INTERNATIONAL SUSTAINABLE DEVELOPMENT STUDIES INSTITUTE
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The Theory and Practice of Experiential Learning and Sustainability

People, Ecology and Development
Landscape based experiential studies of Southeast Asian ecosystems and cultures

A unique program combining immersive cross-cultural study, experiential education, and leadership development

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SUMMARY

The mission of the International Sustainable Development Studies Institute (ISDSI) is to develop committed leaders for a sustainable future. Our vision is to combine the best of cross-cultural study abroad with leadership development—focused on the study of people, ecology, and sustainable development. We believe that hands-on learning in a cross-cultural environment is the best way to help students understand the challenges of creating a sustainable future, and engender a commitment in them to be change agents in their future careers.

What distinguishes the ISDSI *People, Environment, and Development* program from both faculty led and the university-based programs is the expedition and landscape based course design model. Drawing on the education for sustainable development work of David Orr and Roselyn McKeown, among others, the ISDSI program strives to take advantage of natural teaching opportunities that are "locally relevant and culturally appropriate" (Orr) rather than taking a curriculum developed in a North American college or university and trying to fit it to the Southeast Asian context. ISDSI offers courses designed and taught with the collaboration of the local communities where students will live and learn.

Working in Southeast Asia with American, Thai and other students, ISDSI has developed unique "Expedition Field Courses" which allow the students to be immersed in field studies for weeks at a time. A strong academic focus on sustainable development issues is supported by two key enabling skills—cross-cultural competency (including language study) and expedition skills.

The ISDSI *People, Ecology and Development* program has courses in every region of the country, representing every significant region in Thailand and Southeast Asia. These include upland (mountain) ecosystems and tribal communities, lowland villages, rivers, cities, islands and coasts.

Nationally recognized in the US as a "best practice" program by the Institute of International Education (IIE) in 2005, several things make ISDSI programs unique:

- The semester is a series of four courses, each one a month long "block"—one week on campus and then three weeks of field studies.
- The curriculum is landscape based—developed out of specific environments and cultures—to take advantage of contextually rich learning opportunities.
- Courses are collaborations between ISDSI, local communities and NGOs, ensuring that the program is both culturally sensitive and accountable.
- Cross-cultural skills, including language, are a key component of courses on the program.
- Expedition skills and leadership are required and taught as necessary during the courses.

ISDSI Expedition Field Courses are an innovative approach to studying ecology and sustainability within the context of cross-cultural learning. By participating in the program, students will become knowledgeable about sustainability, cross-culturally competent, and have the leadership skills to be change agents on their return home.

Introduction

Education at its best is concerned with providing students with the knowledge and skills to work and live in an increasingly interdependent world. If education is to contribute to building a more enduring society, it must also include a focus on sustainability as a core concern.

> "Educating for a sustainable future is not so much about a destination as about the process of learning to make decisions that consider the long-term economy, ecology and equity of all communities. Its goal is to build an enduring society. This involves learning how to anticipate the consequences of our actions, envision a sustainable future and create the steps needed to achieve the vision." (UNESCO, 2002)

There are many encouraging signs of a growing emphasis on sustainability in education. However, much of higher education, especially in the liberal arts, focuses on providing students knowledge with less emphasis on the skills needed to use that knowledge.

> "...the use of education as a tool to achieve sustainability...calls for giving people knowledge and skills for lifelong learning to help them find new solutions to their environmental, economic, and social issues." (McKeown, p. 7, 2002)

Two skills, cross-cultural competency and leadership, are often discussed as desired outcomes for students. While cross-cultural competency is addressed through many study abroad and intercultural learning programs, and some schools are beginning to address leadership skills, few are taking these two critical areas and applying them to education for sustainability. If we are to envision and create a sustainable future, students must have not only knowledge of sustainability, but the leadership skills to be change agents as well as the cross-cultural competency to thrive in an interconnected and interdependent world.

> "Rethinking and revising education from nursery school through university to include more principles, knowledge, skills, perspectives and values related to sustainability in each of the three realms – social, environmental, and economic – is important to our current and future societies. This should be done in a holistic and interdisciplinary manner. The best chance of success of education for sustainable development lies not in a separate programme but in embedding its vision within other initiatives." (UNESCO, 2003)

The mission of the International Sustainable Development Studies Institute (ISDSI) is to develop committed leaders for a sustainable future, embedding education for sustainability within study abroad. Our vision is to combine the best of cross-cultural study abroad with leadership development—focused on the study of people, the environment, and sustainable development. We believe that hands-on learning in a cross-cultural environment is the best way to help students understand the challenges of creating a sustainable future, and engender a commitment in them to be change agents in their future careers.

The ISDSI mission statement is *"Developing committed leaders for a sustainable future."* The mission statement is focused on education and mentoring students ("developing") with three goals. "Committed" refers to helping encourage students to want to be involved and active in creating a sustainable future. "Leaders" refers to our commitment to teach leadership skills alongside the academic skills. Finally, a "sustainable future" refers to the need to teach students about sustainable development so that they can be equipped to help create a sustainable world.

What distinguishes the ISDSI *People, Environment, and Development* program from both faculty led and the university-based programs is the expedition and landscape based course design model. Drawing on the education for sustainable development work of David Orr and Roselyn McKeown, among others, the ISDSI program strives to take advantage of natural teaching opportunities that are "locally relevant and culturally appropriate" (Orr) rather than taking a curriculum developed in a North American college or university and trying to fit it to the Southeast Asian context.

Our goal is that students who study with us:

1. Understand the complexity and urgency of sustainable development issues.
2. Are competent to live and work cross-culturally.
3. Have the technical skills to study and travel safely in the urban, village and backcountry environments of Southeast Asia.
4. Have the leadership and expedition skills necessary to be effective change agents on their return home.

Background

The International Sustainable Development Studies Institute (ISDSI) began as an initiative of Kalamazoo College, USA. Kalamazoo College is an undergraduate liberal arts college in Michigan, and has been ranked number one in the United States for its study abroad program (US News & World Report 2003: America's Best Colleges). With almost four decades of experience in study abroad, approximately 85 percent of Kalamazoo College students participate in 50 study abroad programs in 29 countries spanning 6 continents.

In 1998 Kalamazoo College started a program in Thailand focused on sustainable development studies, with the mandate to develop new approaches to experiential cross-cultural learning. The first group of students arrived in 1999. This became the basis for ISDSI, which now works with other colleges and universities, and to date has worked with over 500 American, Thai, Canadian and Australian students in both short (multi-week) and long term (multi-month) programs. All of the courses and programs have emphasized a strong experiential component, with field studies central to the courses.

Seeking to expand the experiential component, and to deepen students' understanding and involvement with the field studies, ISDSI began studying various models of experiential education, both within and outside of academic courses, study abroad, and related fields. One model that was very promising was that used in wilderness and outdoor education by Outward Bound, the National Outdoor Leadership School, and others. Emphasizing immersion in the environment, "full person" learning, and intrinsic challenges and rewards, this type of education shared many of the goals of cross-cultural study abroad in terms of personal transformation and a new learning environment for the students.

As well as being mentioned as a goal in the literature on study abroad and environmental education, leadership was emerging as a key issue based on our observations and the feedback of our students. Students needed and wanted leadership skills. ISDSI began incorporating leadership in the curriculum while studying ways of further integrating leadership training throughout the program. Based on this, ISDSI then worked with the National Outdoor Leadership School (NOLS) in 2002 to review ISDSI methods, risk management and course areas.

From the work with Kalamazoo College and NOLS, ISDSI has developed "Expedition Field Courses" (EFCs) which leverage the best of study abroad and wilderness expedition courses. The EFCs take the "expedition model" of wilderness courses and apply them to immersive cross-cultural study focused on understanding the cultures and ecology of Southeast Asia.

Initially working within a traditional 16 week semester of four campus based courses, the program had extensive field studies of NGO projects and other areas of interest throughout the Fall semester. As the years progressed, however, increasing time was spent outside the classroom, and a decision was made to try and find a new model for teaching about sustainability which incorporated more field study. The concept of "Expedition Field Courses" was developed in 2001-2002, and began phased implementation in 2002. EFCs are taught in a series of "blocks" of four weeks each, four courses per semester.

An experimental Spring semester was run in 2002, and ISDSI launched its full academic year program in 2004-2005, with additional courses offered in the Spring, completing the initial plan of having courses in every major area of Thailand.

In 2004, as the program was growing, ISDSI realized a long held goal of registering as an independent educational foundation, the Foundation for Experiential Learning, and moved off the campus of Chiang Mai University to its own facility. Throughout its history ISDSI has hosted short-term programs for other colleges and universities from the United States, Australia and Canada, as well as hosted individual students (both undergraduate and graduate) doing thesis research and writing in Thailand. Now working with over 20 NGOs in Northern Thailand and throughout the country, ISDSI also runs an active internship program for students, and works with approximately 20 communities nation-wide.

In 2005, the ISDSI program, "People, Ecology and Development" was recognized by the Institute of International Education (IIE) as one of three "best practice" programs in campus internationalization. This national recognition in the United States reflected the innovation of ISDSI programs, and ISDSI's growing reputation for excellence.

Sustainable development studies

Sustainable development may be the biggest challenge facing the 21st century. Old approaches to education are not necessarily adequate to develop and prepare people for the unique challenges of sustainability.

> "Now more than ever...we need people who think broadly and who understand systems, connections, patterns and root causes." (David Orr, p. 23, 1994)

In order to address the complexities of sustainable development, ISDSI focuses on the interaction of three areas:

- **People**—languages and cultures, including language study, homestays, participant observation, seminars on society and history and work with local counterparts
- **Ecology**—ecology and geography, including social and political geography, human- environment interactions and ecological perspective on issues, and understanding of complex systems
- **Development**—globalization and change, including challenges facing developing countries, local-global interactions, NGOs and people's movements and sustainability

Sustainable development studies examines the interaction of these three factors to help students understand "...systems, connections, patterns and root causes." While grounded in a specific discipline, the courses are inherently multi-disciplinary through this threefold emphasis.

> "Rather than being clear, simple and unambiguous, the concepts involved in ESD [education for sustainable development] are complex. Their complexity stems from the intricate and complicated interactions of natural and human systems. The challenge to educators is to derive messages that illustrate such complexity, without overwhelming or confusing the learner." (McKeown, p. 30, 2002)

One of the clearest ways to "illustrate complexity" is to show students specific concrete examples in the real world outside the classroom. Rather than abstract concepts in a classroom, field based learning in the "real world" outside the classroom holds the greatest promise for helping students understand the "systems, connections, patterns and root causes" that Orr describes.

ISDSI's approach to culture and sustainability

While recognizing that there are a wide variety of definitions of sustainability and various interpretations about how culture factors into sustainable development, the following position statement guides ISDSI's approach to teaching about culture and sustainable development.

> *Sustainable development is development which meets the needs of today without diminishing the capacity of future generations to meet their needs in the future. Sustainable development conserves or improves the resource base. Anything which diminishes or damages the resource base is thus not sustainable in the long term.*

Every culture has practices and values which are in line with the principle of sustainable development as described above—conserving the current resource base for future generations (also called "stewardship"). At the same time, cultures may also have practices which *are not* sustainable, and which degrade the resource base in such a way as to diminish the ability of future generations to sustain themselves.

Often cultural practices (such as hunting or fishing) are sustainable under low population densities, as the resource base has time to naturally renew and regenerate itself. However, as demands on the resource base grows, both in terms of population pressures and additional users, some traditional practices may become *unsustainable* as the natural environment can no longer renew itself.

ISDSI recognizes that specific cultural practices can be empirically assessed as *sustainable* (conserving or improving the resource base) or *unsustainable* (degrading the resource base). That is, by understanding the underlying ecological processes and resource base upon which a culture depends, an objective empirical (evidence based) judgment about the impact of specific cultural practices can be made. In our teaching about the relationship between culture and ecology these differences are recognized and studied. Care is taken to emphasize that it is not the entire *culture* which is sustainable or unsustainable, but rather specific cultural *practices* which are sustainable or unsustainable. By studying and analyzing specific cultural practices, ISDSI is also teaching its own students to analyze their own *personal* practices as they relate to sustainability.

Principles of the ISDSI educational approach

While there is variation in specific courses based on the academic subject, the instructor, and the specific ecology and culture, certain core principles are shared in ISDSI courses.

Landscape based: ISDSI courses are *landscape* or *place based* courses—they take a specific location and study the culture and ecology of that place. All ISDSI courses focus on a specific academic subject that is best taught within a specific landscape. Within that landscape courses examine the relationship between culture and ecology. Students thus need to understand both the culture (including language, norms, values, etc.) and the ecology (specific biological and ecological relationships) of place.

Leadership: Leadership and technical skills enable students to successfully study these academic topics experientially in the particular landscape under consideration. These skills form a core part of the mission of ISDSI, as they are a concrete way to teach students skills they can use in the future to build a more sustainable world. They can teach important lessons about ecology, the environment within which the course takes place, leadership, decision making, and other lessons.

Language learning: Language (primarily Thai) is taught at ISDSI as a way to enable students to both understand the culture they are embedded in, and as a way to communicate with local people. Only by speaking the language of the people they are studying with can students begin to understand and appreciate the culture. While language learning is a valuable goal in itself, at ISDSI, language learning is an enabling skill rather than the end goal alone.

Homestays: Homestays in both urban and rural (village) areas are used to help students more fully understand the cultures they are studying, as well as specific practices, such as farming or weaving, that may be a part of family daily life. Homestays are an important view into the culture, values and practices which affect sustainable development in Thailand. Homestays are a key entry point for students to understand the relationship between culture and ecology.

Travel through the landscape (backpacking, hiking, canoeing, sea kayaking): By traveling through the landscape under their own power, students learn important lessons about the landscape they could not learn by traveling in a vehicle. Students are *immersed* in the landscape they study, and by traveling slowly will have time to fully understand the landscape in its multi-sensory complexity—knowing the sights, sounds, smells and feel of the landscape directly—in a way impossible to understand if they were to travel in a vehicle. Travel through the landscape also gives students an important sense of *scale*—so that they better understand how high a mountain is, how far apart villages are, or how long a river is. This *connection to the natural world* is usually missing in most education, and traveling through the natural world is a way to establish that connection.

Direct learning: Rather than learning through mediated (non-direct) experiences such as slide shows and videos, on ISDSI courses students to learn *on their own* directly from the environment. This requires letting students explore in both structured and unstructured ways. While there are appropriate times to use *indirect* learning (through videos or other media), media is carefully considered in relation to how well it fits with the direct learning on the course, and does not *substitute* for direct learning.

Appropriate place of teaching: Generally speaking, nothing is taught in the classroom which can be taught in the field. Classroom based seminars are best for exploring theories, macro level issues, or concepts which are abstract. Field based learning is best suited to teaching about specific cultural and ecological concepts, specific facts about the social and physical landscape, field methods, etc. For each concept taught, care is given to ensure that it is taught in the most appropriate setting.

Facilitation: An important part of how things are taught at ISDSI is through facilitation. “Facilitation” refers to acting as a guide through the learning journey, rather than as only the one who transmits facts and knowledge to students. Any time an instructor tells a students something they could learn themselves, they are robbing that student of a learning opportunity. There are appropriate times to directly teach facts and concepts, but they must be carefully considered against ways to teach as a facilitator.

Graceful failure: An important way of learning for students is through trying things out themselves, which can at times involve failure. We refer to this as “graceful failure” since while we allow students to try and to fail, we work to ensure that they learn from the failure, and build towards success. By trying, failing, and trying again, students can learn valuable lessons taught by the environment, rather than by an instructor or a reading. Those lessons will be usually remembered longer, and may have more practical applications than learning theory alone.

Learning through challenges: Students learn best through challenges. Just because things are difficult does not mean they are not good opportunities for learning. While some students may want everything to be "easy," making everything easy for students robs them of the opportunity to learn about how to cope and meet challenging situations. For some students on ISDSI programs, aspects of the course may be the first time they are put into a challenging situation with the chance of failure. Working through a challenge—of speaking Thai or doing a field survey—is a very valuable learning opportunity for students. The role of the instructor is to support them through those challenges, without taking away so much of the challenge that they cannot learn from it. Taking away challenges also robs students of learning opportunities.

Synergy between study abroad and wilderness / experiential education

Two traditions in education have experience with introducing students to "real world" complexities beyond the classroom—cross-cultural study abroad and wilderness / outdoor education. Our courses combine deeply immersive cross-cultural study abroad with the experiential and immersive learning environments of wilderness and outdoor education.

Both of these types of education share several traits:

- Fully immersive learning environments
- New and unfamiliar contexts
- Necessity of learning new skills
- Intrinsically rewarding

We believe—and have seen demonstrated on our courses—that combining these approaches to education can lead to more transformative and powerful learning opportunities for our students than traditional study abroad or traditional courses based primarily in the classroom with only "excursions" into the field.

There are other areas of overlap between cross-cultural learning and wilderness skills. "Expedition behavior requires flexibility because the outdoors always has a surprise or two waiting." (Harvey, p. 168, 1999) While written about the wilderness, cross-cultural experiences also always have "a surprise or two." By focusing specifically on leadership (including self leadership), we can better train students to handle the surprises—from backcountry travel to cross-cultural sojourns.

Experiential education

Further illustrating the synergies between outdoor and wilderness education, Priest and Gass offer a definition of experiential education for outdoor adventure education which applies equally well to cross-cultural study:

> "We can loosely define experiential education as "learning by doing with reflection." This philosophy is based on the belief that people learn best by direct and purposeful contact with their learning experiences. Simply put, the best way to learn about problem solving is not to read about it in a book, but to actively practice solving problems in a "hands-on" setting. Such learning experiences are realistic: physically active, cognitively meaningful, and affectively engaging." (Priest and Gass, p. 17, 1997)

Common to both cross-cultural and outdoor education is a new environment, which encourages learning that cannot take place in the comfortable "home" environment—regardless of if that "home" means "home culture" or "home city." Again, while writing about the outdoors, Priest and Gass's comments apply equally well to cross-cultural learning:

> "Placing participants into an unfamiliar learning environment can foster the development of a variety of beneficial dynamics. Such environments are often valuable because they present such a stark contrast to learners' familiar environments, often allowing participants to see old behavior patterns in a new light with a richer perspective as well as permitting participants to notice behavior patterns that they may have overlooked in familiar settings." (Priest and Gass, p. 20, 1997)

Intrinsically rewarding learning environments

These new settings can provide rich opportunities for helping students learn new material, as it is much richer and more complex than the abstractions usually presented in the classroom. In addition, these new environments (outdoors or cross-cultural) are intrinsically rewarding, in that the activity itself is the reward, rather than extrinsic (or constructed) rewards, such as grades based on exams. In discussing what effective outdoor leaders should do, Priest and Gass argue that leaders should:

> "Create situations where the consequences (positive or negative) are natural outcomes from the clients' actions (e.g., delivered by the environment), rather than artificial ones (e.g., from the leader)." (Priest and Gass, p.24, 1997)

Both cross-cultural settings and wilderness settings share this trait. Consequence based learning is extremely powerful. Students who master a new language are naturally rewarded by being able to function in the new host culture—traveling, meeting people, buying what they want in the market, etc. If they can speak the host language or understand cultural norms, students will be rewarded with deeper and more meaningful interactions—a natural consequence. Likewise, students who learn how to pitch a tent correctly

will be dry in the rain. By relying on the environment to be a powerful teacher, these types of education help to get students to be active and engaged learners.

Illustrate complexity and holistic knowledge

A key aspect of these natural learning environments is that they are complex. Part of the value of going to and living in a new culture is that you learn more about the culture and the people than you ever could out of a book. For example, a village in Thailand is a complex place. Reading about village life can never capture the complex interactions and factors that go into "village life." Arguing for attention to complexity in environmental education, Manning captures well the concerns of both cross- cultural study and outdoor education:

> "The need to teach students to appreciate and understand complexity, all agreed, is critically important but also constitutes a major challenge, as students must be able not only to grasp a diversity of disciplines and perspectives, but also to integrate them. The integration process in turn requires an understanding of certain guiding principles and techniques. In many cases, the inability to integrate disciplines is embedded in the structure and culture of the academic institution itself." (Manning, p. 16, 1999)

This "integration of disciplines" is especially critical in understanding sustainability, and all ISDSI courses are cross listed in two major disciplines. ISDSI courses are designed to immerse students in the complexities of naturally rewarding environments, guided by a specific academic line of inquiry. By conducting these courses cross-culturally we are able to put students in a culture where things are new—helping them to examine and see cultural, social and other issues in a new light. For example, many students have noted how they didn't really understand how much Americans consume until they had lived for a time with villagers. It was only then that the intellectual concept of "ecological footprint" became real in their comparison between their own familiar environment and the new environment they found themselves in.

Advantages of Thailand as a study site

The *People, Ecology and Development* program uses landscape based courses to teach about the relationship between ecology and culture. Thailand presents several advantages for this sort of program:

- Thailand has great ecological variation, from tropical islands, to rainforests, remote mountains, alluvial valleys, a variety of river systems and an extensive coastline. This allows ISDSI to have courses in areas representative of Southeast Asia—rivers, forests, villages, cities, islands and coasts.
- Thailand has extensive cultural variation, including ethnic minority tribal people living in the uplands, semi-nomadic *chao lay* in the coastal and island areas, northern "*khon müang,"* Lao in the Northeast, Southern Thai Muslims of Malay ancestry, rural villagers, city dwellers, and others.
- Thailand has a wide variation in terms of development, from cosmopolitan cities like Chiang Mai and the mega-city of Bangkok to isolated villages that have no roads, electricity or running water. Classic problems of under and over development can be seen within a single country.
- While there is a great deal of variation, Thailand also is united by a common language. Although there are distinct dialects in each region, and a variety of ethnic minority languages, all formal public education is conducted in the Central Thai dialect. This means that students on ISDSI programs can study a single language, and still be able to communicate with people throughout the country.

By working in Thailand, ISDSI is able to study the ecological, social, ethnic and developmental diversity of Southeast Asia. ISDSI courses take place in every region of the country, and include upland tribal communities, lowland rice farming villages, dense urban areas, remote tropical islands, diverse river ecosystems and extensive coastal areas.

Landscape based courses

> "ESD [education for sustainability] carries with it the inherent idea of implementing programs that are locally relevant and culturally appropriate. All sustainable development programs including ESD must take into consideration the local environmental, economic, and societal conditions. As a result, ESD will take many forms around the world." (McKeown, p. 13, 2002)

ISDSI strives to take advantage of natural teaching opportunities that are "locally relevant and culturally appropriate" rather than taking a curriculum developed in a North American college or university and trying to fit it to the Southeast Asian context. All ISDSI courses are "landscape based"—looking at the social, environmental, political and other "landscapes" of Southeast Asia. Sometimes this is may involve designing a course which traverses a particular geographic landscape—such as backpacking through the remote mountains of Mae Hong Son while studying human-forest interactions. This grounds courses in the reality of particular communities and villages.

Why landscape based courses?

There are a number of reasons for courses to spend significant time outside the "traditional" classroom. Manning argues that a key part of environmental education is connecting students to human and natural communities:

> "There was general agreement that today's generation of students lacks a deep intimacy with, and affection for, living, non-human organisms, as well as close interaction with the human communities in which they live." (Manning, p. 17, 1999)

Only by spending extended time in the field can students and others understand and develop this "deep intimacy" with the environment and human communities. David Orr describes this as a need for "immersion in particular components of the natural world":

> "...[A] course on a nearby river might require students to live on the river for a time, swim in it, canoe it, watch it in its various seasons, study its wildlife and aquatic animals, listen to it, and talk to people who live along it. A river become..."a microcosm of the world" and a doorway to wider knowledge. Each student might research a particular aspect of the river, say, its history, evolution, art, chemistry, ecology, literature, or the politics and law that govern its use. Collectively, a picture of the river might begin to emerge that would be more than the sum of the individual projects. I am not proposing just a weekend field trip but a longer period of time to allow the senses to soak in the experience as sights, sounds, tastes, smells, and feel until something like profound respect, or more, begins to take root." (Orr, p. 96, 1994)

Our EFCs are designed to do just what Orr proposes—multi-week "immersions" in a particular landscape. For example, during the EFC on agriculture students are not only studying a text or in seminars, but are also living with farmers, working in the fields, chopping compost, planting seeds, and other activities. By basing courses on local cultures and landscapes, students can be better immersed in the real world issues and complexity of the topic at hand.

Advantages of landscape based courses

> "What might such experiences do? …they would remove the abstractness and secondhand learning that corrupts knowledge at its source. Natural objects have a concrete reality that the abstractions of textbooks and lectures do not and cannot have." (Orr, p. 96, 1994)

Many times students on ISDSI Expedition Field Courses have remarked how they didn't *really* understand something until they saw it first hand. The "concrete reality" of compost hot from decomposition or rich, moist high biomass soil also communicates through multiple sensory channels—not just auditory or visual as is the norm in most classroom experiences. Rather than abstract ideas limited to intellectual integration, seeing and engaging "concrete reality" allows students to see things in a naturally integrated way, and understand the complexity of natural systems that cannot by captured in text alone.

> "[A] course on a river or a forest or a farm might help make up the experience deficit now common among urban and suburban young people whose minds have been exposed overly long to shopping malls, video games, and television." (Orr, p. 96, 1994)

Students thrive in an environment which is complex and rich. However, due to this "experience deficit" Orr identifies, students are often unfamiliar with moving safely through rugged terrain (a great opportunity to learn expedition and leadership skills), or working with hand tools on a farm (a great chance to learn from local people).

Advantages of traveling through the landscape

> "[C]ultivate mindfulness by slowing the pace of learning to allow a deeper kind of knowing to occur." (Orr, p. 96, 1994)

This "slowing the pace of learning" is enforced by learning in the natural environment. Natural rhythms (weather, plant growth, etc.) have their own pace. Learning in those environments forces students (and teachers) to pay attention to the pace of things, instead of moving through abstract content at a pace unrelated to the natural rhythms of the subject. Drawing further from experiential and wilderness education, ISDSI expedition field courses focus as much as possible on human powered travel—consciously slowing down to experience the landscape on its own terms.

In a course focusing on coastal ecology and mangrove ecosystems, students spent over a week sea kayaking down the coast of Thailand while studying various mangrove and estuary ecosystems before living in a small Muslim fishing village. The course required students to read tide charts to time when to leave the beach, where to set up camp, and what route to take through the shallow tidal flats and mangrove channels. As one student noted, "I've always lived by the sun. Now I've learned to live by the rhythms of the moon—something that the fishermen we are staying with now have done their whole lives." Learning about "the rhythms of the moon" is a key part of knowing both the tidal based mangrove ecosystem *and* the local cultures that depend on the sea.

Intrinsic learning opportunities

> "[I]t would give students stronger reasons to want to learn those things that require the knowledge of various disciplines… [and] it would teach the art of careful field observation and the study of place." (Orr, p. 96, 1994)

What Orr is discussing about environmental education in particular are the same issues that are critical in cross-cultural learning. The complexity of the natural world, as well as cross-cultural living, requires students to learn through careful observation and to understand things in a multi-disciplinary way. The intrinsic rewards help motivate students to want to learn. So in addition to synergies between cross-cultural study and wilderness education, this illustrates synergies between crosscultural study abroad and environmental education.

Experiential learning from the environment

Finally, Orr argues that this new approach to education:

> "[W]ould teach students that there are some things that cannot be known or said about a mountain, or a forest, or a river—things too subtle or too powerful to be caught in the net of science, language, and intellect. It would introduce students to the mysterious and unknowable before the mere unknowns of a particular discipline." (Orr, p. 96, 1994)

On an ISDSI course studying island and marine ecology, students were sea kayaking along the coast of an island when then tide turned. They had to paddle out of the current into the still water of an eddy formed by the headland to avoid being swept down the coast. This dramatically turned that morning's seminar on tides and ocean currents into "concrete reality." Paddling hard against a turning tide is a more holistic, complex and memorable learning experience than notes, diagrams and discussion alone. More than that, experiencing a powerful part of the natural world gave the students an understanding of tides both "more subtle and powerful" than could be communicated through words alone.

Collaborative course design

Keeping with the landscape based principles of course development, each course is designed in collaboration with several groups of stakeholders:

- **ISDSI** focuses on the theory and pedagogy, framing academically relevant topics, working with experts in the field, reviewing relevant literature, designing the learning progression, etc. This includes student collaboration via extensive debriefing and feedback to involve students in course development.
- **Communities** are involved both in helping determine content (what issues can be taught effectively there) as well as in the logistics (when and how students should stay with host families, etc.). ISDSI works with local communities in partnership to make sure that ISDSI courses are a benefit to local communities (e.g. helping to preserve traditional knowledge through teaching about it) while meeting the educational goals of ISDSI. Local experts are drawn from these communities for teaching and learning opportunities.
- **NGOs** and other development organizations are involved on a number of important levels. First, they help to determine what issues are important to the local development community, pointing out areas of particular interest or relevance. Also, they are a key link in establishing initial contacts with the communities where ISDSI courses are taught. Finally, some course studies are done at NGO project sites, and often with experts from the NGOs assisting in the instruction.

Expedition Field Course (EFC) structure

The structure of each expedition field course (EFC) is based on three components. The "academic core" is the academic topic focused on people, ecology and development. This is supported by two groups of "enabling skills" which allow the students to successfully study the academic topic. The first enabling skill concerns both cross-cultural skills (living cross-culturally, intercultural communication, etc.) and language skills (proficiency in the Thai language). This is joined by the second set of enabling skills, leadership and expedition skills. These involve leadership skills learned and practiced during the course, as well as specific expedition skills or field research skills which might be necessary for the successful completion of the course.

Enabling skills and holistic education

The enabling skills are in place to support the academic goals of the program. That is, skills are taught on the program in order to enable the academic focus, and not as a separate focus in and of themselves. For example, to study the upper watershed of a catchment area, students need to be skilled in travel by foot through difficult terrain, or the study of reef ecology may require basic competency in snorkeling and skin diving. Likewise, studying agroecology with local villagers will require facility in the Thai language, as well as knowledge of cultural norms and practices.

Thus, a student on a course about forest ecology would be expected to know the scientific basis of ecology (academic core), be able to live and communicate with people living in forest communities (cross-cultural and language skills), and be able to safely travel in a group through remote mountain ecosystems (leadership and expedition skills).

The EFCs are designed to be holistic—teaching the whole student—engaging them on a more than intellectual level with the course materials. Students on the courses become proficient in a range of skills which have immediate relevance as they live and learn in new environments.

Learning leadership skills

In a paper on environmental teaching and learning (Manning, 1999), four goals for an environmental education were identified: fostering environmental literacy, building leadership, supporting professional development, and encouraging scholarship. Regarding building leadership:

> "To become "brilliant entrepreneurs" or "agents of constructive social change," students must acquire the skills necessary to become leaders in their field or community. Leadership in turn requires effective communication skills. Do faculty know how to teach skills like communication and leadership?" (Manning, p. 17, 1999)

Manning correctly identifies why leadership is important, while raising a question (can faculty teach it?) critical to figuring out how to do it. The question of "do faculty know how to teach skills like communication and leadership" is an excellent one. A challenge is that many faculty do not have specific training in teaching communication and leadership.

Both intercultural education and environmental education mention leadership as a desired outcome. However, in a lot of writings on environmental education and intercultural education there often seems to be the sense that somehow "leadership" will emerge naturally out of student experiences without any intentional or specific focus on those skills and competencies. While no one would expect any but the most exceptional student to acquire fluency in a language while on study abroad with no formal instruction, there seems to be the idea that leadership *will* somehow emerge with no formal instruction. Leadership and related expedition skills can, however, be taught, as shown by the experience of the National Outdoor Leadership School and others.

NOLS has identified seven leadership skills:

- Expedition behavior (working well as a member of a group)
- Competence (skill specific and "meta" competencies)
- Communication
- Judgment & Decision Making
- Tolerance for Adversity & Uncertainty
- Self-Awareness

- Vision & Action

These seven “core” leadership skills are useful as a way to focus on specific and concrete skills which can be taught and assessed.

These leadership skills are taught and practiced during the ISDSI courses, as the instructor team “opens up” the course to the students—including teaching and mentoring students on specific leadership skills, risk management, and other areas. As students participate in the course as “leader of the day” and in other activities, students are able to learn decision making skills and techniques.

The goal of ISDSI expedition field courses is not to simply guide students through the landscapes of Southeast Asia. The goal is to enable students to be competent on their own, so that they have the language, cultural knowledge and leadership skills so that they are able to safely travel and learn in the urban, rural and backcountry environments of Southeast Asia and beyond.

Semester structure

The semester at ISDSI consists of 16 weeks, and four courses—each taught in a four week "block" during the semester. Common to all courses is a specific four week progression. Throughout all of the courses Thai language and cultural skills are taught, along with leadership and any specific expedition skills called for by the course.

The first week focuses on theory and context—issues related to the academic core which are not easily taught in the field. The course "front loads" the contextual and more theoretical material in the first week so that the remaining three weeks can look at specific applications and case studies.

The next three weeks are off-campus in field-based study of the particular topic. Often each week deals with a distinctive aspect of the course so that students can move through a grounded learning progression.

For example, the course on agroecology and sustainable agriculture progresses as follows:

- **Week 1:** General issues with food and agriculture, sustainable development principles, biological carrying capacity of the biosphere, etc.
- **Week 2:** Off campus studying the biology of agroecosystems on an experimental demonstration farm, mapping intercropped complementary species, etc.
- **Week 3:** Off campus studies of various upland (hill tribe) villages to examine challenges to sustainable farming in mountain villages.
- **Week 4:** Off campus studying in a lowland Thai village in homestays with Thai farming families, working in their fields daily to see the application of the principles learned in the earlier weeks.

Courses

Several things make the courses distinctive:

- Academic coursework takes place in both classroom and field settings.
- All subject courses (the Expedition Field Courses) are cross-listed in two subjects, one social science and one natural science.
- Courses are taught in "blocks" of four weeks each (four courses per semester).

There are two types of courses offered on the program, Chiang Mai based and Expedition Field Courses.

- Two courses (Foundations and the Service-Learning Internship) are based in Chiang Mai
- Five courses are "Expedition Field Courses" which use a landscape-based approach to the topic, with a specific bioregion and community as the focus on the course.
- Contact hours are in both classroom seminars as well field studies. The field study includes immersion time (living in tribal host families, etc.) and directed field study / research assignments

Chiang Mai based courses

FOUNDATIONS: Thai language and society (Foreign Language): This intensive course focuses on the acquisition of the Thai language and understanding of Thai culture. In addition, this course features seminars and field studies on: NGOs, significant historical and cultural locations, expedition skills, and experiential learning. (Language instruction continues throughout the semester.) Fall and Spring

SERVICE LEARNING INTERNSHIP: NGOs and development (Internship): An immersive internship with a local NGO (non-governmental organization) working on grassroots sustainable development issues. January or Summer term

Expedition Field Courses (EFCs)

AGROECOLOGY: Social and biological factors in sustainable agriculture (Biology/ Sociology): Food—or the lack of it—is probably the most important challenge facing the poor. This course looks at the problem of sustainable food production by examining agroecology—sustainable farming based on ecological principles. This course includes extensive field studies of both upland and lowland agriculture and communities. Fall

POLITICAL ECOLOGY OF FORESTS: Upland people and natural resources (Anthropology/ Ecology): This course explores the ethno-ecological relationship between people and forests. The course is located in upland forest-dwelling communities in the mountains of Northern Thailand, learning from and working with Ba'ken'yaw (Karen) ethnic people. Fall and Spring. Indigenous peoples and forests are a critically threatened resource. This course examines the relationship of tribal groups with forest resources, including traditional knowledge systems and current political and economic pressures. Fall and Spring

CULTURE AND ECOLOGY OF THE ANDAMAN: Islands, reefs and mangroves (Ecology/ Geography) Coastal communities are on the front line of the ecological impact of marine resource depletion and global fish stocks. This course examines islands, reefs and mangroves, focusing on the human communities that depend on fishing and on reef ecology in the Andaman Sea, Southern Thailand. Fall and Spring.

HUMAN RIGHTS AND THE ENVIRONMENT: Rivers, dams and local struggles (Political Science/Ecology): This course examines how human rights and environmental rights are linked. Special emphasis is on communities and their access to forest and river resources, specifically the social and ecological impact of dams—one of the most important and contentious issues facing the developing world. Field studies may include monitoring of water quality, river travel, and extended time with local communities. Spring

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