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Effective Practice and Experiential Education

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Don Novello in his comedic persona Father Guido Sarducci captured the central challenge to educators in the liberal arts i.e. providing an education that sticks and is usable. His solution was to bypass an expensive four years of liberal education; in the ‘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 cord.

The challenge to educators in the liberal arts as in all areas of study is to design learning environments and instruction so that students will be able to use what they learn in appropriate new contexts i.e. 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” (AACU, 2008). In order to translate social responsibility to effective community engagement positive attitudes towards civic engagement are not enough; effective citizenship requires the students to be knowledgeable, be able to use what they know, have the capacity for critical analysis and to be equipped for life long learning; personal, social and intellectual goals are intertwined (Eyler & Giles, 1999). Yet programs designed to develop personal, social and economic capacities of students are often separated from their core academic experience.

Experiential education, which takes students out of the classroom and into the community, is designed to help students build a bridge between formal classroom study and life in the world, to transform inert knowledge to knowledge in use. It rests on theories of experiential learning which were first clearly articulated by Dewey (1938),

and have been developed further by David Kolb (1984), among others. Experiential learning is at its core a process whereby the learner interacts with the world and integrates new learning into old constructs. When new experience and previous learning conflict, the learner transforms understanding by resolving conflicts among different perspectives (Piaget & Inhelder, 1969).

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. This paper will argue that experiential education has value far beyond building the kind of social skills, work ethic and practical expertise that are important in professionally oriented programs, that, in fact, experiential education can also lead to more powerful academic learning. In particular, the paper will argue that experiential education can 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
- the capacity for effective civic engagement

It also explores the practices necessary for these outcomes, in particular the use of structured reflection to help students link experience with theory and thereby deepen their understanding and ability to use what they know (Eyler, Giles & Schmiede, 1996; Kolb, 1984; Schön, 1983).

Typical Forms of Experiential Education

Cooperative Education in which students alternate periods of paid work with campus study or split their time between workplace and campus was pioneered in the early 1900s. Coop programs peaked at about 1000 college and university programs in the mid 80s as a result of Title VIII financing. Their numbers have been cut nearly in half since that funding ceased in 1996 (Howard, 2004). Most of the enrollments are at a handful of colleges and the programs are marginalized elsewhere. Fewer than 2% of

students nationally participate. The programs help students finance their education, provide opportunities to clarify career goals, give students a head start in employment, and contribute to their academic success by improving self confidence and motivation (Kerka,1989). Most coop programs are heavily vocational; the majority of coop students are studying either engineering or business and nearly half are in community college programs. Antioch College, which closed in 2008, is perhaps the most visible example of incorporating cooperative education into a liberal arts curriculum. An interesting study of graduates that examined reflective papers they wrote during their coop experience and current interviews in which they talked about the impact of their learning, showed powerful memories of the value of their learning 50 years later and links between their earlier writing and these later memories (Howard & Linn, 2001).

While cooperative education has waned as an influence, internships are gaining considerable attention and often the distinction between the two is blurred (Ricks, Cutt, Branton, Loken & Van Guyn, 1993). Most US college students complete an internship (NACE 2008). Internships may be part or full time work placements. They may carry credit or not and may be paid or unpaid. Students often choose to do them as summer jobs. Grinnell College's definition is typical in its focus on career development. "An internship is a practical way to gain valuable experience in one or more fields to help define your career goals. It is an opportunity to put the theory you have been studying and learning into practice" (Grinnell Career Development Office, 2008). Career centers at liberal arts colleges, disciplinary journals devoted to curriculum and the popular press are keeping up a steady drumbeat encouraging faculty to support and liberal arts students to obtain internships to ease the transition to the workplace. Internships are touted as opportunities to network and gain experience necessary for employment and there is evidence to suggest that all this is succeeding. Indeed, according to the National Association of Colleges and Employers which conducts periodic benchmark studies of graduate employment, employers provide internships or cooperative education positions as part of their strategy to recruit new employees and find these employees are more likely than others to succeed in their jobs. Employers reported offering employment to 57% of their interns in 2001 and 70% in 2006. They also report that the majority of their hires had internship experience even if not with their own company. Internships and

Cooperative Education do give students an advantage in the workplace (NACE Survey, 2008).

While the rationale given for cooperative education and internships often includes academic learning through connecting theory and practice, there is little evidence that this is consistently implemented (Howard & Linn, 2001; Munby, Taylor, Chin & Hutchinson, 2007; Parilla & Hesser, 1998; Bay, 2006). Internships are often undertaken on an independent study basis with little college supervision; when they are closely supervised it is rarely by faculty associated with the ongoing curriculum; while students may be assumed to apply what they know to real world situations, structured reflection is often not required as part of the process. Liberal arts interns often don't meet regularly with a faculty member or have the chance to share experiences with other interns; even where credit is granted – and many programs don't offer credit in the discipline – the experience is not well connected to coursework. Where departments do take on the responsibility for internships for their own students and provide internship seminars this close connection is fostered (Hesser & Parilla, 1998; Mooney & Edwards, 2001; Bay, 2006).

Service-learning where students combine academic study with service in the community emerged in the 1970s and has grown exponentially. Campus Compact an association of college presidents of schools offering service-learning began in 1985 with four members and has about 1200 institutional members today. Ninety-one percent of its member campuses offer service-learning with an average of 35 courses per campus. They claim based on annual surveys of members to have engaged over 20 million college students in service and service-learning and to have contributed over 7 billions dollars in service value a year in their communities. Service-learning's pioneers were committed to social justice and drawn from such backgrounds as internship programs, volunteer service, action research, community development, campus ministry, youth development and the civil rights and peace and justice movement of the 60s. They believed that combining service with learning would improve the quality of both (Honnet, Poulsen & Migliore, 1989) and could be a path to reforming education and revitalizing democracy. One of those there at the beginning noted “We decided to call it service-learning because service implied a value consideration that none of the other words we came up with did....We were looking for something with a value connotation that would link action

with a value of reflection on that action- a disciplined reflection” (Bill Ramsay in Stanton, Giles & Cruz, 1999. p. 67).

Service-learning is distinguished from other experiential education approaches by both this values commitment and by the inclusion of continuous structured reflection (Mooney & Edwards, 2001; Parilla & Hesser, 1998). It has from its outset been oriented to the achievement of academic goals in all fields including the liberal arts and fits easily into most disciplines and with creativity into virtually all. There are readily available resources for liberal arts faculty who wish to integrate service into a course. AAHE published a series of 21 discipline specific books which include research, models and curriculum ideas for the specific discipline; liberal arts disciplines included were philosophy, environmental studies, history, psychology, Spanish, sociology, political science, religious studies, biology, peace studies, women’s studies, communication studies and composition. Campus Compact has a repository of service-learning syllabi.

The term service-learning is misused by many to include mandatory college community service requirements or volunteerism which has led to some resistance, but service by itself is not service-learning. Dale Rice professor emeritus at Eastern Michigan State University created the term Academic Service-Learning to distinguish it from volunteerism and the most widely used definition of service-learning in higher education makes the centrality of the academic goals of service-learning clear: “Service-learning is a course based credit-bearing educational experience in which students participate in an organized service activity that meets community needs and reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility” (Bringle & Hatcher, 1996, p 222).

Just as internship programs may claim to connect experience and learning but fail to provide the reflective experiences to make this happen, service-learning varies in the degree to which well structured reflection occurs. In addition to the vagaries of individual implementation, some models of service-learning are more likely to include intensive reflection than others. Models in which students add a credit to a liberal arts class for completing a service project or which involve optional assignments where students complete placements for extra credit or to replace another assignment tend to be

low in structured reflection and tend to have limited impact on students; the service is often arranged through a service center and faculty are little involved. Models in which students in a class are required to complete related placements may be incorporated into the class discourse but often are also low in structured reflection as the service vies with content coverage for class time. Models where teams of students complete projects in the community that anchor course discussion of subject matter are most likely to integrate service and learning through continuous reflection (Parker-Gwin & Mabry, 1998; Eyer & Giles, 1999, Enos & Troppe, 1996).

The Convergence of Liberal and Experiential Education

While some liberal arts programs have made room for internships and service-learning experiences around the edges of the curriculum for some time, two recent trends have tended to increase interest in integrating experiential education into the liberal arts and sciences. First, there is growing awareness that employers do not find college graduates to have the skills, abilities and habits of mind and work demanded for success in the workplace (Business-Higher Education Forum, 1997; Hart Research Associates, 2006). Rapid change means that there is less concern about particular vocational training and more demand for the ability to learn, to analyze and solve problems and to work and communicate effectively with others. These expectations by employers track fairly closely the outcomes touted as important outcomes for liberal education by AACU.

Additionally since mid 80s 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. "Education for democratic citizenship involves human capacities relating to judgment, to choice, and above all, to action. To be literate as a citizen requires more than knowledge and information; it includes the exercise of personal responsibility, active participation, and personal commitment to a set of values. Democratic literacy is a literacy of doing, not simply of knowing" (Morrill, in Stanton, 1987).

The convergence of valued liberal arts outcomes with the clearly understood need for them in the workplace and in citizenship participation invites consideration of

incorporating community based learning into the liberal arts curricular core. But advocates of this perspective have typically encountered resistance from those who associate practical experience with vocationalism or who believe that engagement with the non-academic world, while a contributor to overall student development, has no place in an academic curriculum. The arguments will be familiar. Students will be in the workforce all too soon; why should valuable time be taken away from their liberal studies? Why can't they take summer jobs to get this experience? Community service is valuable, but should credit be given for 'volunteerism?' These objections to experiential education are all based on the presumption that practical experience lacks intellectual content and does not contribute to the kind of learning associated with liberal education. This presumption is profoundly wrong. It is in fact through the use of academic material in practical contexts that students truly come to understand what they are studying. Far from being a distraction from liberal learning, experiential education, when integrated into classroom study and properly supervised, can result in a more powerful learning experience in the liberal arts and sciences than classroom study alone.

The Role of Experiential Education in Mastery and Use of Subject Matter

A fundamental goal of liberal learning is mastery of both a broad and specialized body of knowledge. The failure to be able 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 (Bransford & Vye, 1989). 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 explicitly learn to recognize when knowledge they have might be useful, can recall that information, and know how to apply it, they will fail to transfer what they 'know'.

Part of the reason that students cannot transfer what they have learned is that they have not attained sufficient depth of knowledge i.e. depth of understanding (Bransford, Brown & Cocking, 2000). As Dewey (1933) argued, recall and reproduction of material

taught in the classroom does not constitute understanding. He believed that 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. (Giles & Eyer, 1994). Students who understand are more likely to have conditionalized their learning; they can articulate different perspectives, can interpret material and situations related to the topic, can explain material to others, can apply it to new situations and can empathize with the perspective of others (Wiggins & McTighe, 2005). 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. Richard Feynman (1985) gives a dramatic example of the importance of understanding and not just being able to reproduce subject matter knowledge from his work with graduate students in physics in Brazil. He found that the students were incredibly precise in their ability to cite definitions of theories, even definitions that he had to look up himself, but that when he posed application problems they just stared at him. “They could pass examinations and ‘learn’ all this stuff and not know anything at all.” (Feynman, 1985, p. 213) They had learned as students, not as scientists.

There is evidence that well designed internships do contribute to students’ understanding of disciplinary concepts and that these experiences may also provoke deeper insights about the material i.e. qualitatively different learning (Parilla & Hesser, 1998; Bay, 2006). A study comparing students who studied legislative process in the political science classroom with students participating in a state sponsored legislative internship illustrates this power of experiential education to help students go beyond what they have learned in the classroom to develop a more complete and nuanced understanding of the subject matter. Asked to identify key issues and discuss a strategy for formulating and passing legislation, students in the classes were knowledgeable about the formal steps in the legislative process; they wrote about how a bill becomes a law. Interns placed the task within the broader social context of the legislative process, incorporating information on how bills become laws but anchoring it in the importance of involving and convincing key legislators on particular committees, to the need to build coalitions within the legislature, to connect the policy to the governor’s legislative agenda and budget priorities, and to finding organized support outside the legislature. They

understood the legislative process in ways those reading and listening to lectures simply did not (Eyler & Halteman, 1981). Their internship did not just bring them practical social skills and professional connections but had deepened their understanding of subject matter. And being able to associate these concepts about the political process with multiple concrete experiences during their internship also gave them many paths to future recall of the information. Studies of students in school to work placements have also documented qualitatively different learning from student learning in the classroom (Bailey, Hughes & Moore, 2003; Moore, 2004), although there is relatively little research in cooperative education to document this (Ricks, Cutt, Branton, Loken & Van Gyn, 1993).

A few studies have found that incorporating service-learning into a liberal arts course leads to a similarly improved quality of understanding. Unlike the numerous studies in which students report that they ‘learned more’ in service-learning (Eyler, Giles, Stenson & Gray, 2001), students in these studies demonstrated the quality of their learning in intensive problem solving interviews (Eyler & Giles, 1999) or problem analysis essays (Batchelder & Root, 1994; Steinke & Fitch, 2003). They demonstrated a more complex understanding of the issues and information than did students who did not experience service incorporated into their coursework.

John Lachs, a popular philosophy professor at Vanderbilt University argues for the importance of incorporating service into his introductory ethics course. This is a lecture class of 300 students, but he breaks the class into smaller teams each of which does community service related to a particular social problem. As he notes “Ethics deals with the real problems of people, problems that cannot be encompassed by abstract discussion or in a spectatorial stance. Moral notions have to be supplemented by concrete experiences and emotions. To understand, students must engage in activity, in helping individuals deal with the issues they face. Service learning provides first-hand exposure to the people ethical reflection is supposed to aid and the problems it is supposed to resolve” (Lachs, 2009). Students learn philosophy with greater understanding when they can cycle between the abstract and the concrete. And this ability to move from general to specific and back increases the ability of people to transfer what they learn to new settings (Bransford, Brown & Cocking, 2000).

While much is made in the internship literature about students learning how the ‘real world works’ it is important to note that understanding organizational culture and how to work with others is not separate from but may also enhance fundamental understanding of subject matter. Bay (2006) describes how an internship associated with courses in English including composition and rhetoric led her students to an “understanding of how human beings use language aesthetically and rhetorically.” (Bay, 2006, p. 134) When her students discuss workplace culture and practices and how particular policies and practices have been developed in a particular organization, they are in a position to explore potential “rhetorical strategies for introducing change in to the organization.” Students in service-learning classes who are helping develop newsletters and brochures and other written products for local agencies are deepening their understanding of audience and voice. Students developing local history projects are learning what it is to be an historian. Chemistry students working with elementary school teachers to develop science fairs refine their understanding of the scientific method as they teach it. Students assisting with an AIDS patient who hear his stories of scheming to get medications otherwise unavailable to him have a different understanding of the “problem” posed by gaming the system as they study the economics of health care. Students conducting data collection and analysis for state agencies are learning about the processes and the compromises that underlie the data that is often relied upon for policy making. This is not vocational. It contributes directly to the quality of understanding of subject matter.

Organizing student learning in ways that give students some control over their learning is also associated with deeper understanding (Barron, et al. 1998); students in workplace or community positions of some responsibility also develop a sense of agency which is associated with active rather than passive receptive learning. Communities of learning that encourage cooperation and reciprocity among students (Chickering & Gamson, 1987) improve learning and are particularly well suited to field based projects. While it is possible to create classroom exercises using a constructivist or problem based approach and to give students some sense of control over their learning using simulations or team challenges, there are also some particular advantages of workplace or community service based projects.

One of the particular benefits of having students grapple with problems in the field, messy though that can be, is that student commitment and curiosity are fueled when what they are doing has real consequences for other people. The affective is not disconnected from the cognitive. As one student noted “ I think great service, and great learning, and just good being happens only when you are entirely engaged. The whole person needs to be engaged. When you talk about what you thought, you miss part of it. You miss the feeling part . . .I think people will do more thinking once they have felt” (Eyler & Giles, 1999, p 84). Even in classroom based projects learning is more powerful for students when they have a “real” community audience hear final presentations of their efforts (Barron, et al. 1998). Students’ sense of doing important work has consistently been associated with student learning in field based experiential education (Conrad & Hedin, 1981; Eyler & Giles, 1999). Doing something that students recognize is of value also leads them to devote more intensity and time to their study which in turn increases their understanding. Imagine the power of saving someone’s life? An investigative journalism course at Northwestern has been much in the news as students’ investigations of the circumstances of death row inmates have been successfully used to free men days before their execution dates. Their efforts have also helped cast a spotlight on a wider pattern of injustice and contributed to the governor’s decision to commute death sentences of over a hundred other death row inmates (Tremmel, 2003). When a class project matters this much students are committed to their work. Information acquired out of the curiosity that need brings is also more likely to be deeply understood.

The fact that workplace or community service assignments are engaging and interesting may also pose some risks to the classroom component of the learning. Students may become so enthralled that they neglect the reading or study that is more traditional. The power of experience needs to be harnessed to the goals for learning through carefully planned and continuously monitored opportunities for reflection.

The Contribution of Experiential Education to the Intellectual Capacity to deal with Complex New Situations

To achieve such goals of a liberal education as effective citizenship participation and engagement in life long learning, students need the capacity to perceive and address

ill structured problems, tolerate ambiguity, make warranted judgments and act while continuously seeking and refining further information. Tolerance for ambiguity and critical thinking capabilities are not simply a function of information, skills and social abilities or even of repeated practice, but also require intellectual capabilities, which are not now generally attained before college graduation (Perry,1970; Kohlberg, 1981;King & Kitchener, 1994).

Students often arrive at college with simplistic ways of viewing knotty problems; they may not be able to recognize an ill structured problem. They are likely to see their challenge 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 what she terms post formal reasoning ability that would allow them to frame, explore alternative perspectives, reframe and resolve problems, while understanding that future information will call for re-evaluation of one's current position. These analytic capabilities are fundamental to the process of judgment, to solving problems in the workplace and to decision-making in a democracy. We live in a society built around a Constitution designed to empower us to try, evaluate and adapt our solutions to new circumstances (Feynman, 1998). The tendency to cling to simplistic black and white answers to problems, to fail to re-evaluate our assumptions in the light of new circumstances, and to assume that disagreement is sinister is a failure 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, recognize alternative perspectives and grapple with them. This process of intellectual growth can be promoted through experiential education where students are fully engaged and committed to resolving challenges they address. Service-learning is particularly appropriate for achieving this goal since it commonly focuses on issues that give rise to ill structured problems or what Schön (1995) termed the "swampy lowlands" where problems are "messy and confusing and incapable of technical solution." The cognitive dissonance

that leads to intellectual growth is more likely to occur when students care. A college student bored about the economics of health care may find it engaging when the person he 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 (Perry, 1970 ; King & Kitchener, 1994; Kohlberg, 1981; Kitchener, Lynch, Fischer & Wood, 1993).

Eyler and Giles (1999) in a project funded by the Fund for the Improvement of Post-Secondary Education (FIPSE) examined the potential for impact of service-learning courses on students’ cognitive development as assessed through the lens of reflective judgment theory (King & Kitchener, 1994). Although cognitive development is a slow process, the researchers chose to use reflective judgment measures after a pilot with students in an intensive full time internship showed growth in development over the course of a semester (Eyler & Giles, 1999). In the study itself students in colleges and universities across the country responded to hour-long problem solving interviews before and after their service-learning semester; classic reflective judgment queries were incorporated into the interviews. Students in well-designed intensive service-learning classes where their service and learning were integrated throughout the course of study, showed significant growth compared to students who did not have this experience. They were able to frame, analyze and in some cases resolve complex problems at higher degrees of reflective judgment at the end of their experience than at the beginning. It is important to note however that thorough integration of subject matter and experience was necessary for service-learning classes to have any impact at all on cognitive development of students. Students who did not do service or who were in a service-learning classes where the service was an option and reflection was limited, generally to a journal or final paper, showed no increase in reflective judgment capability over the course of a semester.

Subsequent work by others has been consistent with this finding (Steinke & Buresh, 2002; Steinke & Fitch, 2003; Ash & Clayton, 2003). Boss (1994) found similar results when community service activities were included in a course on ethics; she found

that students who did service linked to ethical issues explored in the classroom showed progress using measures of moral reasoning based on Kohlberg's model of cognitive moral development compared to students in the course who did not participate in the service.

Facilitating cognitive development is a major goal and challenge for liberal arts education. Linking authentic experience in the community with classroom study can have a powerful effect in preparing students to be analytic thinkers, but the intentional structured process of making this connection is the key; experience alone is not enough.

The Role of Experiential Education in Developing Skills for Lifelong Learning

The classic notion of transfer of learning stresses the match between the information and the context in which it is learned and the situation into which it is to be applied. In the 21st Century, even if students were able to apply their classroom learning effectively they would soon find themselves out of date. Students don't just need to learn "job skills" on the job; continuous learning is necessary to both deepen understanding and also adapt to changes in what is known (Bransford, Brown & Cocking, 2000.) As Eric Hoffer (1973, p. 32) once noted "in times of change the learners will inherit the earth, while the learned will find themselves beautifully equipped to deal with a world that no longer exists."

Building capacity for continuous learning is another way to frame the role of experiential learning in transfer. Schwartz, Bransford and Sears (2005) focus on the importance of defining transfer as preparation for future learning and distinguish between "transferring in" and "transferring out". When making direct transfer of particular knowledge to a new situation or "transferring out" success is limited; when entering a situation where further learning is necessary students engaged in particular forms of learning are able to use previous knowledge to interpret that situation and to develop a strategy for further learning. Schwartz and Bransford distinguish these abilities to "transfer in", this preparation for future learning rooted in the context of specific subject matter instruction, from generic "learning to learn" processes often taught college students.

This distinction has importance for how liberal arts learning built around authentic workplace or community challenges might enhance capacity for further learning in that subject area. Bransford and Schwartz (1999) found that when students are asked to learn information through reading and lecture and then challenged to devise an approach to solving a novel problem they are not likely to be able to do so effectively. Students who first are presented with a problem to solve and are then presented with information, are better able to go on and devise questions and promising approaches to a novel problem. Integrating problem or project based challenges into the study deepens understanding of concepts and theories and also prepares students to meet new challenges. Students who struggle to frame and resolve a problem develop questions they need answers to and the process builds their capacity for asking and answering questions and for monitoring their success

A small study of an internship program is suggestive here (Eyler, 1993). Students were asked to write a letter of advice to a nervous peer beginning a new job. Students who had completed a well designed full time capstone internship included advice about systematically observing in the new environment before making judgments of decisions and advised their peers to note who had influence in the informal power structure. They advised a strategic learning orientation; students without this experience wrote a few platitudes like “be yourself.” Students interviewed in the national study of service-learning programs who had similarly been engaged in classes that integrated the service with class activity were similarly able to suggest future learning strategies for community action (Eyler & Giles, 1999).

While experiential learning techniques like those Bransford and Schwartz (1999; 2005) have described can be applied in the classroom, there are some differences in classroom and community learning that may also have implications for building the capacity for life long learning. Traditionally there has been a dividing line between disciplinary learning in the liberal arts and then application of that knowledge to the field in professional or vocational education or in subsequent learning on the job. Experiential education advocates would blur that line (DeMartini, 1983). If we want students to develop strong skills for continuous learning then it makes sense for them to spend some

time practicing those skills in environments consistent with their life long use and to do this as they acquire mastery of their discipline.

Students frame the learning process differently when they are engaged in authentic situations and what they do matters. A small study that compared the learning journals kept by college students in a public policy class with the learning journals kept by those same students in a subsequent full time internship demonstrated this contrast (Eyler, 1993). The policy class was problem based and students worked in teams to analyze and offer policy recommendations for addressing difficult social challenges like homelessness, environmental degradation, and juvenile justice. Although the professor saw this as a class designed to incorporate assumptions and practices from experiential learning, students tended to describe their learning in traditional ways. They wrote about figuring out what the professor is looking for, worried that slacker team members would hurt their grade, expressed relief when they figured out the assignment and thought they knew “what she wants.” These same students talked about the learning process during their internship in terms of being given responsibility, having their work respected and used by their organizations, being proud of the quality and relevance of what they produced. One student noted “I come back to the dorm and my roommate is happy that her 11 o’clock class was cancelled and I am happy because they used my press release.”

Others have observed this same phenomenon in which adults in the workplace frame their learning in terms of their particular role, while students learning the same material in the classroom approach it from the perspective of the demands placed on the student to demonstrate learning to the teacher (Cobb & Bowers, 1999). The difference between experiential learning in the classroom and in workplace or community settings may thus be more than just a matter of subject matter content or instructional principles, but also an existential one; students in experiential learning learn as workers, or community participants with a need to know to get a job done and not just as students who need to take a test (Bay, 2006). As Resnick (1987) noted in her presidential address to the American Educational Research Association there is a profound mismatch between how students learn in the classroom and how they will later learn in the community. 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. The NACE finding that employers are more satisfied with the progress of employees who have been interns and that they tend to be more successful and be retained on the job may reflect this increased capacity to learn in workplace settings.

The Contribution of Experiential Learning to Civic Engagement

Many of the outcomes of experiential education already discussed are critical to effective citizenship engagement. Deep understanding, being able to learn effectively in community settings and the willingness to take a reflective inquisitive stance rather than plunging in with the answer make for effective participants. Democracy involves conflict and compromise which is engaged more effectively by individuals who can tolerate ambiguity and understand that the lack of an obvious right answer is part of the fabric of life in society and not some defect in the situation or the people addressing the issues. While a desire to participate is central to citizenship, it is not sufficient; citizenship also is a matter of competence.

Over the past decades students have shown less interest in citizenship and increased cynicism; there has been a clear shift towards more personal often economic goals and away from a commitment to social justice or participation(Sax, 2000; Saltmarsh, 2009). Young people are not thinking of themselves as citizens. Several researchers interested in identity development have reported on the effects of community service in the construction of civic identity (Torney-Purta & Barber, 2005; Yates & Youniss, 1998;Youniss, McLellan, & Yates, 1997). Participation in community service and service-learning in college has been consistently associated with strengthening of civic predispositions, life skills and sense of efficacy (Eyler & Giles, 1999; Astin, Vogelgesang, Ikeda & Yee, 2000; Astin, Vogelgesang, Misa, Anderson, Denson, & Jayakumar, 2006; Astin , Sax & Avalos, 1999; Gray et al, 1998).

Attitudes of social responsibility and personal and political efficacy have long been associated with later civic engagement. In the early political socialization literature

there was a clear link established between attitudes and experiences of community or school engagement and later voting behavior (Almond & Verba, 1963; Beck & Jennings, 1982). One benefit of participation during college is that people tend to do what they do. People who have participated find it easier to participate in the future. The tendency of those who participate in the community during school to continue to participate in adulthood has been documented most recently by Astin and his colleagues at UCLA using CIRP (Cooperative Institutional Research Program) longitudinal data to track the relationship of service learning and the climate for engagement in college to community participation years after graduation (Denson, Vogelgesang & Saenz, 2005). A retrospective study of college graduates over forty years found similar outcomes (Warchal & Ruiz, 2004).

More positive attitudes towards civic engagement are important, but there are also knowledge and skills about effective participation that increase the likelihood and effectiveness of future participation. Just as experiential education students are likely to understand subject matter more deeply and have improved capacity for analyzing complex social issues, they are also likely to have a better practical understanding about how to get things done. Students engaged in well designed service-learning programs when asked to take the role of community newcomer and presented with a novel problem, were able to describe a strategy for entry and identify ways to locate resources and gather data about the community before engaging in action. Students who lacked that experience offered naïve suggestions for starting new programs or blundering into the community and telling people what to do (Eyler & Giles, 1999).

Effective Experiential Education – Quality Matters

While experiential education can be a powerful contributor to learning in a variety of ways, achieving this outcome requires careful structuring and supervision of out-of-classroom student experience. Studies of experiential education have shown that poorly structured programs that are not well integrated with the academic curriculum make little contribution to student learning even though they may help students develop in other ways (Vogelgesang & Astin, 2000; Eyler & Giles, 1999). When college students across the country were interviewed about their experiences with community service and

service-learning, only the service-learning students spoke spontaneously about how what they experienced in the community illuminated their understanding of subject matter (Eyler, Giles & Schmiede, 1996).

Service-learning was developed in the context of the liberal arts curriculum and its goals are more likely than those of internships and cooperative education programs to be explicitly academic rather than career oriented. While the internship and cooperative education literature also mention the integration of field experience with curricular goals – learning through doing – there is often a mismatch between stated goals of programs and the experiences that students have. Moore (1981) in ethnographic studies of secondary school students in school to work programs found that ambitious goals which touted the connection of learning with real world practice often did not match the job site experiences of students. Students' experiences were often fragmented and isolated from any understanding of the work of the organization. They might be science students in a scientific placement but have little idea of how scientific principles related to what they were doing. Parilla and Hesser (1998) noted similar findings in the literature on college internships where field experience was not connected to previous knowledge or current study and viewed by faculty as an add on to the regular curriculum rather than integral to it. The internships were valuable to students in many ways but did not connect well to their disciplinary study.

In order to justify the inclusion of work or community service activities as part of the liberal arts curriculum, attention needs to be paid to assuring the quality of the intellectual as well as the work experience. It doesn't matter what type of experiential education is chosen, it is the specific experiences that students have within the program that make a difference (Conrad & Hedin, 1980). There have been a number of prescriptions for creating high quality experiential education programs (Honnet & Paulsen, 1989; National Society for Experiential Education, 1998; Alderman & Milne, 2005; Heffernan, 2001) and a number of guides produced to help students make the most of their experience (Schweitzer & King, 2004; Stanton & Ali, 1994). These guidelines are similar and consistent with much of the literature on effective liberal education. They include:

- Work or service related clearly to the academic goals of the course or program
- Well developed assessments that provide evidence of 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 placement and for learning from experience
- continuous well structured reflection opportunities for students to help them link experience and learning throughout the course of the placement.

Reflection and Feedback: The Keys to Effective Experiential Learning

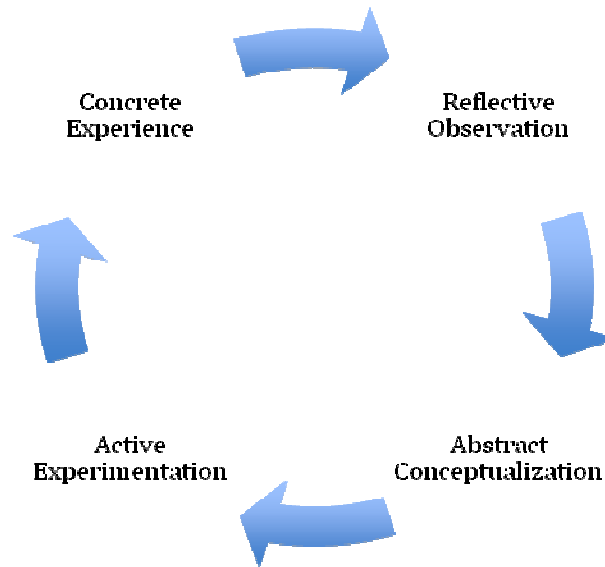
The most critical factor for achieving powerful learning outcomes from experiential learning programs is the inclusion of opportunities for feedback and reflection. It is the challenging, continuous, context appropriate reflection that turns work experience into learning experience. It is easy to underestimate how intensive reflection must be to have an impact; it is not unusual to find faculty who believe their program provides adequate reflection where the effects on students fall short. This reality was demonstrated in a small study of Vanderbilt's interdisciplinary Human and Organizational Development major (Eyler, 1993). The program culminates in a full time capstone internship and the assumption was that this would enable students to consolidate and apply their learning. When students were presented with a task where they might use wisdom from their major to advise someone, those who had completed the internship were no more likely to draw on the content of their major than students who had not completed it; virtually no transfer occurred. The internship did include a series of conference-like reflection events throughout the semester in which faculty would lead

activities and discussions to link their part of core coursework to the internship, but this was not enough make information accessible when needed, to conditionalize it so that students recognized its utility. The internship was revised to include four days in the field and one day each week in seminars in which students completed assignments and participated in discussions where their work experiences were analyzed, shared, compared and used to illuminate core ideas from the major curriculum. Students in the revised internship, proved much more likely to spontaneously draw on concepts from their studies. This program builds its reflective papers around David Kolb's model of reflective thinking which creates a scaffolding that students can use in their own personal reflections or facilitating discussions within their seminar group.

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 the most widely embraced by advocates of experiential education. 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 to use in written assignments and discussion. The cycle moves from experience to reflection and back to experience; the student is encouraged to connect the concrete and the abstract and reflection with action. Typically students describe their reflection on service in terms of sharing feelings or describing events in the field. For many sharing feelings and reflection are synonymous (Eyler, Giles & Schmiede, 1996). Kolb's model offers the advantage of pushing students beyond descriptions and feelings to analysis and ultimately action.

This model begins with experience although it is also possible to begin reflective discussions at other stages such as with course concepts from reading or research. Before students begin interpreting experience, they are encouraged to describe it clearly. Once observations are out on the table, the model calls for abstract conceptualization or making sense of the experience. Students are encouraged to interpret the experience using concepts and theories from their classroom study; they compare what they thought they knew about a phenomenon with what they experienced; they are encouraged to rethink their understanding of the material. This provides the opportunity for challenging assumptions and developing the capacity for critical thinking. Making these links also helps students acquire a deeper richer and more anchored understanding of subject

Figure 1. Kolb's Model of Learning



matter. The process of making sense of experience is a powerful learning tool; it can even create value in a failed attempt at service in a service-learning course. For example, a team of students in a communications class failed to get their project established with men in a halfway house; something always impeded their follow through or that of the residents of the house. When it came time to present what they learned about communication through their service experience, this team talked about theories of why communication failed, elevating a failure into at least deeper understanding of the subject matter. The students expressed amazement that in spite of their failure, putting the failure into the context of theory had made it a learning success for them (Eyler & Giles, 1999).

Once the experience has been explored in the context of previous experience, knowledge and theory, the next step is action. In the active experimentation phase students may be pressed to seek new information or they may take new insights back into the field, to help shape further observation or try a different course of action. By repeatedly thinking about experience and moderating their action, students are encouraged to take a metacognitive stance towards their work in the field and to continuously practice transferring learning to action and action to learning.

Ash & Clayton (2004) have developed a structure for guiding reflection in experiential education that takes much from Kolb but that has a more explicitly structured process and set of questions designed to increase metacognition. Students produce a product – in writing or discussion – called an ‘articulated learning’ having described, analyzed and then expressed their learning. They are asked to specify not only what they have learned, but how they have come to know what they know. Metacognitive approaches to instruction like this have been shown to increase the degree to which students will transfer to new situations without the need for explicit prompting (Bransford, Brown & Cocking, 2000).

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, 2003). The map identifies times and occasions in which reflection should take place.

Figure 2

Mapping Experiential Education Reflection Activities

	Before Service	During Service	After Service
Reflect Alone			
Reflect in Class			
Reflect with Community Partners			

Like the Kolb model, the reflection map is a simple and intuitive tool that helps the instructor accomplish several goals. Attention is given to preparing students for learning by helping them to surface their prior knowledge, assumptions and expectations before they enter the field so they are prepared to observe. ‘Preflection’ can also include engaging students in setting learning goals for their field work. Often preparation and orientation revolves around the logistics of the experience; the reflection map encourages

the instructor to also prepare students for the learning and encourage students to take ownership of it.

A second advantage of using this planning tool is that it addresses a thorny problem for instructors when service or work is used as part of a traditional class. By attending to opportunities for continuous reflection with peers or supervisors in the field placement as well as on their own, it moves some of the reflection out of the limited time available in the classroom. With the map, coop/internship coordinators are encouraged to pursue opportunities to build reflection into the placement and to work in closer partnership with field supervisors. This helps assure that the learning is approached from the practitioner role as well as that of a student completing a conventional assignment. Bringing supervisors more closely into the learning partnership also reinforces their importance and makes them more conscious of learning goals in their feedback to the student.

The map also encourages continuous iterative reflective experience. Failure to do this is a particular risk for service-learning that is implemented through ‘add on’ assignments where the service is completed much like a term paper rather than being integral to the class. It is also a common risk of internships which function as independent studies without regular internships seminars. While the map is helpful for all reflection planning, it is particularly useful in situations like these where frequent classroom reflection is not possible.

If the map is used to design opportunities to engage students in linking experience and course concepts before and throughout the service experience the final reflective activities will be richer and more powerful. This is especially true when reflection occurs in multiple settings outside the classroom. When students formally reflect only as they write a final paper or prepare a final presentation, they are likely to be raising questions about how the experience challenges their previous understanding for the first time. When the semester is over, those questions may cease to be compelling. Learning may be shallow, stereotypes or glib assumptions may be reinforced, and a transformation of thinking is not likely to occur. Continuous challenging reflection is likely to lead to deeper and more interesting final expressions of learning; if the coop, internship or service-learning class is organized to accomplish this, students can be left to plan their

own method for demonstrating that learning. By the end of the experience, they are likely to have something interesting to say.

Even when professors understand the importance of reflection to link field based experience to subject matter being studied, they may find it difficult. In addition to the practical barriers posed by managing the field placement, there are also challenges in course design. Zivi (2006) discussed her struggles in making time for disciplinary content as well as student experience in her political theory course. It is tempting to add community service to a traditional class as if it were just another assignment, but effective experiential education requires careful thought as to how the particular experiences will illuminate content and a complete re-design of the course (Hefferman, 2001). As Varlota (2000) notes, the community experience becomes text for the course; when a course can integrate the community work into the day to day discourse of the class, it is more likely to have a profound effect on student insight.

The management of the placement and monitoring of students is also critical to making reflection central to the experiential education process. Separation of the management of internships from the core faculty of a program, or use of non-academic public service centers to create service-learning opportunities may create conditions in which effective integration is difficult. Faculty are unlikely to perceive involvement with work placements as part of their job and the status barriers between staff and faculty limit collaboration. It is unrealistic to expect integration of disciplinary study with experiential education to happen without attention to support structures to do the hard work of organizing field placements, but without close faculty involvement in guiding student reflection these placements will continue to be isolated from the core of the liberal arts.

If experiential education is to become part of the core liberal arts experience then departments and/or colleges of liberal arts need to take ownership of the internship, coop or service-learning curriculum. One approach is to create interdisciplinary capstone internships in which the liberal arts curriculum is explicitly linked to an intensive work or service experience (Musciant & Ondich, 2008). Faculty formulate the goals for the program and take their turn facilitating internship seminars just as they take turns teaching first year courses. Portland State University makes a senior capstone project part of its liberal education core and helps students consolidate their gains in

communication, critical thinking, social responsibility and understanding diversity. These projects are guided by faculty and students can choose options that fit their own future interests. Other programs make experiential education capstones specific to major. Another model integrates field experiences throughout the program (Caccese, 1984) and this is a model particularly apt for integrating cooperative education (Howard, 2004). There are many ways to go about it but the key to developing experiential programs that support academic learning is designing structures in which faculty assist students in making connections between their experience and their liberal studies.

Conclusion

Of course experiential education can help liberal arts students make the college to work transition more gracefully and community service experience prepares them for more engaged citizenship. But experiential education can also improve the quality of liberal learning and increase the likelihood that students will be able to use the knowledge, critical abilities and habits of mind acquired in their studies throughout their life. This does not happen automatically or easily. Faculty dubious about credit for volunteering or for work have a point. The response to that is that credit is for learning and it is the challenge to liberal arts faculty to incorporate experiential education into their liberal arts instruction and to assess the learning outcomes of these experiences. This requires a clear sense of what learning in community or workplace can add to 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. Disciplinary departments and colleges of liberal arts within universities need to construct programs that provide support for the involvement of liberal arts faculty in the planning and implementation of experiential education for their students. Without this attention to structure and to faculty leadership experiential education will continue at the periphery and its promise will not be realized.

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