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Experience This! The Experiential Approach to Teaching Environmental Issues

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Experiential education has been promoted by John Dewey and Paulo Freire since the first half of the twentieth century. Freire called the type of teaching where students are passive "banking education." In this first person account I describe my shift from teaching environmental issues in the traditional style to teaching in an experiential style. As a result of this shift, which involves no lecturing or "banking" on my part, students have rated me as a more outstanding instructor.

INTRODUCTION

The experiential approach to education is nothing new. John Dewey (1859–1952), who has been called the most influential educator of all time,[1] was promoting experiential education before most of us were born. He was highly critical of educational practices that put the teacher in the position of handing out facts as discrete units to passive students—as a bricklayer would deliver bricks to a wall. Paulo Freire (1921–1997), another highly influential educator, also detested this type of education, which he called "banking education"—the educator making deposits in the educatee. Both men insisted that there is an intimate connection between knowledge and activity, that learning is a social endeavor, and we should be asking what types of social situations provide the proper context for learning to take place. The type of education they advocated has been called by many names: experiential education, situational learning, and action learning, to name just a few; but the basic precept is the same: students learn best when they interact with each other and with the object of their study (McKeachie, 1963; Roberts, 2003).

CONTEXT

Despite my awareness of the advantages of experiential education I found myself constrained by the conditions dictated by the administration of my university. I was asked to teach a freshman-level class on environmental issues, and the class of fifty was scheduled to meet two days a week for an hour and fifteen minutes each time. The course was taught every spring for three years on this schedule. I used the current year's *State of the World*[2] as text, so our material was fresh

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[1]For basic information about John Dewey, Paulo Freire, and Martin Buber, and links to their works, see *The Encyclopaedia of Informal Education*, 2005. www.infed.org (4/23/2005).

[2]State of the World has been published each year, beginning in 1984, by Worldwatch Institute (W. W. Norton & Company: New York).

and up-to-date, but I continually found myself frustrated that I could not show students the things we were talking about. Typically, all of the students in the class could recognize the Nike logo, but none of them could tell me where the water they drank came from. "*Here*," I wanted to be able to say as I pointed to the well sucking fresh, clean, water from the aquifer under our feet. "*Here* is where it begins. And *here* is where the chlorine is added, and *here*, the fluoride."

Simple enough you might think: a field trip. But seventy-five minutes was not enough time to get fifty students there and back; besides, I had much more I wanted to show them. I also wanted to show them where their wastes went—both trash and sewage, and how their food was grown, and where the logs went after the forest was clear-cut, and I wanted them to meet the men who hauled the fish from the sea. The scenes will be different where you live but the idea is the same: allow the students to *experience* their physical connections to the environment.

Recently, some educators have begun calling this "place-based education" (e.g. Knapp, 2005). As Johnson (1995, p. 123) puts it: "It seems clear that children need to be taught at a deep level that the earth is our home, how life on the planet functions, that we are a part of those systems of life, and that how we live affects the whole."

The course, as I currently taught it, was good; my evaluations were consistently high. But I knew it could be better, more effective, less like banking. To teach the ideal course I envisioned I would need a longer block of time. Instead of meeting twice a week, the class should meet once a week for three hours; this would allow us time to get out and see the issues we were learning about. Instead of fifty students, the class should be limited to twenty-five students so we could all fit on one bus. Oh yes, we should also have a bus available most weeks.

ADVOCATES (OR NOT) IN ADMINISTRATION

My ideal course did not sound ideal to the dean or the registrar. Appropriating a long block of time on a single day—during daylight hours, of course—might mean that students could take just two courses instead of three on those days of the week. Cutting class size in half, but leaving my salary the same, would make the course less cost effective. The cost of the bus was not even mentioned but I am sure it did not help.

The bridge between my fine course and my ideal course would never have been crossed without a strong advocate in the administration. And, of course, it helped that the advocate just happened to be the president of the university. Our interim president was a believer in experiential education. By chance, while entertaining a visiting lecturer, we found ourselves discussing the topic. He recommended the book *The Walk of the Conscious Ants* (1972), which documents perhaps the most experiential semester possible. Taylor Morris and his students simply walked northward for forty days. No topics, no assigned readings; just experiencing the landscape, the social fabric of the group, and their own reaction to it all. As you might imagine, the administration at Morris's college, Franklin Pierce, was skeptical at first, too. At the end of the walk Morris mused that:

> The problem with schools is not at all how they might teach more; it might even be that students are learning too much, to the detriment of something much more important. The missing ingredient is being. Living the learning, instead of reading the "learning"—which, no matter how beautifully it may be put down on paper, is not theirs. Not quantity, but intensity, vividness, quality: three dimensions instead of one.

The president, who had read these words, said that he would support what I was trying to do. Praise be, the registrar and the dean capitulated.

TEACHING ENVIRONMENTAL ISSUES EXPERIENTIALLY

If Dewey and Morris were ever in the same room together it is likely they would agree about many things, but one place where they would differ would be in the *content* of the experience. For Morris experience itself was sufficient, but Dewey (1938) stated that, "no experience is educative that does not tend both to knowledge of more facts and entertaining of more ideas and to a better, a more orderly arrangement of them (p. 82)." My own views tend toward those of Dewey. I *did* want students to learn content and I *did* want to prepare them for the experiences I had planned—but how to do that without handing over information as one might hand over a brick?

There is a great deal of literature available on experiential education (see, e.g., Cantor, 1997; Keeton, 1976; Starnes, 1999; Steinaker & Bell, 1979), although very little of it applied to the type of class I had in mind. A large proportion of the articles discuss experiences such as internships, or ropes courses, or even recording cultural histories. In the end, after extensive reading, I developed my own methodology for the course:

1. Individual background study on the topic to prepare for the experience.
2. The experience in a social group.
3. Individual reflection and evaluation of the experience.
4. Further study and dissemination of selected topics.

By asking students to prepare *themselves* for their weekly experience I was able to completely shed the banker/bricklayer mode of education. Each week students were given a series of questions designed to prepare them for their upcoming experiential activity. Students were expected to work alone. They could consult articles I had made available to them online to answer some of the questions, but for other questions they had to do independent research. Most of the questions, such as: "How many pounds of paper does the average American use per year?" were fact based; but a few questions, such as: "Do you recycle? Why or why not?" were designed to elicit a more personal engagement with the topic of study.[3] Students came to class with their answers in hand, anxious to discuss what they had learned. I spoke to them for a few minutes about where we were going, who they would meet, and then we would board the bus and depart for our experience in the real world. This particular week it would be the landfill and the recycling center. Another week it would be a forest, then a chip mill, then the water plant, then the sewage plant, a farm, a factory emitting toxic waste, a commercial fishing harbor.

The combination of solo learning of the preparatory content, social experience, and self-reflection was successful beyond my expectations. One unexpected benefit of the trips was that I could model effective ways to interact with other players in the environmental drama. They could witness, for example, that as upset as I was about overfishing of our oceans, I could respect and hold conversation with the young man trying to earn enough to support his family. They also heard me ask him if he had ever considered modifications to his gear that would decrease the by-catch. The skill of conversation with a broad section of the population is a delicate one rarely learned in the classroom. When one student asked the environmental officer of a factory if he had warned his female workers that styrene could cause spontaneous abortions, we all witnessed the man becoming upset and defensive. When I then asked him about his personal history—what had he studied to get this job?—we could see his pride and willingness to share. Philosopher Martin Buber (1878–1965) is often mentioned in discussions of John Dewey and Paulo Freire; he too was concerned with ways we could improve education. "All real living is meeting," he said, (Buber, 1958, p. 136)

[3]Readers who wish to see more of the questions I ask are invited to visit the website for the course, http://faculty.salisbury.edu/~jemaloof

and the "right way to teach is the personal example springing spontaneously, naturally from the whole man." Well, I am no man, but still I was pleased to be able to model skills I have learned. This is true social learning: learning from observing other people in a social setting. Best of all, though, the trips are *fun*. Even for me. And we learn. I mean *really learn*. How often do students say to you: "This course has changed my life"? I hear that frequently now, and I do not have to deliver a single lecture.

For the final step in my methodology I require each student to go into greater depth on one of the issues we have covered. They are required to write a research paper and create an eye-catching Earth Day display to educate others on the topic. When I see students standing behind their displays and answering questions posed by other students and the general public, I know that they are having an experience of a different kind: the experience of dissemination, of being personally involved in teaching others.

ANALYSIS OF EVALUATIONS

How does this experiential teaching translate into ratings on peer and student evaluations? When fellow faculty are scheduled to observe my course to evaluate my teaching for tenure review they come with a checklist asking such questions as: "Was the presentation organized?" It is likely that my teaching skills would be judged higher by them if I were to deliver a smooth lecture instead of "just" collecting homework, herding students onto a bus, and asking a few questions. From afar it must look as if I am taking the easy way out. But what about from up close? What of the students' perceptions? Well the students are asked to evaluate my teaching too. Their evaluation forms include questions such as: "Does the instructor take the preparation of lectures seriously?" It is difficult to break away from the banking/bricklayer type of education when you know that promotions and tenure depend partially on answers to those questions. However when I examine student response to the final question on the evaluation: "Considering everything, how would you rate this instructor?" *then* I can see that experiential education is a success. In the three years that I taught this course in the traditional manner an average of 43% of the students rated me as outstanding. But in the four years that I have been teaching it in an experiential style an average of 84% of the students rated me as outstanding.

As necessary and as informative as these evaluations are, it is the personal stories that move me the most. One student told me that when her parents and sister came to visit the campus for homecoming week they took her out to dinner. Her father ordered the catch of the day, swordfish. "But Dad," my student protested, "you *can't* order swordfish, it is being so over harvested that the average weight of a fish has dropped from over two hundred pounds to ninety pounds. Besides, swordfish has one of the highest concentrations of mercury of any fish and mercury is toxic to the brain." My student's younger sister looked at her in amazement. "Heather," she said, "you're not *like* that. You don't care about those things."

Like a gift from the skies, there was this answer to the simple homework question: "What do you think could be done to improve the recycling rate in this area?" My student wrote:

> The most important step anyone can take to improve the recycling rate is to raise awareness. My mother is a hairdresser and meets lots of people from all walks of life. It is amazing how fast a note of good news can spread through all of her clients and back again to her. The fact is that most people do not think about pollution or recycling because they aren't aware of how important it is or the huge effect it has on all of us. It's easy to close your eyes to something that isn't affecting you immediately or to something you don't know is affecting you personally. I was in her shop the other day and had just gotten out of your class, and our field trip to the chip mill. I was fired up and spitting out facts to her and the ladies getting their hair done. I just couldn't believe the damage that we are inflicting upon ourselves, ruining our environment by clear cutting and using herbicides. By the time her clients were ready to leave they were asking me what I was planning to do about it and what they could do. I told them that change has to begin on an individual level. That no one person can reverse the facts overnight, but that if I started recycling, and she started, and we told our families about

> the seriousness of the issue, we would make a domino effect which would then initiate change. People *need* to know, normal everyday self-proclaimed "nobodies," who feel that they are helpless in combating a problem so larger than life, need to know that the power is in their hands. And, though painstaking, in my opinion the most reliable form of advertisement is word of mouth; because it is easy to flip the channel off of an informative commercial, it is easy to categorize a group of protesters as emphatic vegetarian tree huggers, and it is easy to dismiss an international problem as something that won't affect "me" personally . . . but when you see your daughter or your friend, your brother or your check-out clerk—someone who looks like you—or someone you admire, telling you that it's *up to you*. . . . That makes a difference. (Phillips, 2005)

Henry Giroux (1988) says that we should, ". . . create the conditions that give students the opportunity to become citizens who have the knowledge and courage to struggle in order to make despair unconvincing and hope practical." In my experience an environmental issues course taught in experiential style does just that. As teachers we must have the courage to teach beyond what the evaluation forms seem to suggest,[4] with the knowledge that both Dewey and Freire would be cheering us on.

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[4] After writing this article I volunteered to help rewrite the evaluation forms. All references to presentations and lecturing have been removed.