad programs.

Keywords

Service-Learning, Study Abroad, Higher Education, Culture, Communication, Diversity, Adaptation

Funding Source

We thank the FINA farmers who spared their time to be participants of this study. The encouragement of Professor A. K. M. Ziaul Karim, Department of Agricultural Extension Education, Bangladesh Agricultural University is acknowledged. Specially remembered is Dr M. H. Rashid, the co-author, for his interest in this study and the University of Massachusetts Amherst for providing publication funding.

Authors

Caroline Black, Lori Moore, Gary Wingenbach, and Tracy Rutherford

doi: 10.5191/jiaee.2013.20201

**Selected Students' Perspectives on International Service-Learning:
A Case Study in Chajul, Guatemala**

Caroline Black

Department of Agricultural Leadership, Education & Communications
Texas A&M University
600 John Kimbrough Blvd.
2116 TAMU
College Station, TX 77843
Tel: (979)845-6296
caroline.black@agnet.tamu.edu

Lori Moore

Department of Agricultural Leadership, Education & Communications
Texas A&M University
600 John Kimbrough Blvd.
2116 TAMU
College Station, TX 77843
Tel: (979)845-1295
llmoore@tamu.edu

Gary Wingenbach

Department of Agricultural Leadership, Education & Communications
Texas A&M University
600 John Kimbrough Blvd.
2116 TAMU
College Station, TX 77843
Tel: (979)862-1507
g-wingenbach@tamu.edu

Tracy Rutherford

Department of Agricultural Leadership, Education & Communications
Texas A&M University
600 John Kimbrough Blvd.
2116 TAMU
College Station, TX 77843
(979)458-2744
rutherford@tamu.edu

Keywords: Service-Learning, Study Abroad, Higher Education, Culture, Communication, Diversity, Adaptation

Abstract

The purpose of this study was to investigate a unique international service-learning experience between two non-governmental organizations (NGOs) and a college of agriculture. This case study focused on a 25-day international service-learning study abroad program to Guatemala for Texas A&M University students. Ash and Clayton's (2009a) service-learning model was used for Texas A&M University students to complete service-learning projects in the highlands of Guatemala. The study abroad group, working with two NGOs, completed multiple service-learning projects in three rural communities. Nine undergraduate students documented their experiences through field logs and reflection papers. Five major themes were revealed in students' written artifacts: adaptation, culture, collaboration, communication, and value of knowledge. This international service-learning opportunity empowered students to embrace different cultures and languages while applying academic knowledge gained through study abroad coursework in Guatemala. The results are useful for informing the policies and practices of future international service-learning opportunities through Texas A&M University. Future research should expand our understanding of interaction between land-grant universities and NGOs to maximize practical impacts of international service-learning projects in college of agriculture study abroad programs.

Introduction

The inclusion of service-learning courses in higher education has increased over the past two decades (Bringle & Hatcher, 2011). As a form of experiential education, service-learning helps students

expand their knowledge, personal growth civic learning and academic engagement (Ash & Clayton, 2004; Ash & Clayton, 2009a; Clayton et al., 2005). Service-learning experiences can provide "a rich text from which academic lessons are learned through the interplay between theory and practice" (Bringle, Phillips, & Hudson, 2004, p. 5). Service-learning is defined as

A course-based, credit bearing educational experience in which students (a) participate in an organized service activity that meets identified community needs and (b) reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility (Bringle & Hatcher, 2009, p. 38).

One unique form to implement service-learning is through an international service-learning project while students participate in a study abroad program (Woolf, 2008). Combining service-learning and study abroad helps students do more than just study in another country (Bringle & Hatcher, 2011), adding value to each (Honnet & Poulsen, 1989). Students become engaged in challenging and diverse settings where they can apply course content to new situations, contribute to the host country community, experience new/unfamiliar issues, and learn about ideas different from their own (Bringle & Hatcher, 2011; Bringle et al., 2004). It helps students develop appreciation for other cultures, increases world mindedness and international concern, and helps them contemplate how solutions can be created for a variety of societal issues

(Bringle et al., 2004; Kim & Goldstein, 2005; Westrick, 2004). Everyone involved collaborates and should expect change, thus “service-learning encourages students to do things with others rather than for them” (Jacoby, 2003, p. 4). Service-learning during a study abroad helps students form bonds with peers, faculty, and the community in which they work while completing their projects and studies (Eyler, 2002; Westrick, 2004). As a result, Bringle and Hatcher (2011) suggested that international service-learning experiences provide opportunities for students not available in regular service projects or typical study abroad programs. They concluded that “the service experience sheds light on and provides an added dimension to the curricular component of the study abroad course” (Bringle & Hatcher, 2011, p. 11).

Texas A&M University emphasizes the need for international educational experiences to help students better understand the world around them (Sams, 2010). Such experiences enhance students’ academic gains through application of critical thinking, community interaction, and social/global awareness (Sams, 2010; Woolf, 2008). There is potential for added value to service-learning when experienced in an international context (Eyler, 2002; Westrick, 2004; Woolf, 2008); this increases the need for service-learning projects to be

developed to “enhance the core academic function of the university” (Woolf, 2008, p. 30). While the food and agricultural sciences lend themselves nicely to practical applications of service-learning projects in an international context, minimal research exists on students’ perspectives of such projects in college of agriculture study abroad programs.

Theoretical Framework

An international service-learning study abroad program, “Guatemala Agricultural Leadership and Service-learning,” was developed at Texas A&M University, and was based on the service-learning model (Figure 1) developed by Ash and Clayton (2009a). Ash and Clayton (2009a) emphasized service-learning components at the junction of academic material, relevant service, and critical reflection. The model also explains service-learning goals at the intersection of personal growth, academic enhancement, and civic engagement (Ash & Clayton, 2009a). Additionally, it describes collaborative partnerships between community, students, and faculty to create a service-learning environment (Ash & Clayton, 2009a). Ash and Clayton concluded that reflection enhanced the quality of learning and service project outcomes.

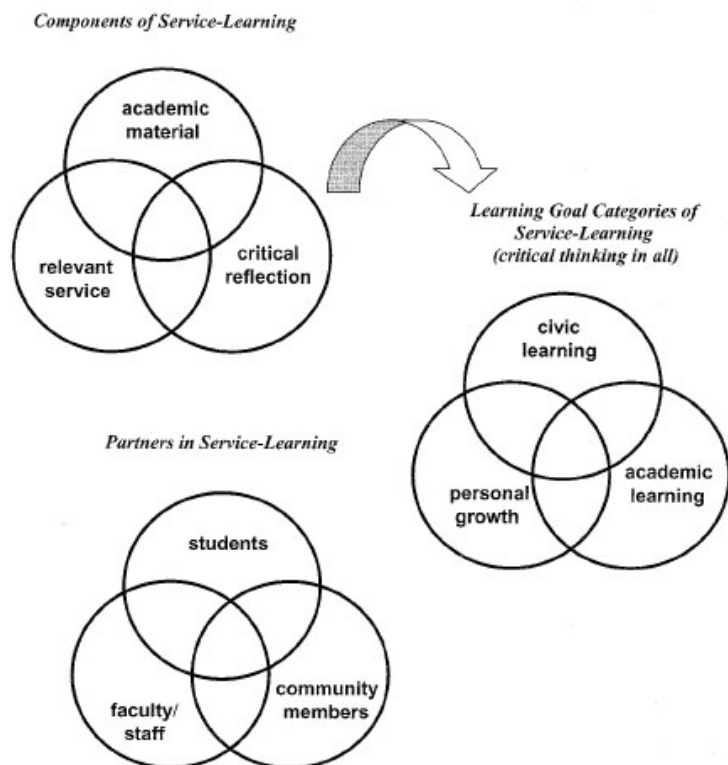


Figure 1. The components of service-learning. "Learning through critical reflection: A tutorial for service-learning students," by S. L. Ash, and P. H. Clayton, 2009a, Raleigh, NC: Authors.

Reflection is an integral part of experiential learning, and is "key to strengthening the power of service-learning" (Eyler, 2002, p. 519). Rogers (2001) defined reflection as a process to "integrate the understanding gained into one's experience in order to enable better choices or actions in the future as well as enhance one's overall effectiveness" (p. 41). Research shows that reflection generates, deepens, and documents learning, thereby challenging students to ask questions, compare theory to practice, and accept alternative perspectives (Ash & Clayton, 2009b; Jacoby, 2003; Whitney & Clayton, 2011). However, if students do not reflect on their service, their experiences may "support presuppositions, reinforce stereotypes, and fail to critically guide future action" (Hatcher & Bringle, 1997).

Methods

The purpose of this study was to investigate a unique international service-learning experience between two non-governmental organizations (NGOs) and a college of agriculture. This study used qualitative research methods (similar to those found in Miller, 2011) to analyze data from a case study. Merriam (2009) defined case study to be "an in-depth description and analysis of a bounded system" (p. 40). Therefore, a case study focused on a single area of concentration (Merriam, 2009). Guba and Lincoln (1981) suggested case studies are the best forms of qualitative research because they provide "information to produce judgment... Judging is the final and ultimate act of evaluation" (p. 375).

Seven female and two male undergraduates, one female graduate student, one female professor and two male professors participated in the service-learning experience in June 2012. Texas

A&M University was also joined by one male and one female leader from one of the NGOs that participated in all trip's activities and served as cultural instructors. Only the nine undergraduates were considered for this case study. This research was approved (#2012-0441) by Texas A&M University's Institutional Review Board.

Texas A&M University implemented an international agricultural service-learning study abroad program in partnership with two NGOs in Chajul, Guatemala. Chajul is located eight hours north of the capitol city, in the highlands of Guatemala. For 17 days the cohort experienced indigenous Chajul's people, food, hills, and living quarters, while gaining a sense of service and responsibility to the local community.

Although the service-learning project was in Chajul, the cohort had three days of training at the Texas A&M University's AGTEC (Agriculture in Guatemala: Technology, Education and Commercialization) center in Chimaltenango, Guatemala. At AGTEC, the cohort learned about gardening and sustainable agriculture and made compost and organic pesticides (Miller, 2011). The cohort learned how to build a *lombricompostura* (worm composter), which served as the service-learning project in Chajul.

In Chajul, the cohort teamed up with two NGOs, Limitless Horizons Ixil and Philanthropiece. By partnering with these NGOs, the cohort was able to enter indigenous communities that are otherwise closed to outsiders. The NGOs shared their community needs assessments and together developed the service-learning projects. Working with community members, it was determined that a *lombricompostura* needed to be built at three different schools. The *lombricomposturas* would help schools produce sustainable compost for their school gardens. Completing the project three times

allowed the cohort time to test their learning through continued application (Clayton et al., 2005).

The service-learning project helped achieve course objectives by placing students in real-world situations where they applied academic concepts and used teamwork and critical thinking skills to complete their projects. The service-learning project helped the professors become facilitators of learning outside the classroom, rather than instructors (Bringle et al., 2004).

Case study data can come from multiple sources, including documentation, interviews, direct observations, participant observations, physical artifacts, and archival records (Cresswell, 2007; Yin, 1994). Data in this study were drawn from observations and documentation to understand and describe students' experiences of their international service-learning project.

Observations were conducted by three participant observers: two professors and one graduate student. The observers were interested in the students' reactions to culture and ability to apply their academics to the service-learning project. Written artifacts included

- Field logs, completed by nine undergraduates, documenting all activities related to the service-learning project; and
- Reflection papers (written after the project) on the three to five most fundamental and powerful concepts (leadership concepts from coursework) learned from the project.

Written artifacts were analyzed using inductive data analysis, through two sub-processes: coding and categorizing (Lincoln & Guba, 1985). Coding helps identify sections or pieces of information that do not require any further explanation (Lincoln & Guba, 1985). Categorizing helps organize

coded data by “lookalike” characteristics or themes (Lincoln & Guba, 1985).

Lincoln and Guba (1985) suggested trustworthiness in qualitative research is established through credibility, dependability, and transferability. To establish credibility, researchers had prolonged engagement (Klenke, 2008; Lincoln & Guba, 1985) in order to “be involved with a site sufficiently long to detect and take account of distortions that might otherwise creep into the data” (Lincoln & Guba, 1985, p. 302). Peer debriefings (Klenke, 2008) were facilitated by the researchers. Member checking (Klenke, 2008; Manning, 1997) was conducted to confirm the accuracy of themes, and to determine if there were any themes missing.

Findings

Several fundamental and powerful concepts were revealed after analyzing the service-learning project field logs and reflection papers. From these concepts, we derived five major themes: adaptation, culture, collaboration, communication, and value of knowledge.

Adaptation

Students experienced adaption by being open, flexible and improvising to meet the needs of the cohort, community, and service-learning project. Students were encouraged to pack their flexibility when preparing to leave for Guatemala, and several students noted this in their reflection papers. One student mentioned in their reflection “Coming to Guatemala taught me to be open to everything: the food, customs and beliefs, traffic laws (or lack thereof), and more” (R2). Upon beginning the service-learning projects, several students noted in their reflections and logs about a particular moment of the trip that encouraged them to unpack their flexibility.

We began to apply flexibility to almost every obstacle that we faced throughout our trip. One particular instance was especially trying. The morning we were scheduled to go to Batzul for the last time, we had a last-minute change in plans and were switched to visit Visuchuj. My team had not planned at all for what we would do at Visuchuj. As panicked as we were, we pulled out our flexibility and put our plans from that morning into action. We adjusted our plans to accommodate what we had previously done at another school. We had a rough start, but we smoothed everything out and the time at that school was spent well (R2).

Learning to change plans last minute and still completing the task at hand empowered the cohort to adapt to any situation presented to them. Another student noted in their log,

[On the trip] We had everything from physiological needs up to esteem needs, and we could have just given up and thrown in the towel. However, we realized that we were there for a higher purpose and we took the challenge of having limited resources and were able to teach the children important concepts about agriculture. We reached our highest potential at the moment and realized our self-actualization needs through improvising and overcoming what challenged us (R3).

The researchers observed the students realizing the importance of adapting to their environment. Other students mentioned in their reflection papers that they learned that,

It takes patience, adaptability, and willingness for a little sacrifice. We had a choice of how to react when plans changed, and it was much more rewarding and amiable environment when people chose to unpack and turn on their flexibility. In the future I will be more accepting of changed plans and not complain when life doesn't unfold like I want it to (R4).

In addition to realizing the importance, students noted the practice of adaption, "Had we not done so [been so flexible], our success abroad would only have been a fraction of what it was, and we would have constantly been lagging behind" (R8). It became apparent that "it is important to adjust and overcome, should one wish to meet his or her objectives with accuracy" (R8). Students had numerous opportunities during the international service-learning project to accept, overcome, stretch their flexibility, and adapt to the environment and obstacles that arose over the course of the study abroad program.

Culture

The international service-learning study abroad enabled students to experience a culture other than their own. The partnership with the NGOs provided the students a unique opportunity to have a more hands-on experience with the indigenous culture in Chajul, Guatemala by eating lunch with Chajul families' homes and by participating in traditional Guatemalan practices such as weaving textiles and making tortillas. Upon arriving in Chajul, a student reflected

This was our first day in Chajul. As we drove into this city we could tell that we were in a different place. As

we arrived, people looked at us and covered their mouth as they giggled. This was the first time while in Guatemala that I actually felt like I was the outsider. I can only imagine what the locals were thinking (L2).

When reflecting experiencing meals in Chajul, one student recorded in their field log that eating lunch with the families helped their commitment to the service project.

After lunch with our host family, I realized how committed I am to improving this community and service-learning project. The way they live completely overwhelmed me and made me appreciate this trip and what we are doing so much more (L1).

Another student reflected that,

I saw the way the families in Chajul live, how many people live in such a small space, and how important the small things in life can be. Through seeing this, I decided to work as hard as I possibly could to help the people in Chajul, use what I have to give to the community, and hopefully improve their way of living, starting with agriculture (R8).

One student noted how meals with the families made them feel.

It was our first experience to a family's home and a little over whelming. We had no idea the level of poverty that they lived in at as we were sitting in the middle of their house on a table that was not taller than my knees we were silent and reflecting on many things (L3).

The researchers observed how these meals in the homes of the town helped students embrace the culture they were working in. One student described the food and a woman's face to be "jubilant upon hearing our words of praise for her excellent cooking" (L2). Another student described the meals to be "humbling," yet "awkward because I can't speak directly to them, and don't know the customs or what manners I should exhibit" (R4).

Collaboration

By teaming up with two NGO's in Chajul, Texas A&M University's international service-learning study abroad program was able to introduce the participants to community leaders and agricultural experts. Through the project, students learned and reflected upon the importance of collaborating with the community and amongst the cohort members themselves. The collaboration began by the cohort meeting with Marcelino, a local agriculturist from Chajul, who gave his insight on building *lombricomposturas*. "Our group and Marcelino exchanged ideas all morning in order to make an effective and easy compost worm bed for the kids to work with" (R1). Through the meeting's idea sharing, collaboration and language translation, one student wrote in their field log that,

It was today that everything came together for us in having a better idea of what we would be working on, why we were doing it, and how we were going to do it. Today we met Marcelino, Ernesto, and Wilson. Ernesto started with presenting us with this idea of how to make a *lombricompostura*. He drew the design out for us on the marker board and we started working from

there. This activity was a pretty complicated process because of the language barrier but we sat down and tackled the problem (L3).

Through this brainstorming meeting the cohort and Chajul agriculturalists were able to talk through every aspect of the service-learning project. After the meeting, one student noted

By the end Ernesto's design had been changed completely. He didn't mind that we had changed the design; he was actually happy that we were able to give input and talk to him about why we thought the new design would work most efficiently (L3).

In addition to designing the project, the cohort collaborated with community leaders at each project site. Guatemalans taught the cohort how to use tools effectively. One student even mentioned, "I have a newfound respect for the carpenters who only have handsaws to work with!" (L1). The cohort learned to lean on each other for knowledge and skill in their group.

From the first day joined together, each individual grew closer to each other and connected together in order to build and serve each community visited. But the team building did not stop there, the group also bonded and built each other up with the local individuals that also participated (R1).

The relationships that were established through the cohort working with the NGO partnership, community leaders, and schools, impacted the community of Chajul. Another student described in their reflections the impact of this collaboration,

We all built connections with the people from each school and the people we were working with. At the last school we visited, Dominga grabbed my hand and held it. Dominga has been working with these schools and visits them at least once a month. I felt that when she grabbed my hand, we made a connection. I feel like she had realized how impactful everything that we had done was and was thankful (R5).

Communication

The theme of communication was also identified through students' field logs and reflection papers. The researchers observed upon arriving in Guatemala that several students were very nervous about being in a country whose first spoken language was not their own. In fact, one student described their emotions in their reflection, "I do not speak Spanish very well, therefore learning how to communicate and fill the gap between me and a Guatemalan could be frustrating at times" (R7). However, the cohort quickly realized that "even with language barriers and cultural difference, the group connected and provided for the community" (R1). One student noted in their reflection "taking initiative is a self-concept that an adult matures from being dependent to directing and taking control of a situation, even with language barriers" (R1).

Upon arriving in Chajul, the cohort tapped into the language barrier by planning the service-learning project with three agricultural experts from the community. "Drawing out every level and component of the *lombricompostura* was also the perfect visual aid to overcome the small language barrier between the specialists from Chajul and the students" (R5). Another student

wrote, "This was a pretty complicated process because of the language barrier, but we sat down and tackled the problem" (L3). Through this activity, the students were prepared to embrace the language gap (Miller, 2011) by "building a bridge between the language barrier and cultural differences" (R7). Researchers observed that bridge was quickly built. The cohort of fifteen individuals included five fluent Spanish speakers (two students, one professor, and two NGO representatives). Each of these individuals was willing to translate as needed.

The researchers observed that communication became a key component of the service-learning project. The students' ability to embrace this theme immediately became apparent at Ixla, one of the service-learning project sites.

During our time at Ixla we were faced with a larger language barrier than seen at any previous school. Through statistics provided by the director of the school, we learned that only 50% of the students and community members spoke Spanish, the others speak Ixil or Quiche. This not only left many [students] feeling helpless, but even the Spanish to English translators were at a loss for words. Being conscience of one's nonverbal communication is extremely important in these kind of settings, because it was the only we were able to communicate. Through body language, we also were careful to show their culture courtesy and respect (R6).

Knowing that language barriers existed, students chose to introduce their project with the telephone game as an icebreaker.

We used the telephone game at Ixla to make a connection to the context we were teaching rather than just having an icebreaker game...As a result to this [language] barrier, teaching the kids about pests and plants was difficult but that icebreaker had addressed that barrier and everyone was trying twice as hard to make things work (R5).

Communication can be seen in terms of group dynamics and language, both of which impacted the time at Ixla. The researchers observed students at Ixla embraced communication challenges by drawing out instructions on the ground and using sign language.

Even though this was a very different way of communicating than I was used to, it worked. I taught the children that the worms would benefit their garden by picking up a worm, pointing to the lombricompostura then the garden, giving it a big thumb's up. They seemed to understand what I was trying to communicate (R7).

Another student's field log described their thoughts on the communication barrier.

I was totally out of my element and was very confused about how to interact with the students...I only needed a few words, and it was mostly action. After that I was having a great time and was feeling comfortable (L4).

Several students bridge the language gap by teaching English to the school children.

I began to use my hands to describe things and asked them to gather

around me on a pile of weeds that had been pulled out. I started with one leaf and made it a mask. I played with them for a little and then pointed at the leaf and said "en Español hoja y en inglés leaf" and they repeated after me...As we did this they pointed at things and I said them both in Spanish and English. It was unique how I was able to help them learn (L3).

Through the field logs and reflections, multiple students noted that it was essential to communicate thoughts, actions, and ideas to others. When spoken language is not an option for understanding, drawing or sign language can be useful.

Value of Knowledge

The final theme discovered in the field logs, reflections, and observed on the trip was the student's value of knowledge. Students noted the importance of a foundation of knowledge, which can then actively be implemented to their service-learning project.

Students reflected upon a foundation of knowledge that was laid for them during the AGTEC training before traveling to Chajul. "We learned organic solutions to the problematic overuse of chemical pesticides and fertilizers" (R8). The information gained from this training would eventually assist the service-learning project in Chajul.

Once the foundation of knowledge was grasped, and the service-learning project planned, the students became active learners, applying concepts from their study abroad courses, to the service-learning projects. One student noted "active learning encourages learners to take ownership and have pride in applying what they are being taught" (R6). "This pertains to Knowles' assumptions from class because adults can apply information to subject matter from

their previous knowledge and experiences with the activity” (R3).

When reflecting about the value of active learning, one student stated, “I now realize that I usually prefer informal learning environments because they allow for so much curiosity and creativity” (R4). This creativity fueled the cohort’s initiative to take ownership in the service-learning project, and to include the community and school children throughout each activity. Students realized the need for motivating children, for teaching new material, immediately upon arrival at schools.

...pertains to class which we learned about Knowles’ six critical assumptions where children are not necessarily always ready to learn, but the teacher must create a channel for motivation to occur. We created motivation for students to learn through ice breakers (R3).

The schools’ children took ownership of the *lombricomposturas* by “signing” the project with painted hand prints. Another student reflected that “keeping followers and learners involved ensures that they feel personally attached to the project they are working on or the material that is being presented” (R6). “If they do not feel ownership in the project, then when Texas A&M University returns next year, the lombricompoustra projects may no longer exist” (R6).

Conclusions

An international service-learning experience combined with a study abroad program adds value to the program as a whole (Honnet & Pulsen, 1989). The service-learning project in Chajul, Guatemala provided students opportunities to relate their service activity to academic materials received during the program (Ash

& Clayton, 2004; Ash & Clayton, 2009a). Ash & Clayton’s (2009) model highlighted the components, relationships, and learning goals that promote a service-learning environment. Through critical reflection exercises, students generated and documented their learning (Ash & Clayton, 2009b), such as identifying the three to five most fundamental and powerful concepts they learned from the service-learning project. These reflections helped students form five major themes about their experience: adaptation, culture, collaboration, communication, and value of knowledge.

The results of this study are useful for informing the policies and practices of international service-learning and study abroad programs. Based upon their experience, students formed opinions and developed new thoughts and ideas about culture, international travel, communication, and study abroad. Many students viewed the international service-learning experience as an applicable, real-world challenge to build their personal skills and prepare for future career opportunities.

Students learned to work with a team, build connections and trust within a community, supporting the findings of Miller (2011) who studied college of agriculture students’ participation in an AGTEC internship. They built networks with two NGOs to complete practical service-learning projects. Students also recognized the benefit of conversations with Chajul agricultural experts to prepare for their projects. This particular aspect should be maintained. Students recognized the value of applying their academic training as they practiced this knowledge through their project, thus creating a true service-learning experience (Ash & Clayton, 2009a; Bringle & Hatcher, 2009).

This study was an account of one case that occurred during one 25-day study

abroad program with one group of students; therefore, the findings cannot be generalized beyond the cohort. Future research should expand our understanding of university and NGO interaction to better understand practical impacts of international service-learning projects in college of agriculture study abroad programs. It is important to incorporate both service-learning and study abroad experiences into the same curriculum.

Acknowledgments

This research was supported by Hatch Act (TEX08934) and State of Texas funds; it was produced through the Texas Agricultural Experiment Station, College Station, Texas.

References

- Ash, S. L., & Clayton, P. H. (2004). The articulated learning: An approach to guided reflection and assessment. *Innovative Higher Education*, 29(2), 137–154.
- Ash, S. L., & Clayton, P. H. (2009a). *Learning through critical reflection: A tutorial for service-learning students (Instructor Version)*. Raleigh, NC: Authors.
- Ash, S. L., & Clayton, P. H. (2009b). Generating, deepening, and documenting learning: The power of critical reflection for applied learning. *Journal of Applied Learning in Higher Education*, 1, 25–48.
- Bringle, R. G., & Hatcher, J. A. (2009). Innovative practices in service-learning and curricular engagement. In L. Sandmann, A. Jaeger, & C. Thornton (Eds.), *New directions in community engagement* (pp. 37–46). San Francisco, CA: Jossey-Bass.
- Bringle, R. G., & Hatcher, J. A. (2011). International service-learning. In R. Bringle, J. Hatcher, & S. Jones (Eds.), *International service-learning: Conceptual frameworks and research*. Sterling, VA: Stylus Publishing.
- Bringle, R. G., Phillips, M. A., & Hudson, M. (2004). The measure of service-learning: Research scales to assess student experiences.
- Clayton, P. H., Ash, S. L., Bullard, L. G., Bullock, B. P., Moses, M. G., Moore, A. C., . . . Usry, R. H. (2005). Adapting a core service-learning model for wide-ranging implementation: An institutional case study. *Creative College Teaching Journal*, 2(1), 10–26.
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Eyler, J. (2002). Reflection: Linking service and learning – Linking students and communities. *Journal of Social Issues*, 58(3), 517–534.
- Guba, E. G., & Lincoln, Y. S. (1981). *Effective evaluation*. San Francisco: Jossey-Bass.
- Hatcher, J. A., & Bringle, R. G. (1997). Reflection. *College Teaching*, 45(4), 153–164.
- Honnet, E. P. & Poulsen, S. J. (1989). *Principles of good practice in combining service and learning*. Wingspread Special Report. Racine, WI: Johnson Foundation.
- Jacoby, B. (2003). *Building Partnerships for Service-Learning*. San Francisco: Jossey-Bass.
- Kim, R. I., & Goldstein, S. B. (2005). Intercultural attitudes predict favorable study abroad expectations of U.S. college students. *Journal of Studies in International Education*, 9(3), 265–278. doi: 10.1177/1028315305277684

- Klenke, K. (2008). *Qualitative research in the study of leadership*. United Kingdom: Emerald Group Publishing Limited.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Thousand Oaks, CA: Sage.
- Manning, K. (1997). Authenticity in constructivist inquiry: Methodology considerations. *Qualitative Inquiry*, 3(1), 93–116.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco: Jossey-Bass.
- Miller, K. (2011). *Students' perceptions of international agriculture after an international agricultural experience*. Unpublished master's thesis, Texas A&M University, College Station, TX.
- Rogers, R. (2001). Reflection in higher education: A concept analysis. *Innovative Higher Education*, 26, 37–57.
- Sams, A. (2010). *Texas A&M University's College of Agriculture and Life Sciences 2010–2015 Strategic Plan*. Retrieved from Texas A&M University, College of Agriculture and Life Sciences website: <http://aglifesciences.tamu.edu/>
- Westrick, J. (2004). The influence of service-learning on intercultural sensitivity. *Journal of Research in International Education*, 3(3), 277–299. doi: 10.1177/1475240904047356
- Whitney, B., & Clayton, P. (2011). Research on the role of reflection in international service-learning. In R. Bringle, J. Hatcher, & S. Jones (Eds.), *International service-learning: Conceptual frameworks and research*. Sterling, VA: Stylus Publishing.
- Woolf, M. (2008). Not serious stuff? Service-learning in context: An international perspective. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 17, 21–32.
- Yin, R. K. (1994). *Case study research: Design and methods* (2nd ed.). Beverly Hills, CA: Sage Publishing.