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Designing and using experiential exercises

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Designing and using experiential exercises

Abstract

Introduction: Experiential learning refers to learning which uses the learner's experience as a base. This definition implies an active and personal approach to learning. A more operational definition is provided below.

While experiential learning has been gaining rapidly in popularity, the evidence on its value is mixed. Wolfe [1] presents evidence suggesting that experiential learning is not superior to traditional methods for transmitting knowledge. Similar results were found by Cherryholmes [2] in a survey of what would appear to be experiential methods; participants did not learn more facts, nor did they retain more facts, nor did they develop more critical thinking abilities. On the other hand, the participants did report more interest in the subject and there was more attitude change.

Rather than asking whether experiential learning is superior, one might recast the question in terms of when experiential learning is superior. This paper describes the conditions under which experiential learning is useful. This description is followed by a discussion of how to design an experiential exercise. It concludes with suggestions on how experiential learning may be introduced into current educational systems. Relevant empirical literature is described.

Comments

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Designing and Using Experiential Exercises

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Introduction

Experiential learning refers to learning which uses the learner's experience as a base. This definition implies an active and personal approach to learning. A more operational definition is provided below.

While experiential learning has been gaining rapidly in popularity, the evidence on its value is mixed. Wolfe [1] presents evidence suggesting that experiential learning is not superior to traditional methods for transmitting knowledge. Similar results were found by Cherryholmes [2] in a survey of what would appear to be experiential methods; participants did not learn more facts, nor did they retain more facts, nor did they develop more critical thinking abilities. On the other hand, the participants did report more interest in the subject and there was more attitude change.

Rather than asking *whether* experiential learning is superior, one might recast the question in terms of *when* experiential learning is superior. This paper describes the conditions under which experiential learning is useful. This description is followed by a discussion of how to design an experiential exercise. It concludes with suggestions on how experiential learning may be introduced into current educational systems. Relevant empirical literature is described.

Conditions Favoring Experiential Learning.: Learner Responsibility

Traditional education is designed to transmit a fixed body of knowledge; i.e., the goal is "content." In contrast, experiential learning is designed to help people to modify attitudes and behavior; henceforth, this will be referred to as a "skill" orientation. There is little reason, therefore, to expect that experiential learning should be superior for content.

Learner Responsibility

Traditional education places responsibility for learning upon the teacher. This seems to be an acceptable procedure when the goal is content. It is not acceptable, however, when the goal is to modify skills. A teacher-responsible program aimed at attitude or behavior change would be viewed as "manipulative" or "brainwashing." Serious problems are likely to arise if experiential exercises are used in a traditional program unless these exercises are restricted to rather trivial things in the life of the participant. Powell and Reed [3] suggest that favorable reactions to a university program are more likely if the program has little impact upon participants.

An educational strategy which aims at skill training is expected to be successful if the learner assumes responsibility. People are more willing to change various aspects of their behavior if they have responsibility for (and control over) the change process. This responsibility would ideally extend to the entire change process. That is, the learner would be responsible for:

1. setting learning objectives,
2. selecting and completing the learning task,
3. reviewing how the task contributed to the objectives, and
4. making plans for future applications.

Armstrong [4] presents a highly structured approach for helping the learner to assume this responsibility.

To say that the learner is responsible for all phases of learning is to say that the teacher is *not* responsible. Responsibility seems to be something which is difficult to “share.” This shift in responsibility has two critical implications: first, there should be no external evaluation, and, second, there should be freedom of choice.

No External Evaluation

For the learner to be responsible for setting objectives implies that the teacher should not judge the objectives; nor should the teacher evaluate progress towards these objectives. The learner sets his own objectives and evaluates his own progress. The role of the teacher is changed from judge to helper.

The helper-learner relationship should be voluntary. Helpers will find that not all learners come to them for help; furthermore, they will find that they cannot help everyone who comes to them. Helpers are not selected for their education, expertise, experience, or recommendations by others; rather, they are selected because the learner expects to feel comfortable with them. It would seem important, then, to provide a safe and supportive atmosphere. This implies no grading by teachers, as well as no evaluation of teachers by learners.

While no external evaluation should be imposed upon the learner, the learner should be free to obtain feedback from the helper or from other learners. In fact, he should be encouraged to do this.

Freedom of Choice

The learner should be able to select tasks which are appropriate to his objectives. It is useful to provide access to a large number of experiential exercises. To aid in the selection of tasks, it is important to describe the objectives and requirements for each task. A brief description of the various steps involved may also help the learner to select tasks. An example of such a description is provided in Appendix 1 (taken from Armstrong [5]).

It is also helpful to provide a variety of other resources. For example, because most groups operate on a fixed schedule, it is useful to have more than one room available. Because learners feel comfortable with different people, it helps to have more than one faculty member.

The Design of an Experiential Exercise

This section provides a more detailed definition of experiential learning by describing how to design an effective experiential exercise. It is assumed here that the learner has accepted responsibility and has described his goals.

Learning implies change. One way of looking at the experiential exercise, then, is to examine how it helps to bring about change. The “unfreeze–change–refreeze” framework [6] provides a useful way to describe change; this framework is used in the design of an experiential exercise.

Unfreeze

The first part of the experiential exercise is to analyze the participant's experiences. These may be specific acts which the participant can recall from his past. For example, the learner may be asked to describe in writing how he planned his last marketing project.

An alternative method is to generate experience to a structured exercise such as a game, role-play, case, etc. This structured exercise should be one which relates to behavior which is important to the participant.

The structured exercise offers advantages over the analysis of previous experiences. This experience is recent, making it easier for participants to describe what they did and how they felt. Since the experience is structured, it allows a participant to compare his behavior with alternative approaches. Finally, it helps to establish a base of experience for participants who find it difficult to describe previous experiences.

When possible, it helps to utilize prior experience *and* the experience from a structured exercise. For example, the following procedure might be used:

1. Learner indicates how he thinks he would respond in a given situation (based on prior experience).
2. Learner gains experience in that situation by means of a structured exercise.
3. Comparisons are made between "a" and "b." Are the learner's attitudes and behavior consistent?

This dual approach helps the learner to look closely into his own feelings and behavior.

The most important part of the unfreezing process then occurs. The participant must be able to obtain information that his current behavior pattern is, in some sense, wrong: he must be able to get *disconfirming evidence*. An ideal task for a learner is one which he tries to perform well, but judges his behavior to have failed.

The acquisition of disconfirming evidence is difficult. Numerous studies have shown that adults have a strong preference for confirming information (e.g., see [7], [8], and [9]). People look for evidence to confirm their beliefs and they try to interpret the data in such a way as to confirm their beliefs.

The experiential exercise should lead the learner to disconfirming evidence. To do this, it may help for the learner to compare his performance with the performance of others – especially when the performance of others has been analyzed to a systematic way. Thus, in designing an experiential exercise, it is often useful to start with an empirical study and work backwards, with the empirical study providing the basis for comparison.

The unfreezing stage, then, involves the analysis of the learner's experience followed by the learner's acquisition of disconfirming evidence. With such an approach, it is critical that the learner have responsibility. He must choose to participate and he must search for the disconfirming evidence. When the learner does not feel responsible, the disconfirming evidence will create an unpleasant feeling. He will reject both the information and the source. Furthermore, anonymous has taught us that "a man convinced against his will is of the same opinion still."

Batson [10] showed that people are not always rational in their use of disconfirming evidence. People who felt strongly that Jesus Christ was God *increased* their belief after receiving disconfirming evidence. This occurred even though the subjects thought that the disconfirming evidence was authentic. Some subjects in this study did, however, use the disconfirming evidence to reduce their certainty.

The unfreezing stage contrasts with traditional education. The initial step in traditional education is to provide a technique for solving the problem; experiential learning presents the problem before presenting techniques. In this sense, experiential learning is perceived by traditional learners as being done backwards.

Change

Experiential exercises provide an opportunity for a learner to experiment with new or “wrong” behavior. The learner is provided with an opportunity to master this new skill. There are a variety of approaches to do this –case analyses, report writing, experiments, role playing. Of these, role playing provides perhaps the safest approach for learners. It allows them to experiment with new behavior. It appears to be an effective way to learn about attitude and behavior change [11]. For example, Janis and Mann [12] asked smokers to play the role of a patient who is told by the doctor that she has lung cancer. A long-term follow-up [13] found that these people cut back on smoking.

Groups are often helpful in the change process. The group should provide a supportive atmosphere as the learner tries to gain mastery over the new behavior. (This is a technique which has been used extensively by Dale Carnegie.) For an empirical analysis, see [14].

Refreeze

If the learner is unable to report specifically the changes to his behavior, it is unlikely that any change occurred. Thus, as a first step, the learner should write what was learned after each exercise. (A sample review form is provided in Appendix 2).

The key to the refreezing process is the *application*. Can the learner use the new behavior in a different situation? Applications seldom “happen”; they are much more likely to occur if they are planned [4]. The learner needs to make written promises to himself. At this stage it often helps the learner to have someone with whom to consult. As noted earlier, this person will probably be someone with whom the learner feels comfortable.

A Marketing Exercise: Forecasting The Air Travel Market¹

The air travel market exercise is an experiential exercise which follows the ideal design. It will be used to illustrate the steps involved in designing an experiential exercise.

Unfreezing Phase: The air travel exercise is designed for a group of 4 to 6 people who play the roles of management in the U.S. Federal Aviation Agency. The group is instructed to use the mini-Delphi procedure. Each participant is asked to review forecasting proposals from four consulting companies and to rank them, along with the current forecasting method, according to accuracy. This allows each participant to compare his rankings with the group. A twenty-minute group discussion then follows on the advantages and disadvantages of each method. After this, each person again ranks the method anonymously, and a final group ranking of the methods is calculated.

The experience of each group is used as the basis for further work. Comparisons are made among the rankings of the various groups and also with rankings provided by various groups in the past. Thus the participants can see how their group did in comparison with “undergraduates” and with “advanced management participants.” The differences among these rankings are generally rather small.

¹ This example was taken from Armstrong [5]. Another experiential exercise from this source is described in Armstrong [13]. The air travel case and instructor’s comments can be obtained from the author.

Disconfirming evidence to provided by the instructor in this exercise. This evidence comes from empirical studies, primarily from Armstrong and Grohman [16]. The rankings implied by these studies contrast sharply with the rankings by the participant groups.

Changing Phase: The rankings from the empirical studies suggest new attitudes and behavior to the participants. These changes are not easily accepted by participants; for example, one suggestion is that the participant should reduce his reliance on judgment in forecasting.

Participants are given a self-administered examination to reinforce the change phase; was it understood? The participants grade their own answers. Readings are then provided, including Armstrong and Grohman [16], to further reinforce the change phase.

Refreezing Phase: Each participant reports what was learned using the review form (Appendix 2). He is asked to make a promise to himself about how to apply something new that he learned. The refreezing phase is completed when the learner has mastered and applied the new behavior in a new situation. Especially relevant are applications on-the-job.

Barriers to the Use of Experiential Learning

I have been trying for some years to find out what academic freedom means. What it doesn't seem to mean is that students are free to learn in the way they feel to be most effective; nor that teachers are free to teach in the way they feel to be most effective. The primary impositions upon freedom are required courses and grades; they interfere with those conditions important to experiential learning – freedom of choice and a lack of external evaluation. In this section, proposals are made for dealing with these constraints.

Required Courses

To maintain freedom, it is useful to develop a two-track course. One track would emphasize experiential learning (skills), while the other would emphasize content. Thus, there should generally be simultaneous sessions. Some participants will prefer all experiential sessions, and others may prefer all traditional sessions; many people will try a bit of each. The two tracks may be run by one faculty member by using two or more rooms. However, it's more convenient to have two faculty members work together, each of whom takes responsibility for one track.

Grades

It is important for the experiential track that the helper be removed from the judging business. As suggested earlier in this paper, and as shown in French, Ray and Heyer [17], these two roles do not mix well. There are at least three ways for the helper to maintain the role of helper only:

1. *Everyone Gets Same Grade:* For equity with students in other courses, one might use the median grade and announce this as the group's grade at the start of the course. This approach works well in situations where the grade pressure is not high; for example, It works for MBA programs. It does not work well in cases where grade pressure is high, such as in most undergraduate programs. Here there is often a norm of minimizing the work for a given grade. If this norm exists, it may help to set a grade which is below the median. This increases the cost to people of taking the course. It represents an attempt to get rid of participants who are motivated by grades. This low-grade strategy is equitable only for elective courses.
2. *Contracts:* Where grades are of great importance, the contract system may be useful. The *student* outlines objectives and a detailed work schedule. For this, he proposes a grade. Once

agreement is reached between the student and the teacher, responsibility is handed over to the student. This decision on the grade should be made at the beginning of the course.

3. *The Helper and Judge System:* Another approach which is relevant to situations where grades are important is the helper-judge system. There are two faculty members; one acts as a helper to the students and does no evaluation, and the other acts as a judge and is not expected to offer help (although he may, of course, help). The helper and the student in this case have at least one objective in common – to provide output which will be judged satisfactorily by the evaluator.

There seems to be no ideal solution to the grading problem. The above approaches, however, seem to help.

Summary

Experiential learning is not a direct competitor to traditional teaching methods. It is not designed to provide a more effective way to transmit knowledge; rather, it is designed to help people to improve skills.

The success of experiential learning depends to a large extent on whether the learner assumes responsibility for the entire learning process. Learners are aided in accepting responsibility when no external evaluation is used and when they have freedom of choice in designing a learning program.

The design of the experiential exercise was broken into three phases as shown in Figure 1. The unfreezing phase calls for an examination of the learner's experience; hopefully this allows the learner to acquire disconfirming evidence. Alternative behavior is described during the change process, and the learner is given a chance to master this behavior in a supportive atmosphere. The learner practices "doing something wrong." In the refreeze phase, the learner provides a written description of the new skills and makes promises to himself to apply these skills in the future.

Figure 1 Designing an Experiential Exercise

Unfreeze

1. Prior Experience Described
2. Experience Generated in Structured Exercise
3. Comparison between #1 and #2
4. Disconfirming Evidence Made Available

Change

1. Description of Alternative Approaches
2. Practice New Approaches in Supportive Atmosphere

Refreeze

1. Learner Writes Summary of Changes
2. Learner Plans Applications

The air travel forecasting case was described. This is an experiential marketing exercise which conforms closely with the proposed design by allowing the learner to go through the unfreezing, change, and refreezing phases.

Constraints on the use of experiential learning were considered. A two-track system was suggested as a way to get around the problem of required courses. Three suggestions were made for the grading problem: (1) everyone gets the same grade, (2) contracts, and (1) the helper/judge system.

Experiential exercises offer much promise for in-residence programs. These programs require a large investment; it is a misuse of this investment to devote the program to content, since this objective can be reached at a much lower cost by an individual reading program. Instead, a more ambitious program would use experiential learning to help people to improve skills that they can use on the job.

Appendix 1. **Salesmen's Compensation: A Prediction Case**

Requirements

The following instructions must be followed in the sequence as outlined in order to benefit from this exercise. The total time requirement is over 3 hours and the case requires that you have *two* learning partners. You must keep time on each of the steps. Obtain packet from the Duplicating Center.

Objectives

Major - To gain a better understanding on how payment affects salesmen's motivation (i.e., to learn more about how to motivate or change others)

Minor - To learn about some procedures for running problem solving groups

Procedure

- Step 1.** Write out what you feel to be the basic principles or guidelines to use in designing a plan to compensate salesmen. Develop a very specific set of principles so that a subordinate could use them to develop a compensation plan. Do not talk to your learning partners during this phase! (Required time 30 minutes)
- Step 2.** Meet with your learning partners. Exchange criteria. Then, to be sure that you understand each others principles, B will explain A's principles to C, then C explains B's principles to A, then A explains C's to B. Note that the emphasis is on understanding and that *no evaluation* should be made of the various sets of principles. (Required time 20 minutes)
- Step 3.** Now open Envelope No. 1. In it you will find descriptions of two experiments. Each person will read these experiments and make predictions as required. Again, this should be done without consulting your learning partners. (Required time 20 minutes)
- Step 4.** Discuss your predictions with your learning partners and reach a consensus. Instructions on how to run a meeting to reach consensus are found in Envelope No. 2. (Required time 15 minutes)
- Step 5.** Open Envelope No. 3. Here you will find a paper describing the two experiments and the results. (Required time 30 minutes)
- Step 6.** Read additional papers in Envelope No. 3. (30 minutes)
- Step 7.** Complete the review form. Remember to pay particular attention to the stated goals of this exercise when doing this. (Required time 15 minutes)
- Step 8.** Discuss review form with learning partners. (Required time 30 minutes)

Step 9. (Optional) Write a set of additional questions which you might have about money and motivation. Find some way to answer these questions. (For example, Scott Armstrong has spent some years as an industrial engineer working on wage incentive plans. He also assisted in *Work and Motivation* and *Motivation and Management*, two books by Victor Vroom; so, you could see Scott about these questions.)

Appendix 2

Individual Review Form for the _____ Exercise

(Spend at least 30 minutes on each review and allow more time to review large tasks)

Go back to the objectives for this task. Report on specific and operational things that you learned which were relevant to those objectives.

List some ways you can apply things from this task to problems in your company, in your personal life, in your job, in a project, or in your schooling. *Pick one thing from this list that you will do within the time frame of this course. Star that item here and put in on your pert chart.*

Write one paragraph about the Most important change in you as a result of this learning task – e.g., what was the most important change in your attitudes, or what was the most important thing you learned about yourself, or what was the most surprising thing, or what was the most useful thing? *Do not evaluate things outside you!*

Did you complete the task by your time deadline? No _____ Yes _____

Did you follow the prescribed procedure for this task? No _____ Somewhat _____ Yes _____

(Now read what you have written above to cross out any evaluation of things outside you and to ensure that the review is specific enough to be of value to you.)

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