

Chapter 15

Global Programs in Sustainability: A Case Study of Techniques, Tools and Teaching Strategies for Sustainability Education in Tourism

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Abstract This chapter describes the pedagogical approach adopted by the Discover Abroad's Global Programs in Sustainability (GPS) and its growth from a concept in 1999 to the largest single education abroad program for students at UGA and one of the most popular in the country. Focusing on broad questions of human–environment sustainability, GPS uses a module-based pedagogical approach to deliver inter-disciplinary, faculty-led, study abroad programs for students from virtually every major on campus to a range of destinations. The mission of GPS is to foster humility through programs that address sustainability, conceptualized as the “meaning of progress”. Quantitative evidence of GPS student learning outcomes has been published in several leading journals and suggests that a one-size-fits all approach cannot be justified in study abroad. Rather than encouraging students to simply go abroad, academic advisers should attend to the needs of students beyond their desired country of destination and academic goals, to include professional development including higher-order outcomes such as global citizenry.

Keywords Study abroad • Global programs • Sustainability • Educational travel

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15.1 Introduction

Educational travel, including study abroad, has become a major form of travel and tourism with 274,000 U.S. students studying abroad annually (an increase of over 300 % since 1994) and millions of students worldwide traveling overseas for education (Institute of International Education, 2012). This chapter describes the pedagogical approach adopted by the Discover Abroad's Global Programs in Sustainability (GPS) housed in the Warnell School of Forestry and Natural Resources at the University of Georgia (UGA) in the United States, and its growth from a concept in 1999 to the largest education abroad program at UGA (and one of the largest in the U.S.). Each year since 2006 GPS has worked with between 250 and 350 students, contributing to UGA ranking in the top five of all Research I universities nationally for the number of students on short-term study abroad programs (Institute of International Education, 2012). While student numbers have been important (with more than 2500 students since inception and representing almost 15 % of all UGA students who study abroad each year), equally important has been the breadth of faculty involvement (from assistant professors to college deans) and academic college/departmental support (with 12 of the University's 16 colleges and schools collaborating with GPS).

Focusing on broad questions of human–environment sustainability, GPS uses a module-based pedagogical approach to deliver inter-disciplinary, faculty-led, study abroad programs for students from virtually every major on campus to a range of destinations (see www.DiscoverAbroad.uga.edu). The GPS approach, initially adopted by consortia representing over 20 U.S. colleges and universities in 2006, has resulted in an additional 500 students or more annually. For example, from 2008 to 2010, approximately 4.7 % of all U.S. students studying abroad in Australia and New Zealand participated in one of the UGA or consortium programs. Since 2008, an ongoing large-scale empirical research effort has addressed student learning outcomes, resulting in several publications with leading travel/tourism and international education journals (e.g., Tarrant, 2010; Tarrant & Lyons, 2012; Tarrant et al. 2014; Tarrant, Rubin, & Stoner 2014; Tarrant et al., 2011; Wynveen, Kyle, & Tarrant, 2012).

15.2 Context of the Activity

The concept of GPS began in 1999 when representatives of five UGA academic units gathered to create a single course in sustainable development. At the request of a former UGA Vice-President for Instruction, our task was to propose an approach for combining four UGA core required courses: Introduction to Anthropology, Environmental Issues, Introduction to Human Geography, and Introduction to Global Affairs. The result was (1) a single study abroad course in Sustaining Human Societies and the Natural Environment, cross-listed in six academic units

(anthropology, ecology, education, forestry and natural resources, geography, and international affairs) at both the undergraduate and graduate levels and (2) a one semester, study abroad program that molded the four core required courses using a module-based curriculum approach.

The mission of GPS is to foster humility (i.e., a love and respect for the diverse peoples of the world and the environment in which we live and belong) through programs that address sustainability (conceptualized as the “meaning of progress”). We focus on questions of how humans interact with the natural environment, with a view to understanding how we may live more sustainably, and extend this guiding philosophy to broader disciplines. In understanding progress, students are required to consider the range of values (economic and non-economic) that are critical to expanding their moral horizons. We believe that sustainability cannot be considered outside of social equity (or a Green Paradigm) that acknowledges a movement away from a Dominant Western Paradigm (focused on economic growth as the sole/core indicator of progress). Consequently, students are challenged to question whether there are other ways of doing things, of living sustainably, and maintaining a healthy and progressive standard of living through experiencing other cultures and countries.

As an example of this paradigm shift, social equity has arguably been a political agenda in New Zealand for many years, dating back to women’s suffrage (New Zealand was the first country in the world to give women the right to vote in 1893) to the recent anti-smacking legislation in 2009 (protecting the rights of children) and, moving forward, in a proposal to become the world’s first smoke-free country by 2025. Unlike many other European colonized societies, the first peoples (the Maori) have been represented in many areas of society resulting, in part, from the Treaty of Waitangi in 1840 and, more recently, from subsequent court settlements through the Waitangi Tribunal (e.g., Office of Treaty Settlements, 2008). In sum, study abroad in New Zealand provides U.S. students a place to study a form of progress that has moved beyond the Victorian ideals of land as a commodity to a Green philosophy in which human–environment relations span a range of non-economic and economic values and includes, at the core, the concept of *kaitiakitanga*, an obligation to take care of, and to protect, our natural resources as guardians of their future.

As global citizens, Americans are recognizing the need to balance economic, social, and environmental demands. Issues such as human population capacities, climate change, biodiversity preservation, and environmental pollution transcend national boundaries and our responses will accordingly need to be international and global in perspective. Furthermore, such problems and their solutions not only have complex ecological and biophysical bases but they are also dependent on understanding the social, cultural, historical, and political contexts. As a result, we adopt an integrated, multi-disciplinary approach that is relevant for students of most, if not all, majors. Our greatest strength has been in improving student access to programs by bridging diverse (often times, seemingly unrelated) academic units to (a) consider their disciplinary perspectives and relations to sustainability and (b) explore how their disciplines could work with other subjects to form an inter-

disciplinary study abroad program in sustainable development. For example, Education, English, History and Forestry have created a program on *British Landscapes and Literature*, while Theater, Anthropology, and Ecology teamed up for a program in India titled *Nature and the Human Spirit*.

A primary goal of GPS is to explicitly relate sustainable development issues across multiple disciplines. Subsequently, course credit for GPS is/ or has been available in at least the following majors: Agriculture and Applied Economics, Anthropology, Art, Biology, Business, Comparative Literature, Ecology, English, Epidemiology, Food and Nutrition, Forestry and Natural Resources, Geography, Geology, Health Policy and Management, History, International Affairs, Journalism and Mass Communication, Literacy Education, Marine Sciences, Physical Education, Public Health, Recreation and Leisure Studies, Social Science Education, Speech Communication, and Theater. Formerly titled Studies Abroad in the South Pacific (and focused on the Australasian region exclusively), programs are now offered across the globe, in Antarctica, Australia (multiple states), Bali and Lombok, Fiji, India, Ireland, New Zealand, Tahiti, and the United Kingdom. Programs range from short- (1–4 weeks) to mid- (one semester) length and provide credit in university core required courses, major core courses, and electives. While most students are undergraduates, a growing number of students are graduates and/or take honors (graduate) level courses.

15.3 Description of the Teaching Activity

Two key aspects have characterized the GPS pedagogical approach: (1) adoption of a module approach and (2) an operational capacity to work with students and faculty from multiple disciplines. The GPS curriculum approach is built around faculty-devised modules, each of which relates to a specific theme and consists of (a) an introductory/background narrative, (b) direct instruction (field experiences/ observations, UGA/host faculty classroom lectures, informal conversations with faculty, small group seminars, and meetings with specialists and professionals), (c) related readings, and (d) assessment (comprised of ~250-word essays about complex ecological, environmental and social issues; peer-reviews; group debates; and digital stories). Not only is this a writing-intensive approach that meets the UGA Writing Certificate standard, but it incorporates strong social- and multimedia elements that recognize (and build upon) the real world in which students live and learn.

Our operational approach provides a comprehensive delivery mechanism for the academic, administrative, and logistical development and implementation of (primarily short-term) faculty-led programs on sustainable development, by facilitating collaboration across diverse (and sometimes seemingly disparate) academic units. (According to the 2012 Institute of International Education Open Doors Report, short-term programs represent the fastest growth sector currently attracting almost 60 % of all education abroad students.) As such, GPS provides an umbrella

framework for (a) developing academic material; (b) faculty preparation (risk assessment, health and safety training, and program policies/procedures); (c) student recruitment; (d) student preparation (online pre-departure orientation, in-country orientation, and Program Handbook); (e) conducting all in-country logistics; and (f) a collaborative research study on student learning outcomes and global citizenry.

15.3.1 Module Approach

The module approach is unlike most other approaches to teaching and learning that students have experienced on campus. In typical campus classes, students learn through lectures in a somewhat linear fashion with one class building upon another. In contrast, ours is a holistic approach, akin to a mosaic, in which the complete picture only gradually comes into focus as more and more pieces of the mosaic are put into place. When the last piece of the mosaic is in place, the picture is complete, depicting the complex and multifaceted nature of what has been created. To push this analogy a little further, the pieces of the mosaic are like pieces of information, and the complete mosaic is the knowledge that has been gained of the subject. Students typically find the module approach confusing and even frustrating early on. Where does one find the pieces of information? Where does this piece fit? Does this piece fit? How does this piece relate to the overall topic? The single greatest advantage, however, is that it obliges students to be an active participant in the learning process and actively engaged in finding the pieces of information from multiple sources. In practice, this means listening and looking, taking good notes, asking good questions, and generally taking advantage of all of the resources and opportunities they encounter. It is a way of learning that is far removed from the taking and regurgitating of lecture notes.

This approach is novel and challenging for many students but, as evidenced from our recent studies (e.g., Tarrant & Lyons, 2012; Tarrant, Rubin, & Stoner 2014; Tarrant et al., 2011) most complete the program with a renewed worldview and a new lens for addressing critical socio-scientific issues. It is a writing-intensive approach to study that requires students to have a clear understanding of the question, to develop a central message/thesis that answers the question, and to formulate a response in a grammatically correct, concise, and non-redundant manner (in ~250 words only or in 6 min debates). We believe that reading, writing and communication skills are critically important to gaining the most from higher education and for being successful in the workplace. Those who speak and write well are at a clear advantage when competing for jobs and promotions.

The programs conclude with a requirement that students submit a 3-min digital story addressing the following question: How has your understanding of progress (and your personal values) changed, if at all, as a result of this program? The stories enable students to address the “big picture” of their study abroad experience relative to the academic goal of progress by projecting their own (substantiated)

values and opinions in a social media format/delivery mechanism. The approach builds on the theory of transformational learning (Kegan, 2000; Mezirow, 2000) by asking students to reflect on their experience using the following cues/guiding questions (adapted from Dolby, 2007):

- What did you learn about the country that you visited?
- What did you learn about yourself, as an American?
- How have your perspectives about the world changed?
- What, if any, changes in your own behavior do you anticipate as a result of this program?

15.4 Evaluation of the Activity

In 2012 GPS received an Honorable Mention by the Institute of International Education (IIE) Heiskell Award for Innovation in International Education (<http://www.iie.org/Who-We-Are/IIENetwork-Membership/Heiskell-Awards/University-of-Georgia>). Considered to be the pre-eminent award for study abroad in the country, GPS is the first (and to date, the only) UGA program to be honored with such. For many students and faculty, the impact of their engagement with GPS has been transformational. Faculty collaboration has resulted in a substantial growth in the number and range of courses being offered across campus (and in the breadth of faculty involved); while, student evaluations acknowledge the growth in personal confidence as well as professional achievements:

This trip has forced me to break down who I am and my beliefs which has allowed me to understand my prejudices and see the world from a new perspective with a new understanding of what is culture. . . I have grown so much as a person and my mind has been opened to a level of global thinking that I never knew existed. . . Experiences that I will use every day of my life for the rest of my life.

Equally as important as student comments are the evaluations of faculty. Dr. Alexandra Brewis-Slade (Executive Director and Professor of School of Human Evolution and Social Change at Arizona State University) acknowledges that:

It is very challenging to develop programs that engage students of all backgrounds and inclinations, but this has been one of the reasons GPS has been so successful. . . [the programs] are driven educationally by a vision of promoting lifelong environmental stewardship in UGA students as the future Georgia and US citizenry, and by all assessments achieve this elegantly and effectively.

State University of New York's Environmental Science and Forestry Provost Dr. Bruce Bongarten notes:

My personal perception of what study abroad courses can be was completely altered. I saw students' eyes and minds opened. I saw curiosity and excitement for learning renewed. I saw students grow intellectually and personally within the course of a single month.

In evaluating the module approach, Dr. Steve Elliott-Gower (Director of the Honors Program, Georgia College) proposes, “it is an approach that maximizes the benefits of a study abroad experience.”

Quantitative evidence of student learning outcomes (growth in global citizenship and pro-environmental behavior) has been published in several leading journals of international education and in travel and tourism. A description of the theoretical (i.e., Values-Beliefs-Norms) framework (providing a conceptual rationale for why study abroad can promote learning outcomes) can be found in Tarrant (2010). The empirical work has demonstrated that engagement in GPS fosters global citizenry by promoting critical assessment of justice issues (as compared with, for example, lower-level citizenry such as personal responsibility and participatory citizenship) with the effect of the program varying by (1) destination/country, (2) gender, and (3) previous study abroad experience (Perry et al., 2013; Perry, Stoner, & Tarrant, 2012; Tarrant & Lyons, 2012; Tarrant, Rubin, & Stoner 2014; Tarrant et al., 2011; Wynveen et al., 2012). Our current work suggests that studying abroad is associated with higher global perspectives (one of several desired learning outcomes of an undergraduate education at U.S colleges and universities) than with traditional on-campus courses and that this difference is greater for courses addressing the academic subject of sustainability (including topics such as globalization, engagement, and citizenship) than for courses unrelated to sustainability.

In sum, a one-size-fits all approach cannot be justified in study abroad and, rather than encouraging students to simply go abroad, academic advisers should attend to the needs of students beyond their desired country of destination and academic goals, to include professional development (including higher-order outcomes such as global citizenry). Incorporating such personal transformational changes into the core objectives of study abroad courses may encourage faculty (and institutions) to acknowledge the added value of study abroad beyond the classroom. It is only in the study abroad environment, for example, that the most dramatic advances in promoting global citizenry are likely to be achieved. Simply put, it is the combination of location (abroad) and academic focus that yields the greatest increases in specified learning outcomes of study abroad.

15.5 Conclusions

In striving to be both innovative and accessible, GPS has been guided by the following objectives: (1) To provide the highest quality, most intellectually and personally challenging and satisfying study abroad experience possible for both students and faculty. (2) To provide programs accessible to a diverse body of students by keeping them as affordable as possible and providing courses suitable for students of all majors and backgrounds. (3) To use the programs as an education framework for developing a body of future scholars and leaders who understand the complex, multi-faceted, global nature of human-environment problems. This reflects our philosophy that sustainable development is not just an issue or problem

for scientists or politicians, but requires a well-educated and informed citizenry with a global perspective, sophisticated socio-cultural, economic, and environmental understandings and sense of responsibility and stewardship. (4) To guide students to high personal standards of global citizenship, stewardship and intercultural competence. We believe that students themselves are significantly enriched not only academically but also personally by well-managed international experiences that can have a significant impact on a student's own philosophy and values.

In addition to promoting and enabling high quality education abroad experiences in sustainability for students, GPS has supported faculty participation in education abroad in three distinct ways:

- GPS has evolved a logistical infrastructure that encourages talented faculty—who otherwise might shun the rigors of administering a study abroad trip—to take the leap into leading education abroad. This level of support allows faculty to capitalize on their teaching skills rather than being mired in details such as student recruitment, in-country logistics, or other administration. (Notably, the GPS Faculty Handbook has served as a template for a number of other UGA study abroad programs.)
- GPS offers a curricular infrastructure that provides faculty with a foundation for implementing classes abroad, but still allows for creativity and innovation. The module approach assures even reluctant faculty that they will be offering rigorous academic experiences, yet is sufficiently flexible to accommodate course content ranging from public health to studio arts. Participating faculty members are accorded the autonomy they expect to mount a course within this framework that yet express their unique perspectives on the subject matter.
- GPS prizes the scholarship of teaching and learning and affords faculty with rich opportunities for engaging in associated activities, including detailed student feedback, learning artifacts, and collegial debriefing sessions following each course taught. Such opportunities are consistent with GPS' culture of continuous quality improvement. In addition, the GPS collaborative research program on teaching and learning enables their faculty to publish and present in education abroad.

The programs are guided by a mission statement and set of objectives that seek to position GPS at the forefront of redefining study abroad, as not only a valid academic enterprise, but also as an extraordinary one that can surpass the impact of traditional campus-based instruction. At a time when employers are seeking individuals who are globally connected, with a critical and multi-disciplinary lens to address many of the global issues threatening the sustainability of our planet, research has empirically demonstrated that our students exhibit a significantly broader worldview and sense of global citizenry (relative to pre-departure) than students who do not study abroad or who do not study sustainability while overseas (Tarrant, 2010; Tarrant & Lyons, 2012; Tarrant, Rubin, & Stoner 2014; Tarrant et al., 2011; Wynveen et al., 2012). Moreover, in demonstrating the breadth of impact, GPS provides a first step for many students who otherwise would not consider study abroad. Initial evidence suggests that the opening of this lens is

resulting in second (and third) steps, moving UGA beyond the goal of 30 % of graduating students with an international experience to the point where many students can lay claim to an international vocation before graduation.

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