DOCUMENT RESUME

ED 398 024 RC 020 680

AUTHOR Herbert, Tom
TITLE Experiential Learning: A Teacher's Perspective.
PUB DATE 95
NOTE 19p.; In: Experience and the Curriculum; see RC 020 678.
PUB TYPE Reports - Descriptive (141) -- Viewpoints (Opinion/Position Papers, Essays, etc.) (120)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Active Learning; *Adventure Education; Curriculum Enrichment; Educational Environment; *Educational Principles; *Experiential Learning; High Schools; High School Students; Learning Experience; Models; Personal Narratives; *Relevance (Education); *Risk; *Student Responsibility; Theory Practice Relationship
IDENTIFIERS Reflection Process

ABSTRACT

This chapter examines questions about the nature of experiential learning and how the experiential process can be applied in the classroom. Experiential learning may be viewed as a continuum that ranges from passive students receiving transmitted knowledge to active students deeply involved in generating knowledge from their own experiences. The experiential base for learning requires that students make decisions about meaning, interpretation, and content, and take responsibility for deriving meaning from what they have done. Five variables that influence the impact of experiential learning are (1) reality of experience or relevance of vicarious experience; (2) level of risk and uncertainty; (3) student's sense of responsibility and personal investment in what is being undertaken; (4) unpredictability of specific outcomes and teacher's attitudes toward planning and predictability; and (5) student reflection, which derives learning from experience. Problems of applying experiential learning in the classroom include limitations of the classroom itself, restrictions stemming from the school environment, and the need to create vigorous environments where students can be challenged within a behaviorally acceptable climate. Adventure education can be used to overcome these difficulties. Suggestions are offered for building adventures of varying length into the school curriculum. (Contains 13 references.) (SV)

Chapter 3

EXPERIENTIAL LEARNING: A TEACHER'S PERSPECTIVE

Tom Herbert

Tom Herbert graduated from Cornell College with a BA in History and Education. Later, he gained an MS in Education from Oregon State. While teaching at Concord (New Hampshire) High School over some 25 years, Tom has started two different experiential courses and has worked to "experientialize" traditional classes. His mentor in experiential education was Keith King. Tom has received several state awards for his teaching.

In his chapter, which is both personal and professional, Tom provides a picture of a thoughtful and successful teacher making sense out of his practice. He demonstrates the meeting of theory and practice, not as one driving the other, but rather as a kind of dialogue. Tom's great contribution is in expanding the notion of adventure beyond wilderness travel and ropes courses. In doing this, he gives many practical hints for practice in any subject in any school. A similar version of this chapter appears in Kraft and Kielsmeier, *Experiential Learning in Schools and Higher Education* (Boulder, Association for Experiential Education, 1995).

When I first came across the idea of experiential learning, I thought it took place only at a ropes course or in the woods. As a classroom teacher I struggled to make my classes more experiential, but found that this limiting idea made it difficult to do. Then I modified my working definition to be "active learning." With this definition, I started to make changes in my teaching techniques. But I still had numerous questions, such as, if it was active, did it automatically mean it was experiential? Could an outdoor program not be experiential?

I took a sabbatical leave to try and answer just two of my questions. These were: "What is experiential learning?" and "How can the experiential process be applied to the classroom?" This paper presents some of my findings.

What is Experiential Learning?

Originally, I viewed experiential learning in an either/or framework. Either a teaching strategy was experiential or it was not. Upon reflection, I realized that this was false. It is much more accurate to look at it as a continuum or sliding scale. One end of the scale has passive students receiving transmitted knowledge and the other end has active students deeply involved in generating knowledge from their own experiences.

I looked for answers to my questions in research literature. Gibbons and Hopkins (1985) and Warren (1988) describe students' involvement in their learning. At one extreme is the transmission of information, where students passively receive the experience of others as interpreted by the teacher. This learning is second- or third-hand. Sometimes this type of learning is important. For example, teachers would not want their students to learn to cross streets safely by walking in front of cars. At the other end of this continuum, students experience learning firsthand and draw meaning and information from their own experiences. The teacher's role is one of guide, resource, and clarifier (Warren, 1988).

Mosston and Ashworth (1990) write about teaching and learning styles. They visualize two separate tracks that can, but do not

necessarily, intersect. Both tracks involve decision making—w kinds of decisions are made and who makes them? In some sit tions, teachers make the decisions about major issues. In others, the students who decide. The same goes for other types of proble facing the class. Mosston and Ashworth attach no moral valu either end, or to the middle, of the spectrum of styles. They do p out that all styles have implications for students becom independent and critical thinkers. Mosston's work enables a teac to understand the process of transferring more decisions to stud while at the same time changing the quality of those decisions.

The two models described above are important when think about experiential learning because of the importance of ac involvement in the learning process. When students are encoura to make more decisions, especially important ones about meani interpretation, and content, the learning is more directly experi tial. When important decisions are to be made, and the stud make fewer of them and the teacher more, the experiential base learning tends to diminish. It is possible to have students be v active, but not make many decisions. "Active" does not trans into "experiential." The central distinction is the responsibi assigned to the students to derive meaning from what they h done.

There are five variables that helped me explore the range experiential learning. They are reality, risk, responsibility, pred ability, and reflection. Each deserves a closer look.

Reality of Experience

The impact of learning depends on the amount of rea involved, the directness of the experience, and the number of ser used. Interviewing a former prisoner of war, for example, is gc to result in longer lasting learning than reading an interview c ducted by someone else. Neither will have the impact of actu being a prisoner of war.

Jernstedt (1980) studied the psychology of experiential learr in academic courses at college. He found that active learnin more effective than passive learning.

> Students who use information they are trying to learn, who challenge and grapple with their new knowledge, or who use it to solve new problems, tend to learn more effectively than students who passively read, memorize or merely absorb that to which they have been exposed. . . . Learners remember not what they encounter while learning, so much as what they do while learning. (p. 12)

Vicarious experiences, for example, relevant stories and movies, have a kind of reality which helps to secure learning. Jernstedt (1980) reported that "tying information to be learned to experience, even when the experience is purely hypothetical, can preserve learning within the mind and prime the mind for new learning more effectively than other techniques" (p. 13).

Jernstedt's investigation of the contribution of vicarious experience to the perception of reality in an academic context can be summarized as follows:

1. Whole-class experiences, such as reading a novel or taking a trip, are better than individual experiences because they have been shared by the class and can be validated.

2. Printed handouts and examples drawn from real life are remembered more accurately and longer than information taught without them.

3. Demonstrations are remembered best and for the longest periods of time, and they should be chosen for their intellectual value and not simply as motivational aids.

4. Modeling, in which the instructor actually engages in the behavior which the students are trying to learn, has a powerful, positive effect on learning.

The pioneer research of Jernstedt (1980) has been richly amplified in other work. Finkel and Monk (1985), Warren (1988), and Biedler (1987), to mention only a few, all give examples which put principles articulated by Jernstedt into practice. Other research, such as that of Allen (1987), Yerkes (1988), and Horwood (1994), shows that these principles apply at the elementary and secondary levels as well as at college.

Levels of Risk

The condition of reality helps generate a sense of risk and uncertainty for the learner. John Dewey (1938) states that ". . . growth depends upon the presence of difficulty to be overcome by the exercise of intelligence" (p. 79). The difficulty Dewey refers to can be physical, emotional, social, or intellectual. It could be the result of having to make a speech on a personally important issue, finding oneself in what is perceived to be a dangerous situation, or being relied upon by other class members to complete a task.

In using this discordant atmosphere, the teacher must also take care to create an environment of trust and support, without which the learner will not risk anything. For example, my high school sociology class discussed different types of risk in class participation. The class concluded that being called on by a teacher was of relatively little risk because your opinion was being solicited. You were not being given a choice of expressing it or not. To volunteer an opinion involved more risk—what you said had to have some value to you because you were offering it. Class discussions and opinion sharing are important to our class. Therefore, we do not allow "killer statements" or put-downs. We disagree, but disagree without personal judgments. To do otherwise would be to foster a climate where only a few would be willing to risk.

This concept of risk has been defined as a "vigorous environment ... any place in which you are uncomfortable, or any place in which you have not learned to behave [competently]" (King, 1981, p. 1). Thus, there can be risk involved on the dance floor or on a rock wall, spending time alone or standing in front of a group, or working in a day care center or an old age home. Vigorous environments vary for the individual.

The greater the level of risk, the more real one perceives the consequences of one's actions to be. The sense of reality in those consequences helps to involve the entire person in the experience. It is no longer solely a physical or intellectual exercise. The reality of the consequences that arises from the uncertainty is the glue that cements the learning for the individual.

Sense of Responsibility

In experiential learning, there is a feeling of personal investment in what is being undertaken. The learner is involved in decisions leading up to the experience. He or she chooses the course, the assignment, or method of presentation, helps in the construction of the test, and participates in the decision of what should be covered in the unit of study. This establishes a high level of responsibility and expectation on the part of the student.

Once students have been involved in the decision making, they also have a responsibility to help carry it through. Instead of remaining on the sidelines as a recipient of someone else's decisions, the learner is now responsible for implementing them. Eliot Wigginton (1978) once advised staff members of a basic belief at Foxfire: "Before you start to do anything related to your work in this organization, ask yourself first why a student is not doing it instead. If you don't have a good reason, then go and find a student —preferably one who has not done it before" (p. 30). In experiential learning, teachers are not responsible for their students' learning so much as they are responsible to their students to help them learn.

Students involved in experiential learning make decisions that affect their learning. A teacher committed to experiential learning must be willing to accept the consequences of those student decisions. The only exceptions to this are decisions that affect the safety of an individual or group. In these cases, student decisions must be carefully monitored and may be occasionally overruled by the teacher.

The commitment by the teacher to the student's exposure to the consequences of his or her own decisions is sufficiently difficult and important to warrant two examples from my own practice. In planning a March trip to a mountain lake, a student in the ROPE class (a modified Outward Bound course at Concord High School, New Hampshire) asked to take along his fishing pole. Our response was that as long he had the proper licenses it was not a problem. We did not tell him of the thick layer of ice that we expected to find. When we arrived, he went down to the lake with his small hatchet

to chop a hole in the ice. Before we left the next day, he was still chopping in the hole, visible only from the waist up.

The point here is that the staff expected an impossibly thick layer of ice. Yet we made it possible for him to learn this for himself in a far more meaningful way than if we had told him that bringing fishing gear would not be useful. He ended up bringing fishing tackle on every subsequent trip, as a matter of pride, I suspect. On the last trip, a bike tour, he finally managed to hook something—his hand—while riding his bike.

The second example is from an oral history class, called "Homegrown," that I used to teach. Each year, the class took a 12-day trip to another part of the country, not to sightsee, but to learn from local people in other regions. On one occasion, the class had set up a seminar with a local resource person from a college. He was an extremely easygoing and humorous person, until he got in front of a group. In that formal situation he became boring, reading verbatim from his notes. True to form, this trip he had nearly half the class nodding off within 20 minutes. When we went for a break, I asked the class if everyone had liked the first half of his presentation. After a few initial grumbles and foot shuffles, someone, in understatement, said, "Uh, I think he's a bit dry." I then asked if there was any way they could change his method of presentation to make him feel more comfortable. After talking for a few minutes, they decided to ask him questions and get him telling stories. The second half was much more interesting and the speaker enjoyed it more, too, because he could feel the students' interest through their questions.

In this example, I asked a question to determine if the students were dissatisfied with the presentation. If they had been content, I would have let the issue drop. I could not impose my opinion at this point without undermining students' responsibility. In later discussion, if they continued to have positive reactions to the session, contrary to my own experience of boredom, I would let the matter rest. Otherwise, it would be an opportunity to hold a discussion on how they might deal with boring presentations another time. In this example, it was the students who said that the presentation was boring. I was not imposing my evaluation. This is not to say that the teacher must never express his or her opinions. On the contrary, the

teacher must be responsible to the class to reveal insights and understandings but always in a context and at a time which supports the pattern of decision making and student responsibility. Teachers must always be aware of the special weight which their opinions carry and how expressing them can unduly influence students' decisions.

In these examples, carrying a fishing pole and not taking initiative to alter a boring, guest speaker's presentation are not "mistakes." The only true mistakes are experiences one doesn't learn from, or that don't lead to further learning. What is ordinarily perceived to be a mistake in school is better understood as an acceptable part of experiential learning because the focus of learning is on the process of achieving a goal, as well as on the goal itself.

Predictability and Planning

In experiential learning, the specific outcome is not always predictable. This is a result of the students' involvement in decision making and the teacher's role being that of clarifier, rather than leader, and the overall value of process in preference to product. The wide range of student options requires the teacher to plan for an equally wide range of possible outcomes. Each possibility must be anticipated and researched. Student choices should not be limited by inadequate planning on the part of the teacher. At the same time, enthusiasm should not be tempered by overplanning.

Anticipating every possible outcome and planning for it removes some of the adventure and discovery for the teacher. Nothing can replace that genuine shared enthusiasm between teacher and class. This is a fine line for the teacher to walk: how much to plan and how much to leave to circumstance depends on both the teacher's experience and confidence in being able to adjust to the moment.

It is tempting for the teacher to try to manipulate the students to select one plan for which the teacher is ready. It can also be frustrating for the teacher to plan for five possibilities, knowing full well that only one of them may be selected. It is important for the teacher to appreciate the significance of choice in experiential learning in order to keep his or her frustration at manageable levels.

An example of this kind of prediction and planning in my practice comes from students making decisions about the format of their reports. Thinking about it, I anticipate that some students will write, as usual. What other options are there? Tape record it! Are tape recorders available for students to use? Videotape it! Is there someone available to instruct students in use of the camcorders? A photographic essay! Can students get materials and help from the school's photography lab? Once answers to these and related questions are determined, the teacher knows what is possible. Without this knowledge, there are really no options for students at all. But all this background information is not passed on to the students because it is up to them to make their choices and find out the needed resources on their own. If they get stymied, the teacher may offer hints or possibilities without robbing the student of the central experience.

Sometimes a student will propose an option that has not been expected. Rather than reject it, the teacher should encourage the student to develop the idea further. Perhaps the student will discover that it is truly unreasonable. On the other hand, perhaps the teacher will learn that it is possible.

Reflection

In experiential learning, the student decides what he or she has learned from the experiences. One method of learning is reflection on the experience, thinking about what happened and one's position in the process. Reflection includes separating elements in the experience (analysis) and connecting those elements with other experiences and knowledge (synthesis), as well as other mental activities, such as feeling emotions. Reflection can be verbal or nonverbal, alone or as a group, or alone with the instructor or with the class and the instructor. There are many effective ways. It should also be understood that analysis and reflection does not take place only after the planned activity. It takes place when it is needed during the activity. The goal is to achieve learning and it doesn't matter at which points in the educational sequence learning happens. The critical thing is that experience alone is not necessarily educative—it must be turned into learning by thought.

To be effective facilitators of reflection, teachers must be keen observers of events and people. Then, at appropriate times, observations may be offered, questions asked, or feelings explored.

Teachers should also be able to vary the methods of helping students analyze what has taken place. The choice of methods depends on the personalities and the situations involved. At times it might be necessary to be blunt and honest with feedback. At other times, questions, discussions, or a gentle approach will enable students to discover for themselves the significance of what they have done and how they are perceived. Sometimes nothing needs to be said. It is difficult for teachers to know which method is the ideal one to use. Experience, with reflection, is a good teacher.

Another stimulus for reflection and connection in experiential learning is the application of newly learned material, such as a skill, in another demanding situation. Repeated re-application of learning helps to reinforce it and also helps to ensure that students have not made the learning in isolation. Applications in other contexts help to integrate learning. Without such bridge-building, what is learned in the woods will stay in the woods, what is learned in science will stay in science, and what is learned in school will stay in school.

An example of forging this sort of connection is found in the speech requirement of the ROPE class in Concord High School. I am often asked, "Why require a five-minute prepared speech as part of an outdoor adventure class?" The reasons are twofold. First, it helps students to recognize that fear is fear, whether it is on a rock face or in front of a group of people. If you use your inner strength to overcome fear in one place, the same source of strength is available to help in the other. And why stop tapping that strength in only those two fearful settings? The second reason is so that those students who felt little or no fear on the rock face can understand something about those people who did, when the roles are exchanged and they stand alone in front of the class, sharing a part of themselves. These repeated applications of experience go beyond metaphoric implications of a single experience and seek to make the connections concrete.

Pulling it Together

The interrelationship of the above five factors is complex. It is impossible to modify one without affecting the others. The level of risk is at least partially determined by the reality of the experience and vice versa. Student responsibility for learning makes it less predictable. Students' reflection determines what meaning emerges from all the others.

The first three factors (reality, risk, and responsibility) work in parallel. The greater the reality, the higher the level of risk, and the more responsible the students are, the more directly experiential is the learning process. Movement on these scales influences predictability. In general, the higher any of the first three, the less predictability there is. The methods and timing of reflection will depend on all four factors. The teacher must be prepared to deal with considerable ebb and flow.

There have been numerous attempts to explain these complexities by placing them into flow charts. One of the earliest (Gager, 1977) shows a flow sequence in which the learner, placed in a demanding reality context, must master a new skill and apply it with reflection in a challenging setting. The result is that the students "learn" through a reorganization of their individual understandings. Another widely used experiential learning cycle has been developed by Kolb (1974). In this cycle, four phases are connected in a continuous cycle of learning. Concrete experience flows into reflective observation and the resulting thought generates abstract conceptualization, the implications of which are tested by active experimentation. The cycle is completed as the results of active experimentation become a new set of concrete experiences.

Joplin (1981) has developed a widely cited model. Her flow path is through a spiraling sequence of focus, challenging action, and debriefing (reflection) which leads to another round. For Joplin, it is essential that these actions be embedded in a climate of support and feedback.

In practice, each of these models helps our understanding of some aspects of the experiential learning process. But each one also fails to meet the rich complexities of human interaction and individuality.

The teacher should use insights from such mechanical models and then be ready to flow with events in a more organic way.

How Can Experiential Learning Be Applied in the Classroom?

The problems of application are not only with the limitations of the classroom itself. Rather, they are the other restrictions that go along with being part of a school: noise level, time constraints, student and teacher responsibilities in other classes, and transportation, to name a few. Also, it is a problem to create a vigorous environment, as defined by King (1981), in a place where students already have an established pattern of behavior. Finally, it must be

remembered that students have very little choice whether to be in school or not. Since student choice is an important part of experiential learning, this is an almost impossible problem to overcome for students who don't want to be in school at all.

Here are some of the ways I have found to work around these restrictions. No doubt there are other ways I have yet to learn. Students have to be in school. Without getting into the merits of the issue here, I simply deal with the law by accepting it as a given in my work.

I tend to view concerns like noise, time, outside commitments, and transportation simply as problems to be dealt with. They are difficult but not insurmountable. They can be overcome. It helps me to be flexible, reasonable, and good-humored in what I do. I try very hard not to impinge too much or too often on other teachers and I find that with these operating principles, I can usually teach as experientially as I want. A classic example is the "seats-in-a-row" problem. I like moving desks around to fit what the class does. Other teachers with whom I share the room (and the desks) don't. Instead of a cold war, we have established the "Concord High Compromise": they put the desks in a circle for me and I replace the rows for them. The point is that different lessons occupy different places on the various spectrums and require different arrangements. It is not a matter of right and wrong, but a matter of mutual accommodation.

It is also possible to create vigorous environments where students can be challenged within a behaviorally acceptable climate. First I determine the students' behavioral norms, the ways in which they are accustomed to act in various parts of school work. Then the way is clear to begin the process of changing expectations. For example, students accustomed to a large amount of teacher decision making will find the shift to student decision making a vigorous environment. Students used to individual tests will find that group tests challenge their ways of acting. Since there are many students in a class with different school experiences, what counts as a vigorous environment for some may not have vigor for others. I meet this need by changing the pattern on an irregular and unpredictable basis. One of my favorite bits of feedback from my students is that they come to class because they don't know what to expect.

The concept of adventure is also helpful when one is faced with these restrictions. Lentz, Smith, Stentowski, and Seidman (1976) identify four elements that comprise adventure education. One of these, the idea of having an adventure, is different from the stereotype of adventure programs which seems confined to wilderness travel or high ropes courses. Many adventurous people have not been adventurers in the wilderness travel sense of the word. Yet they have been on an adventure in different ways. These adventures could be the development of their first photograph, writing a book review and sending it to the book's author, reading one's own poetry in public, or discovering a possible solution to a problem facing a social agency in one's community. It is not necessary to go to the top of a mountain to have an adventure.

There are essential elements common to all adventures. Three of them are the same as the first three factors in experiential learning: reality, risk, and responsibility. As a general operating principle, having an adventure in school supports experiential learning by creating conditions in which students feel that their work is real, that they are exposed to some risk and have ownership for the situation and the outcomes.

There are three ways to build adventure into the school curriculum, depending on the amount of time available. One of the most obvious adventures is for the class to go on an extended field trip. The duration could be for the weekend or for as long as several weeks. It could be a trip to the ocean or the mountains to study ecology, a sociological study in a large city neighborhood, or a history class reenacting a long march across a state. Preparations in the classroom focus on the trip and become part of the adventure. Fund raising, development of the areas of study, logistics, relations with the rest of the school, and media contacts are only a few of the activities that can become part of the set of learning experiences.

The second adventure curriculum is planned to take a few hours. Here the time available limits not only what can be done, but also where. The advantage is that it can be more easily negotiated within the school's time and budget framework. Half-day field trips to a funeral home or to a prison are examples of adventures in vigorous environments for most students, and they contribute to experiential learning in the social sciences. An English class that presents an act

of a play being studied to a school assembly or to a local nursing home is having an adventure. The French class that uses the school's home economics facilities to prepare (and eat!) French pastries, while speaking only French, is having an adventure. The possibilities, limited only by imagination, apply to every subject.

The third time interval is the class period. It is the most accessible but also the most constrained as to content and place. Reality and risk in these short adventures are reduced, but the experiential teacher should not be deterred because the opportunities are many, and significant experiences as part of the day-in and day-out schedule are critical and cumulative. It may be discouraging not to be able to pull off the big adventure, but the accumulating impact of daily lessons is equally important in the long run.

Within a classroom period, adventures can be provided that sustain direct experience. A lesson on trust will emerge from a blindfolded Trust Walk in or around the school. A study of prisons will become more real following a period of sensory deprivation. An important decision in history will gain focus by a related problem-solving task with which students must grapple. An English teacher uses obscure facts and little known people to create a mystery which students can only solve by learning how to use the reference section of the library. Routine testing becomes an adventure when half a class creates a test for the other half to take, and vice versa.

In my sociology classes, it was possible to use repeated single-class periods and homework time for a sustained exploration of social agencies in our town. Students determined that they were responsible for contacting an agency and spending ten hours of service time there. Then, they were expected to determine what social problems the agency was trying to deal with and suggest some practical solutions for them. Students prepared reports for the class and for the agency's reaction. Other small group and individual projects that call on reality, risk, and responsibility can be organized to fit the time available in class periods.

Conclusion

In trying to answer the two questions I posed at the outset, I have come to realize two central and critical points. First, it is absolutely essential to the implementation of experiential learning to work at understanding its flow and process. Second, experiential learning can happen in any place and subject where people are interested in having it.

It is easy for busy teachers to latch on to the superficial or symbolic aspects of an educational process without understanding the underlying philosophy. Their efforts fail and they return to what they were doing before because the newly adopted methods are not supported by adoption of related values. Without the principles of experiential learning, it is not possible to successfully translate classical experiential symbols such as ropes courses and cultural journalism magazines into each teacher's unique setting.

Romantic and large-scale experiential programs cloud the fact that ordinary classroom teachers can implement experiential learning on a small scale within their schools and within their subjects. An adventure does not have to be monumental to count. Leo Buerman, a person with severe birth defects and sheltered for most of his life, said in a film on his life, "Courage is a factor in many things that are seemingly insignificant." It is one of the jobs of the experiential teacher to find those things and arrange events so that students learn from them.

For me, as teacher, experiential learning is an adventure in and of itself. I feel the reality, risk, and responsibility just as my students do. Although it is hard to plan for all the various options, to deal with the unexpected, and to remain flexible to students' needs, the results can be worth it. Please note that I did not write "will be" worth it in the previous sentence. In experiential learning and teaching there are no guarantees, for if there were, reality, risk, and responsibility would be lost. But if I, and others like me, can run the risk of failure and determine to learn from it, then, as teachers, we become learners, too, and have the best of both worlds.

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