This chapter builds on lessons I have learned from working with over 5000 (mostly undergraduate) students in field programs across the globe focusing on sustainable development and how this experience helps me relate the natural world to young people. If there is a golden rule for working with young people in the outdoors, whether aged two or twenty years, it is about setting reasonable expectations both of myself and of them. Establishing and communicating boundaries that we share with one another and our relations with nature are key to forming a bond that nurtures a global citizenry, defined broadly here as a life-long love and respect for the peoples of the world and the natural environment to which we belong.

I make a case for nurturing a global citizenry, as a desired outcome of a shared overseas learning experience. Study abroad is no longer simply a college experience. An increasing number of high-school students are studying abroad, students and their families are using study abroad opportunities as a criterion for selecting a college or university, and families are now more heavily invested (in terms of both time and money) in their child’s study abroad selections than previously. Moreover, the pedagogy of study abroad is changing—short-term, educational travel programs that incorporate a strong experiential component are now the most popular form of international education. Likewise, today’s most notable teachers no longer stand in front of the classroom, rather they facilitate learning by coordinating a multi-sensory experience that combines active/hands-on and class environments, involves technological-laden activities, demands peer-group and in-situ/applied contexts, and perhaps most importantly, a dialogue with the instructor in which student and teacher share an intimate relationship where both gain a greater appreciation and level of respect for the other. It is this shared experience that drives learning across all ages, contents, and situations. Experiential educators have long touted the benefits of ‘learning through doing’ but the mutual respect that is gained
through an experience in which expectations are shared and met is a critical extension if a global citizenry is to be nurtured. I have sought to nurture such love and respect through providing opportunities for a myriad of field experiences for students, both locally and internationally. Moreover, I apply these principles equally to my own two young children as I do with the hundreds of undergraduates with whom I work annually on study overseas.

**Global Programs in Sustainability**

In 2001, I initiated and continue to direct Global Programs in Sustainability ([www.discoverabroad.uga.edu](http://www.discoverabroad.uga.edu)), a suite of faculty-led, short-term, educational travel programs throughout the South Pacific (Antarctica, Australia, Fiji, New Zealand, and Tahiti) for the University of Georgia. In 2004 I founded, and until 2010 directed, American Universities International Programs Ltd, providing similar study abroad programs for a consortium of 20+ U.S. colleges and universities. In recent years, the UGA and AUIP programs have collectively reached approximately 1000 undergraduate students annually. Anyone who has run a single study abroad program understands the critical importance of managing group behavior, and associated issues of risk, health, and safety. Without doubt, the single most important lesson I have learned in directing such programs has been to establish realistic expectations that are shared by faculty and students alike.

The mission of Global Programs in Sustainability (GPS) is to nurture tomorrow’s global citizens through discovery abroad. The programs focus on broad questions of how humans interact with the natural environment, with a view to understanding how we may live more sustainably. As global citizens, Americans are beginning to recognize 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 need to be not only international but also global in perspective. Furthermore, such problems and their solutions not only have complex ecological and biophysical bases but also are dependent on understanding the social, cultural, historical, and political contexts. Accordingly, GPS adopts an integrated, multidisciplinary approach that is relevant for students of all majors. More specifically, GPS seeks:

- To provide the highest quality, most intellectually and personally challenging and satisfying study abroad experience possible for both students and staff.
- 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.
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 (reflecting 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 cultural/social, economic, and environmental understandings and sense of responsibility and stewardship).

To guide students to high personal standards of global citizenship, stewardship and inter-cultural competence, in the beliefs that students themselves are significantly enriched academically and personally by well-managed international experiences, and that we can have a significant impact on a student's own philosophy and values.

To be at the forefront of redefining study abroad as a valid academic enterprise and an extraordinary one that far surpasses the impact of traditional campus-based instruction.

**Nurturing a Global Citizenry**

Most institutions of higher education acknowledge that the future workforce of America depends on a citizenry that is sensitive to, and aware of, global issues. With an estimated one-in-every-six domestic jobs tied to international trade, the bi-partisan Lincoln Commission in its report to Congress concluded that,

"What nations don’t know can hurt them. The stakes involved in study abroad are that simple, that straightforward, and that important. For their own future and that of the nation, college graduates today must be internationally competent" (Commission on the Abraham Lincoln Study Abroad Fellowship Program, 2005).

One response of higher education has been to increase student enrollment in study abroad (among promoting other opportunities for international education). Several, including private and public, as well as research and teaching institutions, now require an international experience as part of the baccalaureate degree. While the Institute of International Education Open Doors Report (2010) cites a near-record level of 260,327 students studying abroad in the academic year 2008/09 (a ~350% increase since 1989/90), it is proposed that this number increase over four-fold to one million within the next decade with passage of The Senator Paul Simon Study Abroad Foundation Act (H.R. 2410, which includes the Simon Act, was approved by the U.S. House of Representatives as part of the Foreign Relations Authorization Act for 2011, and in 2010, an initial $2m was made available through the Senate Appropriations Committee, but as of this writing the Act still requires Congressional approv-
al). But as large as it may appear, the current number represents less than two percent of all students enrolled in post-secondary education having had an international experience before they graduate.

Two core reasons for promoting study abroad were identified by the Bipartisan Commission: (a) global competence and (b) national needs. It can be argued that the former is in response to increasing claims – both within and outside of academia – that societies respond to global environmental degradation facing our Earth, which is largely self-induced (United Nations Intergovernmental Panel on Climate Change, 2007). The second reason concerns a national security and growing need for U.S. leadership and economic competitiveness in the international community. Both objectives reflect an interest in nurturing a global citizenry that is not only sensitive to, and aware of, complex human - environment relationships but is willing to act in a manner consistent with the new sustainability-focused needs and demands facing society. Accordingly, it is imperative that any new/proposed sustainability agenda (i.e., policy, program or intervention strategy) recognize how these new values and beliefs are formed and their influence on changing human behavior (Tarrant & Hull, 2005). A key objective of GPS is not only to facilitate the development of an ecological literacy but, more importantly, a global mindset/citizenry upon which that literacy/knowledge base is both formed and nurtured.

**Establishing Expectations**

The broad assumption in higher education is that studying abroad promotes a worldview and awareness of global issues, yet nurturing global citizenry clearly requires more than simply travel. Dobson (2003), for example, argues that civic obligation is a key determinant; a “Good Citizen” is one who accepts a political obligation to act in a just and fair manner, in contrast to a “Good Samaritan” who may act out of a duty. This distinction is illustrated using the example of climate change,

> "if global warming is principally caused by wealthy nations, and if global warming is at least a part cause of strange weather, then monies should be transferred as a matter of compensatory justice rather than as aid or charity.... globalization then changes the source and nature of obligation" (Dobson, 2003, p.31).

A civic obligation is a duty, or expectation, of responsibility, in this case, concerning how (limited) global resources are distributed across the planet. Indeed, many authors acknowledge that the natural environment is the context in which global citizenship is best considered. The global nature of most
environmental issues facing humans today such as climate change, ozone depletion, the supply and distribution of renewable and non-renewable resources, and biodiversity and species loss transcend national boundaries with effects distributed across the planet. It follows therefore, that the civic obligation expressed by citizens most appropriately concerns the sustainable consumption and use of earth’s resources. As such, global citizens are not simply international by reason of their world travel but as a result of their ecological footprint – the quantity of nature required and consumed to sustain their lifestyle behaviors. To the extent that people hold environmentally virtuous (or just) values, obligations of environmental responsible behaviors will follow, resulting in more sustainable ecological footprints.

At GPS, we have refrained from using the term “obligations” (which has social and political connotations) in preference to “establishing expectations” (as perhaps a less value-laden term). Accordingly, we have recognized several core expectations governing both academics and non-academics of our global programs. Non-academic areas cover risk management, logistics, and health and safety; and our policies and procedures are very clear about what behaviors are considered unacceptable with respect to drug and alcohol use, disorderly conduct, discrimination and harassment, and conduct in the field. Similarly, academic expectations such as academic honesty, attendance and tardiness, assessment criteria, and extra credit are clearly prescribed. An excerpt from the GPS Program Manual concerning ethical expectations, for example, states that participants are expected to demonstrate:

- A responsibility to people whose lives and cultures are studied.
  - Students must do everything in their power to protect the dignity and privacy of the people with whom they conduct field study.
  - The rights, interests, safety, and sensitivities of those who entrust information to students must be safeguarded. The right of those providing information to students either to remain anonymous or to receive recognition is to be respected and defended. It is the responsibility of students to make every effort to determine the preferences of those providing information and to comply with their wishes. It should be made clear to anyone providing information that despite a student’s best intentions and efforts anonymity may be compromised or recognition fail to materialize. Students should not reveal the identity of groups or persons whose anonymity is protected through the use of pseudonyms.
  - Students must be candid from the outset in the communities where they work that they are students.
o Students must acknowledge the help and services they receive, and must recognize their obligation to reciprocate in appropriate ways.

o To the best of their ability, students have an obligation to assess both the positive and negative consequences of their field study. They should inform individuals and groups likely to be affected of any possible consequences relevant to them that they anticipate.

o Students must take into account and, where relevant and to the best of their ability, they must make explicit the extent to which their own personal and cultural values affect their field study.

o Students must not represent as their own work, either in speaking or writing, materials or ideas directly taken from other sources. They must give full credit in speaking or writing to all those who have contributed to their work.

A responsibility to hosts.

o Students should be honest and candid in all dealings with their own institutions and with host institutions. They should ascertain that they will not be required to compromise either their responsibilities or ethics as a condition of permission to engage in field study.

A responsibility to comply.

o When a supervising faculty member or GPS staff feels that the student has violated this statement of ethics, the student may be placed on probation. Egregious violations can be grounds for dismissal from the program.

Shared Experiences

Unlike traditional field programs, which are often a survey of geographic locations, GPS adopts a modular-based approach in order to build a story, piece by piece. Each module (on average there is one module per week) relates to a specific theme and/or geographical location and consists of (a) a background/introductory narrative, (b) related readings and other associated material (e.g., field activities and instruction, classroom lectures, etc) and (c) several questions (essays, projects, field quizzes, etc) about complex ecological, environmental and social issues, most of which are answered in a short (~250-word) essay.

The module approach is unlike other approaches to teaching and learning that students have probably experienced on campus. In most classes, students are taught and learn through lectures in a somewhat linear fashion with one class building upon another. The module approach is akin to completing a
mosaic in which the entire 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, and one can see 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 gained of the subject.

Students often find this 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? These are all legitimate questions, and questions that students will have to keep asking themselves and their classmates. Despite some initial confusion (perhaps like the confusion when confronted with a jumble of mosaic pieces), we believe that the module approach has numerous advantages, especially for teaching and learning within the context of a field-oriented study abroad program. Perhaps the single greatest advantage of this approach is that it is an active and shared approach. Students are actively engaged in finding the pieces of information from multiple sources and sharing this with others (peers and professors). While one of these sources is the traditional classroom lecture, there are also mini field-lectures, class discussions on the road, informal conversations with field faculty, meetings with specialists and professionals, and direct experience and observation, as well as the related readings. The module approach obliges students to be active learners, active participants in the learning process. In practice, this means listening and looking, taking notes, asking good questions, and generally taking advantage of all of the resources and opportunities encountered. This practice is a way of learning that is far removed from taking and recalling lecture notes. The module approach is novel and challenging for most students but, if embraced, it becomes a highly satisfying way of learning. Indeed, students comment that it influences the way in which they look at the world around them and learn beyond this particular study abroad experience. Some typical student evaluations include,

I have learned more here than in the rest of my time at UGA... I learned how to travel internationally and am not timid anymore to go out and do what I have always wanted to ... It was from this [program] that I learned the most about myself...
Experiences that I will use every day of my life for the rest of my life.

My analysis of student learning outcomes associated with the programs demonstrates a growth in global citizenship (Tarrant, 2010) and pro-environmental behavior (Tarrant, Stoner, Borrie, & Kyle, 2011). 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.
Translating Shared Experiences and Expectations to My Own Backyard

It is understood that students must first form a close relationship with the issue or subject at-hand in order to begin to understand its value and meaning (Hodson, 2011). Equally, I have sought to build that shared relationship with my own children as we seek to explore and understand the natural world. While boundaries and expectations regarding appropriate behaviors (much as with undergraduate-aged students) are first established, the key aspect is to unfold a story that allows them to understand the meaning of the subject and then to share or relate the meaning of that subject with others through some common association.

On a GPS study abroad program, for example, a forested landscape may represent a community of different trees with each species known intimately by one student, or it may simply be a mass of brown and green woods to another student. The former student knows everyone at the party, while the latter may find his or herself alone in a corner knowing no other person. The story to be told, however, does not rely on knowing each species, or indeed even one species, rather it concerns the mosaic of meanings or values represented by the forest. Values ultimately enable the student to see the forest through a different lens, or worldviews, in a way that previously would not have been translated or even considered. Moreover, the values are lived experiences – students form a relationship with the landscape by residing and learning in it – shared amongst one another and with their instructor in both a personal and professional context. The landscape is no longer a collection of trees but a representation of history, politics, and society through the interdisciplinary module questions that are posed.

In translating this to the students with whom I work, my goal is to emphasize values – however rudimentary they may be – above pure knowledge. Consistent with the thinking of Aldo Leopold, considered by many to be the Father of Conservation, the importance of simple awareness, appreciation, and sense of interdependence with nature is far greater than knowing the science:

He who owns a veteran bur oak owns more than a tree. He owns a historical library and a reserved seat in the theater of evolution... Education, I fear, is learning to see one thing by going blind to another (Leopold 1949, p.30, 158).

Leopold’s Land Ethic teaches us that unless nature is to be loved and respected, humans will continue to abuse it as a commodity belonging to us. Instilling a global citizenry is therefore a pre-requisite to establishing a long-term ethical relationship that considers the rights of all living species in the community and not solely the dominion of humans. Ethical values prompt us to cooperate as members of a community to which we belong and, in an attempt to
incorporate ethics into our instruction, we have framed science within a socioscientific issues (SSI) based approach. Socioscientific issues are value-laden and consider the sociocultural and ethical contexts of real-world scientific problems. In one of our natural resource field courses, for example, students role-play characters in a simulated Senate Hearing of a proposal to drill for oil in the Arctic National Wildlife Refuge. Over the course of ten years we have developed a resource packet containing political, social, cultural, and economic arguments that reflect the diverse range of opinions from pro- to anti-drilling. The simulation exercise has now formed part of a Teacher Quality Workshop in the state of Georgia that offers teachers opportunities to develop the skills and abilities to create simulations in their own backyard. The meaningful purpose is to connect students with local decisions that reflect environmental, social, and health issues in their own community, and concomitantly, to empower teachers (and the students they work with in schools) to be active and responsible citizens by equipping them with “the capacity and commitment to take appropriate, responsible, and effective action on matters of social, economic, environmental, and moral-ethical concern” (Hodson, 2011, p. 29).

Conclusion

Experiential programs that simply incorporate a field component in the delivery of its instruction are arguably little more than educational forms of tourism. Rather, to nurture global citizenship requires a delivery mechanism that engages students with the real world and enables them to think beyond their own immediate needs. This mechanism is dependent upon a transformational learning process in which new values, beliefs, and meanings are created and formed and one in which the ideals of justice-oriented citizenship are promoted. Our programs’ educational focus not only establishes an experiential base on which to build new beliefs about human–environment connections, but also provides a platform for interpreting the academic content of the programs in light of our research goal of nurturing justice-oriented (Earth) citizens. As such, sustainability is only possible if we act as citizens rather than consumers since, “as a 'citizen’, I am concerned with the public interest rather than my own interest; with the good of the community rather than simply the well-being of my family…. as a ‘consumer’, I concern myself with personal or self-regarding wants and interests; I pursue the goals I have as an individual” (Sagoff, 1988; p.8). This extension of obligation (from self to others) arguably requires a fundamental transformation in the way individuals think and behave.

As a parent and as a professor, I challenge students to express a new worldview – a lens through which they view the world – by facilitating learning
through a values-laden approach. I believe that such learning occurs best through shared experiences that nurture a relationship between the student and teacher, bounded by reasonable expectations both of them and myself and our intimate ties and dependencies on nature. In this chapter, I have sought to provide field-oriented programs that nurture and promote a sense of global citizenry – the notion that we live as humans in the environment and are therefore inextricably linked to the health of the peoples of the world and the natural environment to which we belong – as both a professional and personal development outcome.
References


