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DESIGNING AND IMPROVING AN OUTDOOR EXPERIENTIAL LEARNING COURSE: A SOTL JOURNEY

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Jean Bush-Bacelis' chapter is a true "vision of the possible." Jean wishes to take a group of EMU students to a wilderness area for a week-long outdoor education program and see if they can build skills in such areas as teamwork, leadership, delegation, problem-solving, etc. In other words, she wishes to take these students "into the field" and have them learn important management skills in an applied setting. It sounds like an interesting way to learn course material; I suspect, as does Jean, that this will promote deep understanding and allow her students to apply the material in ways that a traditional class would not permit.

Jean has run into some logistical difficulties in implementing this course, which is unfortunate. She continues to work hard to develop her ideas and solve these logistical difficulties; I have confidence that she will soon be able to offer the course. In the meanwhile, however, her chapter offers a nice design for how to develop such a course, and how to assess the learning that takes place in it. As higher education increasingly moves toward these unconventional delivery methods, Jean's chapter is noteworthy both as an example of a non-traditional teaching method, and as a careful discussion of how we can see if this model would be an effective tool to use in educating our students (and helping them to educate themselves).

For many years, I dreamed of developing a course for Eastern Michigan University students in which they would test themselves, reach beyond their perceived self-capabilities and synergize and synthesize the concepts they had learned in the classrooms. I dreamed of an opportunity where our students, many of whom have a limited breadth of experience, would stretch their critical thinking and analytical abilities. I wanted my students to find answers that they knew to be "right for the situation" rather than "right for the exam."

I had mentioned my ideas to several colleagues and was met by blank looks and, in one case, laughter. I had tried to discuss my ideas, about which I cared with a passion, only to find disinterest; I felt isolated. My colleagues conveyed that I should spend my time on more worthwhile projects, especially as I sought the research publications necessary for reappointment, tenure and promotion. In essence, they suggested I do some 'real' research and not look at 'mere' teaching as a research area. Moreover, to my surprise, this message came from a university where teaching is the primary mission, where its beginning was as a normal college and where the College of Education is the second largest of the colleges. I listened to the message and focused on more externally-acceptable research areas. However, now that I have tenure and full professorship, I am able to pursue my own research agenda. Not long ago, I re-focused my ideas about providing experiential learning for my students, with direction from an unexpected source.

Beginning in the fall 2007 semester and continuing through the winter 2008 semester, I had the opportunity to be a fellow in an EMU Faculty Development Center seminar on the scholarship of teaching and learning (SOTL). During these two semesters, eleven faculty, a faculty fellow leader and the director of the Faculty Development Center met. We discussed our individual and each other's proposals for our SOTL projects. In my application for the fellowship, I proposed a new class in which students would take a canoe trip in the Boundary Waters Canoe Area Wilderness (BWCAW) of Minnesota. I wanted the students to share an empowering experience of venturing into the wilderness, coping with and solving problems, and working together.

The proposal was rooted in my own experience in the BW-CAW; from my first empowering trip. I was astonished at how much I could accomplish, and how many management skills I used. My ex-

periences included portaging (carrying on the shoulders) a canoe or a large Duluth pack over rocky and sometimes nearly impassible terrain. Some of the portages are rough walking, especially when one is carrying 40-65 pounds of gear. However, with the team spirit, cooperation, problem-solving and motivation of my group, we continue to have successful trips in which I continue to learn.

Having talked about my ideas with numerous EMU students, I believe a number are interested and they would experience the "aha" moments like those that I continue to experience in my BWCAW trips. In my traditional classroom, I use many activities to create a learning (discovery) atmosphere. After watching my students participate in these problem-solving activities, I believe they would benefit from an opportunity to test their managerial skills more fully, over a longer time and in a new situation. I believe they would pull together the concepts and knowledge about management they have been learning in their classes and apply them on a wilderness canoe trip. These principles include leadership, team participation, communication, delegation, organization, problem-solving and motivation. Most importantly, students themselves would realize that they have acquired and can use management tools from their education. In the BWCAW experience, they would have to use their skills, and with proper guidance, they would reflect upon and realize the applicability of these skills in the business world.

One important example in which students could test themselves is leadership. Leadership is relevant to all majors in our College; all business majors are required to take an organizational behavior (OB) and capstone strategy course. The OB course includes leadership, as does the strategy course. There is a required leadership course for management majors that many other majors select as an elective (2006-7 enrollment was 161.) In addition, there is a required capstone course for management majors called Managerial Skills (2006-7 enrollment was 165) in which 30-40% of the course addresses leadership.

Conger and Benjamin (1999) suggest four primary ways to develop leadership potential: conceptual awareness; feedback; skill building; and personal growth. All can be observed and measured. In addition to developing their leadership, I would expect students to use their knowledge and exercise their abilities and skills in delegation, teamwork, communication, negotiation, conflict resolution, stress

management and decision-making. I would expect them to demonstrate these skills and abilities in an observable and measurable way.

During the SoTL seminar series, I found I learned about the field and was able to apply the concepts to my research project. I related to the isolation referred to by Shulman (1993), as the lack of support to my ideas had left me feeling similarly. I began to reopen my thoughts about proposing this experiential course. In the summer of 2007, as usual, I took another successful trip into the BWCAW. I had time to think in the quiet of the woods and decided I could develop a course that would provide experiential learning, with an opportunity for measurable skill application for students. When I saw the call for applications for the SoTL seminar series, I submitted an application. I was thrilled to receive my acceptance to the seminar series, because participating in it would enable me to investigate experiential pedagogy with feedback from colleagues across campus who might (and did) become supportive and challenging of my efforts to develop the experiential course.

During the seminar series, I realized I had more than one match between my planned project and the scholarship of teaching and learning: I designed a project that was seemingly outside the norm (as communicated to me in the past) and SOTL research itself is inherently unusual. Shulman (1993) summarized this unusualness and isolation, "We experience isolation not in the stacks but in the classroom." As such, SOTL can be a "...nice way to combine (these) two aspects of our professional careers, using practices derived from the research world to investigate our teaching and our students' learning" (Bernstein 2005, 4).

Here then, was the key to forming my project into a widely accepted, even respected research project. There would be appropriately rigorous methods of measurement of student outcomes in my course. The learning outcomes would be distinct. I would design the course with research in mind rather than figuring out what could be researched after the course was already in place. My work in the course would need to be "...judged by the same rubric with which we judge all other forms of scholarship – clear goals, adequate preparation, appropriate method, significant results, effective presentation and reflective critique" (Glassick, Huber and Maeroff 1997, 35-36). In designing this project, I would take my newly acquired SOTL knowledge and apply it

just as I wanted my students to do with their management knowledge on the canoe trip.

I began to read the literature about outdoor experiential education, also known as adventure education or programming, outdoor-based experiential training, outdoor challenge training, outdoor leadership training, and challenge courses. Adventure training has its roots in the Outward Bound movement, begun in 1962 (Broderick and Pearce 2001). "Adventure programs, including professional preparation programs, college, university, camping programs, and other public and private sector adventure programs, have increased over the past 15 years" (Attarian 2001, 142; see also Association for Experiential Education 2000; Houghton 2001; Webb 2000). For the purposes of this article, I will use outdoor experiential learning (OEL) to mean hands on, application-oriented experiences, where the learners reflect upon their decisions, problem solving and critical thinking.

As I have read the literature about outdoor experiential learning, it is clear that not all programs are successful. Successful programs and courses reach their potential only if there are clear goals and measures. For example, Judge (2005) described three iterations of an executive masters of business administration (EMBA) outdoor experiential learning course. His conclusion stressed the importance of assessment, both pre and post-experience, as well as focusing on a well-structured debriefing of the exercise. Without the assessment portion to focus students' expectations and measure change, the majority reported that the experience was enjoyable, but not really a strong learning experience. Students did not report being able to relate the experience with the knowledge and skills that the course designers expected.

OEL has been recognized for quite some time and has a solid history. The Association for Experiential Education (AEE) began in 1975 and as of 2000 had a membership of over 670 organizations. In addition to the overall growth in adventure programs, the number of college and university programs has also been on the rise. Some of the earliest adventure programs were established at colleges and universities in the northeastern United States. For example, according to Webb (2000), Dartmouth College, Williams College and Pennsylvania State University conducted programs before 1925; by 2001, the Society of Park and Recreation Educators Curriculum Catalog listed 41 colleges and universities that offered outdoor leadership courses or degrees

(Attarian 2001).

My own growth and development via my outdoor experiences in the BWCAW fostered my interest in figuring out how to include assessment to foster students experiencing the "aha" of realizing that they have applied their learning and truly have ownership of it. In addition, I was excited to engage and empower students. Even though faculty may use different teaching and learning strategies, consistent learning outcomes may be measured effectively by using multiple assessment techniques. Appropriately structured assessment methods may be applied regardless of teaching strategies. Therefore, I could design a course, which covered learning outcomes similar to other courses, and if we measured outcomes consistently, the assessment process would be sound and students could substitute the experiential course for others. I felt excited and ready to take on this challenge.

During the SoTL seminar series, I realized that differentiating between teaching and learning strategies and assessment would be vital. Teaching and learning strategies are the experiences provided to students while they are learning. Assessment is the experiences provided to students to determine effects of teaching and learning strategies (K. Busch, pers. comm., March 2008). I needed to figure out how these definitions would manifest in the new course, as illustrated in Figure 4-1.

In other words, the assessment piece meant that in designing the proposed course, I needed to develop the experience to demonstrate to students that they have realized growth and tested their knowledge and skills. Once I developed my assessment strategies (described later

Figure 4-1: Teaching & Learning vs. Assessment

Teaching & Learning Strategies	Assessment
Experiences provided to students while	Experiences profiled to students to
they are learning	determine effects of teaching and learning
	strategies
\prod	
Teaching & Learning Strategies for this Project	Assessment for this Project
Experiences in the BWCAW, traveling,	Measurement using various instruments,
portaging, problem-solving, living	pre and post experience, as well as during
together	the experience

class. In 1989, Ewert (as cited in Loeffler 2004) suggested that outdoor adventure education consists of three components: an interaction with the natural world, a perception of risk or danger and an uncertain outcome. In my proposed course, students would necessarily interact with each other and the natural world, they would feel a sense of risk, a need to problem-solve and an uncertainty of the outcome. A canoe trip into the BWCAW, while not requiring a high level of canoeing experience, has the potential to be dangerous.

Therefore, students with no camping or canoeing experience could certainly take the course. However, they would soon realize that when traveling in the wilderness, there is no one to call for help; cell phones do not work, and satellite phones work sporadically. The sojourners would have to depend on each other and the tools they brought to accomplish their tasks and solve their problems. At this point, I want to add that although I considered it, I decided not to send our students into the wilderness without a guide. I believed we would have more success in filling the classes if there is a trained guide, and it just seems like a sound practice that even experienced canoers use. For a time, I considered trying to be the guide myself and later realized that I wanted to be the individual who managed the bigger picture. I wanted to develop the course contents and most importantly be the individual to debrief them after the experience.

While there are many BWCAW guides available, I wanted to find one who understood the concept of experiential education and empowerment. I wanted someone who would step back and let students discover ways to solve problems themselves, yet would not leave them in danger. After searching for the right guide for several years, I traveled in the BWCAW with one who has led these kinds of task- and skill-focused groups, and who is interested in developing a course for EMU. She has many years successful experience leading groups into the wilderness and has the academic credentials of a bachelor's degree in outdoor education from Northland College, Ashland, WI. When I learned about her experience and interest in providing an empowering experience, I contracted her to lead my own group into the wilderness in the summers of 2007 and 2008. I was pleased with her actions in the wilderness as well as with the content of her discussions with me.

Once I clarified my plans for the course design and the guide,

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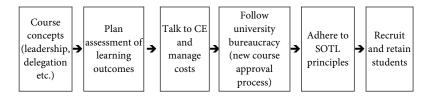
I had to identify the stakeholders and the campus offices and departments that needed to approve the project. For my university, these included the students, other faculty, Continuing Education (CE), which is the unit that coordinates all off-campus offerings, the department head, dean, the course and program development office (coordinator of approval for all new courses), human subjects review and the risk management office. It is important to make certain to gain all formal and informal approvals. It is also important to assure that the course does not duplicate others in the university, or if it does to figure out how to cross-list it and complement (rather than compete with) others' programs. I identified the students to be important stakeholders; we need a critical mass. Prior experience demonstrated that students appreciate completing a three-credit hour course in just over a week, in off-campus locations over a semester break or in the summer and are willing to pay extra for that privilege. The idea would be a welcome one, but there remained one more problem.

Like most students, EMU students have money worries and I wondered if they would actually sign up for such a course. This was likely to be the biggest single barrier, suggesting a need for a strong marketing strategy as well as seeking outside funding. I asked the vendor (guide) to give me a price estimate that included lodging on both ends of the trip, all food, canoes, equipment and fees to the guide. When I provided this information to CE, they added their break-even fees and the result was a cost of \$1465 per student, not including airfare, tuition or normal fees. This may not appear to compare favorably with another EMU program costing \$1595 for 12 days in China (also not including airfare, tuition or normal fees.) The approach I will use to address this issue is to prepare a short PowerPoint presentation with slides from my own BWCAW travels and personally visit classrooms to tell students about the opportunity. Another colleague found success in filling new classes by making these classroom visitations, as well as in distributing flyers. In addition, I will seek funding by contacting our Office of Research Development and the EMU Foundation (the university's chief fundraising arm).

I had envisioned a linear, step-by-step process in developing this course and gaining its approval. Subsequently I realized it would not be linear, but would be two-dimensional. I envisioned the linear process to branch into two lines. One was to continue to brainstorm the learning outcomes from the class and to design the measurement of these learning outcomes. The second was the administrative and bureaucratic steps needed for the approval process. Originally, I thought the process would look like Figure 4-2.

After puzzling over some of my struggles, I realized the process

Figure 4-2: Original Idea of a Linear Process for Course Development



was one of meeting all needs simultaneously. The process was more like a starburst with work going on for each of the parts, simultaneously. In the center of the starburst is the original idea, course concepts (leadership, delegation etc.), with each branch contributing to the center. In fact, it looks more like the dynamic and multifaceted model shown in Figure 4-3.

Before beginning the SOTL seminar series, I assumed the major focus to be on the course content. I have now realized that all parts are equally important; the scope is larger and more demanding than I had realized. For example, defining the learning outcomes is crucial, but making the learning visible is what would make this into a SOTL project. In order to do that I needed to focus on how I would make the learning visible to students, as well as suitable for research. I had to define my research questions clearly. I wanted to know how to recognize the behaviors that revealed that students could apply the knowledge they gained in their classes. In addition, I wanted to see if they could express the realization that they had done so. I wanted to be sure that I would provide a rich opportunity for students to exercise their mental and physical muscles. In other words, I wanted to measure the degree to which the students and I could realize and express that there was a difference in self-perception before and after the course. Specifically stated, my research questions would be:

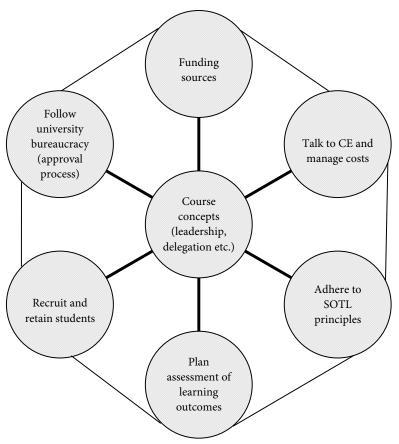
RQ1: How will I recognize that students can apply their skills in the wilderness setting?

RQ2: How will students demonstrate their learning?

RQ3: How will this wilderness setting enable a rich experence for students to accomplish a higher level of self-aware ness pre and post course?

To answer these three research questions, I had to develop a sound and defensible syllabus, which included multiple methods to measure the stated student outcomes and growth. I needed to identify the instruments to be used to measure the changes. I identified a book, *Self-Assessment Library: Insights in Your Skills, Interests and Abilities* (Robbins 2007), which contains 49 different self-testing instruments

Figure 4-3: Revised Course Development Process: Simultaneous, not Linear.



from which I will select pre-tested instruments for students to use. Those most relevant include tests on personality, values and attitudes, motivation, decision making, EQ, communication, leadership and team, power and conflict, and stress.

In addition, I will ask each student to keep a focused journal, in which I will assign them to record examples where they observed skill testing in themselves and others. For example, students could describe a situation where each witnessed conflict and/or negotiation, after the conflict is resolved. The journal will be written and to supplement this, students will complete a photo journal (also called photoelicitation.) Photo-elicitation has proved to be a powerful research tool in investigating and making visible student learning (Loeffler 2004.) Each student will bring a digital camera and take photographs, which will illustrate their observations of the various managerial behaviors.

The photo and verbal journal entries will feed the final paper in which each student must write an essay explaining how s/he has accomplished each of the course goals. In addition, pre-departure, each team of up to 8 students who will travel together will complete a timed, complex task (such as a case) that required teamwork. They will also complete a similar timed, complex task requiring teamwork at the conclusion of the traveling to measure any differences pre- and post-experience. Finally, pre-departure, students will write individual answers to several mini-cases, which propose management problems. They will then rate the confidence level they have for each answer. Following the experience they will answer a similar set of mini-cases and again rate the confidence level they have for each answer, measuring the difference.

How then, will I as the instructor, or how will any outside evaluator, recognize that learning has taken place? First, I would expect to see a difference in the pre and posttest scores on the instruments previously mentioned. I would also expect to see better team efficiency and trust after the experience in the team tasks. This would be measured by the time on task, as well as the outcome. Finally, I would expect the confidence level in their answers to the mini-cases to improve.

Outdoor learning experiences provide an incredibly rich opportunity for students to test their skills, knowledge and abilities. It is also an incredibly rich opportunity for data gathering. Formulated correctly, the experience will empower the students. Correct formula-

tion means painting a clear picture of what to expect before departure, and a briefing on basic wilderness camping, safety and canoeing skills. It means having a properly prepared guide along so that s/he observes and steps in only if there is imminent danger. It means a sound and well-structured debriefing for the students to realize how they have applied their knowledge and skills.

As Judge (2005) stated, it takes planning and carry through for the outdoor experiential learning course to be more than "a great time." It takes careful planning, implementation, evaluation and revision. I am thrilled to be able to have the opportunity to design this course for my university, and for my students. Learning about the Scholarship of Teaching and Learning approach is what enabled me to take my dreams and finally put together a concrete project. I hope that readers will also consider fulfilling their dreams and will include not only designing new courses with new experiences for students, but will also make that learning visible by taking a scholarly, evidence-based approach to teaching and learning.

References

- Association for Experiential Education. 2000. *Association for Experiential Education Membership Directory*. Boulder, CO: AEE.
- Attarian, Aram. 2001. "Trends in Outdoor Adventure Education." Journal of Experiential Education 24: 141-149.
- Bernstein, Jeffrey L. 2005. "Applying Good Research Technique to Questions on Student Learning." *Political Science Educator* 10: 4-5.
- Broderick, Andrew and Glenn Pearce. 2001. "Indoor Adventure Training: A Dramaturgical Approach to Management Development." *Journal of Organizational Change Management* 14: 239-252.
- Conger, Jay A. and Beth Benjamin. 1999. Building Leaders: How Successful Companies Develop the Next Generation. San Francisco: Jossey-Bass.
- Ewert, Alan. W. 1995. "Current Trends in Risk Recreation: The Impacts of Technology, Demographics, and Related Variables." In Proceedings of the Fourth International Outdoor Recreation & Tourism Trends Symposium, and the 1995 National Recreation Resources Planning Conference, May 14-17. compilers Jerrilyn Thompson, David W. Lavarre, Bill Gartner Lime, and Wayne M. Sames, St. Paul, Minnesota.
- Glassick, Charles A., Mary Taylor Huber and Gene I. Maeroff. 1997. Scholarship Assessed: Evaluation of the Professoriate. San Francisco, Jossey-Bass.
- Houghton, John, (ed.) 2001. *National Recreation and Park Association Society of Park and Recreation Educators Curriculum Catalog.* Ashburn, VA: National Park and Recreation Association.
- Judge, William. 2005. "Adventures in Creating an Outdoor Leadership Challenge Course for an EMBA Program." *Journal of Management Education* 29: 284-300.
- Loeffler, T. A. 2004. "A Photo Elicitation Study of the Meanings of Outdoor Adventure Experiences." *Journal of Leisure Research* 35: 536-556.
- Robbins, Stephen P. 2007. *Self-Assessment Library: Insights into Your Skills, Interests and Abilities.* Upper Saddle River, NJ: Pearson Prentice Hall.

- Shulman, Lee S. 1993. "Teaching as Community Property: Putting an End to Pedagogical Solitude." *Change* 25: 6-7.
- Webb, Deborah J. 2000. Outdoor Recreation Program Directory and Data Resource Guide. Boulder, CO: The Outdoor Network.