

CHAPTER 2

WHAT IS EXPERIENTIAL LEARNING?

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Members of ABSEL are dedicated to the proposition that students can learn from experience. Most people adhere to the notion of “trial and error” learning. Various ABSEL participants have used the following quote, attributed to Confucius, to express their conviction that experiential learning is effective:

I HEAR AND I FORGET
I SEE AND I REMEMBER
I DO AND I UNDERSTAND.¹

Others have cited Sophocles’ quote from 400 B.C., “One must learn by doing the thing, for though you think you know it-you have no certainty, until you try.” Or, one could quote George Santayana, “The great difficulty of education is to get experience out of ideas.”

It is hard to argue that experience will not lead to learning under the right conditions. However, it will be argued that the resultant learning can be in error unless care is taken to assure that those conditions occur. The purpose of this chapter is to delineate the components of “experiential learning” so that the necessary conditions for “proper” learning can be specified. While most pedagogies allow students to learn experientially to some extent, an attempt will be made to distinguish those approaches which would be more likely to facilitate experiential learning.

While the title of the chapter implies a focus on learning (the student perspective), to a large extent the chapter actually focuses on the structuring of the experience (the teacher perspective). What the student takes away from a particular experience is often idiosyncratic to his/her perceptions of the experience, and is somewhat outside the control of the instructor. The

¹ The AACSB Memorandum (Carter et al. 1986) used a slightly different version; Tell me and I’ll forget. Show me and I’ll remember. Involve me and I’ll understand.

instructor is responsible for providing the experiential stimulus, and the quality of that stimulus will vary greatly depending upon the pedagogical approach used. Thus, much of the chapter will deal with the issue of which approaches facilitate experiential learning.

DEFINITION OF EXPERIENTIAL LEARNING

Various terms have been used to label the process of learning from experience. John Dewey (Dewey and Dewey 1915) discussed “learning by doing,” while Wolfe and Byrne (1975) used the term “experienced-based learning.” The term “trial and error” learning is used to explain inductive learning processes. The AACSB Task Force (1986) used the term “applied experiential learning,” combining the learning from the “real-world” Situation with the necessary condition of the application of concepts, ideas and theories to the interactive setting. The term “experiential learning” will be used here, but it is intended to cover the same domains as the other terms.

The AACSB Task Force (1986, p. 3) defined applied experiential learning as:

A business curriculum-related endeavor which is interactive (other than between teacher and pupil) and is characterized by variability and uncertainty.

Most discussions of the concept by ABSEL participants have referred to the original (to ABSEL) definitional work by Hoover (1974) at the first ABSEL conference. He drew upon the work of Rogers (1969, p. 5), who defined the essence of experiential learning as:

It has a quality of personal involvement-the whole-person in both his feeling and cognitive aspects being in the learning event.

Using this definition as a springboard, Hoover (1974) made the point that experiential learning involves more than just the cognitive learning generally stressed by management education. In addition to the affective domain mentioned by Rogers, Hoover also stressed the learning of behaviors. In a subsequent paper (Hoover and Whitehead 1975, p. 25), the following definition of experiential learning was given:

Experiential learning exists when a personally responsible participant cognitively, affectively, and behaviorally processes knowledge, skills, and/or attitudes in a learning situation characterized by a high level of active involvement.

Discussion leading to Hoover’s definitions used phrases such as “participative,” “contact with the environment,” “[~an] attempt to combine the

processes of learning with the content of learning,” and emphasis on “the ‘how’ as well as the ‘what’ of the instruction or training.”

Comparison of the AACSB definition and that by Hoover and Whitehead shows that neither is comprehensive. Before discussing the components involved in either or both definitions, it will be beneficial to discuss the overall experiential learning task structure proposed by Wolfe and Byrne (1975). They state that experientially-based approaches involve four phases: design, conduct, evaluation, and feedback.

Design. This phase involves the upfront efforts by the instructor to set the stage for the experience. Included in this phase are the specification of learning objectives, the production or selection of activities for participants, the identification of factors affecting student learning, and the creation of a scheme for implementation. Thus, this phase is critical for the “applied” part of the AACSB’s applied experiential learning; the theoretical base is laid so that the participant can view the experience in the desired context.

Conduct. This phase involves maintaining and controlling the design. The design phase may include the creation of a timetable for the experience, but the conduct phase involves the altering of the original timetable and activities to sustain a favorable learning environment. The important implication of this phase is that the experience is a structured and closely-monitored one.

Evaluation. To be sure, evaluation is conducted by the instructor. But the emphasis here by Wolfe and Byrne is on the provision of opportunities for students to evaluate the experience. Participants should be able to articulate and demonstrate specific learning gained from the design and conduct of the experience.

Feedback. Wolfe and Byrne point out that feedback should be an almost continuous process from the pre-experience introduction through the final debriefing. Included is the monitoring of the process by the instructor in order to foster positive aspects and eliminate those features that are negative. One possible concern in this phase is whether students should have the opportunity to fail. To the extent that we learn from our errors, the freedom to fail may be encouraged. On the other hand, if the experiential exercise involves a business client (such as in a small business case), failure can affect the business school’s reputation negatively.

Learning will be best facilitated when all four phases (design, conduct, evaluation, and feedback) are present and repeated over time. Such a process

would resemble that in Figure 2-1. This process-oriented approach is somewhat similar in nature to those proposed by Kolb (1984) and Lewin (1951).

FIGURE 2-1
Process-Oriented Version of the Wolfe and Byrne Model



CRITICAL COMPONENTS TO EXPERIENTIAL LEARNING

Contrasting the AACSB and the Hoover and Whitehead definitions while considering the Wolfe and Byrne framework, one can begin to delineate the components of “experiential learning.” This section will provide a discussion of them.

Business curriculum-related. Clearly the business discipline has no monopoly on the use of experiential learning. Given that AACSB administers collegiate schools of business and that the majority of ABSEL members are business faculty, the emphasis on business curricula is appropriate. As pointed out by the AACSB Task Force, business is an applied discipline:

“Business education involves studying applications of mathematics, economics and behavioral sciences to problems in the production and distribution of goods and services” [Carter et al., 1986, p. 6]. Thus, the applied nature of business education might be a more appropriate discipline for the use of experiential learning pedagogies than one with a stronger theoretical orientation.

One should note in passing that experiential learning approaches are not used solely by universities, but also by corporate trainers. The emphasis of this volume is on the university classroom; consequently, topics such as grading may be largely irrelevant to corporate trainers. However, the vast majority of the discussion herein should be of value in any application of experiential learning (corporate or university; business discipline or behavioral science discipline).

One interesting point raised in the AACSB Task Force Memorandum is that, as an alternative or possibly a supplement to an increased use of experiential learning in the business curriculum, business schools should emphasize the benefits of the extracurricular activities of students. Clearly,

such activities offer a small subset of the student body a chance to develop their leadership skills experientially. The Memorandum suggests that business schools actively encourage student clubs to promote activities which involve student participation so that their speaking, discussion, interpersonal, and goal-setting abilities are developed.

Applied. As presented by Wolfe and Byrne (1975), the design phase of the experience is critical. Experiences occurring without guidance and adequate academic preparation may yield little insight into the general processes taking place. The Task Force stated that experiences will not qualify as applied experiential learning without having the expected educational outcomes articulated and related to the curriculum.

Participative. The student must be involved in the process. Experiential learning is active rather than passive. Rather than just listening to a lecture, students do role plays, or make decisions (as in a simulation game), or perform an analysis of a firm's problems (as in a small business case project).

Interactive. As specified by the Task Force, the interaction involves more than just the instructor/student dyad. Student/student, student/client, or student/environment interaction is also required. Example interactions include group decision-making in a simulation game, presentations to clients in small business case projects, and conducting survey research of local households for a marketing research course project.

Whole-person emphasis. Experiential learning can involve learning on the behavioral and affective dimensions as well as the cognitive dimension. Given the problem-solving orientation of most management education, there is a natural tendency among business faculty to emphasize the cognitive dimension. Given the importance of "people skills" and "technical skills" though, the broader horizons offered by experiential learning approaches (as compared to more traditional teaching methods such as lectures and class discussion) may be very beneficial. While the AACSB definition does not mention the whole-person concept, the Task Force did acknowledge the development of a student's interpersonal and other non-cognitive skills as one of the major expected benefits from experiential learning.

Contact with the Environment. The term "experience" implies a real world contact (or at least a "real-world-like") contact. Some forms of experiential learning (such as simulation games, role-playing exercises, and case discussions) do not involve actual real world contact and were labeled as "surrogate" applied experiential learning by the AACSB Task Force.

Business internships may involve actual work experience, but most types of experiential learning will fall short of giving students actual decision-making authority. Nonetheless, the simulated environments are intended to be analogous to the real situations which students will face later.

The real or simulated experience makes possible learning through interaction with one's environment. The person X situation interaction is itself crucial. Students should be provided with a variety of situations. Also it should be noted that different students will react quite differently to the same situational cue, and that the interaction process should be monitored closely.

Variability and Uncertainty. The use of these terms in the AACSB Task Force definition may have been for the purpose of placing added emphasis on the real-world environment. One of the benefits which they cite for experiential learning is that students get a feel for the "messiness" and ambiguity associated with real-world situations. It may be enlightening to a student to listen to a lecture on organizational conflict; however, when it is encountered in the team play of a simulation game and there is no one with the authority to reconcile the opposing views, the messiness associated with organizational conflict becomes very real.

A divide and conquer approach is used in most lecture-based courses, as the topic being covered is broken down into its components which are then dealt with separately. This process sometimes obscures the complexity that occurs when the various parts are integrated into the whole. The systems aspects may become clearer to students when they have to handle tradeoffs in a large-scale simulation game.

Structured Exercise. The experience should be structured and monitored. If there is insufficient autonomy, the willingness to participate may be greatly stifled. On the other hand, if there is no guidance provided, the experience may be largely meaningless in terms of the specific content area for which the instructor is responsible. Faculty time commitments to teaching usually increase (and increase substantially) rather than decrease when students become more participative in and out of class. An "experience" by itself will not insure learning; the instructor has to insure that it is a quality experience.

Student Evaluation of the Experience. Students need to have the opportunity to articulate their thoughts and feelings as to what the experience is involving. Even though the instructor is monitoring the experience, the important perceptions of what is happening reside within the student. Accordingly these perceptions must be understood and articulated by the student. The design of even highly structured experiential exercises such as

simulation games and role plays is often dynamic in nature, as the designer modifies the exercise upon receiving feedback as to what is perceived by the participant to be happening as opposed to what the designer “objectively” perceives to be happening. A good measure of students’ ability to integrate content and process is to have them critique the experience by specifying what should have occurred in the experience as opposed to what was actually involved.

Feedback. We do not always learn well from experience. George Bernard Shaw once stated that “we learn from experience that we never learn from experience.” To the extent that we learn by “trial and error,” the learning is essentially inductive in nature. We experience certain situations and we generalize rules to explain what happened. Or as Kelly (1955) described the process:

The person who merely stands agog at each emerging event may experience a series of interesting surprises, but if he makes no attempt to discover the recurrent themes, his experience does not amount to much. It is when man begins to see the orderliness in a sequence of events that he begins to experience them. . . . From the standpoint of the psychology of personal constructs, it is the learning which constitutes experience.

Most learning occurs through outcome feedback—an action is taken and we observe the outcome. In many cases, we judge the quality of the decision by the favorableness of the outcome. Phrases such as “we reward productivity, not effort” and “bottom-line management” indicate emphasis on outcomes. Decision theorists (one example is Emery and Tuggle, 1976) have frequently pointed out that outcomes frequently depend on factors outside the control of decision makers, and that we should evaluate the decision process rather than the Outcome. In the long run, a good decision process should result in more profit, but this may not be true in the short run.

This emphasis on process rather than outcome feedback has found its way into our approaches to teaching. When we grade cases, we often state that the final recommendation is not as critical as the logical and empirical support that precedes it. In simulation games, we do not weight the entire game grade on the game results, but rather place quite a bit of emphasis on the students’ discussion of their game strategies and their justifications for the specific decisions. On the other hand, it is simpler to observe their game-end profit or their recommended case solution than it is to delineate the process used to bring about these outcomes. Further, far less effort is required to critique the Outcomes than to critique the process.

Even if we as instructors provide process feedback, students may concentrate on the outcome feedback (grade) and ignore the process feedback (written Comments). Most students have come to expect consistency between

the two types of feedback, and they are not easily placated when distinctions between the two are made.

Students are not alone in finding the distinction between good/bad decisions and good/bad outcomes to be counter intuitive. Most people do. After all, we have a lifetime of experience in learning from outcomes. Outcomes are visible, available, and often unambiguous; the process, however, often must be inferred on the part of the instructor. In many business contexts, process feedback is almost impossible. For example, salespersons perform most of their duties outside the home firm's environment; consequently, the sales manager must evaluate outcomes (total sales) rather than process. Those process variables which are available (such as the number of sales calls) often do not provide much insight into the sales process.

Unfortunately, most of our learning based on outcome feedback is based on a very small sample size. Frazer (1986) discussed the possibility of indoctrinating students as to the importance of certain variables (such as price or salesforce) given the nature of the particular demand function used in a simulation game. To the extent that students carry such an artificially developed view of the importance of variables away from the game as the lesson learned, the experience may be more harmful than helpful in future decision-making.

Even when sufficient outcome feedback is available to provide a systematic view of possible relationships among variables, problems still may occur. Because of the way feedback occurs and the methods that humans use to test rules via experience, positive reinforcement can occur even for incorrect rules (Wason 1960). More specifically, representation of outcomes in memory is thought to be often of categorical form—successes and failures, rather than absolute levels of the criterion (Estes 1976). Further research (Jenkins and Ward 1965; Smedslund 1963; Ward and Jenkins 1965) indicates that people tend to focus on positive outcomes. In studies measuring subjects' ability to judge the contingency between variables x and y from information in a 2×2 table such as Figure 2-2, people were found to judge the strengths of the relationship by the frequency of positive hits while generally ignoring the other three cells. The implication of this finding is that people do not use all available outcome feedback even when it is presented systematically. An additional implication is that people have a tendency to focus on positive feedback more than on negative feedback.

Einhorn and Hogarth (1981) conclude that one must pay attention to nonoccurrences of the event as well as occurrences in order to develop a correct decision process. Without the search for disconfirming evidence, the development of decision processes will be based on the more visible and more memorable successes.

FIGURE 2-2
2 × 2 Table Format

	x	\bar{x}
y	positive hit	false positive
\bar{y}	false negative	negative hit

In summary, feedback is critical for proper learning to take place after an experience. The student should not be allowed to conclude what was learned without receiving feedback; there is too much evidence that human beings do not do this properly. The debriefing session is crucial. Students need to articulate their perception of what was learned, and the instructor needs to put things into a broader perspective. If the students correctly uncover what the key variables are in the present exercise, discussion should probe whether those variables are also dominant in other situations.

Second, process feedback is much more valuable than outcome feedback. The bottom line in many games is a less-than-perfect representation of the quality of the decisions for several possible reasons: (1) a high degree of randomization in the generation of the results, (2) unequal starting points, (3) different levels of competition, (4) competitive dynamics which yield different levels of performance across groups, or (5) a poorly structured model. Process feedback requires much more monitoring by the instructor, but it is the decision process used that needs to be applauded or critiqued.

WHICH PEDAGOGIES FACILITATE EXPERIENTIAL LEARNING?

Given that the components of experiential learning are specified in the previous section, it may be possible to dichotomize pedagogies as involving experiential learning or as not. An earlier attempt (Gentry 1981) to do so in the ABSEL Newsletter was criticized (Goosen 1981) for being somewhat narrow in its scope. Perhaps a superior approach to dichotomization is the one taken by the AACSB Task Force, which essentially presented a continuum of pedagogies. At the low end (those with little or no experiential learning potential) were the basic lecture, the seminar discussion, and a library research paper. Those approaches with some experiential learning potential were problem solving, laboratory and experiential exercises, case discussions, study group discussions, and individual case write-ups. Pedagogies with increasing experiential learning potential were group case

assignments, simulation games, descriptive/analytic field projects, and consultative field projects. Over the years, ABSEL (through its acceptance of conference papers) has indicated that the following approaches may involve experiential learning: assessment centers, forums, group discussions, panel meetings, live cases, writing experiences, student-written textbooks, computer-assisted instruction, COMPUSTAT tape usage, communication workshops, Delphi forecasting, time management sessions, game show formats, learning cooperatives (where students take the responsibility for teaching themselves), internship programs, job search preparation, on-the-job training, field trips, and cases. Applying the criteria developed earlier, it is clear that a number of these may not qualify for having strong experiential learning potential. Three of the more prominent pedagogies will be evaluated as examples.

Internships. Internships meet most criteria easily: participative, interactive, contact with environment, and variability/uncertainty. Given that most interns have at least completed their junior year, a theoretical base of sorts should have been presented. Similarly, in order to get credit for the internship, most students must provide a written evaluation of the experience. The two criteria presenting problems are the structured exercise and feedback components. Since the internship takes place completely outside the university environment, it is nearly impossible to structure the experience for the student. Consequently the internship experience tends to vary greatly, from one that actually has negative learning (poor work attitudes, for example) to extremely positive experiences. Controlling the nature of the experience requires extremely good university/business relations and a great deal of effort on the part of the faculty in charge. As programs become successful, size problems often make them unsuccessful as administrative burnout occurs. Given the distance problem cited earlier, process feedback is difficult. It is possible to require interim reports, but it is often difficult to monitor the student's learning as it takes place. Giamartino and van Aalst (1986) provide a somewhat labor intensive model which indicates how to incorporate process and outcome feedback for secondary school educators. Thus, while internships are extremely high on the experiential, the quality of the learning involved may be suspect. Clearly there are those for whom the increased external validity of the experience is more than sufficient to compensate for control problems. These issues are discussed at greater length in Gentry and Giamartino (1989).

Computer-Assisted Instruction. At the other extreme may be an approach such as computer-assisted instruction. It may well be applied, since its focus is on content. Also, it is usually highly controlled, so it is high on

structure. Similarly, feedback is very likely; in fact, continuous monitoring by the computer is possible. It does require more activity than the standard lecture format, and many such applications are self-paced. On the other hand, it may be weak on many criteria: interactive, contact with the environment, variability/uncertainty, and the whole-person perspective. It concentrates on the cognitive dimension, it involves communication with a static program (most commonly), there is no real-world environment, and there is usually no variability nor uncertainty involved in the process. In general, such an approach should be classified as being very low in experiential learning potential.

Live Case. An approach which meets the criteria well is the live case approach. This may take the form of a small business case, a marketing survey research project for a local business, or the development of an advertising campaign for a firm. A survey research project will be used as the specific example. In most situations, the students are doing this as part of the course requirements or as a follow-up course to a marketing research class. In either case, prior or concurrent coursework has provided the theory base. The typical project requires the students to determine the information needs, obtain background information, develop a questionnaire, pretest it, develop a sampling plan, collect the data, code them, enter them in the computer, analyze the data, write a report, and present it to the client. Participation and interaction are thus very prominent in the process, as is contact with the environment. The learning taking place involves the cognitive (especially in the questionnaire design and analysis stages), the affective (especially in the data collection stage), and the behavioral (in several stages) dimensions. The variability/uncertainty criterion is very much present, especially in the early stages when the students are trying to understand the nature of the problem being investigated. Guidance from the instructor is crucial, both in the form of deadlines that insure the completion of the project by the end of the semester and in the teaching of content which will shortly be used in the research process. Students provide feedback at various stages, but especially at the data collection stage. Most learn about themselves as they contact time-pressured individuals who do not want to be bothered; rarely does a project take place without students wishing to share horror stories. Relating such stories to the lecture material on differential response rates by various groups is straightforward. The nature of the research process (questionnaire design, sampling, analysis) presents ample opportunity for the instructor to monitor the progress of the project. Moreover, such monitoring is crucial in order to assure that the client gets something of value at the end. Thus, the live case pedagogy would be classified as being very high in experiential learning potential.

SUMMARY

This chapter has delineated several criteria which can be used to help evaluate whether a particular teaching methodology can be classified as facilitating experiential learning. Experiential learning is participative, interactive, and applied. It allows contact with the environment, and exposure to processes that are highly variable and uncertain. It involves the whole-person; learning takes place on the affective and behavioral dimensions as well as on the cognitive dimension. The experience needs to be structured to some degree; relevant learning objectives need to be specified and the conduct of the experience needs to be monitored. Students need to evaluate the experience in light of theory and in light of their own feelings. And, process feedback needs to be provided to the student to complement (and possibly supersede) the outcome feedback received by the student. A wide variety of pedagogies have been labeled as involving experiential learning; the use of the criteria can help evaluate their experiential learning potential. Approaches such as computer-assisted instruction may fall short on the “experience” Criteria (contact with environment, variability! uncertainty, interactive, etc.). On the other hand, approaches such as internships are strong on the experience criteria but may yield highly variable learning due to the lack of structure and to the difficulty associated with providing process feedback. Approaches such as live cases would appear to meet most of the criteria easily.