

The Power of Experiential Education

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FEATURED TOPIC

Experiential education can lead to more powerful academic learning and help students achieve intellectual goals commonly associated with liberal education

IN HIS COMEDIC PERSONA of Father Guido Sarducci, Don Novello captured the central challenge to educators in the liberal arts: providing an education that sticks and is usable. Father Guido's solution was to bypass an expensive four years of liberal education; in his "five-minute university," students would pay twenty dollars and spend five minutes learning what the typical college graduate remembers five years after graduation. In economics, that would be supply and demand; in Spanish, *como esta usted* and *muy bien*. For any of us who have traveled to Madrid and tried to call on our college Spanish, this strikes a chord.

The challenge for liberal educators is to design learning environments and instruction so that students will be able to use what they learn in appropriate new contexts—that is, to enable the transfer of learning. This is, of course, a bigger challenge than the one recognized by Father Guido. Graduates need not only to remember what they learn, to develop and retain a "broad knowledge of the wider world (e.g., science, culture, and society) as well as in-depth study in specific area of interest," but also to have "a sense of social responsibility, as well as strong and transferable intellectual and practical skills such as communication, analytical, and problem-solving skills" (AAC&U). Effective citizenship requires students to be knowledgeable, to be

able to use what they know, to have the capacity for critical analysis, and to be equipped for lifelong learning; personal, social and intellectual goals are intertwined. Yet programs designed to develop students' personal, social, and economic capacities are often separated from the core academic experience.

Experiential education, which takes students into the community, helps students both to bridge classroom study and life in the world and to transform inert knowledge into knowledge-in-use. It rests on theories of experiential learning, a process whereby the learner interacts with the world and integrates new learning into old constructs.

Experiential education

Within professional programs, there is a long tradition of including field experiences as a way to build practitioner skills and facilitate the move from theory to practice. Two of the most common forms of workplace learning are cooperative education and the internship. In cooperative education, students alternate periods of paid work with campus study or split their time between the workplace and the campus. While cooperative-education programs have waned, internships are increasing. Most college students now complete an internship. Career centers at liberal arts colleges, disciplinary journals devoted to college curricula, and the popular press are keeping up a steady drumbeat encouraging faculty members to support, and students to obtain, internships in order to ease the transition to the workplace. And this is paying off for students: internships and cooperative education are increasingly important for job placement (National Association of Colleges and Employers 2008).

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Service learning—a form of experiential education that combines academic study with service in the community—emerged in the 1970s and has since grown exponentially. The pioneers of service learning believed that the combination of service and learning would improve the quality of both and that it could lead to educational reform and democratic revitalization. Service learning is distinguished from other approaches to experiential education by its commitment to certain values as well as its inclusion of continuous, structured reflection. From the outset, service learning has been oriented to the achievement of academic goals in all fields, including the liberal arts. It fits easily into most disciplines, and with some creativity it can be fit into virtually all disciplines. Models range from add-on, extra-credit, or assignment options to the thorough integration of service as a class “text.”

Experiential education has been a commonplace in vocationally or professionally oriented programs for many years, but field-based pedagogies have struggled to gain legitimacy in the liberal arts. As advances in cognitive science have begun to blur the line between academic and practical learning, awareness of the relevance of experiential education to achieving goals of the liberal arts has increased. And a

similar awareness has also increased among employers who are increasingly less concerned about particular vocational skills and who are demanding the same skills, abilities, and habits of mind long valued by the liberal arts (Business-Higher Education Forum 2003; Peter D. Hart Research Associates 2006). Additionally, since the 1980s, there has been renewed interest in the civic role of colleges and universities and a call for increased civic literacy for students; this has fueled much of the interest in service learning as a way of achieving the goals of liberal education so central to citizenship.

Experiential education has value far beyond building the kind of social skills, work ethic, and practical expertise that are important in professionally oriented programs. In fact, experiential education can also lead to more powerful academic learning and help students achieve intellectual goals commonly associated with liberal education, including

- a deeper understanding of subject matter than is possible through classroom study alone;
- the capacity for critical thinking and application of knowledge in complex or ambiguous situations;
- the ability to engage in lifelong learning, including learning in the workplace.

Experiential education also identifies the practices necessary for achieving these outcomes, particularly the use of structured reflection to help students link experience with theory and, thereby, deepen their understanding and ability to use what they know.

Mastery and use of subject matter

A fundamental goal of liberal learning is mastery of both broad and specialized bodies of knowledge. The inability to call on this knowledge base is what Alfred North Whitehead (1929) described nearly a century ago as the problem of “inert knowledge.” Often, students cannot apply even recently learned information to new situations. Modern cognitive scientists ascribe this inability to apply what is learned to a failure to conditionalize knowledge; the learners don’t see the relevance and cannot access what they know when confronted with an opportunity for transfer (Bransford, Brown, and Cocking 2000). Life is not organized by chapter, with tests to signal what information to apply. Unless students learn explicitly to recognize when their knowledge might be useful, can recall that knowledge,



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and know how to apply it, they will fail to transfer what they know; their understanding is incomplete.

Transfer of knowledge requires deep understanding. Recall and reproduction of material taught in the classroom do not constitute understanding. For knowledge to be usable, it has to be acquired in a situation. Otherwise, it is segregated from experience and unlikely to be remembered or transferred to new experiences. Well-understood material can be retrieved from memory and used in new situations because it is linked with multiple experiences and examples and not isolated from other experience and knowledge.

A small study comparing student learning in classes on legislative politics with student learning in internships at a state legislature found that both groups did equally well on a traditional test of facts (Eyler and Halteman 1981). But when challenged to develop a strategy for enacting policy, the interns incorporated the need to engage powerful and well-placed legislators and to organize support, while the classroom-based students drew on the formal steps about how a bill becomes a law. Experiential education, as this and similar studies have shown, leads to deeper, more nuanced understanding of subject matter.

Organizing student learning in ways that give students agency is also associated with deeper understanding. Communities of learning that encourage cooperation and reciprocity among students improve learning and are particularly well suited to field-based projects. Students' commitment and curiosity are fueled when they take responsibility for action with consequences for other people, and this, in turn, leads to increased effort and attention. Such engagement is instrumental in achieving mastery of the subject matter and also in confronting the intellectual challenges that promote cognitive development.

The capacity to deal with complex new situations

To achieve such liberal learning goals as effective citizenship and engagement in lifelong learning, students need the capacity to perceive and address ill-structured problems, tolerate ambiguity, make warranted judgments, and act while continuously seeking and refining fur-

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ther information. Neither tolerance for ambiguity nor critical thinking is simply a function of information, skill, and social ability or even of repeated practice, but rather

both require intellectual capabilities that are not now generally attained before college graduation.

Students often arrive at college with simplistic ways of viewing knotty problems, and they may not be able to recognize an ill-structured problem. They are likely to see their task as learning right answers rather than understanding the difficulty of framing issues and problems and understanding that the very nature of difficult problems makes one clear solution unlikely. Or they may reject discussion as pointless because they regard disagreement as simply a matter of opinions, any of which is equally valid. King (1992) argues that most students graduate without attaining a level of reasoning ability that would allow them to frame, explore alternative perspectives, reframe, and resolve problems, while understanding that future information may call for a reevaluation of one's current position. Yet these analytic capabilities are fundamental to the process of judgment, to solving problems in the workplace, and to making decisions in a democracy. The tendency to cling to simplistic black-and-white answers to problems, to fail to reevaluate assumptions in the light of new circumstances, and to assume that disagreement is sinister represent failures of liberal education.

The process by which students develop the capacity to use advanced formal reasoning processes involves confronting dissonant information and making sense of it. It requires students to monitor their own understanding and to recognize and grapple with alternative perspectives. This process of intellectual growth can be promoted through experiential education, which fully engages students and commits them to resolving the challenges they address. Service learning is particularly appropriate, since it commonly focuses on issues that give rise to ill-structured problems or what Schön termed the "swampy lowlands" where problems are "messy and confusing and incapable of technical solution" (1995, 28).

The cognitive dissonance that leads to intellectual growth is more likely to occur when students care. A college student who is bored

about the economics of health care, for example, may find it more engaging when the person he or she is working with has to “game the system” to obtain needed care. The personal connections and the need to be effective in the field create a level of engagement and caring that increase the likelihood that students will recognize the contradictions within their own assumptions or will be open to perspectives different from their own and feel the need to resolve these differences. This is the process that creates increasingly adequate cognitive abilities for dealing with complexity and uncertainty.

A national study of college students tested the power of service learning to facilitate cognitive development (Eyler and Giles 1999). Students who were involved in intensive, highly reflective service-learning courses showed significant increases in reflective judgment over the course of their study as compared to those in less-intensive service-learning courses and those with no service-learning experience at all. These gains were measured through problem-solving interviews during which students demonstrated their reasoning capacity. Subsequent work by others has been consistent with this finding (Steinke and Buresh 2002; Steinke and Fitch 2003; Ash and Clayton 2003).

Developing skills for lifelong learning

Classic transfer of learning stresses the match between the learning context and the situation in which learning is applied. In the twenty-first century, even if students were able to apply classroom learning effectively, they would soon find it outdated. Students don’t just need to learn “job skills” on the job; the capacity for continuous learning is critical.

Building this capacity for continuous learning is another way to frame the role of experiential learning in transfer. What Schwartz, Bransford, and Sears (2005) call “transferring out”—that is, the direct transfer of new learning to a situation—is often limited by the lack of well-developed expertise of novice learners. They note that particular forms of instruction prepare learners to “transfer in,” to use previous learning to interpret the situation and develop a strategy for future learning. If students are engaged in problem solving before being presented with new information, rather than

simply learning information through reading and lecture, they are more likely to be able to solve a novel problem. This distinction has importance for how liberal learning built around authentic workplace or community challenges might enhance the capacity for further learning in that subject area. Integrating problem- or project-based challenges into the study deepens understanding of concepts and theories and also prepares students to meet new challenges.

Studies of internship and service-learning programs have demonstrated that students who repeatedly engage in structured reflection during field experience are more likely to bring a strategic learning orientation to new challenges (Eyler 1993; Eyler and Giles 1999). Experiential education blurs the line between theory and practice; theory lacks meaning outside of practice. In order to develop strong skills for continuous learning, students need opportunities to practice those skills in envi-



ronments consistent with lifelong use and as they acquire disciplinary mastery.

The difference between experiential learning in the classroom and in workplace or community settings is not only a matter of subject-matter content or instructional principles, but it is also existential. Students in experiential education learn as workers or community participants with a need to know in order to get a job done, not just as students who need to take a test. Students even in problem-based classroom instruction frame their learning in terms of grades and pleasing the professor, while those same students talk about respect, achievement, and the quality of their contribution in an internship placement (Eyler 1993). Others have observed this same phenomenon in which adults in the workplace frame their learning in terms of their particular roles, while students

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learning the same material in the classroom approach it from the perspective of the teacher's demands (Cobb and Bowers 1999).

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and how they will later learn in the community (Resnick 1987). In the workplace or in addressing community issues, learning often occurs collaboratively, is organized around concrete situations, makes use of tools and resources, and is iterative, whereas classroom-based learning often involves decontextualized knowledge, manipulation of abstract symbols, and highly individual efforts. Knowledge in the classroom tends to be compartmentalized into disciplines, whereas in use in the community or workplace it tends to be organized around problems or domains of practice.



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Quality matters

While experiential education can contribute to liberal learning, achieving this outcome requires careful structuring and supervision of out-of-classroom student experiences. Studies of service learning have shown that poorly structured programs that do not integrate service with the academic curriculum make little contribution to student learning, even though they may help students develop in other ways (Vogelgesang and Astin 2000; Eyler and Giles 1999). Literature on internships, cooperative education, and school-to-work programs also mentions the integration of field experience with curricular goals—learning through doing—but often there is a mismatch between the stated goals of programs and the actual experiences of students (Moore 1981; Parilla and Hesser 1998). Internships are often run like independent studies with little faculty oversight or opportunity for structured reflection.

In order to justify the inclusion of work or community service as part of the liberal arts curriculum, attention needs to be paid to ensuring the quality of the intellectual as well as the work experience. Guidelines for creating high-quality experiential education programs and helping students make the most of their experiences are similar and consistent with much of the literature on effective liberal education. They include

- work or service clearly related to the academic goals of the course or program;
- well-developed assessments that provide evidence of the achievement of academic objectives;
- important responsibility for the student;
- site supervisors who understand the learning goals for the student and partner with the academic supervisor to provide continuous monitoring and feedback;
- an academic supervisor or instructor who pays close attention to the students' work in the field and partners with the site supervisor to provide continuous monitoring and feedback;
- attention paid to preparing students for both the practical challenges of their placements and for learning from experience;
- continuous, well-structured reflection opportunities to help students link experience and learning throughout the course of their placements.

Reflection and feedback

The most critical factor for achieving powerful learning outcomes from experiential-learning programs is the inclusion of opportunities for feedback and reflection. Challenging, continuous, context-appropriate reflection turns work experience into learning experience. It is easy to underestimate how intensive reflection must be in order for it to have an impact; it is not unusual to find faculty members who believe their program provides adequate reflection even though the effects on students fall short.

There are a number of models and tools that provide a foundation for organizing reflection. The reflection cycle developed by David Kolb (1984) has been widely embraced by advocates of experiential education, and others have built on that work (Ash and Clayton 2004). It is a useful choice because it is simple and intuitive, making it easy for students to use as a facilitation tool with their peers and for faculty members to use in written assignments and discussion. The cycle moves from experience to reflection and then back to experience. Students are encouraged to connect the concrete and the abstract and to connect reflection with action, and they are pushed to make sense of their experience in terms of what they are learning in the classroom as well as to draw implications for further application or study.

If experiential education is to be reflective throughout then care must be given to planning, and this process should be embedded in the experience from start to finish. One tool for organizing the reflection process is the reflection map (Eyler 2002). Like the Kolb model, the reflection map is a simple and intuitive tool that helps the instructor accomplish several goals. It focuses on reflection alone—in class and in the field—before, during, and after the field experience. Students are prepared for learning and gain ownership through planning their academic goals. Classroom time is conserved by building reflection into other settings, and the process encourages continuous iterative reflection rather than a single paper or event at the end of the field experience. This is particularly important for cooperative education and internships where regular classroom meetings are difficult to arrange.

Even when professors understand the importance of reflection for linking field-based experience to the subject matter being studied, they may find it difficult to design courses to

accomplish this. Instructors need training and support to use experience as a “text” for their courses, and departments need to take ownership by placing faculty in charge of formulating goals for experiential education and facilitating internship seminars and service-learning classes. Logistical support is important but should not be isolated from the academic program.

Conclusion

Of course, experiential education can help students transition more gracefully from college to work, and community-service experiences prepare them to be more engaged citizens. But experiential education can also improve the quality of liberal learning itself and increase the likelihood that students will be able to use throughout their lives the knowledge, critical abilities, and habits of mind acquired in their studies. This does not happen automatically or easily, however. Faculty members who are dubious of awarding credit for volunteering or for work do have a valid point. But such credit is for learning; the challenge for faculty members in the liberal arts is to incorporate experiential education into their instruction and to assess the learning outcomes of these experiences. This requires a clear sense of what learning in the community or the workplace can add to the understanding of subject matter, training in skills to recast appropriate courses to integrate these experiences, and logistical support for placement and monitoring of student work that is more closely connected to the curriculum. Liberal arts programs need to support faculty involvement in the planning and implementation of experiential education. Without this attention to both structure and faculty leadership, experiential education will remain at the periphery and its promise will not be realized. □

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