Our model is designed to address strategies for internationalization highlighted in the American Council on Education project 'Spotlighting Excellence in Comprehensive Internationalization' and the 'Internationalization Collaborative' (Green & Olson, 2003).

The focus of this chapter is less the quantitative analytical methods, but rather the qualitative heuristic inquiry (Moustakas, 1994) of phenomenological analysis using guided reflective journalling to elicit the impact of experiences in the students' own words. We will share the results of such reflection in two undergraduate international experiences in the College of Agriculture at Purdue University. These reflective journals illustrate the growing intercultural competence of individuals within a group of American students undertaking a service learning experience in Ecuador and on a study tour of agriculture in Central Europe. An additional finding is that the process of responding to specific guided questions and keeping a journal also helped to develop students' actual observation, learning and that which they seek to describe.

University Context

The University's main campus is in West Lafayette, Indiana, with around 39,000 students from all 50 US states and 124 other countries. In 2007–08 there were 4,994 international students, 2,042 of whom were undergraduates. The total enrollment across five campuses is roughly 70,000. For the past five years, Purdue has ranked first or second in the United States in total international student enrollment among public research institutions (Purdue University facts, 2008).

Purdue is striving to be a world-class comprehensive university, with a mission stated in the 2008–14 New Synergies Strategic Plan as

Commitment to People: Purdue University serves diverse populations of Indiana, the nation, and the world through discovery that expands the frontiers of knowledge, learning that nurtures the sharing of knowledge, and engagement that promotes the application of knowledge.

The three articulated Goals of the University are:

- Launching Tomorrow's Leaders

  Promote excellence in learning experiences and outcomes, fostering intellectual, professional, and personal development to prepare learners for life and careers in a dynamic, global society.

- Discovery With Delivery

  Advance the frontiers of knowledge, innovate technologies that address the grand challenges of society to serve humanity, and improve the quality of life around the world.
Meeting Global Challenges

Address the critical needs of society, and catalyze economic development and entrepreneurship consistent with a public research university of the 21st century with global impact.

Purdue was one of five institutions in the country to receive the 2006 Senator Paul Simon Award for Campus Internationalization. The award, given annually by NASFAA, honours colleges and universities for overall excellence in internationalization efforts.

College of Agriculture (COA)

Targeted graduate outcomes for the 2,535 full-time students in the College of Agriculture include:

- Demonstrate knowledge of a range of cultures and an understanding of human values and points of view other than their own.
- Demonstrate ability to apply social, economic, political, and environmental principles to living in a global community.
- Demonstrate awareness of civic responsibility to community and society at large.

Undergraduate students, regardless of major, take nine-credit courses in International Understanding. They are also required to take three credit hours of a Multicultural elective on cultures and people different from themselves. An International Studies Minor is also offered.

The mission of agricultural study abroad at Purdue is to 'help prepare agriculture students for the global nature of our modern world by increasing opportunities for participation in study abroad, overseas internships, and international studies'; 25.4 per cent of Purdue COA undergraduates study abroad, the highest percentage of any college or school at Purdue University. Programmes include semester- and year-long exchanges, summer courses or work, three-week Maymester, and one-week spring break or winter session group study courses. Purdue COA students can choose from 33 study-abroad and internship programmes, partnering with 31 institutions in 19 countries specifically developed for COA students. They also participate in over 200 campus-wide programmes.

Such success has been rewarding for students, but, as Deardorff says, 'Demonstrating the success of our internationalization by relying on the numbers of students studying abroad, international students on campus, etc. fails to address the student learner's behavior, attitude, and knowledge gained' (Deardorff, 2004). Even at an internationally engaged scientific research and educational institution like Purdue University, until recently little had been done to assess the outcome of our internationalization efforts and claims of their benefits.

Objectives of International Experiences

The COA lists learning objectives for international programmes under Personal Development, Education and Employability. Both courses in this case study are three-week travel courses led by Purdue professors and hosted by our international partners in the respective countries. Learning objectives for these courses include:

'Serving International Communities':

- Help students develop intercultural skills through working as part of diverse teams in both a domestic and an international setting.
- Encourage students to develop a servant leader attitude by using service-learning as pedagogy to help communities build on their assets to address critical issues.
- Connect students to the ideas and people who can instill habits of thought and practice that embrace larger vistas, worldwide challenges, and opportunities to serve the global community.

The real challenge for higher education is defining and measuring such lofty ambitions. Developing values, behaviours, attitudes and competencies is a much larger task than assessing technical knowledge gained and skills. The good news is that in the 21st century international labour market the development of employability skills and attributes through adopting international perspectives is essential to the enhancement of the employment prospects of the students of any nationality. Employers in many countries world-wide share the same sorts of required graduate employability skills and attributes. Spending a period of time studying or working in another country permits students to develop these skills.

(Leggott & Stapleford, 2007)

Purdue students said:

- 'I learned to focus more on people and events rather than the time.'
- 'I now feel that I can work effectively with anyone and am much more patient with people.'
- 'I know now that the regulations and procedures of work are different everywhere and you need to take time to understand the setting.'
Assessing Impact/Outcomes of International Experiences

Most international educational programmes are designed to either discover new science and research technologies or to expand awareness, knowledge or skills in understanding a different culture. Agricultural universities are conducting diverse international programmes for study abroad, extension and discovery, but with little evaluation of how international initiatives help students, faculty and staff acquire an understanding of the international, cross-cultural and trade implications of their studies. Comprehensive internationalization affects the hearts and minds of students, faculty and staff, requiring voluntary change. We believe the most valuable benefit of internationalizing learning, discovery and engagement is the return on our investment measured by the strengthening of student capabilities. Ashwill suggests that many education-abroad experiences are more akin to an introduction to Culture X rather than a meaningful opportunity to become interculturally competent. He highlights growth in awareness of cultural differences, in knowledge of cultures, and in skills based on interacting across cultures. These can be set as expected learning outcomes of the international programme and then measured. Ashwill shares best practices in developing intercultural competencies for students, faculty and staff (Ashwill, 2004).

As a result of the funded project, 'Strategies to Enhance the Integration and Assessment of International Education in Colleges of Agriculture' from the US Department of Agriculture, we became more focused on assessment. We are evaluating the usefulness of widely available assessment instruments to measure change. It is beyond the scope of this chapter to discuss the use of quantitative measures such as the Cultural Orientation Indicator, the Intercultural Development Inventory (IDI[Reg]), Culture Active Scale[Reg], or the internally developed Openness to Diversity Questionnaire and the Global-Mindedness Scale. The IDI has proven very helpful in establishing baseline worldviews of our students for the purpose of curriculum development, training, and course sensing but limited in other respects. Incremental changes in individuals cannot be attributed to the experience alone and group averages do not change significantly. Maybe Emotional Intelligence assessment and the Multicultural Personality Questionnaire[Reg] will prove useful to assess individual student development and growth. Traditional quantitative methods have limitations. Additionally, Boyd, Felton and Dooley (2004) conclude that courses that include an international dimension should consider the use of reflective writing, both as an instructional tool to improve learners' cognitive models, as well as an assessment tool to measure changes in attitudes, beliefs, values, and motivations.

Internally developed surveys and questionnaires are proving useful for assessing international study abroad programmes. Incoming first-year and graduate exit surveys can provide baseline data of the whole population relative to the proportion of students with previous international experience, self-perceived benefits of these international experiences, worldview in general, international plans while at the university, and the primary obstacles/barriers that prevent participation in an international study experience. Approximately 60 per cent of freshmen entering the COA indicate intention to study abroad. A similar exit questionnaire for outgoing graduates can evaluate the whole programme for students who studied abroad and those who did not.

Qualitative Phenomenological Analysis

Anyone who has travelled with or known the students beforehand or witnessed their growth upon return can testify to anecdotal change, but how should this be measured? We have found the best measures to be qualitative, not quantitative. We examined the changes in students' skills, attitudes, and behaviours as a result of participating in three-week international experiences utilizing a qualitative methodology, 'naturalistic inquiry, the use of non-interfering data collection strategies to discover the natural flow of events and processes and how participants interpret them' (McMillan & Schumacher, 1997, p. 391). This helped uncover evidence difficult to obtain using quantitative methods. 'Qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meaning people bring them' (Denzin & Lincoln, 1994, p. 2). Phenomenology allows researchers to understand and elucidate 'the meaning, structure and essence of the lived experience of a phenomenon for a person or group of people' (Patton 2002), while heuristic inquiry (Moustakas, 1994) is a highly personal process allowing 'voice' to be exhibited throughout a study, personalizing the experience.

Nicodemus (2006) suggests a written objective or subjective journal as a qualitative method to determine the attitudes of students participating in an overseas course:

The objective journal is generally a chronology of events, or data collection. The subjective journal goes beyond what one has observed or experienced or read. The subjective journal will give a better insight into the students' personal growth, reactions, and thoughts.

We have called ours a reflective journal and we expect more critical thinking and personal thought than the objective journal referred to here.

Student Voices

Central Europe

In Exploring International Animal Agriculture, student assignments were originally open journals without guiding questions. This allowed instructors to evaluate content but most students used the journals either to detail a chronology of their experiences, or to communicate with instructors about ongoing trip issues. We subsequently designed reflection and post-experience assignments linking directly to the learning objectives (Jones, 2005). Reflection included:

- What do you hope to gain by completing this course?
- How do you expect the culture in central Europe to be most different than home and how do you plan to deal with these differences?
In what way, if any, do you expect that the experiences of this course will cause you to view other people, cultures, practices, and beliefs differently?

What do you think is the role of the United States and of the American people relative to the rest of the world?

How do you anticipate that this course will help you in your career objectives upon graduation?

Asking questions beforehand increases the intentionality of the consciousness or the 'orientation of the mind to its object' thus deepening the experience (Jones, 2005). With basic guiding questions it is possible to follow those themes throughout the experience. To assist in understanding the method, actual questions from the Central European travel study course are given here:

Journal 1 – When Leaving Warsaw

- How have you found the culture here to be most different than home and how are you dealing with these differences?
- Give examples of 'uncertainty' that required you to be flexible. How have you handled this need for flexibility?
- In what way have the experiences of this course caused you to view other people, cultures, and beliefs differently?

Journal 2 – When Leaving Krakow

- What cultural attitudes are different here than Warsaw or home and how are you dealing with these differences?
- How have you communicated with our hosts, students, local residents here? How do you feel about your success with communications?
- How have the experiences of this course caused you to view other people, cultures, and beliefs differently?

Journal 3 – When Leaving Nitra

- How is the culture in this country different/similar to that of Poland and how does that make you feel?
- How are the relationships within our group changing? What have you learned about group dynamics and yourself?
- How have the experiences of this course caused you to view other people, cultures, practices, and beliefs differently?

Journal 4 – When Leaving Brno/Prague

- How is the culture in the Czech Republic most different than home and how are you adjusting to these differences?
- Give examples of 'uncertainty' that required you to be flexible. How have you handled this need for flexibility?

- How have the experiences of this course caused you to view other people, cultures, practices, and beliefs differently?
- What do you now think is the role of the United States and of the American people relative to the rest of the world?

An example of sequenced responses from a single student on this course follows.

Preflection – Four Months Before Trip

How do you expect the culture in Central Europe to be most different than home and how do you plan to deal with these difference?

'I expect the culture to be less dependent on technology and computers and less modern. I feel that I will need to be patient as life will not be as fast paced.'

Journal 1 – One Week into Trip When Leaving Warsaw

How have you found the culture here to be most different than home and how are you dealing with these differences?

'I have been hearing faculty say "It isn't right or wrong, just different" for a long time, however it never really sinks in until you get to experience that culture, talk to the people, and try to practice these beliefs. I'm seeing now that people here do indeed live differently than me and that is ok. I've never been in a place where I'm a minority. I've always been in a place where the "different" people look different than me. I don't think I've been rude to them just curious, but now I see people look at me and wonder what I'm doing in their country. I think I will be more open-minded and interested in different people now.'

Journal 2 – When Leaving Krakow, Poland

What cultural attitudes are different here than Warsaw or home and how are you dealing with these differences?

'I view the culture as something that needs to be appreciated. I now have a greater appreciation for the practices studied and realize that Americans aren't the only ones with an amazing story to tell. My experiences have made the words I've read in a textbook heard on TV real and I now have something to associate them with and will always try to appreciate them more.'

Journal 3 – Three Weeks into Trip When Leaving Nitra, Slovakia

How is the culture in this country different/similar to that of Poland and how does that make you feel?
'Getting to know the culture and history of places we go truly make me appreciate their culture more and in some ways my own. To understand this culture you really have to better evaluate and understand yourself. Going to the ballet/ opera and taking city tours shows the deep roots of history but at the same time realize there is a lot of history in our home country that we take for granted and don’t appreciate. Much of it came from Europe.'

Journal 4 – End of Trip When Leaving Prague, Czech Republic

How have the experiences of this course caused you to view other people, cultures, practices, and beliefs differently?

'I didn't think that they were as advanced as we are but especially after Prague it is obvious that they are. I really see life in general in a new way after this trip. There is usually not one right way to do anything. I think that my view of Europe has definitely changed. I especially think my view of people changed a lot because of the interactions with students and leaders of the universities. I was very impressed by how welcoming and genuine all of our hosts are, and I will always remember their hospitality.'

Final Exam – One Week Post-Trip

How did this experience help you better understand different cultures and people at home? Use specific examples.

'In each country I learned that people are somewhat different and in many ways similar. For instance they listen to much of the same music and movies, but on the other hand they show more respect to elders than we do, especially teachers, but they seem more distant from their instructors. Paying to use the restrooms is different and was a pain but then you realize that this supports employment for people. Cultures are based on traditions, like toasting before meals and drinking more beer, but it is in these traditions and understanding why people do what they do that you really begin to understand and appreciate them. I also learned that the technology and customs of others are often equally alternative ways of doing things. I have learned to think in a different way, which I hope I can continue to do.'

Other student voices on the same programme were as follows:

'I am a lot more independent now.'

'I am more flexible now and more willing to take a job in a foreign country because of this trip.'

'I am much more aware and interested in news from around the world now.'

'People are similar around the world but we just do things differently.'

'I was able to better understand how people from the US are perceived around the world.'

'I am much more open-minded now and intend to seek out opportunities to talk and learn about exchange students and faculty.'

'I am more flexible with people and have learned that plans change and there are times that going with the flow not only makes life easier but is more effective.'

'I have learned the value of listening to others’ thoughts more carefully will help me serve others.'

'I learned a lot about working with others and how we can learn something for everyone.'

'I most benefited by working on my people and small group skills and how to work with a diversity of people. It made me take a step back and work on my open-mindedness and acceptance of others.'

Service Learning in Remote Villages in Ecuador

Examples from this programme were more specific to course objectives. Here students lived and worked with indigenous and Afro-Ecuadorian underserved people. The faculty team brought in an expert from the Purdue Center for Instructional Excellence who travelled with the class in 2006 and then drafted questions around the stated learning objectives. Examples include:

- How do you view the gender roles in Ecuador?
- How receptive do you feel the people here are to our efforts?
- How do you view the effectiveness of our group now?
- Give three examples of uncertainty and how you are coping.
- Describe a time when you and/or your team weren’t sure what you were going to do or how you were going to handle a situation: what did you learn about yourself and how you handle uncertain situations?
- How are you communicating with our hosts?
- Describe how you felt that we were welcomed by our partners in Quito?
- How did you react to the way the community partners live?
- How work in the community is organized: discuss how your impressions of the culture and customs are similar to and different from your expectations prior to coming to Ecuador.
- Do you think it is important be able to accept the community as it is, even when aspects of its culture and customs may challenge your own world view or values? Why/why not?
- Think back across your time in Ecuador to date. Describe your two most rewarding or meaningful experiences. Discuss what made those experiences rewarding or meaningful for you.
- How has your experience in Ecuador increased your understanding of your own discipline? Describe specifically what you have learned about your own discipline/profession based on your interaction with your team and community partners in Ecuador.
Identify and describe the approach you or others took or, looking back on it, could have taken, toward meeting the objectives you and your community partner jointly decided on. What alternative approaches could have been taken to meet these objectives (e.g., directing action toward an individual rather than a group, toward a short-term rather than long-term solution)?

Student voices from this programme included:

'The more aware of myself and know what I can do and what I can't. However, I also learned that the things that I thought I couldn't do I actually can.'

'I learned to accept help from others as not a statement that I am incompetent but an expression of sincere desire to assist and I have gotten better at realizing this.'

'I really learned a lot about using my communication skills to interact with others and develop relationships with the (Ecuadorian) people. When you come to work beside others, you can find a way to communicate.'

'I am a lot more adventurous than I thought I was. I had never used a machete, never harvested pineapple and cocoa, or ridden a horse down a mountainside but if I let myself try, I know that I can do more than I thought possible.'

'When you are put in a totally foreign place (with no electricity, roads, or running water), to live with people you don't know anything about you have to be willing to communicate and find out what their needs are and how you must live. I don't think I could ever grow so much sensitivity in a place where I am already comfortable.'

'I now realize how fortunate I am to have the opportunities I have and getting a Frisbee out to play with the village kids and realizing they had never seen one was a reality check for me. I learned most about my self on this trip.'

'I have learned that even though people see me as a quiet girl, I see when it is needed to step up and lead a work team. I learned that I am a leader.'

Summary

This chapter serves as a case study of one college's attempts to demonstrate and document the impacts of two short-term international experiences on undergraduate students. As teachers and administrators we will continue to find it challenging to measure that which we have difficulty defining such as intercultural skills, global mindedness, a worldview, etc. We need to be more specific in our expected learning outcomes – open mindedness, flexibility, intercultural sensitivity, etc. and not expect every international experience to result in the same outcomes.

There is no doubt that students involved in international experiences are changed through these experiences but we have not yet found an effective quantitative method to measure changes in these rather subjective skills and attributes. Rather, we suggest it is possible to develop qualitative measures through reflective journaling to demonstrate change. Moreover, when similar guiding prompts are used sequentially throughout the course it is possible to measure growth or change in individual student responses. We have noted that more change appears to occur in students when the guided reflections are consistently part of the learning experience rather than only used at the beginning and at the end. We also believe that learning from experiences is enhanced when the learner is forced to reflect on the experiences while simultaneously engaged in the experience itself.

References


