Best Practices in Experiential Learning

To determine the best practices in experiential learning, it is necessary to first define experiential learning. In the words of Lewis and Williams (1994, p.5):

> "In its simplest form, experiential learning means learning from experience or learning by doing. Experiential education first immerses learners in an experience and then encourages reflection about the experience to develop new skills, new attitudes, or new ways of thinking."

The first theories of experiential learning arose in the mid-nineteenth century as attempts to move away from traditional formal education, where teachers simply presented students with abstract concepts, and toward an immersive method of instruction. Students would "learn by doing," applying knowledge to experience in order to develop skills or new ways of thinking (Lewis & Williams, 1994, p. 6).

Experiential learning is also built upon a foundation of interdisciplinary and constructivist learning. Experiential methodology doesn't treat each subject as being walled off in its own room, unconnected to any other subjects. Compartmentalized learning doesn't reflect the real world, while as the experiential classroom works to create an interdisciplinary learning experience that mimics real world learning (Wurdinger, 2005, p. 24). Similarly "experiential learning is aligned with the constructivist theory of learning" in that the "outcomes of the learning process are varied and often unpredictable" and "learners play a critical role in assessing their own learning" (Wurdinger, 2005, p. 69). How one student chooses to solve a problem will be different from another student, and what one student takes away from an experience will be different from the others.

Experiential Learning: An Expanded Definition

The open nature of experiential learning means that it can often be difficult to define what is and is not an experiential activity. There are many activities that have the potential to be experiential, but may not be depending on the execution. As explained by Chapman, McPhee, and Proudman:

> "Simple participation in a prescribed set of learning experiences does not make something experiential. The experiential methodology is not linear, cyclical, or even patterned. It is a series of working principles, all of which are equally important or must be present to varying degrees at some time during experiential learning. These principles are required no matter what activity the student is engaged in or where the learning takes place" (1995, p. 243).

To that end, Chapman et al. have provided a list of characteristics that should be present in order to define an activity or method as experiential. These characteristics include:

1. *Mixture of content and process*: There must be a balance between the experiential activities and the underlying content or theory.

2. *Absence of excessive judgment*: The instructor must create a safe space for students to work through their own process of self-discovery.
3. *Engagement in purposeful endeavors*: In experiential learning, the learner is the self-teacher, therefore there must be "meaning for the student in the learning." The learning activities must be personally relevant to the student.
4. *Encouraging the big picture perspective*: Experiential activities must allow the students to make connections between the learning they are doing and the world. Activities should build in students the ability see relationships in complex systems and find a way to work within them.
5. *The role of reflection*: Students should be able to reflect on their own learning, bringing "the theory to life" and gaining insight into themselves and their interactions with the world.
6. *Creating emotional investment*: Students must be fully immersed in the experience, not merely doing what they feel is required of them. The "process needs to engage the learner to a point where what is being learned and experience strikes a critical, central chord within the learner."
7. *The re-examination of values*: By working within a space that has been made safe for self-exploration, students can begin to analyze and even alter their own values.
8. *The presence of meaningful relationships*: One part of getting students to see their learning in the context of the whole world is to start by showing the relationships between "learner to self, learner to teacher, and learner to learning environment."
9. *Learning outside one's perceived comfort zones*: "Learning is enhanced when students are given the opportunity to operate outside of their own perceived comfort zones." This doesn't refer just to physical environment, but also to the social environment. This could include, for instance, "being accountable for one's actions and owning the consequences" (Chapman, McPhee, & Proudman, 1995, p. 243).

Experiential learning can also be defined by what it is not, or how it differs from conventional academic instruction. In experiential learning, the student manages their own learning, rather than being told what to do and when to do it. The relationship between student and instructor is different, with the instructor passing much of the responsibility on to the student. The context for learning is different—learning may not take place in the classroom, and there may be no textbooks or academic texts to study. Finally, the curriculum itself may not be clearly identified—the student may have to identify the knowledge they require and then acquire it themselves, reflecting on their learning as they go along (Moon, 2004, p.165).

Experiential learning can also be defined by the qualities it imparts on its learners. Successful experiential learners have a willingness to reorder or alter their conception of a topic. They can reason for themselves and are able to successfully explain their position. They have clarity of purpose with tasks they undertake, and the self-management skills necessary to work successfully both alone and in a group. Experiential learners are aware of the "rules" governing their discipline or mode of operation, but are also open-minded, and able to work with people with different views. Finally, experiential learners are in control of their voice—they can identify the role of emotion in their learning, as well as reflect on how they have come to their new knowledge (Moon, 2004, p. 163).

Who Benefits Most From Experiential Learning

The first and foremost beneficiary of experiential learning is the student. Depending on the learner population, the benefits of experiential learning can increase. Learner groups that have been shown to benefit from experiential learning include:

- The mature learner who has been long removed from the traditional classroom and needs the motivation of contextual learning to get them back into the swing of academia.
- The learner who needs to personally experience the value of a subject in order to be motivated to learn.
- The learner who has trouble learning within the formal classroom, and needs an alternate learning method in order to succeed.
- Any learner who can benefit from having hands-on examples to bolster their traditional learning (Cantor, 1995, p. 80).

Research has also identified certain groups of students that have the most to gain from experiential learning. These groups include "minority students who traditionally have not participated in internships… and students aspiring to enter nontraditional professions and occupational areas" (Cantor, 1995, p. 89). This has often been the approach taken, for example, for encouraging the participation of women in STEM-related majors and careers (WISER, Case Western Reserve). Cantor stresses the importance of marketing experiential opportunities to these groups, "use newsletters, college fairs, posters, college radio stations, college newspapers, and whatever else exists to get the message out" (Cantor, 1995, p. 89).

From the point of view of the university, experiential learning can help institutions stay relevant to students by providing them with the necessary skills to transition into the workforce. Cantor also sees experiential learning as helping the university fulfill the need for "higher education to more closely interface with business to promote community economic development" (1995, p. 79). For institutions concerned with issues of inclusion, experiential learning can promote "the value of diversity… and bring together people of different social, ethnic, and economic classes," preparing students for entry into the world at large (1995, p. 81).

Experiential learning can also be a boon to departments with few resources, and "the literature highlights the benefits of using experiential learning to embellish lean instructional and budgetary resources" or to "bolster your available resources" (Cantor, 1995, p. 84).

Types of Experiential Learning

Experiential learning can be divided into two major categories: field-based experiences and classroom-based learning.

Field-based learning is the oldest and most established form of experiential learning, having been integrated into higher education in the 1930s. Field-based learning includes internships, practicums, cooperative education, and service learning (Lewis & Williams, 1994, p.7).

Classroom-based experiential learning can take a multitude of forms, including role-playing, games, case studies, simulations, presentations, and various types of group work. Experiential learning in the classroom has been growing in breadth and depth since "Chickering and Gamson recommended 'active learning' as one of the seven 'principles of good practice' for excellence in undergraduate education" in 1987 (Lewis & Williams, 1994, p.7).

Getting Started: Planning to Incorporate Experiential Activities

When beginning to think about incorporating an experiential component into your course, there are several steps to take:

1. *Analyzing your learner population and determining their needs*. Are your students primarily at the graduate or undergraduate level? Are they mature learners with comprehensive past work experience, or have they never held a job in their field? What are their present levels of content mastery? Are there any cultural needs or variations? (Cantor, 1995, p.80). "Each person is a product of his or her cultural environment. Each person is conditioned over time to react in certain ways to given situations" (Chapman, McPhee & Proudman, 1995, p. 244). Instructors must understand that their students have been raised in a different cultural environment, and how this will impact their interactions.
2. *Identify appropriate activities for your learner population and course content*. What activities are "appropriate for your course content and meet the cognitive development needs of your particular student population" (Cantor, 1995, p. 81)? Which aspects of your course content could experiential learning embellish? How does the activity you are considering meet course objectives or instructional goals? How does it allow students to experience key concepts in the course? How does the activity complement the program curriculum (Cantor, 1995, p. 82)?
3. *Identify potential issues when integrating experiential learning*. What tradeoffs are necessary to include experiential activities in your course? When designing and modifying a course, will content have to be sacrificed to make time for activities? How will the activity fit within the program curriculum as a whole? Is there institutional support for replacing traditional course content with experiential activities? For external activities, what are the liability issues? How will partner institutions be selected and how will problems with partners be dealt with? How will students be placed to ensure equal opportunities for all (Cantor, 1995, p. 84)?

Designing Experiential Activities

As mentioned above, it isn't the particular activity that is experiential; it is the way that it is framed that makes it experiential. So how are instructional activities made experiential? A general framework could be:

1. Decide which parts of your course can be instructed more effectively with experiential learning.
2. Think about how any potential activities match the course learning objectives.
3. Think about how the potential activity complements the overall course of study.

4. Think about the grading criteria and evaluation method that would match the proposed activity (Cantor, 1995, p. 82).

Once a potential activity has been identified, it has to be framed properly to be fully experiential. First, begin by thinking of problems to be solved rather than information to be remembered (Wurdinger, 2005, p. 51). "A problem or question must be intertwined with activities, projects, and field-based experiences. This will help ensure that a combination of thinking and doing occurs in the learning process" (Wurdinger, 2005, p. 13).

Think about the mixture of primary and secondary experiences. Primary experiences are the experiential activities themselves, while secondary experiences result from the primary experience, as in reflection. It is necessary to "combine primary and secondary experiences within the same academic course. Learning may be lost if students are not given the chance to reflect on primary experiences and, likewise, when students are not given opportunities to apply information from secondary experiences." Depending on your learner population, the blend of primary and secondary experiences may change. For instance, undergraduates may need to begin with primary experiences, as they haven't had a chance to accrue any themselves. Graduate students may have already been working in a professional capacity, therefore they may have a host of primary experiences that they can reflect on at the start (Wurdinger, 2005, p. 19).

Build in the necessary structure to underpin the activities. The creation of an effective experiential learning environment for students is "initiated by the teacher through clearly defined educational parameters—group working agreements, activity learning goals, a big-picture design plan, etc." (Chapman, McPhee & Proudman, 1995, p. 243).

Wurdinger has provided a short guide to integrating experiential learning into a course that may help instructors start thinking about the process holistically:

1. *Use a major project or field experience to guide learning over the entire course*. Having one major task to work on all semester motivates students to keep moving forward, gives them a clear goal to focus on, and becomes the "driving force behind everything the student does in the class… When students know what they are aiming toward, they understand that each class has purpose because it provides a stepping-stone toward that overall aim."
2. *Use a combination of projects, classroom activities, and external experiences* to keep the course interesting and engaging while adding value to the overall process.
3. *Tie everything together*. The class readings and lectures should be directly related to any experiential activities. The readings and class activities should all be thought of as resources that will help the students complete their major project.
4. *Ensure activities are challenging, yet manageable*. When students are given the responsibility of devising their own projects, the instructor must then make sure that they are able to complete them.
5. *Provide clear expectations for students*. This could include assessment criteria, or examples of completed projects and activities from previous courses.
6. *Allow students the necessary time* to "identify, clarify, and keep focused on their problem."

7. *Allow students to change direction midstream*. The most important thing is that the students be working on projects that are meaningful and relevant to them. If they lack interest, the learning will also be lacking (Wurdinger, 2005, p. 63).

Designing Classroom Activities

In experiential classrooms, "students can process real-life scenarios, experiment with new behaviors, and receive feedback in a safe environment. Experiential learning assignments help students relate theory to practice and analyze real-life situations in light of course material" (Lewis & Williams, 1994, p. 8).

To help structure classroom activities, Wurdinger suggests Dewey's "pattern of inquiry." The reason this pattern of inquiry is so effective is that "thinking occurs not only after an experience but also throughout the entire experience." The pattern begins with a student's inquiry into a problem. The student then develops a plan to address the problem, tests their plan against reality, and then applies what they've learned to create a solution. The experiential component of this model is the application of knowledge (2005, p. 8).

When implementing an activity using the pattern of inquiry, remember that the activity should be student-centered. The activity should be hands-on, and require the students to solve a problem that is relevant to their lives. Student interest is critical—students must be able to design their activity, not feel that it has been assigned to them: "Projects are more meaningful than tests because students must think, plan, and execute their ideas to produce something from their own creativity" (Wurdinger, 2005, p. 13).

According to Wurdinger, there are some key things to keep in mind when implementing classroom activities:

1. *The importance of being able to make mistakes*: Students are accustomed to being penalized for making mistakes. Instructors in an experiential classroom must work hard to overcome the stigma attached to mistakes by actively celebrating them as opportunities for learning. "Allowing students to make mistakes may also lead to a situation where they retain more information because it is a more challenging learning process" (2005, p. 9).
2. *The importance of personal relevance*: Discover what the students are interested in, and then select the appropriate problems. "When interest is internal, as opposed to being forced, students become both emotionally and intellectually invested in the learning process" (2005, p. 18).
3. *The importance of students understanding why they are doing something*: If the student cannot see the reason behind their project, or do not see why they are involved, they may not learn anything at all.
4. *The importance of matching students with appropriate activities:* In experiential learning, the means are as important as the ends, therefore it is of utmost importance that students stay engaged throughout the whole process. "Not enough challenge may result in boredom, and too much challenge may result in frustration"—in both cases, engagement will drop and learning will cease (2005, p. 19).

5. *The importance of students reflecting on their experience*: This step is tied to the previous one—reflection, along with driving questions from the instructor, will help students maintain interest, learn successfully, and complete their tasks.
6. *The importance of the instructor delegating authority to the students:* In experiential learning, the instructor serves as a guide and a resource to students, rather than as a leader. "This does not mean teachers withdraw from power by denouncing their authority… Instead, the teacher needs to use the respect and position they enjoy at the onset of class to promote student empowerment" (Warren, 1995, p. 250).

Designing External Activities

In her book on experiential learning, Jennifer Moon discusses the difficulty of implementing successful external activities in the classroom. For instance, in the case of placements, it is important to remember that learning "from work experience mimics everyday learning. It is disrupted and non-routine, emotion is involved… much of the learning is incidental or informal… there are different points of view for virtually any issue…. Making something of this chaotic learning situation is confusing for a learner who is used to being 'fed' information in lectures" (Moon, 2004, p. 165).

There is also the "danger of trapping learner understanding within their own work setting." The students' "understanding and working knowledge becomes over-localized and cannot transcend the present and the particular" (Moon, 2004, p. 167). The underpinning principle of the external activity therefore must be the use of reflection to focus on the process of learning, allowing the experience to be generalized to other situations (p. 164).

To help structure external experiences, instructors should "incorporate the pattern of inquiry so that students are thinking and solving problems" while still involved in the experiences (Wurdinger, 2005, p. 11). The pattern of inquiry is discussed in greater detail in the section of this document on designing classroom activities.

To help learners make sense of their experience, it is crucial that learning be focused. Moon suggests that learning can be focused with the following:

- Carefully structured learning outcomes
- Briefing sessions and/or handouts
- Opportunities for reflection
- Tasks that directly apply what has been learned from the placement
- Assessment criteria (Moon, 2004, p. 165)

To help clarify what she means by the importance of helping students understand how their particular experience applies to the world as a whole, Moon has listed areas of potential learning that "should be included in learning outcomes and assessment criteria" for external activities (Moon, 2004, p. 164). When planning an external activity, instructors should consider this list and select the most appropriate items to expand upon.

As part of an external experiential activity, a student should learn:

- about work and workplace practices,
- how organizations work,
- communication skills and about working with people,
- about personal work behavior patterns,
- to evaluate their own performance,
- to work with feedback from others,
- about their own career aspirations,
- to plan and complete projects,
- to learn from experience,
- about self-management,
- to use reflection and reflective practice,
- key employability (or other) skills "not easily gained elsewhere in the curriculum,"
- self-confidence and a willingness to take initiatives, and
- to enhance their orientation toward lifelong learning (Moon, 2004, p. 164).

The other major hurdle that instructors must successfully leap when developing external activities is the identification and recruitment of placement sites and supervisors, and the negotiation of agreements that will benefit both the site and the students. Cantor describes several key ingredients for successful placements:

1. Programs should be designed to make them of "sufficient duration that employers are motivated to invest in training and use the program as their primary recruitment source."
2. Placement opportunities should be "substantive enough to be challenging even to highly educated or experienced adults."
3. Instructors should "locate the positions in the curricula with great professional potential and a dearth of entry-level opportunities" (Cantor, 1995, p. 87)

Instructors should visit the potential site and list the benefits that will "accrue to each, and the expectations of each partner… there should be a written agreement listing the kinds of activities that the students will be doing as part of the placement. Make sure there is a mutual understanding of the working conditions, salary (if any), hours of work, attendance, and evaluation process. These need to be spelled out in the written agreement. Make sure limits of liability are understood" (Cantor, 1995, p. 88).

When negotiating with potential partner institutions, Cantor reminds instructors to expressly state that mentors are expected to help "learners explicitly understand learning as it is occurring," that expectations between mentors and learners must be "mutually understood and agreed upon, and reviewed periodically," and that "concrete exhibition of learning and skills should be encouraged to enhance the learners self-concept" (p. 85).

If it is the student's responsibility to select their placement, instructors should guide their selection by helping the student identify their career goals, complete an environmental

assessment, review the potential positions, develop suitable terms, complete the placement, and then review their experience (p. 84).

Running Experiential Activities: The Role of the Instructor

The role of the instructor in the experiential classroom is different than in the traditional classroom. In the experiential classroom, the instructor is a guide, a cheerleader, a resource, and a support.

Because students must take control of their own learning, the instructor must work to both relinquish their authoritarian influence and become, instead, "an integral member of the evolving group." Students "accrue power as their initial promise of academic freedom becomes realized… After the students have attained self-determination, intervention by the teacher acting as a leader… occurs only in situations when the group lacks the skills to deal with obstacles they encounter" (Warren, 1995, p. 251).

When thinking about the role of the instructor in the experiential classroom, it can be helpful to ask several critical questions:

1. Whose experience is it?
2. Whose definition of success is being used?
3. What is the goal of the activity for the student?
4. How invested is the instructor in guaranteeing a certain student outcome?

These questions can help instructors explore any pre-conceptions they might have, or discover areas in which they haven't fully relinquished control over learning (Chapman, McPhee, & Proudman, 1995, p. 243).

Warren lays out the teacher's role as encompassing the following areas:

1. *Informed consent:* "Students need to know what they are getting into so they can make responsible choices." An instructor should provide "a precise course description and a detailed introduction to both the potentials and perplexities of the class."
2. *Establishing a concrete vision*: To help students make the leap to self-determination, instructors must "provide some initial structure and focusing." The instructor provides a "concrete vision of the class by suggesting the course goals and what the students might expect from such an endeavor." The instructor also "facilitates the first several weeks of class to give direction and set a model" for future class sessions.
3. *Setting ground rules*: By setting "basic operating principles by both statement and example," the instructor creates a safety net for students, empowering them to take risks. Some potential ground rules, as suggested by Warren, are: "the use of 'I' statements to express feelings, active listening, use of inclusive language, constructive feedback, and intolerance of oppression."
4. *Providing process tools*: In their work either in class groups or as part of teams within placements, students need the appropriate skills for being part of collaborative projects. For each of these skills, Warren suggests ways to help students develop their capabilities:

a. *Thinking as a group*: "In order to come up with what they want to learn," students should be "introduced to brainstorming and prioritizing strategies."
b. *Decision-making*: Explain consensus decision-making and then help students test it out by starting with small decisions that grow gradually more complex.
c. *Leadership*: To ensure all students can practice being leaders, the instructor can point out the many potential leadership roles, such as "timekeeper, feelings articulator, group collective conscience, minority opinion advocate, question framer, summarizer, focuser, and gate keeper."
d. *Problem solving*: Providing students with opportunities to solve simple problems at the beginning will help them refine the skills they need to solve more complex problems in the future.
e. *Feedback and debriefing*: Because evaluation and reflection are a crucial component of experiential learning, the instructor must ensure that feedback and debriefing occurs. "Insisting on quality feedback time early in the course sets an expectation for continuation during the latter sessions" (Warren, 1995, p. 251).

As much as it is the responsibility of the instructor to allow students to take control of their own learning, there are teaching techniques that can enhance reflective and experiential learning. Moon lists the following methods:

1. *Wait time*: When lecturing, the instructor should take opportunities to pause between sentences and give students the opportunity to reflect or question what they've just heard.
2. *Confronting learners with their misconceptions*: "Learners are helped if their misconceptions are pursued to the end, not just corrected."
3. *Concept maps*: Find out how learners see a topic by asking them to draw a concept map—the differences in each learner's map "may demonstrate differences in thinking and therefore material on which to reflect."
4. *Require learners to explain and apply*: Asking students to explain a concept and then apply it to something else will help determine which students have picked up the necessary skills of critical thinking and reflection, and which have not. Further, "if learners know they will be required to explain something, they are likely to adopt a deep approach to the learning of it."
5. *Questioning*: The types of questions used both in class and in assessments matter when it comes to experiential learning. Open questions, leading questions, and questions set as problems to be considered are all effective ways of encouraging reflection. "Often the simplest questions are the most difficult to answer and demand the most thought" (Moon, 2004, p. 162).

Once students have been provided with the necessary skills and information, the instructor then steps back and serves as a resource person, cheerleader, and facilitator.

- *Instructor as resource:* After topics have been selected and projects have gotten underway, the instructor becomes the "resource for readings, speakers, films, and programs. By having a ready repertoire of provocative resources, the teacher can influence the quality of the course content" (Warren, 1995, p. 255).

- *Instructor as cheerleader:* Because experiential learning often forces students outside of their comfort zone, the instructor must help build their confidence in the process. Students often "need someone to point out that their struggles are an important part of growth toward success." The instructor should reframe conflicts and difficulties in a positive light, show faith in the students, and exude enthusiasm for the process (p. 255).
- *Instructor as facilitator*: During the learning process, the instructor must create, support, and model a safe environment where students feel valued, trusted, and respected. Verbally remind students that they are in control of their learning experiences, give students the power to make meaningful choices, and model each behavior in a variety of ways to make sure the concepts are fully understood and absorbed (Chapman, McPhee & Proudman, 1995, p. 243).

Finally, instructors must provide a sense of closure when bringing the experiential process to an end. The instructor should help students to understand what they've accomplished over the course of the experiential activity. "As they articulate their growth, students can better internalize what self-determination has taught them… they can also postulate future applications of the theories learned. Asking for written and verbal self-evaluations and encouraging a closure celebration" are ways for instructors to assist students with closure (Warren, 1995, p. 255).

Teaching Reflection

Since reflection is such a crucial component of a successful experiential learning process, it is imperative that students understand exactly what reflection is and how to use the process to deepen their learning. To do so, Moon has articulated a two-stage process for training students in reflection. The first stage is called "presenting reflection." In this stage, students are provided with examples of reflective writing, and are led through a discussion and some small exercises that get them accustomed to the concept and methodology of reflection. The second stage works to deepen the students' understanding of reflection, moving from basic to more complex forms (Moon, 2004, p. 134). Here is a skeleton of this model, as laid out by Moon:

Stage 1: Presenting reflection

1. "Discuss how reflective writing differs from more familiar forms of writing
2. Consider the issues around the use of the first person
3. Give examples
4. Generate discussion of learners' conception of reflection
5. Enable practice and opportunities for feedback
6. Give a starting exercise that does away with the blank page
7. Support the further development of reflective writing with exercises/activities
8. Set up situations in which learners can share their ideas
9. Be prepared to support some learners more than others
10. Be open about your need to learn about this form of learning and how to manage it
11. Consider what reflection, reflective writing, reflective learning are
12. Consider why reflection is being used to facilitate the current area of learning"

Stage 2: Facilitating deeper reflection

1. "Introduce a framework that describes levels of reflection. Use example to demonstrate deeper reflection activity
2. Introduce an exercise that involves 'standing back from oneself'
3. Introduce exercises that involve reflection on the same subject matter from different viewpoints (people, social institutions, etc.)
4. Introduce exercises that involve reflection on the same subject matter from the viewpoints of different disciplines
5. Introduce exercises that involve reflection that is obviously influenced by emotion reaction
6. Introduce methods of deepening reflection by working with others (eg critical friends, collaborative activities)
7. Use second-order reflection" (Moon, 2004, p. 143).

Teaching Experiential Learning to Teachers

Not surprisingly, the most effective method of training instructors to use experiential learning in the classroom is experientially. Warren presents a model for teaching experiential education that is project-based and student-directed.

In Warren's model, the experiential component of a course in experiential education theory is "the students' active creation of the class itself. Students determine the syllabus, prioritize topic areas, regulate class members' commitment, facilitate actual class sessions, undertake individual or group-inspired projects, and engage in ongoing evaluation" (Warren, 1995, p. 250).

In this model, the students (and future experiential educators) are given the opportunity to facilitate every aspect of the class, providing them the necessary skills to run their own experiential classrooms. The model includes:

1. **Group work**, providing students with direct experience of group dynamics and the management of group work.
2. **Group, class, and/or individual projects** that "support an in-depth look at a particular aspect of experiential education theory." The class can decide whether the project will be collective or not, adding another opportunity for group decision-making.
3. **Constant reassessments** as the class learn from their experience. The students rework the components of the class, refining the syllabus, and resetting the ground rules. "Collectively, [the class] determined what, specifically, being prepared for the class meant, agree they wanted to start and end class on time, and verbally announced to their peers what their level of commitment was."
4. **Student Co-Teacher** from a previous class to assist with the course. "Having participated in the struggles of self-direction firsthand in the previous year, the student co-teacher brings an invaluable voice of experience to the new group." This student co-teacher brings perspective, credibility, and is "yet another way to redistribute power" from instructor to learner.
5. **Evaluation** in this model takes three forms.

a. **Facilitation feedback** where students are "critiqued on how they ran a particular class… It allows class members immediate access to ideas on how to structure future teaching attempts."
b. **Mid-course assessment** helps keep learning on track, even when a mid-semester slump or class conflicts may have brought about feelings of disengagement or lethargy. This assessment is directed by the instructor and is meant to "gauge satisfaction and frustrations with the class… Because we do the repair work at mid-semester instead of waiting until the end, students feel as if they have the power to change their immediate educational experience."
c. **Peer evaluation** in which class members reflect on the growth and learning of their peers and write constructive evaluations of their classmates (Warren, 1995, p. 256).

Assessment of Experiential Learning

Assessment is an integral part of the experiential learning process. It provides a basis for "participants and instructors alike to confirm and reflect on the learning and growth that has and is occurring." Further, proper assessment methods engender a "reflective process that ensures continued growth long after specific learning opportunities have been completed" (Bassett & Jackson, 1994, p. 73). Without the "appropriate assessment tool, such as a self-assessment, the educator might not ever realize that significant learning occurred. Therefore, classroom educators should search for assessment techniques that measure more than just the ability to remember information" (Wurdinger, 2005, p. 69).

The assessment of experiential activities presents a unique problem to instructors. Because in experiential activities the means are as important as the ends, "it is important to look at assessment as more than outcome measurement. While outcomes are important to measure, they reflect the end product of assessment, not a complete assessment cycle" (Qualters, 2010, p. 56). It is therefore necessary to devise unique assessment methods to measure success in both the process and the product—each area requires separate learning outcomes and criteria (Moon, 2004, p. 155).

Another difficulty when developing assessments has to do with the variability of experiential activities. Because students are working on different projects, or participating in different external activities, they can't all be expected to learn the exact same things, and each student may take away something different from the experience. Beyond the variability of activities, there is also the variability amongst the different students.

In experiential learning, these two types of variables are often uncontrollable, and thus have to be accounted for when developing assessment methods. Ewert and Sibthorp have broken these "confounding variables" down into three areas based on what part of the experiential learning cycle they affect. The confounding variables are either precursors, concomitant, or post-experience (2009).

Precursor variables "exert their influence prior to the beginning of an experiential education experience." They are "the antecedent that an individual 'brings into' the experience." These variables include:

- *Prior knowledge and experience*: "Participants with more or less past background and knowledge have both the ability to learn and benefit from (or not benefit from) different lessons from the experience."
- *Demographic*s: The age, sex, and socio-economic status of students have an impact on what students learn.
- *Pre-experience anxiety, motivations, and expectations*: These three items can "influence a participant's readiness to learn, engage in, and benefit from the experience."
- *Self-selection into a specific program or experience*: The various reasons for why each student has chosen to participate in an experiential learning activity can create fundamentally different cohorts every time the program is run. The inherent differences between groups or individuals are often difficult to isolate from the "variance between experiential education experiences" (Ewert & Sibthorp, 2009, p. 378).

Concomitant variables "often arise during an experiential education experience and influence the outcomes during, or immediately after, that experience" (Ewert & Sibthorp, 2009, p. 380). These variables include:

- *Course specifics*: This refers to the structure of the program, including the length, the specific activities, and the influence of the instructors.
- *Group characteristics*: The attributes and characteristics of the individual students make each group different. This impacts both their individual experiences as well as the experience of the cohort.
- *Situational impacts*: These "specific, non-structured, or unanticipated events" can have both a positive or negative effect on learning.
- *Frontloading for evaluation*: This is a type of experimental bias in which the instructors or students "consciously or unconsciously influence the student results because of the evaluation process." For instance, instructors might alter the experience to match the findings they hoped to see, or students "might, through a pretest, be predisposed to learning certain course outcomes" (Ewert & Sibthorp, 2009, p. 381).

Post-experience variables exert their influence after the completion of an experiential education activity. These variables include:

- *Social desirability or self-deception positivity*, in which students respond to an evaluation survey with what they think instructors want to hear, rather than what they really feel.
- *Post-experience euphoria*, in which a short-term feeling of excitement and accomplishment obscures the true feelings of a participant.
- *Post-experience adjustment or re-entry issues* refers to the time that students need to adjust back to "normal" life after they complete their experiential activity. Collecting data during this period may not reflect how the student will feel after they get some distance from the program.

- *Response shift bias* can occur when "the testing or measurement of a self-perception variable occurs at different times, and the participant's understanding of the variable changes over this time period." For instance, a student may, through the learning they experience over the course of their program, change their view of what constitutes "productive teamwork skills," and thus their self-assessment at the beginning of the program cannot be accurately compared to their self-assessment after the program, as these assessments would be measuring different things (Ewert & Sibthorp, 2009, p. 382).

Effective assessment methods must be able to take these variables into account, and be able to both "separate perceived learning from genuine learning" as well as capture accurate levels of growth and change in students (Qualters, 2010, p.59). To accomplish this, Qualters provides this list of criteria for good assessment:

> "ongoing, aimed at improving and understanding learning, had public and explicit expectations, set appropriate standards, and was used to document, explain, and improve performance. But it also seemed reasonable, doable, and logical to the faculty, as it drew on methods and models of the discipline as well as educational methodologies" (Qualters, 2010, p. 60)

To set about creating effective assessment methods, Qualters suggests asking the following "essential questions":

1. Why are we doing assessment?
2. What are we assessing?
3. How do we want to assess in the broadest terms?
4. How will the results be used? (Qualters, 2010, p.56)

Having produced answers to the essential questions, Qualters then suggests that the next step be to move from the general to the more specific, answering "burning questions."

> "These are the questions that all parties involved in the experiential experience are really concerned about answering. For example, faculty may be concerned with capturing whether or not students are using classroom theory in practice; students may wonder how the experience enhances their discipline knowledge; administrators may be concerned with out accreditation will view these activities; staff may be apprehensive about the processes involved in setting up the activities; and the site personnel may be anxious about how student involvement affects their clients. By eliciting burning questions, you can develop and prioritize assessment mechanisms to provide useful answers, not just accumulate data" (Qualters, 2010, p. 57).

With the answers to these questions in hand, instructors can then go about developing their assessment strategy. Qualters recommends the use of Alexander Astin's I-E-O (Input-Environment-Output) model:

- *Input:* Assess students knowledge, skills, and attitudes prior to a learning experience
- *Environment:* Assess students during the experience

- *Output:* Assess the success after the experience (Qualters, 2010, p. 58)

To demonstrate the use of this model in the process of developing an effective assessment method, Qualters provides the example of a health education course in which students worked with the homeless:

- *Input:* Students were surveyed for their attitudes and assumptions about the homeless, their conceptions of the homeless community, their concerns, and what they hoped to gain. Their current skill level was assessed through a "mini observed structured clinical experience."
- *Environment:* During the experience, students were required to keep structured reflective journals as well as participate in collective reflection. They were also given periodic structured observations to assess any increase in their knowledge and skill.
- *Output:* After the experience, students were given the same attitudinal survey, they were asked to identify any insights or thoughts they had about working with the homeless, and they were given another "mini observed structured clinical experience" to assess any gains in skill level.

Qualters believes this method was successful for the following reasons:

- Because students only conducted their necessary tasks as part of the experiential portion of the course (i.e. practicing taking blood pressure with the homeless community, not sometimes in class and sometimes on site), skill development could be measured absent of any of Ewert and Sibthorp's confounding variables.
- The observations, journals, and collective reflections "allowed the faculty to understand student learning processes as skills improved and attitudes evolved."
- The pre- and post- experience surveys were "able to surface student attitudes and misconceptions prior to going into the community, an important step in addressing and structuring the experience to prove or disprove their beliefs… faculty could understand how students were thinking, direct their reflection to make connections with prior knowledge and theory, and help them identify new insights as they reflected through writing and in groups." The results from these surveys not only improved the current course, but allowed instructors to gather the necessary data with which to improve future course iterations (Qualters, 2010, p. 60).

When developing assessments for experiential learning, it is also important to keep the assessment method student-centered. Much in the same way that students are given power over their learning in the experiential classroom, they should also be given a role in assessing their own learning. Wurdinger reports on three ways in which students can conduct self-assessment in the experiential learning:

1. *Student involved assessment* allows students to define how their work will be judged. They choose what criteria will be used to assess their work, or help create a grading rubric.

2. *Student involved record keeping* allows students to keep track of their work. This could be done through the creation of portfolio that documents student progress over time.
3. *Student involved communication* allows students to present their learning to an audience, such as with an exhibit or conference (2005, p. 70).

Another important point to remember when designing assessments is that although in many cases what is being assessed in the experiential classroom is reflective work, assessment shouldn't be aimed directly at the actual reflective writing of learners. The reflective writing should be seen as an aid to learners in working through a process, not as a final product. Rather than assess such raw material, require students to re-process their reflection in the form of a more finished report or project. Students should be required to use their primary reflective material "either to support an argument or to respond to a question." It may even be "useful to ask student to hand in their reflective writing as evidence that it has been completed in an appropriate manner" or require them to "quote material from their reflective writing" in their finished product. Requiring students to "reflect on their primary reflections is likely to yield deeper levels of reflection with improved learning" (Moon, 2004, p. 156).

Methods for Assessing Experiential Activities

There are many potential ways to assess experiential activities, both external and internal. These methods are tied to reflection, helping learners to focus their learning while also producing a product for assessment purposes. Moon lists several examples:

- "Maintenance of a learning journal or a portfolio
- Reflection on critical incidents
- Presentation on what has been learnt
- Analysis of strengths and weaknesses and related action planning
- Essay or report on what has been learnt (preferably with references to excerpts from reflective writing)
- Self-awareness tools and exercises (e.g. questionnaires about learning patterns)
- A review of a book that relates the work experience to own discipline
- Short answer questions of a 'why' or 'explain' nature
- A project that develops ideas further (group or individual)
- Self-evaluation of a task performed
- An article (e.g. for a newspaper) explaining something in the workplace
- Recommendation for improvement of some practice (a sensitive matter)
- An interview of the learner as a potential worker in the workplace
- A story that involves thinking about learning in the placement
- A request that students take a given theory and observe its application in the workplace
- An oral exam
- Management of an informed discussion
- A report on an event in the work situation (ethical issues)
- Account of how discipline (i.e. subject) issues apply to the workplace

- An identification of and rationale for projects that could be done in the workplace" (2004, p. 166)

Of these methods, Qualters singles out the learning portfolio as one of the most comprehensive methods of assessing experiential learning. Learning portfolios are distinguished from standard professional portfolios through their inclusion of a reflection component. It therefore becomes more than just "a showcase of student materials," and instead becomes a "purposefully designed collection connected by carefully thought out structured student reflections." Beyond assessing student learning, well-constructed portfolios can be used for accreditation, university-wide outcome assessment, and to document and understand the learning process at both the level of course and program (Qualters, 2010, p. 60).

John Zubizarreta proposes a simple model for a learning portfolio with three fundamental and interrelated components:

1. Reflection
2. Documentation
3. Collaboration (2008, p. 1).

This conception of a learning portfolio mirrors that of a teaching portfolio, pairing a concise, reflective narrative with a series of appendices containing appropriate evidence for each area of reflection. Zubizarreta believes that "the value of portfolios in improving student learning resides in engaging students not just in collecting representative samples of their work for assessment, evaluation, or career preparation, but in addressing vital reflective questions that invite systematic inquiry" (2008, p. 2). Portfolios engage students in "intellectually challenging, creative, rigorous work," and serve as both a process and an end product. This recalls the above-stated definition of experiential learning as being as much about the means as about the ends, and the necessity of devising assessment methods to measure success in both the process and the product.

Keeping Zubizarreta's three fundamental components in mind, it is important to remember that there is no right way of constructing a portfolio, and each portfolio will be different depending on the program of study or experiential learning activity. Zubizarreta provides the following generic table of contents to give suggestions as to the potential contents of a portfolio and a logical order that can be used to drive learning:

1. *Philosophy of learning: What, how, when, and why did I learn?*
   A reflective narrative on the learning, process, learning style, value of learning
2. *Achievements in Learning: What have I accomplished with my learning?*
   Records—transcripts, course descriptions, resumes, honors, awards, internships, tutoring
3. *Evidence of Learning: What products, outcomes do I have to demonstrate learning?*
   Outcomes—research papers, critical essays, field experience logs, creative displays/performances, data/spreadsheet analysis, lab results
4. *Assessment of Learning: What measures and accounting to I have of my learning?*
   Instructor feedback, course test scores, exit/board exams, lab/data reviews, research project appraisals, practicum reports

5. *Relevance of Learning: What difference has learning made in my life?*
   Practical applications, leadership, relation of learning to personal and professional domains, ethical/moral growth, affiliations, hobbies, volunteer work, affective value of learning
6. *Learning Goals: What plans do I have to continue learning?*
   Response to feedback; plans to enhance, connect, and apply learning, career ambitions
7. *Appendices: How coherently have I integrated evidence with reflections and self-assessments in the portfolio?*
   Selected documentation for areas 1 through 6 (Zubizarreta, 2008, p. 4).

To plan a learning portfolio project, Zubizarreta provides a short rubric that asks instructors to first identify the purpose of the portfolio, and then answer the following questions:

1. What kind of reflective questions should students address?
2. What kinds of evidence or learning outcomes would be most useful?
8. How will students engage in collaboration and mentoring during the process? (Zubizarreta, 2008, p. 4)

The purpose of a learning portfolio "strongly determines the themes of the reflective narrative, as well as the types of documentation or evidence selected in the appendices." A planning rubric representing this can be a table with three columns—purpose, theme, and evidence—and the content of these columns can be quite broad. For example, if the purpose of the portfolio is "improvement," then the themes could be "development, reflective inquiry, focus on goals, philosophy of learning," and the evidence for that could be "drafts, journals, online threaded discussions, emails, statements of goals, classroom assessments, research notes." If the purpose of the portfolio is "problem solving," then the themes could be "critical thinking, creativity, application of knowledge, flexibility, curiosity," and the evidence for that could be "problem-solving log, lab reports, computer programs, spreadsheet data analyses" (Zubizarreta, 2008, p. 5).

No matter what the contents of the learning portfolio, a well-designed project will keep students, active, engaged, and reflective, helping them to "own their own learning as more independent, self-directed, and lifelong learners." To that end, Zubizarreta cites a recent trend amongst universities to supply alumni with perpetual server space, enabling students to maintain their learning portfolios electronically long after their time in university, "a nod toward a true conception of portfolio development as a lifelong commitment to learning" (Zubizarreta, 2008, p. 6).

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