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LOYOLA UNIVERSITY CHICAGO

THE EFFECT OF PARTICIPATION IN EXPERIENTIAL LEARNING PROGRAMS  
ON PERSONAL AND CIVIC ATTITUDES

A DISSERTATION SUBMITTED TO  
THE FACULTY OF THE GRADUATE SCHOOL  
IN CANDIDACY FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY

PROGRAM IN CLINICAL PSYCHOLOGY

BY

CHRISTINE INEZ CELIO

CHICAGO, ILLINOIS

AUGUST 2011

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## ABSTRACT

Experiential learning is a general term that includes service-learning courses and academic internships. Students involved in experiential learning leave the classroom to solidify their knowledge with real-world experience. Service-learning, i.e. community service integrated into academic coursework, has become an important part of many universities' curricula. Research indicates benefits to service-learning students in self-efficacy, civic responsibility, attitudes about diversity, and attitudes about school and learning. Less is known about another type of experiential learning, academic internships, in terms of these outcomes. Experts in the experiential learning field have commented on the need for better, more frequent evaluation of experiential learning programs. Evaluations need to focus on strong methodology, such as use of reliable and valid measures and pre-course evaluations. Further, more information is needed to understand the benefits of experiential learning programs overall, as much of the research in the field focuses either on service-learning or internships. In addition, more research is needed to distinguish the benefits of service-learning programs compared to academic internships, and courses that discuss the importance of service, but do not have an experiential component. Research indicates that certain recommended practices, such as student engagement and reflection, can contribute to stronger outcomes, but the methodology in previous

studies limits confidence in findings. The creation of a methodologically rigorous evaluation that could be used by several universities is crucial to the development of this field. This study proposes to create a general evaluation for experiential learning courses at two different universities, Loyola University Chicago in Illinois and Stanford University in California. After completion of this dissertation, a modified version this evaluation survey will be used by the 43 college campuses involved in Illinois Campus Compact, a coalition of colleges and universities committed to civic engagement in higher education. The current study will evaluate the impacts of differing aspects of courses (experiential learning, discussion about service, and a combination of both) on outcomes known to be affected by service-learning, namely self-efficacy, civic responsibility, attitudes about diversity, and attitudes about school and learning. Moreover, this dissertation will examine the influence of two recommended practices, reflection and engagement, on student outcomes.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **What is Experiential Learning?**

The term "experiential learning" can be used for service-learning, internships, and applied projects, as well as less-structured experiences that can be reflected upon and assessed from a learning standpoint (Washbourn, 1996). All these types of experiential learning use methods of performing work in real-world settings to strengthen learning. In the current study, experiential learning will refer to service-learning and academic internship courses.

#### **What is Service-learning?**

Although many definitions exist in the literature, in general, service-learning is a way to engage students in the learning process by having them provide meaningful service to others, and to connect this service experience with the students' academic curriculum (Fenzel & Leary, 1997; Giles, Honnet, & Migliore, 1991). Jacoby (1996) suggests this broad definition of service-learning:

Service-learning is a form of experiential education in which students engage in activities that address human and community needs together with structured opportunities intentionally designed to promote student learning and development. (p.5)

No standardized approach exists within the field of service-learning. Programs vary considerably in design, requirements, and goals. These programs can range from students choosing their volunteer site during an introductory child development

undergraduate course (Strage, 2004), to teachers helping third and fourth graders establish a school recycling program (Drake Dones, 1999). Certain college courses might offer service opportunities as an option for partial fulfillment of course credit, while other courses might require service of all students (Parker-Gwin & Mabry, 1998). Service-learning students could complete their service over one day (Stafford, Boyd & Lindner, 2003), or over 100 hours throughout an academic semester (Sherman, 1982). Activities might include culturally relevant service projects aimed at native Hawaiian students at varied service sites (Yamauchi, Billig, Meyer, & Hofshire, 2006) or a local tutoring program at a single school (Knutson, Miller, & Yen, 2004). Service could be as “micro” as walking dogs at PAWS for a general service course, or as “macro” as organizing a symposium on human trafficking for a history of slavery course (Loyola University Chicago, 2009). As a result, the concept of “service-learning” covers many different types of courses. What students do, what they learn, how long they serve the community, and who benefits, varies from program to program.

### **Benefits of Service-learning**

Service-learning courses are frequently evaluated for personal and civic outcomes (Celio, Durlak, & Dymnicki, in press; Conway, Amel, & Gerwien, 2009). Research suggests that students benefit from service-learning programs, and four frequently cited outcomes are personal self-efficacy, civic responsibility, attitudes about diversity, and attitudes about school and learning. Although the benefits in these areas are often highlighted, many findings are mixed (Conrad & Hedin, 1991).

**Self-efficacy.** Self-efficacy is the perceived ability to produce a desired behavior or action (Bandura, 1997). Social-cognitive theory speculates that perceived self-efficacy is an important factor in one's self-regulation of his or her affective states. The theory posits that a person who perceives himself or herself as incapable of influencing social situations that could significantly affect his or her life may feel useless, inadequate, hopeless, and anxious (Bandura, 1997).

Consistent with Bandura's (1997) theory, the empirical literature suggests that one's level of belief in one's own competence is related to mood disorders, like depression (Bandura, Pastorelli, Barbaranelli, & Caprara, 1999; Jenkins, Goodness, & Buhrmester, 2002) and anxiety (Bandalos, Yates, & Thorndike-Christ, 1995). Furthermore, perceived self-efficacy in students is linked to mental health. For example, among college students, perceived college self-efficacy is associated with college satisfaction (DeWitz & Walsh, 2002), and low perceived academic self-efficacy predicts long-term depression (Bandura et al., 1999). Data suggest that perceived self-efficacy on personally significant tasks is an important contributor to mental health and psychological well-being. Moreover, empirical evidence has also shown that perceived self-efficacy is an important psychological construct for individuals in cultures across the world (Scholz, Doña, Sud, & Schwarzer, 2002).

***Self-efficacy in service-learning.*** In previous studies, one of the most frequently reported outcomes of service-learning was increased self-efficacy among students (Astin, Vogelgesang, Ikeda, & Yee, 2000; Giles & Eyler, 1994; Kendrick, 1996; Morgan & Streb, 2001; Sedlak, Doheny, Panthofer, & Anaya, 2003). In fact,

increased self-efficacy is not only an outcome of service-learning, it can be a predictor of whether individuals would become involved in service (Giles & Eyler, 1994). These findings were reiterated in Eyler, Giles, and Braxton's (1997a) survey of over 1500 students at 20 colleges, which found that involvement in a service-learning course was a predictor of self-efficacy.

However, mixed findings with service-learning and self-efficacy exist. For example, Lakin and Mahoney (2006) reported that changes in self-efficacy were not significant after middle school students were involved in a service-learning program. Potentially the age of the students in the study limited their ability to believe that they could be part of a larger change. The authors also suggested that being involved in a service-learning program may have prevented a natural decline in self-efficacy that may occur during that age (Lakin & Mahoney, 2006).

**Civic responsibility.** Although civic responsibility is often an intended outcome of service-learning courses (e.g., Moely, McFarland, Miron, Mercer, & Ilustre, 2002; Parker-Gwin & Mabry, 1998; Lakin & Mahoney, 2002), it is not easily defined. According to Komives, Lucas and McMahon (1998), civic responsibility is the sense of personal responsibility individuals should feel to uphold their obligations as part of any community. Astin and colleagues (2001) define civic responsibility as the act of becoming effective social change agents by making a positive difference in society to help solve the problems that plague the country. Lakin and Mahoney (2006) note it involves placing a high value on the well-being of other people. Although many definitions are offered, the central idea is the understanding of the

importance of being involved in one's community and the desire to be a part of the change that the individual wishes to see happen.

***Civic responsibility in service-learning.*** The impact of service-learning on students' civic responsibility has been promising. A recent meta-analysis of 62 service-learning studies indicated that nearly half of studies assessed civic engagement attitudes (Celio et al., in press). The authors reported that studies assessing civic attitudes yielded a positive and significant effect size (Celio et al., in press). Involvement in service-learning increases social responsibility and moral reasoning (Conrad & Hedin, 1982; Newmann & Rutter, 1983) and increases positive attitudes toward the populations served (Conrad & Hedin, 1982). Students enrolled in service-learning courses show more positive changes in their civic attitudes and skills than non service-learning groups (Kendrick, 1996; Moely et al., 2002a). Research suggests that following their service activities, college students are less likely to blame clients for their misfortune, more likely to stress a need for equal opportunity, and more likely to report awareness of societal problems (Eyler et al., 1997b). Finally, students with service-learning experience are more likely to understand social issues, and how to approach them, than students who did not participate in service-learning (Eyler et al., 1997b; Markus, Howard & King, 1993).

Although some studies indicated positive results, others showed negative, or no effects. Lakin and Mahoney (2006) reported that after a service-learning program, students increased their intent to be involved in community action, but did not increase their sense of civic responsibility. The authors noted that the length of their

program, 20 sessions over 10 weeks, may not have been long enough to create an impact. Findings from another study demonstrated that students in a service-learning course held less favorable attitudes toward community service after taking the course than before, which authors attributed to unrealistic student expectations (Parker-Gwin, 1998).

**Attitudes about diversity.** Attitudes about diversity are measured in various ways in service-learning studies. Moely and colleagues (2002b) offered that attitudes about diversity can be defined as a measure of the appreciation and value of relationships with persons of diverse backgrounds and characteristics. Open attitudes and interest in people from different backgrounds may enable students to establish positive interpersonal relationships in the community and increase the possibility that they will be well-received by the people with whom they work (Schmidt, 2002).

***Attitudes about diversity in service-learning.*** Data indicate that service-learning can impact attitudes about diversity. Service-learning participation results in increased awareness of others in need (Piper, DeYoung & Lamsam, 2000), and increased tolerance and appreciation of others (Markus et al., 1993). Myers-Lipton (1996) found that service-learning students had lower modern racism scores than non-service-learning students. In addition, service-learning students score higher on diversity attitudes than non-service-learning students (Osborne, Hammerich, & Hensley, 1998).

Attitudes about diversity can affect student self-efficacy; college students with high scores on diversity attitudes felt they were more effective in their service



activity (Schmidt, 2002). Further, a student's attitude about diversity can affect how the recipients of the service view the students. Schmidt (2002) reported that after college students tutored second-through-sixth grade Hispanic students, the tutors with high scores on diversity attitudes received more positive evaluations from the students they tutored.

Not all programs have found increases in attitudes about diversity. Kwon (2007) found no change in attitudes about diversity in her college sample. The author attributed the finding to a small sample size, and recommended that future studies examine diversity attitudes with a larger population.

**Attitudes about school and learning.** Academic achievement is measured in the form of a grade at the end of the semester. An issue more interesting to service-learning is the attitudes students have about school and learning. Attitudes about school and learning can be defined as students' feelings about school generally, or specific courses, and how the service component of their experience enhanced or detracted from their learning. Understanding and measuring these attitudes gives insight into whether the experiential component of the course is accomplishing its goals.

***Attitudes about school and learning in service-learning.*** Studies evaluating the benefits of service-learning programs have assessed students' perceptions on how much they have learned, their enjoyment of the course, attitudes about the relationship between service and academic course content, and students' perceptions of their own skill development (Celio et al., in press). Research indicates that,

following involvement in a service-learning course, students' interest in course subject matter increased, self-reported learning increased, and academic and career skills increased (Billig, Root, & Jesse, 2005a; Cohen & Kinsey 1994; Kendrick, 1996; Markus et al., 1993). Service-learning students have been shown to be more satisfied with their courses than non service-learning students, even if non-service-learning students started the course with high expectations (Moely et al., 2002b). The authors suggested that high satisfaction in service-learning courses could motivate students' learning and commitment to community in the future (Moely et al., 2002b).

Celio and colleagues' (in press) meta-analysis of service-learning indicated that attitudes about school and learning yielded significant and positive effect sizes. These findings are important because students' positive attitudes towards school and learning is linked with higher motivation and better academic performance (Billig & Klute, 2003; Furco, 2002; Hawkins, Guo, Hill, Battin-Pearson, & Abbott, 2001; Kraft, & Wheeler, 2003; Klute & Billig, 2002).

However, not all findings are significant or positive. A large-scale survey found that students reported decreases in academic engagement and engagement in school following a service-learning course (Blythe, Saito & Berkas, 1997). Another study found no change in attachment to school (Billig, Root & Jesse, 2005b).

In summary, research on service-learning programs suggests that service-learning can show promise in affecting student self-efficacy, civic responsibility, attitudes about diversity, and attitudes about school and learning. However, more research is necessary to understand what affects these outcomes. Thus an aim of this

dissertation is to examine the effect of being in a service-learning program on these four outcomes.

### **What is an Academic Internship?**

An example of experiential learning, but not a service-learning course, is an academic internship. Internships are defined as “work or service experiences related to the student’s major or career goal. . . [with] students working in professional settings under the supervision and monitoring of practicing professionals” (National Association of Colleges and Employers, 2009). Academic internships are viewed as a way students can optimize their chances of obtaining attractive employment when they graduate by accumulating relevant work experience (Wallace, 2007). This work can consist of interning at a private corporation, like a financial firm, where students can build skills to assist them in pursuing a career in that field. However, academic internships can also be civically-focused. For example, a student could intern with an elected official, a university, or work with a non-profit organization. Although it is possible for students in an academic internship and service-learning course to volunteer at the same site, the coursework and reflection would be different. For example, if a student volunteers at an elected official’s office, service-learning courses might focus on community involvement in the political process, whereas the academic internship might focus on student interest in pursuing a career in politics, and building skills to meet this career goal.

**Benefits of academic internships**

Because internships are traditionally focused on career development, personal and civic outcomes are rarely assessed. Data do exist, however, to suggest that completion of internships improves individual career decision-making self-efficacy, and strengthens the crystallization of vocational self-concept (Brooks, Cornelius, Greenfield, & Joseph, 1995; Taylor, 1988). Further, students in internships apply the knowledge gained in the classroom and solve problems at internship sites effectively (Raymond, McNabb & Matthaei, 1993).

Academic internships are offered at many universities, and their ability to help students develop their career interests and skills is established (Knouse & Fontenot, 2008). However, understanding the potential personal and civic benefits of these programs is important. Thus, another objective of this dissertation is to evaluate the personal and civic benefits accrued by students involved in academic internships.

**Effectiveness of Components of Service-learning and Academic Internships**

Although the components of service learning-courses and academic internships are similar, they are often treated as distinct entities and rarely are included in the same evaluations. Understanding the benefits of being in an experiential learning program, either service-learning or academic internship, would add greatly to the literature because it would allow examination of the mechanism of service outside the classroom. Consequently, another objective of this study is to evaluate experiential learning students overall, and examine the benefits of being

involved in these courses on their self-efficacy, civic responsibility, attitudes about diversity and attitudes about school and learning.

### **Service-learning vs. Academic Internships.**

Understanding how experiential learning students benefit from their service is one aspect of the current study, but understanding the differences between two components of experiential learning programs, academic internships and service-learning courses, is also important. Many studies have shown the benefits of students in service-learning courses as compared to students in “regular” courses (see Celio et al., in press, for a list of studies). Less is known, however, about the efficacy of specific components of service-learning programs. In particular, it is unclear whether the experiential aspect, or the focus on service, that affects student change. To date, there has never been a comparison between service-learning programs and a more general experiential learning course, like an academic internship. Thus, the next aim of this dissertation is to compare service-learning programs to academic internships to understand the differential benefits to students.

### **Service-learning vs. Service-focused Courses**

Service-learning courses have two basic components: experiential learning and a focus on service. As noted previously, little is known about the differential effects of the experiential piece. In addition, equally little is known about the differential effects of having a service-focus in a course. That is, can the benefits of a service-learning program remain if the experiential component is removed?

Courses exist that have a focus on the importance of service, but do not involve any direct service to the community. At Stanford, “public service-focus” and “preparation for public service” courses are offered (Stanford University, 2009). Stanford University comments that these courses “provide students with the requisite academic skills and related preparation for public service fieldwork and internships” (Stanford University, 2009). The possible rationalization for these courses is that the primary goal is to understand the *systemic* causes of disadvantage and inequality and help students understand if this is the type of work they want to pursue in the future.

Students can benefit from courses such as these because it can allow them to understand the bigger picture about community need and thoughtful community change. Herzberg (1994) argues that service-learning needs to involve critical analysis of issues otherwise it is simply charity. Without the critical analysis, students can think that they are doing service *for* disadvantaged people, but it does not help them understand *how* people are disadvantaged (Parker-Gwin & Mabry, 1998). If students have a foundation to better understand the concepts, they can begin to understand the causes of the problems that their future service will address (Long, 1995). Although Battersby (1998) supported the use of direct service, he did note that students in service-learning courses must be encouraged to examine the conditions that create a need for service, and the social policies that might address these needs.

### **Possible disadvantages of direct service-learning**

Data suggest that service-learning can decrease personal and civic outcomes (Parker-Gwin & Mabry, 1998). In a study examining students with required and

optional service, all students exhibited decreases from pre to post in personal and social responsibility, and attitudes about the importance of community service. The authors suggested that this could be explained by student naiveté. At the beginning of the semester, students may have the tendency to believe that a few weeks of service would make a significant impact on the community or problem with whom they were working. The authors noted:

Some students may regard their service simply as “doing good” or helping the “less fortunate” by meeting direct needs. As a consequence, if the service does not make these students “feel good” they may hold less favorable attitudes than before their service (p.284).

Semester-long service-learning courses can be considered by students as a ‘band-aid’, where students can potentially become involved in situations where their involvement will stop at the end of the semester, but the community need will continue (Parker-Gwin & Mabry, 1998). Service-learning courses might appear to attempt to solve community issues with short-term, immediate work. Alternately, service-focused courses can address the sensitive topics of disadvantage and inequality, without direct service, and create critical analysis skills and new perspectives. This learning, in turn, can assist students in future career decisions as well as their interest in continued involvement with underserved populations.

Fifteen years ago, a study at Stanford University compared undergraduates in a communications course that had a direct-service component, and students in the same course that had a service-focus, but did not do service (Cohen & Kinsey, 1994). Results indicated that students in the direct-service component rated their learning as significantly higher than their non-direct service peers. However, few other studies

have examined the differences between direct service and service-focused courses, and no studies have been published to date comparing the two in terms of student civic and personal outcomes. Thus, the next research aim of this dissertation is to evaluate the effect of service-learning courses versus service-focused courses on student outcomes.

### **History of Experiential learning**

The concept of experiential learning is not a recent phenomenon. Ideas regarding the importance of connecting education to community needs have been present since the beginning of the 20<sup>th</sup> century. John Dewey, an early advocate of educational reform and experiential learning, argued that democratic participation was crucial to solving community problems (Dewey, 1916). He suggested that it was the responsibility of education to encourage such participation. Furthermore, Dewey posited that defining problems in the community, and working toward their solutions, could produce a democratic society. Through this process, a foundation for a civically engaged society could be established and, moreover, would assure the continuation of such a society in the future (Dewey, 1916).

As a successor of Dewey, William Kilpatrick is credited as being one of the earliest proponents of school-based community service. He argued for a project method in which education should also meet community needs (Conrad & Hedin, 1991). This approach to education was echoed again in the 1950s at the Citizenship Education Project at Columbia University, which stressed education combined with participation and direct community involvement (Conrad & Hedin, 1991).



The 1960s were a time of revitalized commitment to service in this country.

The civil rights movement, the formation of the Peace Corps in 1961, and Volunteers in Service to America (VISTA) in 1965, produced opportunities for activist education by engaging young people in creating change (National Service-Learning Clearinghouse, 2008). It was during this time period that the early pioneers of the service-learning movement began to emerge and attempted to connect 'service' to 'learning' in a direct and powerful way (National Service-Learning Clearinghouse, 2008).

The term “service-learning” was coined in 1967, by educators Robert Sigmon and William Ramsey, to refer to the integration of tasks with educational growth (Wilczenski & Coomey, 2007). Just two year later, an important meeting was held by the Southern Regional Education Board, the City of Atlanta, Atlanta Urban Corps, Peace Corps, VISTA, and the U.S. Department of Health, Education, and Welfare. They met to discuss the benefits and disadvantages of service-learning and the importance of implementing these types of programs in American colleges and universities. The participants felt strongly that colleges and universities should encourage students to participate in community service, insure that academic learning was a part of this service, and give academic recognition for that learning. Further, the participants at this meeting believed that colleges and universities, private organizations, and federal, regional, and state governments should provide the opportunities and funds for students wanting to participate in service-learning. Finally, they noted that students, public and private agency officials, and college and

university faculty should all participate in the planning and running of service-learning programs (National Service-Learning Clearinghouse, 2008).

In the 1970s, the National Commission on Resources for Youth worked to promote youth participation programs (Conrad & Hedin, 1991). The early and mid-1980s saw even more interest in experiential and service-learning on college campuses, with a national initiative to promote service among undergraduate students (National Service-Learning Clearinghouse, 2008). Service efforts were launched across the country, including the Campus Outreach Opportunity League (1984), the National Association of Service and Conservation Corps (1985), National Youth Leadership Council (1982), Youth Service America (1985), and Campus Compact (1987) (National Service-Learning Clearinghouse, 2008). As the years progressed, students have become increasingly involved in service programs, and more schools have incorporated experiential learning into their curriculums (National Service-Learning Clearinghouse, 2008).

### **Current State of Service-learning**

Conrad and Hedin (1991), authors of one of the first known reviews of service programs almost two decades ago, ended their seminal article with this thought:

Whether the current interest in youth service represents the wave of the future or a passing fancy cannot, of course, be known. Whether service as a school practice merits the serious consideration of practitioners and policy makers, seems to be beyond question (p.749).

Since the 1991 review, service-learning has proved to be anything but a “passing fancy” (Conrad & Hedin, 1991, p. 749). In 1999, 32% percent of all public schools organized service-learning as part of their curriculum, including nearly half of all high schools (Skinner & Chapman, 1999). Many community colleges and four-year universities also offer service-learning programs (Campus Cares, n.d.). The popularity of service-learning programs has increased to the point that in 2003, US News and World Reports magazine started to list universities with service-learning programs in their annual “Best Colleges” issue (U.S. News and World Report, 2006). Further exemplifying the popularity of service-learning is the organization Campus Compact. Created in 1987 with just a few schools, this organization began with the intention of infusing service and civic engagement into college academics, and now boasts almost 1200 schools (Campus Compact, 2008).

Funding is available for experiential and service-learning programs through universities, corporations, private foundations and the federal government (e.g., Illinois Campus Compact, n.d.; ETR Associates, 2004; Learn and Serve America, 2006). Advice on how to start programs and examples of curricula are available on websites funded by groups ranging from the Disney Corporation to the federal government (Disney, n.d.; Learn and Serve, 2006). In January 2003, President George W. Bush created the President’s Council on Service and Civic Participation which was established to “recognize the important contributions Americans of all ages are making within their communities through service and civic engagement” (Learn and Serve, 2006). Administered by the Corporation for National and

Community Service, the council encourages more Americans to get involved in their communities. This group offered \$37 million in Learn and Serve America funds to implement and support school-based, community-based, and higher education service-learning programs in 2008 (Corporation for National and Community Service, 2009). Further, on May 7, 2009, President Barack Obama released his detailed fiscal year 2010 budget request. The budget requested \$1.149 billion for the Corporation for National and Community Service and its programs. In the budget, President Obama notes that \$39.5 million is designated to support 1.3 million participants in Learn and Serve America, a \$2 million (5 percent) increase over the year before. This provides continued support for service-learning, increases the number of disadvantaged youth participating, integrates annual grant competitions, and began a 10-year longitudinal study on impact of service-learning (Corporation for National and Community Service, 2009). More recently, on February 1, 2010, President Obama released his Fiscal Year 2011 budget request, including proposed funding for the Corporation for National and Community Service and its programs. The Corporation noted on their website that the 2011 budget request of \$1.416 billion “will strengthen our nation’s volunteer sector, foster innovation and civic engagement, and mobilize more than six million Americans to solve critical problems through national service” (Corporation for National and Community Service, 2010).

### **Evaluation in Service-learning**

Although service-learning programs may be popular, and research indicates many potential benefits, they are not consistently evaluated. Billig (2000) has noted:

“Research in the field of service-learning has not caught up with the passion that educators feel for it.” (p.660). The first well-known review of community service and service-learning programs performed within schools was published in 1991 at the University of Minnesota by Dan Conrad and Diane Hedin. Their review of studies suggested that service can have a positive effect on the “intellectual and social/psychological development of the participants” (Conrad & Hedin, 1991, p. 747). Benefits from participation in youth service programs included increases in personal and social responsibility, more active exploration of careers, enhanced self esteem, increased positive attitudes toward adults and others, moral development, and skill mastery. Despite the advantages of these programs, the same review found that results were mixed in regards to whether they increase political efficacy or involvement in civic affairs (Conrad & Hedin, 1991).

### **Meta-analysis**

A recent meta-analysis reviewed 62 empirical outcome studies designed to evaluate the benefits to the students who participated in service-learning programs (Celio et al., in press). This review examined both published and unpublished studies, and noted that almost half were written from 2000-2008, indicating that this is a newly evaluated field. Overall, the meta-analysis yielded significant positive effects. Specifically, the data suggested that service-learning students showed increases in personal skills, civic engagement, social skills, attitudes about school and learning, and academic achievement. Although the review consisted of evaluations of service-learning programs for students of all ages, most of the programs (59%) were with

college students. Thus, most of these findings can be generalized to a college population.

In the review, several observations were made about the current state of the field and recommendations for the future. First, the authors discussed four recommended practices in the service-learning field, and their impact on study effect sizes. They specifically examined providing opportunities for reflection, incorporating youth voice, involving community partners, and linking programs to academic and program curriculum or objectives. Their results suggested that incorporation of these recommended practices is associated with stronger effects, as compared to programs that did not incorporate any of these practices. However, the authors stated that many studies did not report details of their programs, which could affect these findings. That is, some studies could have used reflection, had youth involvement, worked with community partners, and linked service to work done in the classroom, but not reported it. Thus, the authors recommended, if possible, measuring and reporting on these practices when evaluating a program.

Second, the authors commented on the varying methodological rigor of these programs. Although all the studies included in the review had control groups, only two-thirds of the evaluations used pre-testing. The use of pre-testing is essential because students could self-select into these courses. It is possible that students who had higher outcomes than their non-service-learning peers could have had entered the courses with pre-existing differences. Few (31%) studies used randomization, another technique used to minimize possible pre-existing differences. The authors

posited that, especially in college courses when randomization is often not possible, pre-testing needs to be used. In addition, they stated the importance of using reliable and valid measures; only two-thirds (68%) of outcomes were from reliable measures, and a little less than half (45%) were from valid measures. Use of measures with known methodological rigor assists in the confidence and generalization of findings (Celio et al., in press).

Third, the authors noted the lack of information regarding student characteristics. They originally intended to do an analysis of effects based on gender, but studies were inconsistent in their reporting of these data. Thus, the authors recommended that future evaluations collect data regarding student characteristics to better understand who selects these courses and if there are differential effects based on gender (Celio et al., in press).

Fourth, studies in the field lacked important data about program characteristics. Notably, nearly half of the studies did not report how many hours of direct service that students completed. Most studies reported how long the course was, but these data do not translate easily into length of service experience. Understanding the number of service hours a student completed could give an indication of the amount and frequency of service needed for optimal impact. The authors suggested that, in the future, studies should include more information on the details of the programs, specifically on amount, type, and frequency of service, to understand if certain program characteristics can maximize effects (Celio et al., in press).

In sum, this meta-analysis of service-learning programs suggested that these programs are effective. Service-learning programs produce significant, positive effect sizes in the categories of personal skills, civic engagement, social skills, academic achievement, and attitudes about school and learning. Recommended practices, such as providing opportunities for reflection, incorporating youth voice, involving community partners, and linking programs to academic and program curriculum or objectives, increased effects in these studies. The authors strongly suggested that future evaluations include more detail about the characteristics of the program and the students involved. Furthermore, it is essential that future studies are more methodologically rigorous so authors can have more confidence in their findings. The current study aims to address the recommendations of this meta-analysis, by creating a methodologically strong evaluation of service-learning programs, utilizing more complete reporting, and assessing use of certain recommended practices.

Another service-learning and community service meta-analysis was published recently, but focused exclusively on psychology courses (Conway et al., 2009). Conway and colleagues' results suggested that although the studies produced positive effect sizes for personal, social and civic outcomes, amount of service in terms of hours did not seem to predict or moderate the effects. The suggested that more research should be done in the area of number of hours relating to outcomes.

### **Problematic issues in service-learning evaluation**

Although more evaluation exists in this field that indicates advantages of involvement in service-learning, this research also suggests that simple involvement



in service is not inherently beneficial. Limitations in program design and methodology raise concerns about the validity of previous findings in the service-learning literature (Metz & Youniss, 2005). In addition, positive outcomes appear to depend on upon how the service activity is presented and carried out (Billig, 2004). For example, Billig and colleagues (2005b) found that factors such as program duration, perceived quality, and student initiative had differential effects on outcomes for youth engaged in service-learning.

A recent presentation by well-known service-learning scholar, Dr. Andrew Furco, outlined some issues with evaluation of service-learning programs (Furco, 2009). Furco noted the main problems with the service-learning evaluation field are that evaluation is an afterthought and not aligned to program goals and that evaluations assume that all service-learning experiences are the same (Furco, 2009). His suggested solutions included focusing the evaluation, assessing the quality of the service-learning practice, applying appropriate instruments and data collection techniques, and using a systematic approach for data collection and analysis (Furco, 2009). Thus, the next research aim of this dissertation is to create a methodologically rigorous evaluation of service-learning programs and assess the quality of the service learning practice by inquiring about use of certain recommended practices.

### **University evaluations**

Despite the popularity of experiential learning programs for college students, no standard evaluation has been created specifically for the use in multiple university settings. The National Service-Learning Clearinghouse (2009) highlights the

importance of evaluation and assessment on its website. Although they offer suggestions for evaluations of different courses, little advice is given about how to categorically evaluate these programs. Furthermore, types of programs are incredibly varied. Individual universities might offer many different experiential learning courses in different departments and subjects. This diversity makes it difficult to create a document that measures change in the student specific to the course or service project, as well as evaluating course characteristics important to the university.

Despite the difficulty in creating a more universal evaluation, the field has created a demand for one. In particular, the head of Illinois Campus Compact has been discussing the creation of a more general assessment and is interested an evaluation to be used for all the universities in Campus Compact in Illinois (Personal Communication March 27, 2009 with Kathy Engelken, Executive Director of IL Campus Compact to Patrick Green, Director of the Loyola Center for Experiential Learning). Thus, another objective of the current dissertation is to create an evaluation for experiential learning courses that both applies to the different courses in a single university, as well as is applicable for use at different universities. After this study, a modified version of this evaluation survey will be utilized with the 43 member campuses of Illinois Campus Compact.

## **Recommended Practices**

### **Service-learning recommended practices**

Service-learning programs have shown mixed effects on a variety of domains, but it is unclear what moderates these outcomes. It is hypothesized that the inclusion of the field's recommended practices leads to stronger effects (Celio et al., in press).

The National Service-Learning Clearinghouse (2002) created a list that outlines the basis for effective service-learning programs. The following “hallmarks of effective service programs” are suggested to provide valuable service, build civic skills, and increase student achievement:

- Service activities should be of sustained or significant duration. Program experience suggests that a minimum of 40 hours over a school year (or 20 per semester) is necessary to yield positive results for students and the community.
- Teachers or after-school program coordinators or sponsors need to work with students in order to draw the connections between what the students are doing and what they should be learning. Even if service activities are conducted outside of class, it is important that the project have clear and specific learning objectives.
- The service that students perform should have a strong connection to the curriculum they are studying or to their after-school activities.

- The relationship between service and democratic practices, ideas, and history should be made explicit in order that students see service as a civic responsibility.
- Project participants should be given time to reflect on their service. That may involve asking students to keep a journal, or having teachers and organizers lead discussions or coordinate activities that get participants to analyze and think critically about their service. These activities need to be planned, not left to chance.
- Students should have a role not only in executing the service project, but also in making decisions about its development. Students should be involved in leadership roles in all phases of the project.
- In order to ensure that service is really useful and strengthens community ties, strong partnerships with community groups based on mutually agreed upon goals, roles, and responsibilities are essential (The National Service-Learning Clearinghouse, 2002).

These presumed recommended practices are consistent with much of the literature in the field regarding components for effective service-learning programs. Several of these practices are assessed by the outcome measures in this dissertation, including civic responsibility and attitudes about school and learning. Other aspects, like community involvement and learning objectives, are best evaluated on the instructor or community level. The remaining recommended practices emphasize at

least two primary issues: engagement and reflection (The National Service-Learning Clearinghouse, 2002).

### **Academic Internship Recommended Practices**

The recommended practices in academic internships are very similar to service-learning's hallmarks of effective programs. In Knouse and Fontenot's (2008) review of benefits in business internships, they outlined several recommended practices, including: (1) active student participation in the process; (2) active employer participation in the process; (3) clear expectations; and (4) keeping a journal (Knouse & Fontenot, 2008). Both service-learning and academic internships highlight that the group or person with whom they work, whether it is an employer or a community group, should be involved in the process. Further, both types of experiential learning discuss the importance of clear expectations of what the internship or the service-learning experience is supposed to accomplish. And, as with service-learning, the concepts of engagement and reflection are central.

### **Engagement**

First, experiential learning programs should create opportunities for students to be engaged and feel ownership of the project. The National Service-Learning Clearinghouse refers to this idea as "leadership," and Knouse and Fontenot (2008) refer to it as "active participation," but a more general concept is engagement. Celio and colleagues' (in press) meta-analysis suggested that student engagement positively influenced program effects. Data suggest that students who chose what issues to address in their service-learning projects make greater gains in civic

knowledge (Billig, Root & Jesse, 2005a). Further, students who feel engaged experience improved self-efficacy (Billig et al., 2005a). Finding ways to include student input can lead to improvements of self-concept, political engagement, and increasing tolerance toward out-groups (Morgan & Streb, 2001).

Engagement in service-learning is not only an outcome of service-learning programs but can be a predictor. It serves as a strong predictor of other positive outcomes, such as becoming attached to school and community, valuing academics, perceiving a gain in civic knowledge, skills, and dispositions, and becoming more civically engaged in general (Morgan & Streb, 2001; Melchior & Bailis, 2002; Meyer, 2006). Engagement can be measured in two main ways: behaviors and attitudes.

**Behaviors.** Students can indicate their engagement behavior through hours of service, which is one of the other ‘hallmarks of effective service programs’ (The National Service-Learning Clearinghouse, 2002). Since many academic internships and service-learning courses have a minimum number of required hours, more hours could theoretically lead to more student engagement, and students who exceed hour requirements could indicate a higher level of engagement. In addition, research suggests that longer programs might yield better results. Billig, Root and Jesse (2005b) found that longer programs led to improved student outcomes, although year-long programs often had slightly less benefit than semester-long programs. Other work indicates that service projects should last a minimum of 40 hours over a school year (20 over a semester) to

produce positive results for the students and the community (Billig, 2006; National Service-Learning Clearinghouse, 2007). However, few empirical reviews have assessed if hour duration predicts outcomes (i.e. longer programs produce stronger results). Thus, the next research objective of this dissertation is to examine the benefits of engagement behaviors, such as direct-service hours, on student outcomes.

**Attitudes.** Behaviors and attitudes about engagement could differ. Students could have other activities that compete with their time, like outside jobs, preventing them from exceeding the required service hours or from taking a course that involves a high number of service hours. Yet, the students could still *feel* engaged and interested in the project. In addition, some service-learning courses might not have a specific hour requirements, especially if the end goal is to finish a product for an organization, and not complete a number of service hours.

To assess engagement attitudes, students can be asked how engaged they felt in their service activities. Moreover, research indicates that students who are more interested in their course topics are more likely to benefit from involvement in the course. Astin and colleagues (2000) note that the single most important factor associated with a positive service-learning experiences appears to be the student's degree of interest in the subject matter. They reason that subject-matter interest is an especially important determinant of the extent to which the service experience enhances understanding of the "academic" course material, and the extent to which service is viewed as a learning experience (Astin et al., 2000).

Therefore, another research objective is to understand the relationship between self-reported feelings of interest and engagement and student outcomes.

### **Reflection.**

The second recommended practice that could affect student outcomes is reflection. Parker-Gwin and Mabry (1998) commented that reflection is crucially important for positive outcomes in service-learning courses. In the context of service-learning courses, Eyler and Giles (1999) conceived reflection as being the hyphen in service-learning. Reflection can involve different types of activities such as asking students to keep a journal or having classroom or small group discussions (Astin et al., 2000). Reflection is thought to be necessary to maximize the learning experience for students (Eyler & Giles, 1999; Hatcher, Bringle, & Muthiah, 2004). Developing critical analysis skills and moving beyond individual explanations of disadvantage is one crucial role instructors play in service-learning courses, and incorporating reflection is a way to encourage these skills (Parker-Gwin & Mabry, 1998). Reflection helps students make stronger connections between theoretical perspectives and practice. It is a skill that can assist students in making sense of their service-learning experience (Correia & Bleicher, 2008). In addition, programs with reflection yield higher effect sizes than programs without reflection (Celio et al., in press). However, despite the importance of reflection in service-learning and academic internship programs, little is known about how much or how often the reflection should be done. Thus, the last research aim for the current study is to understand the degree to which reflection influences outcomes.



### **Summary and Goals of Present Study**

This dissertation created an experiential learning evaluation for two different universities, Loyola University Chicago in Illinois and Stanford University in California. A modified version of this evaluation survey will be utilized with the 43 member campuses of Illinois Campus Compact after the completion of this dissertation. This dissertation includes two studies evaluating the impact of different types of courses (i.e., service-learning, academic internships, and service-focus courses) on outcomes known to be affected by service-learning, namely self-efficacy, civic responsibility, attitudes about diversity, and attitudes about school and learning. Moreover, two specific practices recommended in the literature, reflection and engagement behaviors and attitudes, are examined as potential moderators and predictors. All hypotheses will be examining data at Loyola University Chicago except for Hypotheses 5a-d.

The dissertation has the following objectives:

**Objective 1: To create an evaluation of experiential learning programs with high methodological rigor (pre-testing, reliable and valid measures), and assess the quality of the service learning practice by inquiring about use of certain recommended practices.**

**Objective 2: To create a universal evaluation for experiential learning courses to be used for different courses in a single university, and is also applicable for use in various different universities.**

To address this objective, I met with the Center for Experiential Learning director (Patrick Green, Ed.D.) numerous times, and met with and received feedback from his staff. Dr. Green was generous enough to include both semesters in the IRB, although I originally only intended to evaluate the fall semester. Because of low numbers, I was able to incorporate the spring data into these analyses.

In summer 2009, I visited the Stanford University campus and met with Karin Cotterman, the associate director for engaged scholarship at the Haas Center for Public Service, and Thomas Schnaubelt, the Executive Director of the Haas Center. I sought and received site-specific feedback from Ms. Cotterman and Dr. Schnaubelt which I incorporated into the Stanford evaluation. The Stanford IRB was only written for the fall semester, so only these data were collected.

In May 2009, I conducted an initial focus group of various Loyola students who had enrolled in service-learning courses and academic internships. Input from this focus group was incorporated into the current draft of the survey. Further, I plan to send this survey to Kathy Engelken, Executive Director Illinois Campus Compact, for thoughts and comments on the usability of this survey at multiple universities when this dissertation is completed.

Feedback was solicited and incorporated throughout creation of the survey. Specifically, the use of incentives was eliminated in response to concerns from Stanford's Institutional Review Board. Because incentives (i.e., the lottery for prizes) were not used at Stanford, it was decided to not use them at Loyola University

Chicago. Since an aim of this dissertation is to make this a universal evaluation, understanding if students would complete the survey without incentives is an important part of the process. Evaluating the length of the survey, student fatigue, and when students stopped filling it out was informative. In addition, the emails out to students, by IRB request, needed to be sent by the director of the service program or someone related to the program (Patrick Green, the director of the Center for Experiential Learning, Chris Skrable, the coordinator of service-learning, or Louise Deske, the coordinator of internship programs, all at Loyola, and Karin Cotterman, the director of service programs, at Stanford), so the wording was changed (Appendix A). The approved IRB letter for each school (Loyola service-learning group, Loyola academic internship group and Stanford, respectively) are included in Appendix B, C and D.

**Objective 3: To examine the effect of enrollment in an experiential learning course on personal and civic attitudes**

To address this objective, the following hypotheses were tested for the four outcome variables using repeated measures ANOVA:

**Hypothesis 1a:** Enrollment in an experiential learning course will produce a statistically significant increase in self-efficacy from pre-testing to post-testing.

**Hypothesis 1b:** Enrollment in an experiential learning course will produce a statistically significant increase in civic responsibility from pre-testing to post-testing.

**Hypothesis 1c:** Enrollment in an experiential learning course will produce a statistically significant increase in attitudes about diversity from pre-testing to post-testing.

**Hypothesis 1d:** Enrollment in an experiential learning course will produce a statistically significant increase in attitudes about school and learning from pre-testing to post-testing.

**Objective 4: To evaluate the personal and civic benefits accrued by students enrolled in specific types of experiential learning.**

The following hypotheses were tested with the four outcome measures using repeated measures ANOVA:

**Hypotheses 2a-d:** Enrollment in a service-learning course will produce a statistically significant increase in self-reported student outcomes (self efficacy, civic responsibility, attitudes about diversity and attitudes about school and learning) from pre-testing to post-testing.

**Hypotheses 3a-d:** Enrollment in academic internships will produce a statistically significant increase in self-reported student outcomes (self efficacy, civic responsibility, attitudes about diversity and attitudes about school and learning) from pre-testing to post-testing.

**Objective 5: To compare academic internships to service-learning programs to understand the differential benefits to students.**

The following hypotheses were tested with the four outcome measures outcomes using time x group ANOVAs:

**Hypotheses 4a-d:** Enrollment in a service-learning course will produce a statistically significant increase in self-reported student outcomes (self efficacy, civic responsibility, attitudes about diversity and attitudes about school and learning) as compared to enrollment in an academic internship course.

**Objectives 6: To evaluate the effect of direct service-learning courses as compared to service-focused courses on student outcomes.**

The following hypotheses were tested at Stanford University with the four outcome measures using time x group ANOVAs:

**Hypotheses 5a-d:** Enrollment in service-learning course will produce a statistically significant increase in self-reported student outcomes (self efficacy, civic responsibility, attitudes about diversity and attitudes about school and learning) as compared to enrollment in a service-focus course.

**Objective 7: To examine the benefits of engagement behaviors, such as direct-service hours, on student outcomes.**

The following hypotheses were tested with the four outcome measures by ANCOVAs (hypotheses 6a-d and 7a-d) and multiple regressions (8a-d). In the regressions, linear and curvilinear relationships were examined:

**Hypotheses 6a-d:** In experiential learning courses, students who exceeded their required amount of direct service hours will produce significantly higher scores in self-reported student outcomes (self efficacy, civic responsibility, attitudes about diversity and attitudes about school and learning) as compared to students who did not meet their direct-service requirements.

**Hypotheses 7a-d:** Students in experiential learning courses who completed more than 20 hours of direct service will produce significantly higher scores in self-reported student outcomes (self efficacy, civic responsibility, attitudes about diversity and attitudes about school and learning) as compared to students who completed less than 20 hours.

**Hypotheses 8a-d:** Students in experiential learning courses with more direct service hours will produce significantly higher scores in self-reported student outcomes (self efficacy, civic responsibility, attitudes about diversity and attitudes about school and learning) as compared to students who completed fewer direct service hours.

**Objective 8: To understand the relationship between self-reported feelings of interest and engagement on student outcomes.**

The following hypotheses were tested with the four outcome measures by multiple regressions. Linear and curvilinear relationships were examined.

**Hypotheses 9a-d:** Overall, experiential learning students who reported feeling more engaged in the service project will produce significantly higher scores in self-reported student outcomes (self efficacy, civic responsibility, attitudes about diversity and attitudes about school and learning) as compared to students who reported feeling less engaged in the service project.

**Hypotheses 10a-d:** Overall, experiential learning students who reported feeling more interested in the course topic at pre-testing will produce significantly higher scores in self-reported student outcomes (self efficacy, civic responsibility,

attitudes about diversity and attitudes about school and learning) as compared to students who reported feeling less interested in the course topic at pre-testing.

**Objective 10: To understand the degree to which reflection influences outcomes.**

The following hypotheses were tested with the four outcome measures by ANCOVAs (hypotheses 11a-d) and multiple regressions (hypotheses 12a-d and 13a-d). In the multiple regressions, linear and curvilinear relationships are examined.:

**Hypotheses 11a-d:** Overall, experiential learning students who engaged in any reflection (any course) will produce significantly higher scores in self-reported student outcomes (self efficacy, civic responsibility, attitudes about diversity and attitudes about school and learning) as compared to students who did not use any reflection. Use of reflection was evaluated by asking students if they were involved in any types of reflection (e.g., journals/essays, Blackboard entries, research papers with reflection components, etc).

**Hypotheses 12a-d:** Overall, experiential learning students with more frequent reflection will produce significantly higher scores in self-reported student outcomes (self efficacy, civic responsibility, attitudes about diversity and attitudes about school and learning) as compared to students with less frequent reflection. Reflection frequency was assessed by the question “How often were you participating in reflection activities?” and responses ranged from never (0) to every class period they were offered (10).

**Hypotheses 13a-d:** Overall, experiential learning students who had more reflection (amount) will produce significantly higher scores in self-reported student outcomes (self efficacy, civic responsibility, attitudes about diversity and attitudes about school and learning) as compared to students who had less reflection (amount). Reflection amount was assessed by student self report. Students were asked which means of reflection they were asked to engage in (e.g., reflection journals/essays, etc) and how many of them they were asked to complete. Amount of these reflection activities were summed for the reflection amount score.



## **CHAPTER TWO**

### **METHODS**

#### **Participants**

##### **Study 1**

The participants for the first study included Loyola University Chicago students participating in one form of experiential learning (academic internship or service-learning) between the dates of August, 2009 and May, 2010. It was anticipated that nearly 1500 students would enroll in these courses during this time. In fact, almost 1900 students were enrolled in service-learning courses, and around 600 were enrolled in internship courses, over the 2009-2010 school year. However, only a fraction of these students (547) completed the pre-testing and only 571 students completed post testing. In total, 279 experiential learning students completed both pre and post testing during this time at Loyola University Chicago (Figure 1). Thus, the retention rate was extremely low (11%).

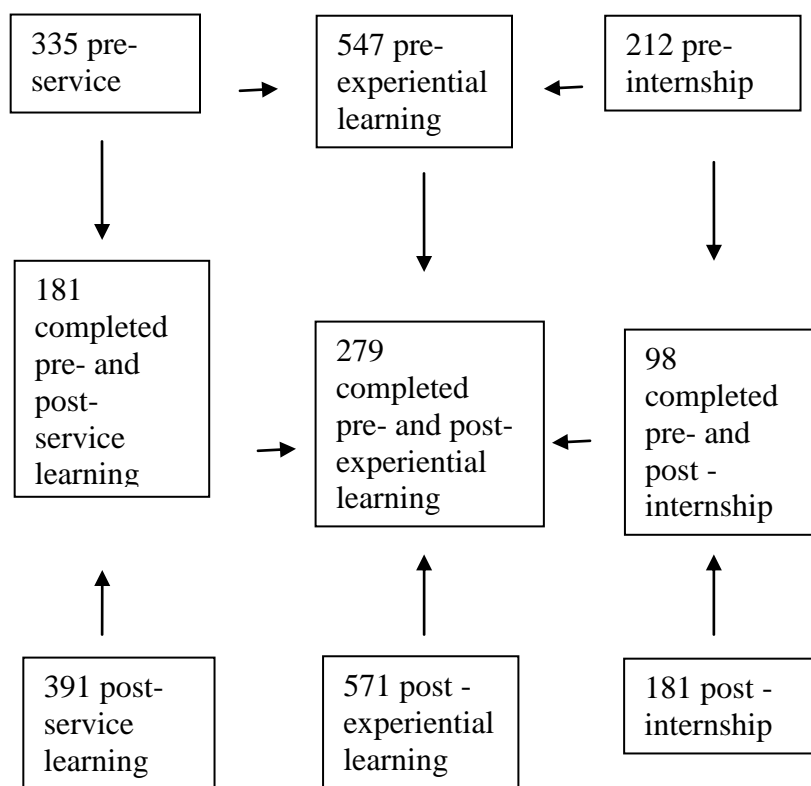


Figure 1. Flow chart for sample

**Loyola University Chicago.** Loyola University Chicago is a private, Jesuit university situated in a major metropolitan area and enrolls approximately 9,300 undergraduate students. The university serves an increasingly diverse population of students; in 2007, the first year class was comprised of 33% minorities, and over 95% of all eligible students receive financial assistance. Loyola University Chicago, in accordance with the mission, challenges students to learn broadly, think critically, serve generously, lead with integrity, and respect diversity with a common purpose of building a better society. Students are encouraged to gain work-related experiences in their field of study through academic internships, and course-based service-learning (Loyola University Chicago, 2009).

In 2007, the university created a new organization, the Center for Experiential Learning (CEL), which is housed under the Office of the Provost. The center notes on their website, “by engaging students in the community, the Center not only actively promotes our Ignatian tradition but also extends the mission of our Core Curriculum, which strives to build the knowledge, skills, and values that students need for lifelong success and to make a difference as ‘persons for others’”(Loyola University Chicago, 2009).

As part of the core requirements in Loyola’s curriculum, all students need to complete a civic engagement requirement. Although not all civic engagement courses are service-learning courses, many are, and, thus, Loyola has a larger and more diverse (in terms of majors) sample of students taking service-learning courses than school where they are only offered as electives.

## Study 2

The participants for the second study included Stanford University students participating in one form of service course (service-focus, service-learning) between the dates of August, 2009 and December, 2009. It was anticipated that 10 direct service courses and 14 service-focus and preparation courses would be offered during this time period, which would have involved an estimated 400 students. In fact, over 300 students enrolled in either a service-learning or service-focused class were invited to take the survey. Despite the large number of students enrolled in these courses, only 30 service-learning students and 24 service-focused students completed the pre-testing, and 17 service-learning students and 13 service-focused students completed post testing. When matched by email address, only 7 students in service-learning courses completed both pre and post testing, and 8 students in service-focused courses completed pre and post testing.

**Stanford University.** Stanford University is a private, secular research university located in the San Francisco Bay area. Stanford enrolls approximately 6,800 undergraduate students from the United States and around the world every year. Stanford's undergraduates come from all 50 states and more than 60 nations, and more than half of the Stanford undergraduates are students of color. The university has been named by US News and World Reports since at least 2006 as one of the best colleges in service-learning (US News and World Reports, 2006).

Stanford's Haas Center for Public Service provides service opportunities, including summer and postgraduate fellowships, integration of service experience with

classroom learning, community-based research, public service leadership training, community programs serving children and youth, and advising on national service options after graduation. The mission of the Center is to connect “academic study with community and public service, to strengthen communities, and develop effective public leaders,” and “aspires to develop aware, engaged, and thoughtful citizens who contribute to the realization of a more just and humane world” (Stanford University, 2009). Service-learning and service-focused courses are offered as electives at Stanford.

## **Procedure**

### **Study 1**

After students registered for one of the two experiential learning formats (service-learning or academic internship), a list of these students was compiled and all Loyola students were sent invitations to take the survey at the same time (Appendix E) with an electronic link to the online pre-test survey (Appendix E) on Opinio, an online survey tool. This survey was sent out under the name of Chris Skrable, the service-learning coordinator, or Louise Deske, the academic internship coordinator. The IRB letter on the service-learning login page is Appendix B, and Appendix C for academic internship students. The link was sent out when the email lists were provided by the Center for Experiential Learning staff, which was one week after the beginning of the semester.

## **Study 2**

At Stanford, the link to the pre-test surveys (Appendix E) was sent by the director of the Haas Center, Karin Cotterman, at the beginning of the academic quarter for all service courses (service-focus or service-learning). The IRB letter seen at login is Appendix D. This link was sent after enrollment was closed for the courses. Stanford closes enrollment two weeks after the start of the quarter.

## **Both Studies**

When students arrived at the online survey, they were asked to read a consent form and check a box that indicated their approval to participate. If the consent-to-participate box was checked, students could enter the site. Once in the survey, students were asked to fill out demographic information such as gender, race/ethnicity, and student status. Next, they were asked to complete a series of questionnaires to assess their service backgrounds, attitudes about the course topic, and the four outcomes: self-efficacy, civic responsibility, attitudes about diversity, and attitudes about school and learning (Appendix E). Students were sent the link to the post-test survey during the last two weeks of the course, right before finals. The survey stayed open for at least two weeks to give students enough time to respond. Students were reminded once a week for the remainder of the semester or quarter and one week after it ended. This survey had the same four outcome measures, and included questions about course content, specifically about reflection activities and engagement attitudes and behaviors (Appendix F).

Opinio is an online survey tool that is designed to collect all the data and directly transfer it to SPSS. Upon receiving the data from Opinio, all measures were cleaned and then scored. More information regarding this procedure is presented in the “Preliminary Analyses” and “Imputation and Winsorization” sections.

### **Instrumentation**

Pre-test and post-test surveys (Appendices B and C, respectively) were created to assess any of the experiential education or service courses. These surveys were administered electronically to each student near the beginning and the end of the course. Feedback was solicited regarding these surveys from both the staff at the Center for Experiential Learning and students at Loyola University Chicago, and from the staff at the Haas Center at Stanford University. Students were asked demographic questions and specific questions about the course experience (e.g., how many direct service hours did you complete, etc.), as well as questions about reflection and their interest and degree of engagement in the course and the experience. The evaluation utilized the General Self Efficacy Scale (Schwarzer & Jerusalem, 1995), the attitudes about diversity subscale (Moely, Mercer, Illustre, Miron & McFarland, 2002), and the academic and the civic responsibility subscales of the Higher Education Service Learning Survey (Furco, Diaz-Gallegos, & Yamada, 1999) (Appendix G).

### **Self-efficacy**

The General Self Efficacy Scale (GSE; Schwarzer & Jerusalem, 1995) is a 10-item scale designed to assess optimistic self-beliefs used to cope with a variety of

demands in life (Appendix G). The authors note that, in contrast to other scales that were designed to assess optimism, this scale explicitly refers to personal agency, i.e., the belief that one's actions are responsible for successful outcomes (Schwarzer & Jerusalem, 1995).

The scaled score for each question on the GSE ranges from 1 to 4. Higher scores indicate stronger belief in self-efficacy. The four points on the instrument are 1= Not at all true; 2 = Hardly true; 3 = Moderately true; and 4 = Exactly true. The scale was originally developed in Germany in 1981 by Jerusalem and Schwarzer and has been translated into many languages. Studies have shown that the GSE has high reliability, stability, and construct validity (Leganger et al., 2000; Schwarzer, Mueller, & Greenglass, 1999). The scale was found to be configurally equivalent across 28 nations, and it forms only one global dimension (Leganger, Kraft, & Røysamb, 2000; Scholz et al., 2002). Cronbach alpha ranges from 0.75 to 0.94 across a number of different language versions (Luszczynska, Scholz, & Schwarzer 2005; Rimm & Jerusalem, 1999;). Relationships between the GSE and other social cognitive variables (intention, implementation of intentions, outcome expectations, and self-regulation) are high and confirm the validity of the scale (Luszczynska et al., 2005).

### **Civic responsibility and attitudes about school and learning**

The civic responsibility and academic subscales will be taken from the Higher Education Service Learning Survey (HESLS) developed at The University of California-Berkeley Service-Learning Research and Development Center by Furco, Diaz-Gallegos, and Yamada (1999) (Appendix G). The HESLS includes four subscales:



academic (6 items), civic responsibility (9 items), career (6 items), empowerment (8 items), and open-ended questions. Only the civic responsibility subscale and the academic subscale, used to assess attitudes about school and learning, were selected by the Center for Experiential Learning for use in the analyses.

The survey instrument uses a 4-point Likert-type scale from the HESLS to allow variance among responses in each scale item. The four points on the instrument are 1 = strongly disagree; 2 = disagree; 3 = agree; and 4 = strongly agree. Cronbach alpha for the civic responsibility subscale is 0.79 and the test-retest reliability coefficient is 0.71. Cronbach alpha for the academic subscale is 0.66 and the test-retest reliability coefficient is 0.58.

### **Attitudes about diversity**

This project will use the diversity subscale from the Civic Attitudes and Skills Questionnaire (CASQ; Moely et al., 2002b) (Appendix G). The CASQ yields scores on six scales, developed through factor analysis, and has shown strong reliability and validity (Moely et al., 2002b). The diversity subscale uses the 5-point Likert-type scale. The five points on the instrument are anchored as 1 = strongly disagree; 5 = strongly agree. Cronbach alpha for the diversity subscale is 0.71 and the test-retest reliability ranges from 0.63 to 0.73. Support for the scales' validity was obtained by examining relationships to measures of social desirability, attitudes about race, motivational beliefs, and respondents' demographic characteristics, indicating acceptable validity (Moely et al., 2002b).

## **CHAPTER THREE**

### **RESULTS**

#### **Preliminary Analyses**

Experiential learning students (i.e., both service-learning and internship students) who completed both pre and post testing were matched by email addresses, making a total sample size of 279. A flowchart of students who were included in the sample is presented in Figure 1. An apriori power analysis indicated that the sample had enough power for all analyses.

Analyses were conducted to insure that the students who completed both pre and post were not significantly different from students who completed just pre ( $n= 268$ ) or just post ( $n=292$ ). Overall, the matched group (i.e., students who completed both pre and post) and unmatched group were not significantly different on outcome variable, demographic or predictor. When examining just the service-learning students, no significant differences were found between the matched ( $n=181$ ) and unmatched groups ( $n= 364$ ). Among students in internship courses, students in the matched group ( $n=98$ ) were significantly different from the unmatched group ( $n=196$ ) only in self-efficacy  $F(1, 178) = 5.71, p = .02$ , with the unmatched students scoring significantly higher (mean=3.59, SD=.34) than the matched students (mean=3.46, SD= .40).

Within the matched group (about which all subsequent analyses and information will refer except Hypotheses 5a-d, which refer to the Stanford sample), internal consistency for each of the four measures was high: Self efficacy (pre  $\alpha = .87$ ; post  $\alpha = .90$ ), civic responsibility (pre  $\alpha = .85$ ; post  $\alpha = .87$ ), attitudes about diversity (pre  $\alpha = .73$ ; post  $\alpha = .73$ ) and attitudes about school and learning (pre  $\alpha = .77$ ; post  $\alpha = .78$ ). The range for the item total correlations for each measure was adequate: Pre self efficacy .29-.72, pre civic responsibility .22 - .73, pre attitudes about diversity .42 - .53, pre attitudes about school and learning .30 - .72, post self efficacy .34 - .76, post civic responsibility .26 - .79, post attitudes about diversity .41 - .60, and post attitudes about school and learning .38 - .72). Although some items were on the lower side (e.g., pre-civic responsibility had an item that was .22), none of the items in any of the measures needed to be removed or, if removed, would not increase Cronbach's alpha substantially.

### **Imputation and Windsorization**

Missing data on the item-level of the outcome measures were imputed. Missing Values Analysis, using Expectation-Maximization (EM) in SPSS 17, was utilized. The underlying principles in EM are that the parameters of the missing data are estimated by the data that were completed (e.g., if the student completed 4 of the 6 items in attitudes about school and learning measure). EM is a two step process. In the expectation step, the missing data are estimated based on the data that the student completed and the current estimate of the model parameters through using the conditional expectation. In the maximization step, the likelihood function is maximized under the assumption that the missing data are known. Finally, the estimate of the

missing data from the expectation step is used instead of the actual missing data (Borman, 2009). This process could only be used for the outcome variables, as the predictor variables were one-item self-report measures. Of the outcome variables, values were imputed for none of the students for self-efficacy, but for 5 for civic responsibility, 6 for diversity, and 8 for attitudes about school and learning.

Prior to analyses, the outcome and predictor variables were examined for the presence of outliers (i.e., any amount greater than or equal to three standard deviations above or below their mean) (Shadish, Navarro, Matt, & Phillips, 2000). Outliers were identified and windsorized; that is, these values were reset to a value equaling 3 standard deviations from the mean. This allowed the sample size to remain the same in the analyses, which could have impacted power to detect change. Seven variables had items removed; five outcome variables and two predictor variables. Pre civic responsibility had three outliers, all on the low end (.89, 1.0 and 1.4) that were changed to 1.7; these changes did not make the mean value of the measure significantly different from the mean value with outliers removed. This non-significant difference between windsorized values and outliers-removed values was consistent for the remaining four variables: Pre-attitudes about school and learning (two low values windsorized), post self-efficacy (one low value windsorized), post civic engagement (three low values windsorized), and post attitudes about school and learning (one low value windsorized). Of the predictor variables, there was no significant difference between the mean number of completed hours with the outliers removed and the windsorized number of completed hours, and three values on the high end were removed (480, 252 and 250

were changed to 240). However, there was a significant difference between windsorized required hours and required hours with outliers removed. The means were extremely close; when windsorized, the mean was 61.3 required hours, and when outliers were removed, the mean was 60.1 hours. In this case, the outlying values were removed and not windsorized.

### **Demographics, Descriptive Statistics, and Correlational Analyses**

Demographics for the overall experiential learning sample (i.e., both service-learning and internship students), just service-learning and just internship groups are presented in Table 1. All groups are predominantly female, Caucasian, and are mostly 4<sup>th</sup> year undergraduates. Besides the predominance of senior standing, these demographics are similar to the population of the university overall, which is majority Caucasian and female (Loyola, 2009). Outside of the current evaluation, no data on students enrolled in experiential learning courses have been collected, so the current sample cannot be compared to the overall population.

Sex, race/ethnicity, and class year were examined as predictors of the four outcome variables and none of them significantly predicted change in outcomes from pre to post testing. Two-hundred and seventy-nine students from both the fall and spring semesters of the 2009-2010 academic year enrolled in an experiential learning course and completed these pre and post surveys; 98 of these students were enrolled in an academic internship and 181 were enrolled in a service-learning course (Figure 1).

Table 1. Demographics for All Experiential Learning (Service-learning and Internship) Students

	All groups (SL and INT)		Service-learning (SL)		Internship (INT)	
	N	%	N	%	N	%
Service-learning	181	65	181	100	0	0
Internship	98	35	0	0	98	100
Fall semester	137	49	95	53	42	43
Spring semester	142	51	86	48	56	57
Class Year						
First year undergrad	16	6	16	8	5	5
Second year undergrad	40	14	35	19	16	16
Third year	53	19	37	20	66	67
Fourth year	147	53	81	45	11	11
5+ year	23	8	12	7	5	5
Sex						
Female	226	81	147	81.2	79	80.6
Male	47	17	31	17.1	16	16.3
Prefer not to answer	6	2	3	1.7	3	3.1
Race/Ethnicity						
Caucasian	211	76	134	74	77	79
African American	8	3	6	3	2	2
Latino/Hispanic	20	7	10	6	10	10
Asian	22	8	17	9	5	5
Multi-racial	15	5	12	7	3	3

Descriptive statistics and correlational analyses were conducted on the outcome and predictor variables. Means and standard deviations were computed for all experiential learning participants as well as separately for service-learning and academic internship students (Table 2) for both the outcome variables and the predictor variables. Correlations among all outcome and predictor variables are presented in Table 3.

Table 2. Means and Standard Deviations for All Experiential Learning Students, Service-learning Students and Internship Students in the Four Outcomes at Pre and Post testing

	All experiential learning students			Service-learning students			Internship students		
	N	Mean (SD)	Range	N	Mean (SD)	Range	N	Mean (SD)	Range
Pre Self-Efficacy	279	3.41 (0.38)	2.60-4.00	181	<b>3.39 (0.37)</b>	2.70-4.0	98	3.44 (0.40)	2.60-4.00
Post Self-Efficacy	279	3.45 (0.39)	2.29-4.00	181	<b>3.45 (0.38)</b>	2.29-4.0	98	3.46 (0.40)	2.50-4.00
Pre Civic Responsibility	279	3.86 (0.67)	1.77-4.89	181	3.88 (0.70)	1.77-4.89	98	3.84 (0.62)	2.33-4.89
Post Civic Responsibility	279	3.92 (0.63)	1.94-4.89	181	3.93 (0.66)	1.94-4.89	98	3.90 (0.58)	2.56-44.89
Pre Attitudes about Diversity	279	3.42 (0.60)	1.80-4.40	181	3.42 (0.59)	1.80-4.40	98	3.41 (0.64)	2.00-4.40
Post Attitudes about Diversity	279	3.44 (0.65)	1.60-4.40	181	3.41 (0.65)	1.60-4.40	98	3.49 (0.65)	2.00-4.40
Pre Attitudes about School and Learning	279	3.95 (0.58)	2.20-4.83	181	3.94 (0.60)	2.20-4.83	98	3.94 (0.54)	2.83-4.83
Post Attitudes about School and Learning	279	3.98 (0.57)	2.26-4.83	181	3.98 (0.60)	2.33-4.83	98	3.99 (0.53)	2.26-4.83
Required hours	247	60.46 (53.24)	0-205	164	34.04 (36.73)	0-205	83	112.6 (40.8)	3-200
Hours completed*	241	71.65 (68.91)	0-285	159	39.65 (36.57)	0-215	82	133.7 (74.5)	0-285
Engagement Attitudes*	270	8.10 (2.47)	0-10	179	7.77 (2.68)	0-10	91	8.75 (1.84)	1-10
Interest in course*	277	3.84 (1.26)	0-5	179	3.65 (1.33)	0-5	98	4.19 (1.06)	0-5
Reflection Frequency*	265	2.85 (4.08)	0-10	174	2.73 (3.97)	0-10	91	3.07 (4.3)	0-10
Reflection Amount*	229	8.77 (6.88)	.00-29.00	150	8.30 (7.03)	.00-29.0	79	9.67 (6.55)	.00-25.00

\*The N for these variables is less than the total because it is based on the amount of students who answered these questions.

Self-efficacy is a 1-4 scale; Civic Responsibility, Attitudes about Diversity, and Attitudes about school and learning are a 1-5 scale **Bold** indicates a significant difference based on time.

Table 3. Correlations for Pre and Post Outcome Variables and Predictor Variables for All Experiential Learning Students

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
preSE 1	Pre-SE 1	1	.16 <sup>+</sup> 6 <sup>+</sup>	.18 <sup>+</sup> 6 <sup>+</sup>	.28 <sup>**</sup>	.54 <sup>+</sup> 6 <sup>+</sup>	.17 <sup>+</sup> 6 <sup>+</sup>	.07	.14 <sup>+</sup>	.12	.08	.22 <sup>+</sup> 6 <sup>+</sup>	.18 <sup>+</sup> 6 <sup>+</sup>	.00	.12	.06	.03 7
	N	279	279	278	279	279	279	279	252	241	270	277	265	229	235	241	279
preCi vic 2	Pre-Outcome 2	.16 <sup>+</sup> 6 <sup>+</sup>	1	.43 <sup>+</sup> 6 <sup>+</sup>	.50 <sup>**</sup>	.10	.66 <sup>+</sup> 6 <sup>+</sup>	.38 <sup>+</sup> 6 <sup>+</sup>	.33 <sup>+</sup> 6 <sup>+</sup>	-.06	-.03	.24 <sup>+</sup> 6 <sup>+</sup>	.36 <sup>+</sup> 6 <sup>+</sup>	.04	.10	.16 <sup>+</sup> 6 <sup>+</sup>	.03 8
	N	279	279	278	279	279	279	279	279	252	241	270	277	265	229	235	241
Predi versit y 3	Pre-Outcome 3	.18 <sup>+</sup> 6 <sup>+</sup>	.43 <sup>+</sup> 6 <sup>+</sup>	1	.43 <sup>**</sup>	.09	.34 <sup>+</sup> 6 <sup>+</sup>	.52 <sup>+</sup> 6 <sup>+</sup>	.19 <sup>+</sup> 6 <sup>+</sup>	-.05	-.08	.10	.14 <sup>+</sup> 6 <sup>+</sup>	.03	.05	-.06	.01 2
	N	278	278	278	278	278	278	278	278	251	240	269	276	264	228	234	240
Preac ademi c 4	Pre-Outcome 4	.28 <sup>+</sup> 6 <sup>+</sup>	.50 <sup>+</sup> 6 <sup>+</sup>	.43 <sup>+</sup> 6 <sup>+</sup>	1	.25 <sup>+</sup> 6 <sup>+</sup>	.46 <sup>+</sup> 6 <sup>+</sup>	.27 <sup>+</sup> 6 <sup>+</sup>	.60 <sup>+</sup> 6 <sup>+</sup>	.01	-.07	.14 <sup>+</sup> 6 <sup>+</sup>	.28 <sup>+</sup> 6 <sup>+</sup>	.04	.05	.04	.03 2
	N	279	279	278	279	279	279	279	279	252	241	270	277	265	229	235	241
postS E 5	Pre-Outcome 5	.55 <sup>+</sup> 6 <sup>+</sup>	.11	.09	.25 <sup>**</sup>	1	.26 <sup>+</sup> 6 <sup>+</sup>	.10	.29 <sup>+</sup> 6 <sup>+</sup>	.08	.09	.17 <sup>+</sup> 6 <sup>+</sup>	.080	.11	.11	.07	.07 2
	N	279	279	278	279	279	279	279	279	252	241	270	277	265	229	235	241
postC ivic 6	Pre-Outcome 6	.17 <sup>+</sup> 6 <sup>+</sup>	.66 <sup>+</sup> 6 <sup>+</sup>	.34 <sup>+</sup> 6 <sup>+</sup>	.46 <sup>**</sup>	.26 <sup>+</sup> 6 <sup>+</sup>	1	.45 <sup>+</sup> 6 <sup>+</sup>	.52 <sup>+</sup> 6 <sup>+</sup>	-.06	-.06	.29 <sup>+</sup> 6 <sup>+</sup>	.32 <sup>+</sup> 6 <sup>+</sup>	.12 <sup>+</sup> 6 <sup>+</sup>	.14 <sup>+</sup> 6 <sup>+</sup>	.15 <sup>+</sup> 6 <sup>+</sup>	.05 3
	N	279	279	278	279	279	279	279	279	252	241	270	277	265	229	235	241
Postd iversit y 7	Pre-Outcome 7	.07	.38 <sup>+</sup> 6 <sup>+</sup>	.52 <sup>+</sup> 6 <sup>+</sup>	.27 <sup>**</sup>	.10	.45 <sup>+</sup> 6 <sup>+</sup>	1	.35 <sup>+</sup> 6 <sup>+</sup>	.10	.07	.10	.27 <sup>+</sup> 6 <sup>+</sup>	-.01	.12	-.03	.11 9
	N	279	279	278	279	279	279	279	279	252	241	270	277	265	229	235	241
Posta cade mic 8	Pre-Outcome 8	.14 <sup>+</sup> 6 <sup>+</sup>	.33 <sup>+</sup> 6 <sup>+</sup>	.19 <sup>+</sup> 6 <sup>+</sup>	.60 <sup>**</sup>	.29 <sup>+</sup> 6 <sup>+</sup>	.52 <sup>+</sup> 6 <sup>+</sup>	.35 <sup>+</sup> 6 <sup>+</sup>	1	.02	-.05	.18 <sup>+</sup> 6 <sup>+</sup>	.27 <sup>+</sup> 6 <sup>+</sup>	.13 <sup>+</sup> 6 <sup>+</sup>	.12	.09	.01 1
	N	279	279	278	279	279	279	279	279	252	241	270	277	265	229	235	241
Requi red hours 9	Pre-Outcome 9	.10	-.04	-.01	.01	.07	-.04	.11	.01	1	.78 <sup>+</sup> 6 <sup>+</sup>	.21 <sup>+</sup> 6 <sup>+</sup>	.16 <sup>+</sup> 6 <sup>+</sup>	.02	.30 <sup>+</sup> 6 <sup>+</sup>	-.04	.32 <sup>+</sup> 6 <sup>+</sup>
	N	247	247	247	247	247	247	247	247	247	230	242	245	238	210	230	230
Comp leted hours 10	Pre-Outcome 10	.08	-.03	-.08	-.07	.09	-.06	.07	-.05	.82 <sup>+</sup> 6 <sup>+</sup>	1	.16 <sup>+</sup> 6 <sup>+</sup>	.11	.01	.15 <sup>+</sup> 6 <sup>+</sup>	.25 <sup>+</sup> 6 <sup>+</sup>	.46 <sup>+</sup> 6 <sup>+</sup>
	N	241	241	240	241	241	241	241	241	235	241	237	239	233	205	235	241
Enga geme nt Attitu des 11	Pre-Outcome 11	.22 <sup>+</sup> 6 <sup>+</sup>	.24 <sup>+</sup> 6 <sup>+</sup>	.10	.14 <sup>+</sup> 6 <sup>+</sup>	.17 <sup>+</sup> 6 <sup>+</sup>	.29 <sup>+</sup> 6 <sup>+</sup>	.10	.18 <sup>+</sup> 6 <sup>+</sup>	.23 <sup>+</sup> 6 <sup>+</sup>	.16 <sup>+</sup> 6 <sup>+</sup>	1	.38 <sup>+</sup> 6 <sup>+</sup>	.12 <sup>+</sup> 6 <sup>+</sup>	.27 <sup>+</sup> 6 <sup>+</sup>	.18 <sup>+</sup> 6 <sup>+</sup>	.31 <sup>+</sup> 6 <sup>+</sup>
	N	270	270	269	270	270	270	270	270	247	237	270	268	265	229	231	237
Pre- intere st 12	Pre-Outcome 12	.18 <sup>+</sup> 6 <sup>+</sup>	.36 <sup>+</sup> 6 <sup>+</sup>	.14 <sup>+</sup> 6 <sup>+</sup>	.28 <sup>**</sup>	.08	.32 <sup>+</sup> 6 <sup>+</sup>	.27 <sup>+</sup> 6 <sup>+</sup>	.27 <sup>+</sup> 6 <sup>+</sup>	.20 <sup>+</sup> 6 <sup>+</sup>	.11	.38 <sup>+</sup> 6 <sup>+</sup>	1	.16 <sup>+</sup> 6 <sup>+</sup>	.26 <sup>+</sup> 6 <sup>+</sup>	.08	.18 <sup>+</sup> 6 <sup>+</sup>
	N	277	277	276	277	277	277	277	277	250	239	268	277	263	227	233	239
Refle ction frequ ency 13	Pre-Outcome 13	.00	.04	.03	.04	.11	.12 <sup>+</sup> 6 <sup>+</sup>	-.01	.13 <sup>+</sup> 6 <sup>+</sup>	.00	.01	.12 <sup>+</sup> 6 <sup>+</sup>	.16 <sup>+</sup> 6 <sup>+</sup>	1	.16 <sup>+</sup> 6 <sup>+</sup>	-.00	.15 <sup>+</sup> 6 <sup>+</sup>
	N	265	265	264	265	265	265	265	265	243	233	265	263	265	227	227	233



Table 3. Correlations for Pre and Post Outcome Variables and Predictor Variables for All Experiential Learning Students (continued)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Reflection Amount 14	Reflection	.12	.10	.05	.05	.11	.14*	.12	.12	.29*	.15*	.27*	.26*	.16*	1	.06	.20*	.15*
	N	229	229	228	229	229	229	229	229	214	205	229	227	227	229	202	205	229
Exceeded hours 15	Exceeded	.06	.16*	-.06	.04	.07	.15*	-.03	-.09	.00	.25*	.18*	.08	-.00	.06	1	.38*	.08
	N	235	235	234	235	235	235	235	235	235	235	231	233	227	202	235	235	235
20+ hours completed	20+ hours	.03	.03	-.01	-.13*	.07	.05	.11	-.01	.32*	.46*	.31*	.18*	.15*	.20*	.38*	1	-.04
	N	241	241	240	241	241	241	241	241	235	241	237	239	233	205	235	241	241
Any reflection	Any reflection	.07	.08	.02	-.02	.02	-.03	-.09	-.11	.08	.07	.10	-.07	-.01	.15*	.08	-.04	1
	N	279	279	278	279	279	279	279	279	252	241	270	277	265	229	235	241	279

\*\* Correlation is significant at the 0.01 level (2-tailed); \*Correlation is significant at the 0.05 level (2-tailed); SE= Self-efficacy; Civic= Civic responsibility; Diversity=

Attitudes about diversity; Academic= Attitudes about school and learning

### Hypotheses 1-13

Because of the large number of hypotheses with several sub-analyses included,

Table 4 gives a summary of significant, and moderately significant, effects found.

#### Hypotheses 1a-d: All experiential learning

The first hypotheses that enrollment in an experiential learning course (i.e., either service-learning or academic internship) would produce statistically significant increases in self-efficacy, civic responsibility, attitudes about diversity and attitudes about school and learning from pre-testing to post testing, was not supported. Through a series of univariate repeated measure ANOVAs, the effect of time was examined; experiential learning students (both service-learning and internship students together) experienced no significant differences from pre to post testing on any of the four outcome measures. Means and standard deviations are presented in Table 2.

**Hypotheses 2a-d: Just service-learning**

The next hypotheses suggested that enrollment in a service-learning course would produce statistically significant increases in self-efficacy, civic responsibility, attitudes about diversity and attitudes about school and learning from pre-testing to post testing, were only partially supported. Through a series of univariate repeated measure ANOVAs, the effect of time was examined; service-learning students exhibited a statistically significant increase from pre to post only in self efficacy:  $F(1,180) = 5.16$   $p = .02$ . No significant differences emerged with civic responsibility, attitudes about diversity or attitudes about school and learning. Means and standard deviations are presented in Table 2.

**Hypotheses 3a-d: Just academic internships**

It was hypothesized that enrollment in academic internships would produce statistically significant increases in self-reported student outcomes (self efficacy, civic responsibility, attitudes about diversity and attitudes about school and learning) from pre-testing to post testing. Through a series of univariate repeated measure ANOVAs, the effect of time was examined and these hypotheses were not supported. Means and standard deviations are presented in Table 2.

Table 4. Overview of Effects of All Hypotheses

Hypotheses	Self-efficacy	Civic Responsibility	Attitudes about diversity	Attitudes about school and learning
Experiential learning pre to post (hypotheses 1a-d ANOVA)	No	No	No	No
Service-learning pre to post (hypotheses 2a-d ANOVA)	$F(1,180)$ $p=5.16^*$	No	No	No
Internships pre to post (hypotheses 3a-d ANOVA)	No	No	No	No
Service-learning vs. internship (hypotheses 4a-d ANCOVA)	No	No	No	No
Service-learning vs. Service-focused (hypotheses 5a-d ANCOVA, Stanford Sample)	No	No	No	No
Exceeded hours (hypotheses 6a-d ANCOVA)	No	No	No	No
More than 20 hours (hypotheses 7a-d ANCOVA)	No	No	No	Interaction: $F(2,239)$ $p=5.06^*$
More <i>required</i> hours (hypotheses 8.1a-d regression)	No	No	No	No
More completed hours (hypotheses 8.2a-d regression)	No	No	Linear: $B=.00$ , $\beta = .104$ , $t(239)=1.91$ , $p = .057$ , $R^2\Delta=.00$	No
Engagement in course (post) (hypotheses 9a-d regression)	Quadratic: $B=.01$ , $\beta=.85$ , $t(269)=4.96^{**}$ , $R^2\Delta=.04$	Linear: $B= .04$ , $\beta = .133$ , $t(269)=2.86^{**}$ , $R^2\Delta=.016$ ; Quadratic: $B=.02$ , $\beta= .73$ , $t(269)=3.93^{**}$ , $R^2\Delta=.03$	No	Linear: $B=.02$ , $\beta =.10$ , $t(269)=1.92$ , $p = .056$ $R^2\Delta=.01$ ; Quadratic: $B=.01$ , $\beta=.66$ , $t(269)=3.29^{**}$ , $R^2\Delta=.02$

\* $p<.05$ , \*\* $p<.01$

Table 4. Overview of Effects of All Hypotheses (continued)

Interest in course (pre) (hypotheses 10a-d regression)	No	Linear: $B = .05$ , $\beta = .10$ , $t(276) = 2.05^*$ , $R^2\Delta = .01$	Linear: $B = .11$ , $\beta = .21$ , $t(275) = 4.09^{**}$ , $R^2\Delta = .04$	Linear: $B = .05$ , $\beta = .11$ , $t(276) = 2.31^*$ , $R^2\Delta = .01$
Any Reflection vs. no reflection (hypotheses 11a-d ANCOVA)	Main effect for condition: $F(1,277) = 3.84$ , $p = .051$	Main effect for condition: $F(1,277) = 7.93^{**}$ ; Interaction: $F(2,276) = 5.26^*$	Interaction: $F(2,276) = 4.29^*$	Main effect for condition: $F(1,277) = 7.72$ , $p = .055$
Reflection Frequency (hypotheses 12a-d regression)	Linear: $B = .01$ , $\beta = .10$ , $t(264) = 2.03^*$ , $R^2\Delta = .01$	Linear: $B = .02$ , $\beta = .10$ , $t(264) = 2.10^*$ , $R^2\Delta = .01$	No	Linear: $B = .02$ , $\beta = .11$ , $t(264) = 2.26^*$ , $R^2\Delta = .31$
Amount of reflection (hypotheses 13a-d regression)	No	No	No	No

\* $p < .05$ , \*\* $p < .01$

#### **Hypotheses 4a-d: Service-learning vs. academic internship**

Hypotheses 4a-d examined the time by condition effects. That is, if a significant difference between academic internship and service-learning students existed, taking into account the students' pre-test scores. Univariate repeated measure ANCOVAs with a within subjects analysis of condition (service-learning or internship) were used to examine the time by condition effects. No data supported these hypotheses; there were no significant differences between groups. Means and standard deviations are presented in Table 2.

#### **Hypotheses 5a-d: Service-learning vs. service-focused courses in the Stanford sample**

Hypotheses 5a-d involved the Stanford University sample. It stated that enrollment in a service-learning course will produce statistically significant increases in

self-reported student outcomes (self efficacy, civic responsibility, attitudes about diversity and attitudes about school and learning) as compared to enrollment in a service-focused course. Service-learning courses were defined as any course that had a direct service component, including group projects, and that resulted in contact with the community in some way. Service-focused courses simply discussed the importance of being civically involved, but did not require any contact with the community or service as part of the course.

The Stanford sample was much smaller; 30 service-learning students and 24 service-focused students completed the pre-testing, and 17 service-learning students and 13 service-focused students completed post testing. When matched by email address, only 7 students in service-learning courses completed both pre and post testing, and 8 students in service-focused courses completed pre and post testing. All students completed the outcome measures so imputation was unnecessary. Outcome values were examined and there were no outliers.

Hypotheses 5a-d examined the time by condition effects. That is, if a significant difference between service-learning and service-focused students existed, taking into account the students' pre-test scores. A univariate repeated measure ANCOVA with a within subjects analysis of condition (service-learning or service-focused) was used to examine the time by condition effects. No data supported these hypotheses; there were no significant differences between groups.

### **Hypotheses 6a-d: Experiential learning students exceeding required hours**

It was hypothesized that students who exceeded their required amount of direct service hours would produce significantly higher scores in self-reported student outcomes (self efficacy, civic responsibility, attitudes about diversity and attitudes about school). The difference between number of required hours and the number of hours that students reported they actually completed was calculated and a new variable was created. From there, a binary code (0=met the hour requirement or did not complete it and 1= exceeded hour requirement) was created to identify the students who exceeded their required hours and students who did not meet, or just met, their required hours. Since not all students reported the number of hours required of them, or that they completed, the number of students in this analysis is less than the complete number of experiential learning students who participated in this study (i.e., the overall  $N=279$ , but the  $n$  in this analysis is 235).

A series of univariate repeated measure ANCOVAs with a within subjects analysis of condition were used to examine the time by condition effects. There were no significant differences between the groups in any of the four outcome variables. No main effect for condition (i.e., exceeded hours or not) were found.

### **Hypotheses 7a-d: Experiential learning students completing more than 20 hours of direct service**

Hypotheses 7a-d posited that students in experiential learning courses who completed more than 20 hours of direct service would produce significantly higher scores in self-reported student outcomes (self efficacy, civic responsibility, attitudes

about diversity and attitudes about school and learning) as compared to students who completed 20 hours or fewer.

A series of univariate repeated measure ANCOVAs with a within subjects analysis of condition (i.e., the binary was 20 or under hours=0, and 21+hours=1) were used to examine the effects by time and effects by both time and condition. However, because the  $n$  of these two groups is so disparate (52 and 189, under and over 20 hours, respectively), the results should be interpreted cautiously. In addition, not all students reported the amount of hours required of them or that they completed, thus the number of students in this analysis does not add up to 279 ( $n$  in this analysis is 241). Given the precaution, it appears that there is a significant time by group interaction in attitudes about school and learning. Meaning that students who exceeded 20 hours increased at post-testing in attitudes about school and learning and those students who did not complete more than 20 hours decreased from pre to post in attitudes about school and learning (  $F(2,239)=5.06$ ,  $p=.03$ ) (Table 5). These effects are presented visually in Figure 2.

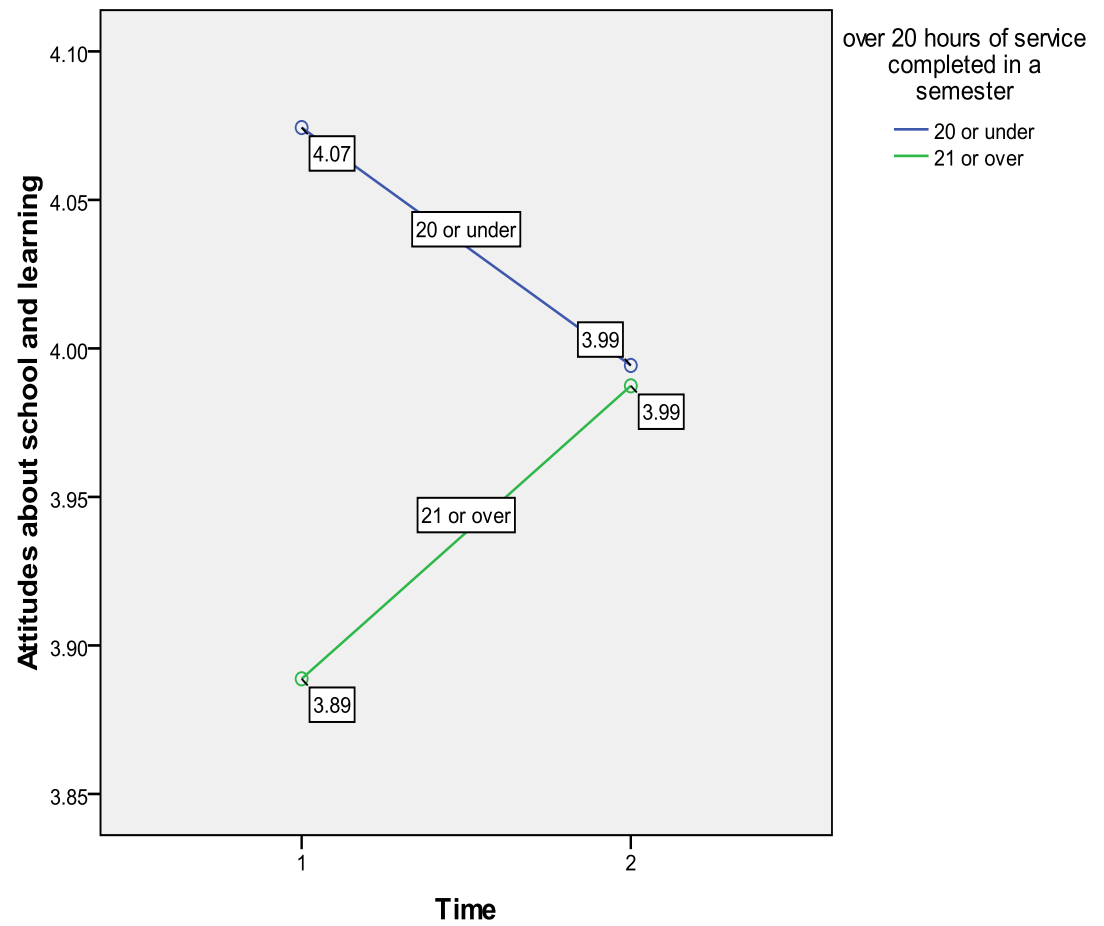


Figure 2. Interaction effects between time (pre=Time 1, post = Time 2) and condition (20 hours or under vs. over 20 hours) in attitudes about school and learning (Hypothesis 7d).



### **Hypotheses 8a-d: Experiential learning students with more direct service hours**

It was hypothesized that students in experiential learning courses with more direct service hours would produce significantly higher scores in self-reported student outcomes (self efficacy, civic responsibility, attitudes about diversity and attitudes about school and learning) as compared to students who completed fewer direct service hours. Because the original proposal was not specific, both service hours *required* by the instructor and service hours *completed* by the student (both as reported by students) were analyzed in separate regressions. The dependent measure entered into the regression was the post score of the outcome variables, with the first step controlling for the pre-score and gender, and the next step entered was the type of hours (required or completed). Data supported that more completed service hours predicted linear increases in attitudes about diversity, but none of the other outcome variables experienced significant change.

A linear regression analysis revealed that *completed* hours predicted an almost significant, positive change in attitudes about diversity ( $B=.00$ ,  $\beta = .10$ ,  $t(239) = 1.91$ ,  $p = .057$ ,  $R^2\Delta=.00$ ). That is, students who reported completing more service hours reported a more positive increase from pre to post testing in attitudes about diversity. Otherwise, hours, both completed and required, did not significantly predict change in any other outcome (i.e., self-efficacy, civic responsibility, attitudes about school and learning). No significant quadratic relationship existed for either completed or required hours for any of the four outcome measures.

### **Hypotheses 9a-d: Feelings of engagement in experiential learning students**

Hypotheses 9a-d posited that students who reported feeling more engaged in their course at post testing would produce significantly higher scores in self-reported student outcomes (self efficacy, civic responsibility, attitudes about diversity and attitudes about school and learning) as compared to students who reported feeling less engaged. The dependent measure entered into the stepwise regression was the post score of the outcome variables, with the first step controlling for the pre-score and gender, and the next step entered was the amount of engagement the student reported feeling in the course at post testing.

A linear regression analysis revealed that engagement predicted a positive change in civic responsibility ( $B = .04$ ,  $\beta = .13$ ,  $t(269) = 2.86$ ,  $p = .01$ ,  $R^2\Delta = .02$ ), when pre-attitudes about civic responsibility and gender were both controlled. Further, engagement was moderately significant ( $B = .02$ ,  $\beta = .10$ ,  $t(269) = 1.92$ ,  $p = .056$ ,  $R^2\Delta = .01$ ) in predicting change in attitudes about school and learning. Thus, students who reported higher levels of engagement in the service project at post reported significantly higher levels of positive change in civic responsibility, and to a lesser degree, attitudes about school and learning. There were no significant effects for self-efficacy and attitudes about diversity.

Further analysis revealed quadratic relationships between engagement and self-efficacy, civic responsibility and attitudes about school and learning. Once the linear term was controlled, engagement predicted a positive change quadratically in self-efficacy ( $B = .01$ ,  $\beta = .85$ ,  $t(269) = 4.96$ ,  $p = .00$ ,  $R^2\Delta = .04$ ), civic responsibility ( $B = .02$ ,  $\beta =$

.73,  $t(269)=3.93$ ,  $p=.00$ ,  $R^2\Delta=.03$ ) and attitudes about school and learning ( $B=.01$ ,  $\beta=.66$ ,  $t(269)=3.29$ ,  $p=.00$ ,  $R^2\Delta=.02$ ). Quadratic values were computed by entering gender and pre-values in the first step of the regression, engagement in the second step, and the value for engagement multiplied by itself (i.e., squared) for the final step. Although the relationship between engagement and self-efficacy only looks mildly quadratic in Figure 3, it indicates that at higher levels of engagement there is a stronger relationship with self-efficacy.

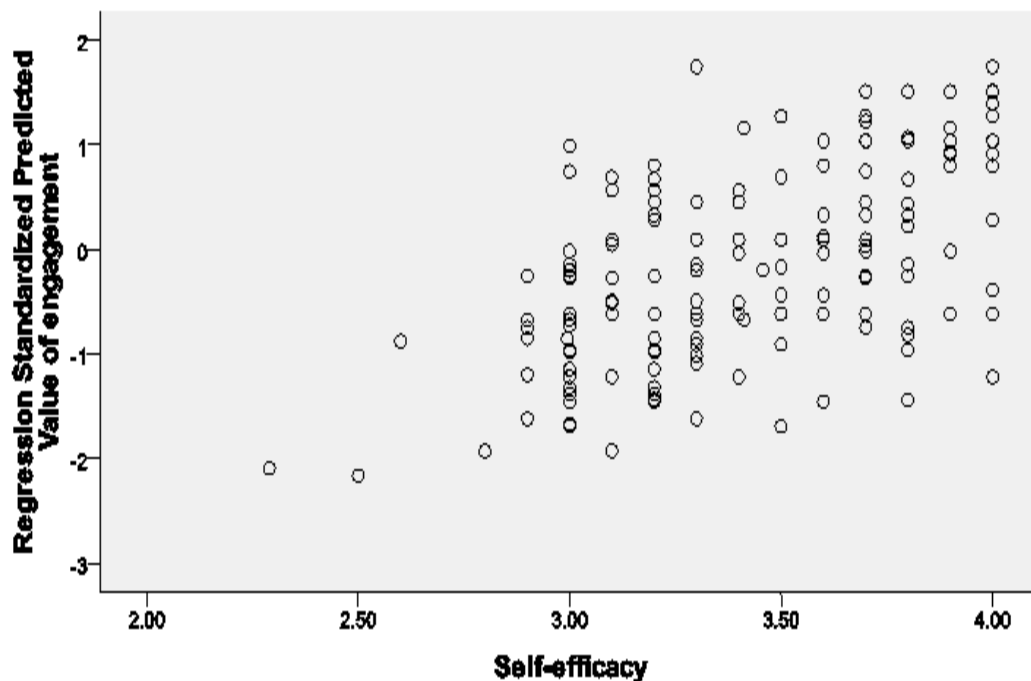


Figure 3. Quadratic relationship between engagement and self-efficacy (Hypothesis 9a)

### **Hypotheses 10a-d: Feelings of interest in experiential learning students.**

It was hypothesized that students who reported feeling more interested in the course topic at pre-testing would produce significantly higher scores in self-reported student outcomes (self efficacy, civic responsibility, attitudes about diversity and attitudes about school and learning) as compared to students who reported feeling less interested in the topic. Using a stepwise regression, the dependent measure was the post score of the outcome variables, with the first step controlling for the pre-score and gender, and the next step entered was the degree of interest the student had in the course topic at pre-testing.

Support was obtained for these hypotheses on three out of the four outcome variables. A linear regression analysis indicated that more interest in a course at pre-testing predicted a positive change in civic responsibility from pre to post testing ( $B = .05$ ,  $\beta = .10$ ,  $t(276) = 2.05$ ,  $p = .04$ ,  $R^2\Delta = .01$ ). Further, higher interest predicted a positive change in attitudes about diversity ( $B = .11$ ,  $\beta = .21$ ,  $t(275) = 4.09$ ,  $p = .00$ ,  $R^2\Delta = .04$ ). And, finally, interest was a significant predictor of positive change in attitudes about school and learning ( $B = .05$ ,  $\beta = .11$ ,  $t(276) = 2.31$ ,  $p = .02$ ,  $R^2\Delta = .01$ ). No significant quadratic relationships were found.

### **Hypotheses 11a-d: Experiential learning students involved in any vs. no reflection**

Hypotheses 11a-d stated that students involved in any reflection would produce significantly higher scores in self-reported student outcomes (self efficacy, civic responsibility, attitudes about diversity and attitudes about school and learning) as compared to students who did not use any reflection. In the survey, students were asked

if certain reflection types were offered, such as reflection journals/essays, research papers with personal reflection sections, online “blackboard” discussion boards, or any other types of reflection. Students who endorsed participating in any of these activities were coded as a “1” in a binary code of “any reflection” and those students who reported “no reflection” were coded as “0.” A series of univariate repeated measure ANCOVAs with a within subjects analysis of condition (i.e., binary= any reflection vs. no reflection) were used to examine the time by condition effects. However, because the *n* of these two groups is so disparate (i.e., 53 students did not report reflection and 225 reported reflection) the results should be interpreted cautiously. Given the precaution, data indicate that there was an interaction effect between students who participated in reflection or not and time in civic responsibility  $F(2,276) = 5.26, p = .02$  (Figure 4), and attitudes about diversity  $F(2,276) = 4.29, p = .04$ , after controlling for pre-testing values (Figure 5).

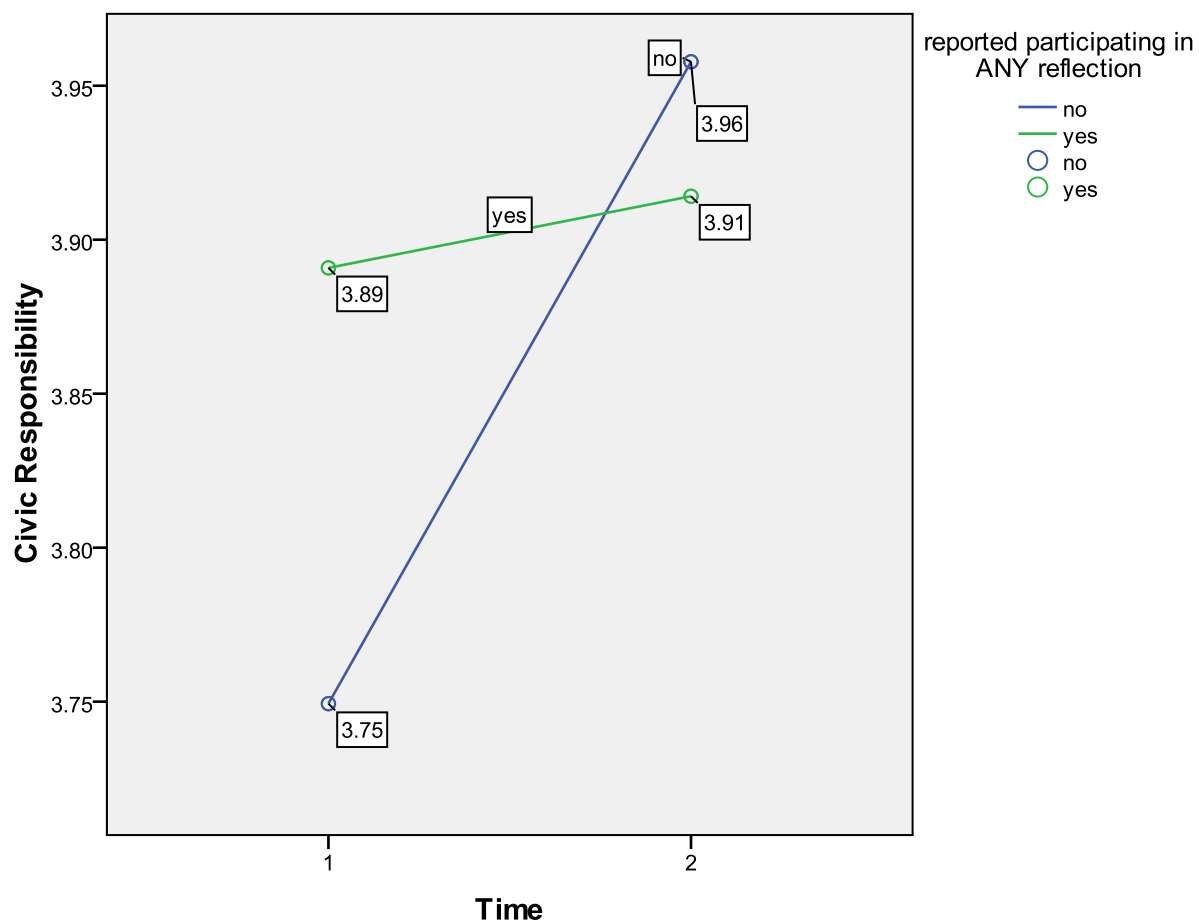


Figure 4. Interaction effects between time (pre=Time 1, post =Time 2) and condition (any reflection vs. no reflection) for civic responsibility (Hypothesis 10b).

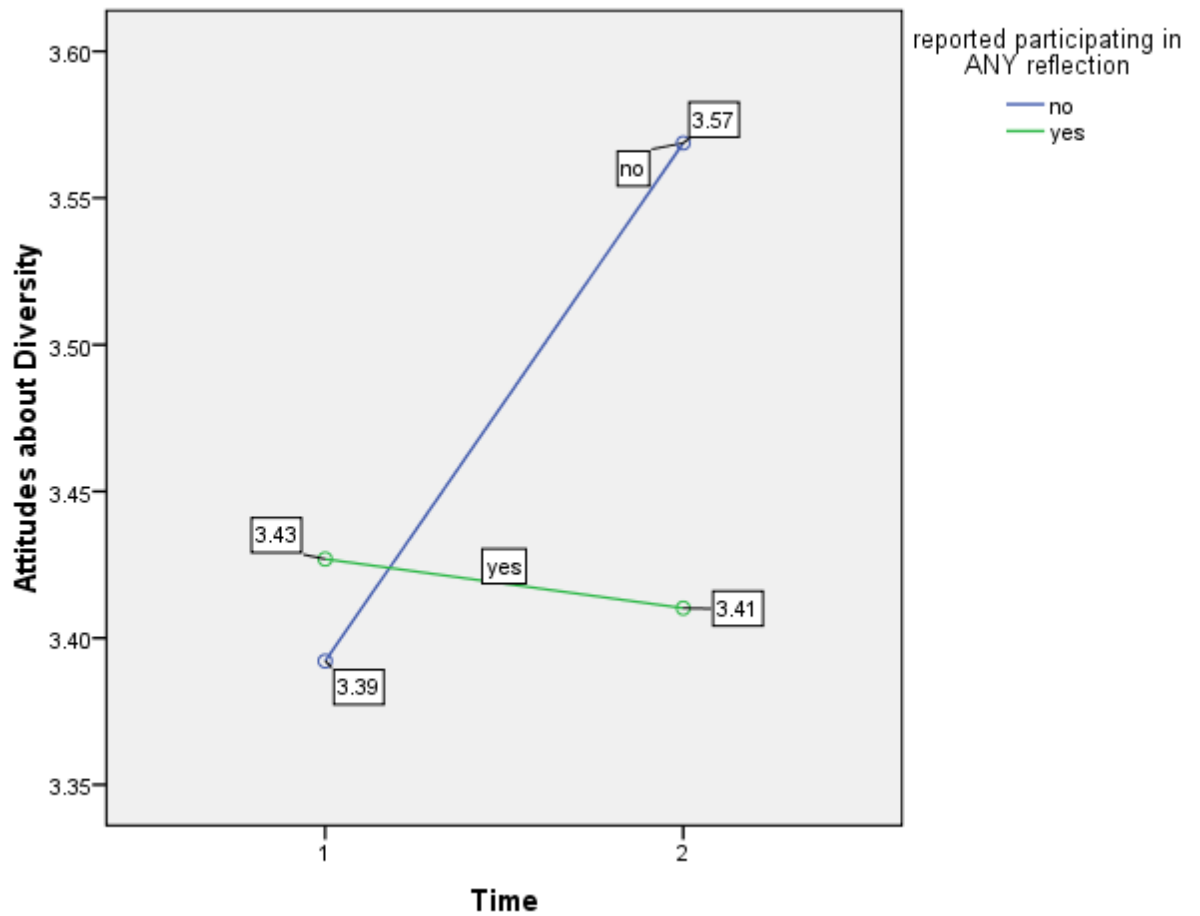


Figure 5. Interaction effect between time (pre=Time 1, post =Time 2) and condition (any reflection vs. no reflection) for attitudes about diversity (Hypothesis 10c).

A main effect for condition was significant in civic responsibility,  $F(1,277) = 7.93$ ,  $p = .01$ , and nearly significant for both self efficacy,  $F(1,277) = 3.84$ ,  $p = .051$  and attitudes about school and learning,  $F(1,277) = 7.72$ ,  $p = .055$ . That is, students who participated in any reflection were significantly, or nearly significantly, different from students who reported having no reflection in three of the four outcome measures when pre-scores were not controlled. Means and standard deviations are presented in Table 6.

Table 5. Means and Standard Deviations of Students Who Reported Using Any or No Reflection in Their Courses (Hypotheses 11a-d)

		N	Mean	SD
Pre Self-efficacy	No Reflection	53	3.36	.42
	Any Reflection	225	3.42	.37
Post Self-efficacy(1)	No Reflection	53	3.43	.35
	Any Reflection	225	3.45	.39
<b>Pre Civic Responsibility</b>	<b>No Reflection</b>	<b>53</b>	<b>3.75</b>	<b>.65</b>
	<b>Any Reflection</b>	<b>225</b>	<b>3.89</b>	<b>.68</b>
<b>Post Civic Responsibility(2)(3)</b>	<b>No Reflection</b>	<b>53</b>	<b>3.96</b>	<b>.54</b>
	<b>Any Reflection</b>	<b>225</b>	<b>3.91</b>	<b>.66</b>
<b>Pre Attitudes about Diversity</b>	<b>No Reflection</b>	<b>53</b>	<b>3.39</b>	<b>.63</b>
	<b>Any Reflection</b>	<b>225</b>	<b>3.43</b>	<b>.60</b>
<b>Post Attitudes about Diversity(4)</b>	<b>No Reflection</b>	<b>53</b>	<b>3.57</b>	<b>.53</b>
	<b>Any Reflection</b>	<b>225</b>	<b>3.41</b>	<b>.67</b>
Pre Attitudes about school and learning	No Reflection	53	3.97	.52
	Any Reflection	225	3.94	.59
Post Attitudes about school and learning(5)	No Reflection	53	4.11	.43
	Any Reflection	225	3.95	.60

(1)Main effect for condition:  $F(1,277) = 3.84, p = .051$

(2)A main effect for condition =  $F(1,277) = 7.93, p < .01$

(3)Interaction effect =  $F(2,276) = 5.26, p < .05$

(4)Interaction effect =  $F(2,276) = 4.29, p < .05$

(5)Main effect for condition:  $F(1,277) = 7.72, p = .055$

**Bold** indicates significant effects

### **Hypotheses 12a-d: Experiential learning students with more frequent reflection**

It was hypothesized that students with more frequent reflection would produce significantly higher scores in self-reported student outcomes (self efficacy, civic responsibility, attitudes about diversity and attitudes about school and learning) as compared to students with less frequent reflection. Using a stepwise regression, the dependent measure entered was the post score of the outcome variables, with the first step controlling for the pre-score and gender, and the next step entered was the frequency of reflection the student reported (e.g., from did not



engage in any reflection when offered, to engaged in reflection every time it was available).

Data supported these hypotheses in three of the four outcome variables. A linear regression analysis revealed that frequency of reflection predicted a positive change in self-efficacy ( $B=.01$ ,  $\beta = .10$ ,  $t(264) = 2.03$ ,  $p = .04$ ,  $R^2\Delta=.01$ ). Another linear regression analysis revealed that frequency of reflection predicted a positive change in civic responsibility ( $B= .02$ ,  $\beta = .10$ ,  $t(264), 2.10$ ,  $p = .04$ ,  $R^2\Delta=.01$ ). And, finally, more frequent reflection predicted a positive change in attitudes about school and learning ( $B= .02$ ,  $\beta= .11$ ,  $t(264) =2.26$ ,  $p = .02$ ,  $R^2\Delta=.31$ ). Thus, students who reported engaging in reflection activities more frequently reported higher levels of self-efficacy, civic responsibility and attitudes about school and learning as well. No significant quadratic relationships existed.

Table 6. Means and Standard Deviations for Students Who Completed 20 Hours or Under and Students Who Completed 21 Hours or Over (Hypotheses 7a-d).

		N	Mean	SD
Pre Self-efficacy	20 hour or under	52	3.93	.38
	21 hours or over	189	3.42	.38
Post Self-efficacy	20 hour or under	52	3.40	.41
	21 hours or over	189	3.47	.39
Pre Civic Responsibility	20 hour or under	52	3.82	.72
	21 hours or over	189	3.87	.64
Post Civic Responsibility	20 hour or under	52	3.86	.74
	21 hours or over	189	3.94	.59
Pre Attitudes about Diversity	20 hour or under	52	3.4	.59
	21 hours or over	189	3.39	.62
Post Attitudes about Diversity	20 hour or under	52	3.29	.68
	21 hours or over	189	3.45	.64
Pre Attitudes about School and Learning*	20 hour or under	52	4.07	.61
	21 hours or over	189	3.89	.59
Post Attitudes about School and Learning	20 hour or under	52	3.99	.66
	21 hours or over	189	3.99	.58

\* Time x condition =  $F(2,239) = 5.06, p < .05$

### **Hypotheses 13a-d: Experiential learning students with more reflection (quantity)**

The final hypothesis suggested that students who participated in more reflection would produce significantly higher scores in self-reported student outcomes (self efficacy, civic responsibility, attitudes about diversity and attitudes about school and learning) as compared to students who had less reflection. A composite score was calculated summing the amount of reflection activities the students reported using (e.g., adding number of reflection essays and amount of online blackboard comments etc). Using a stepwise regression, the dependent measure entered was the post score of the outcome variables, with the first step controlling for the pre-score and gender, and the next step entered was the amount of reflection the student reported completing.

No data supported these hypotheses. Amount of reflection did not significantly predict change in self-efficacy, civic responsibility, attitudes about school and learning or attitudes about diversity in this sample. No significant quadratic relationship existed.

### **Exploratory Data Analysis**

To elucidate some of these quantitative results, students were asked two open-ended questions at post testing. The first question stated: Has this service/internship experience created new opportunities for you (e.g., a job, another internship, etc)? The second questions asked if the student had any other comments. One hundred and eighty (180) students responded about new opportunities, and 79 students reported other comments. Overall, the comments were mostly positive, with 77% of experiential learning students responding positively in the comments. When split into service-learning and internship groups, the percentages were roughly similar, with slightly over three quarters of the students who responded, giving positive feedback.

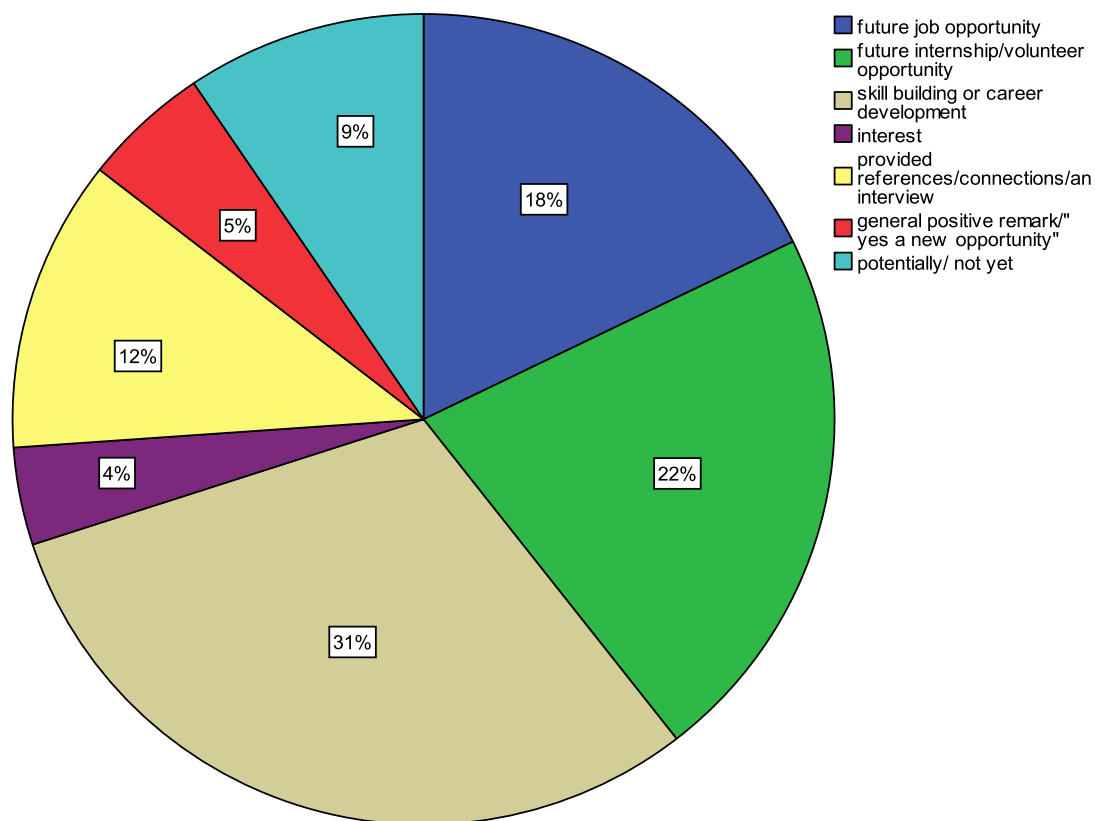


Figure 6. Responses to the question: Has this service/internship experience created new opportunities for you (e.g., a job, another internship, etc)? (All experiential learning)

### **New opportunities**

The qualitative data were examined and grouped thematically. Figure 6 displays the types of new opportunities students were offered and figures 7 and 8 indicate the types of opportunities reported by service learning and internship students, respectively. By far, the opportunity that students reported they were offered was in the career development category. For example, students reported that they explored career possibilities and gained work experience, viewing the experiential learning process as a way to build relationships in the fields in which they are interested (for a full list of responses to the open ended questions, see Appendix H). Alternately, a student commented that it allowed her to understand that she would *not* like to pursue a career in the field in which she did her service. This service also provided students with experiences to highlight on their resumes.

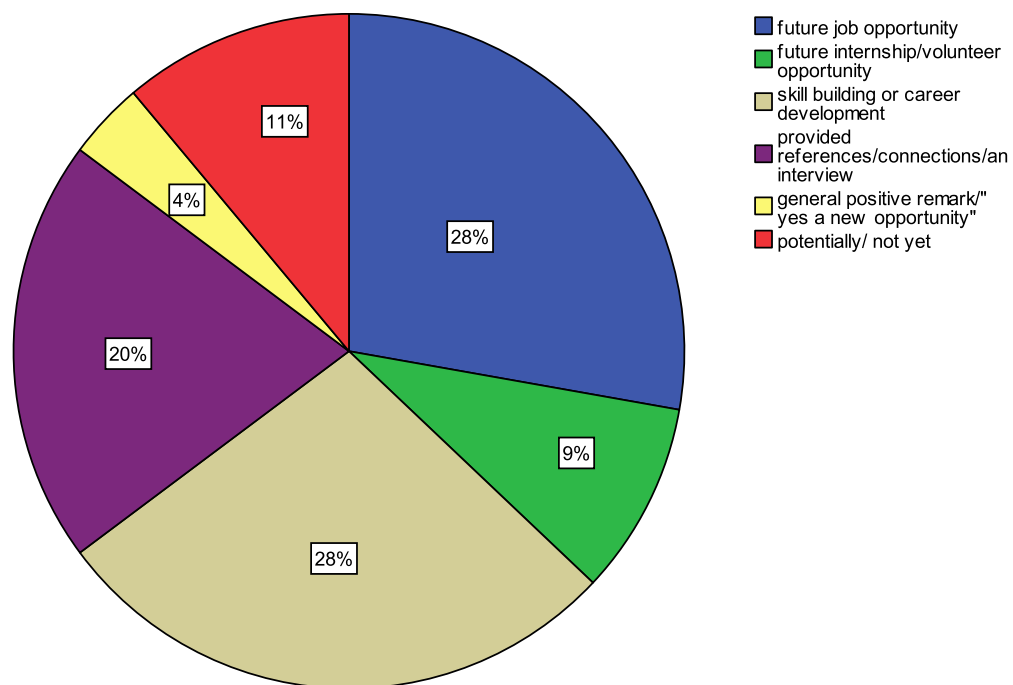


Figure 7. Service-learning student responses to the question: Has this service/internship experience created new opportunities for you (e.g., a job, another internship, etc)?

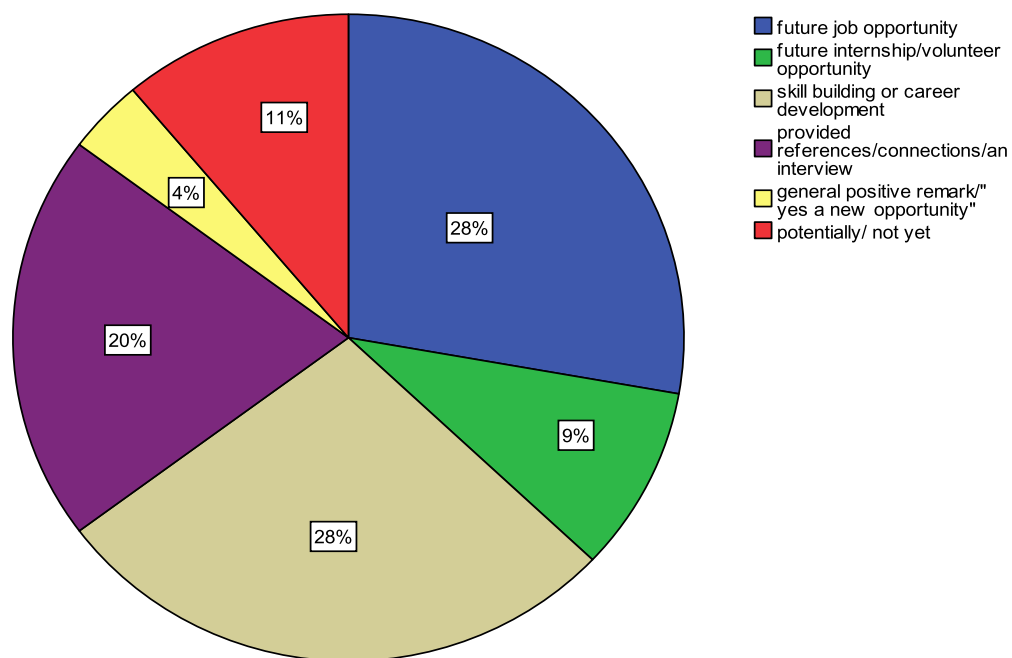


Figure 8. Internship student responses to the question: Has this service/internship experience created new opportunities for you (e.g., a job, another internship, etc)?

Twenty-two percent of students who responded commented that they were going to continue their service or work at their internship site. And perhaps most importantly in the current economic climate, 18% of experiential learning students responding (28% of internship students and 13% of service learning students) said that this experience led to a job offer. Twelve percent of experiential learning students said that it led to strong references, connections to eventually find a job, or an interview somewhere. Students also reported that it increased their interest.

### **Additional comments**

When given the opportunity to give additional feedback, student responses varied. A full list of responses to this question is included in Appendix I. Some students commented on the challenges of integrating service into a course and their frustrations. The following are quotes from three different students:

Trying to teach community service 'theory' in a classroom does not work. It would have been a more productive classroom experience if we spent less [time] listening to lecture about the theories behind 'why' we do service, and more time working in small groups talking about our actual experiences, and relating them somehow to each other. Community service is a concrete thing. Trying to abstract-ify it with theories and models does not really improve our ability to serve our communities better.

While the course is interesting it did practically nothing in terms of whatever 'civic engagement' is supposed to be. In fact, I still don't know what 'civic' engagement' is.

The course was not very well run and once we completed our 'service' I didn't feel like we had bettered the community whatsoever.

Several of the comments remarked on how the classroom part of the course was arranged. The following are quotes from four different students:



This service learning experience was completely disorganized. Our class did not receive the direction for the project until the week before Spring Break. Most of the groups in the class had difficulty contacting people for permission to complete the projects in their selected locations. This project needs to be introduced and groups need to be chosen the first week of class.

I found it EXTRAORDINARILY difficult to find time to complete service activities, because I was unavailable for most of the service hour opportunities. Class time was fine.

I wish the number of hours a week required for 6 credit hours was slightly less.

I feel like the service learning requirement was inappropriate given the semester and nature of the class. Many of the volunteer centers given to us closed for the winter shortly after classes started. Many others were unresponsive to emails and phone calls that I made. Also, with the exception of a few documentaries with subsequent discussions, the opportunities for volunteerism almost always fell on weekends or were out of range of public transit. This puts an unnecessary stress on students with jobs and students without cars, like myself.

Some students commented on the reflection aspect of their course, and offered contrasting opinions. The following are quotes from four different students:

Too many journals to write in the course. The only way to get an A is by getting 100% in the course, a 99.99% is an A-, this is not fair and should not be so.

The final research paper was more of a pain than anything, I feel the reflections were more effective.

I would have liked the same amount of reflection activities but spread out throughout the course, and not have an 18 page paper due on the last day of class

Although reflections are great, after every visit is too much. A reflection on important events is more defining.

A few students used this question to express frustration at the lack of “service” in their service. The following are quotes from two different students:

This should not be considered 'civic engagement.' We were all just doing research and data entry for people who are actually employed by CURL. Free

assistance to a business should not count as helping the community. This organization is not charitable or doing anything to help the community. Loyola should consider charitable organizations for its civic engagement requirements so they can actually help people in need, or at least work for a charity that helps people.

The partnership between a not-for-profit and a class like this should exist only in a way that is structured around the services that students can provide. This class should be taken over by the social work department so that students with knowledge of social services can be involved.

Although in the minority, some responses were purely negative and students expressed their frustration in having this class as a requirement. The following are quotes from two different students:

I hated having to give my time to this project. I hated it. I cannot stress enough how much of a waste of time I felt this requirement was--it was difficult to fulfill and left me no better of a person than when I began. Let me be clear: I have loved my experiences at Loyola. I am leaving LUC a much better educated, well-rounded person, but in NO WAY did this course contribute to that. My time was wasted, and as a graduating senior with more things on my plate than I could count, it was a frivolous and frustrating experience.

I don't think that service learning should be a required thing. Or at least shouldn't have to take classes like this one that are of no interest to a student at all. I hated going to my class and I hated the service hours. I have no idea how pulling weeds for 10 hours helped the environment at all. I have done community service consistently since I started high school so I didn't need this class to show me the importance of giving back.

Despite some negative comments, many comments were positive about the experience. Several students commented that it was one of the best classes they took at Loyola and that it was extremely worthwhile. The following are quotes from four different students:

This course was wonderful in being able to reflect on our experiences and because of them to further evaluate the importance in the profession we choose and the impact we have on others.

This course has been amazing; I was shocked to learn that the pressing issue of refugee resettlement is highly prevalent in our very own Rogers Park community. I've been involved in organizations that help assist people in need in third world countries. But it was through this class that I truly discovered that those very same human rights issues abroad are within blocks of my apartment here on campus.

I think this amount of hours should be required for everyone, I recommend this class to everyone. Most valuable class of my college experience.

I think that the service-learning component of a class is an extremely important aspect of an Ignatian education. I hope that the program continues to expand in the future!

Overall, the qualitative results given by students in these courses indicate that they enjoy their experiences, but there were some criticisms about the service sites, the classroom experience, the course set-up and the core requirement overall.

## **CHAPTER FOUR**

### **DISCUSSION**

#### **Summary of Findings**

The current study gives insight into the effectiveness of experiential learning programs, and how certain aspects of the course and specific student characteristics affect self-efficacy, civic responsibility, attitudes about diversity, and attitudes about school and learning. Specifically, the results suggest that a student's interest in his or her course, degree of engagement in the service project, and frequency of reflection can predict higher scores in those outcomes. Moreover, this study fills the gap in the experiential learning literature, while also adding better methodological practices, like using pre and post testing, valid and reliable measures and mixed methods.

Many studies have examined the effects of being enrolled in these courses on self-efficacy, civic responsibility, attitudes about diversity and attitudes about school and learning. These studies have had mixed results, although two recent meta-analyses found that students overall increased in these areas (Celio et al., in press; Conway et al., 2009). The findings of Celio and colleague's meta-analysis indicated that little is known about the demographics of students who enroll in these courses, and even less is known about the content of these courses (reflection, required and completed hours, etc). Conway and

colleagues' results suggested that although the studies produced positive effect sizes for personal, social and civic outcomes, amount of service in terms of hours did not seem to predict or moderate the effects. The authors commented that more research should be done in this area.

This dissertation created an experiential learning evaluation for two different universities, Stanford University in California, and Loyola University Chicago in Illinois and evaluated the impact of different types of courses (i.e., service-learning, academic internships, and service-focus courses) on outcomes known to be affected by service-learning, namely self-efficacy, civic responsibility, attitudes about diversity, and attitudes about school and learning. Moreover, certain specific practices recommended in the literature, reflection and engagement behaviors and attitudes, were examined as potential predictors in the Loyola University experiential learning sample. This course evaluation was successfully implemented in the fall 2009 and spring 2010 semesters for Loyola University Chicago, and for the fall quarter for Stanford University.

### **Results of Objectives**

#### **Group differences: Service-learning, academic internship and all experiential learning students**

This dissertation had the primary objectives of examining the effect of enrollment in experiential learning courses, and, more specifically, service-learning courses and internship courses, on self-efficacy, civic responsibility, attitudes about diversity and attitudes about school and learning. Overall, students were not affected by

enrollment in experiential learning courses overall, or within internship or service-learning courses, with one exception. Enrolling in a service-learning course significantly positively impacted student self-efficacy. That is, students enrolled in service-learning courses experienced a significant increase in self-efficacy scores from pre to post testing (Table 4.). Findings from each outcome measure are discussed below.

**Self-efficacy.** Personal outcomes, like self-efficacy, are often evaluated in experiential learning programs and have had mixed effects (Celio et al., in press; Conway et al., 2009). In the present study, self-efficacy was increased over time by enrollment in a service-learning course, but not enrollment in internship courses or being enrolled in experiential learning (i.e., when the service learning group was combined with the internship group, no significant effects emerged). Change in self-efficacy was not significantly different for service-learning students than for internship students.

As discussed earlier, many students are required by Loyola to take a course that fulfills the requirement that most service-learning classes complete. Thus, it could be assumed that most of these students take these courses not by choice, but because they are trying to fill the requirement. Internship courses do not fulfill such a requirement and it appears that many of these students take these courses by choice to further explore their career interests. Students may feel somewhat competent in the field that they are exploring through an internship, which may explain why those students did not experience a significant increase in self-efficacy. However, students

who are in service-learning courses may provide service or perform tasks that are more unfamiliar to them. Thus, being in a service-learning course, as opposed to an internship course, may provide students more opportunities to surprise themselves in how competent they are at these new tasks. The newness of service-learning courses for some students provides them with more situations to challenge themselves, and to prove that they are self-efficacious.

Increases in self-efficacy in service-learning groups could be attributed to the structure and design of the course (Feldman & Weitz, 1990). Research indicates more feedback and opportunities to deal with other people affects self-efficacy (Brooks, Cornelius, Greenfield & Joseph, 1995), so perhaps the content of some of the service-learning courses were more direct service in nature and less clerical, and thus could have afforded more opportunity for self-efficacy to increase.

Given the amount of analyses attempted in these hypotheses (12), another explanation is possible. It is possible that service-learning students' significant increase from pre to post testing was found by chance.

Although a significant increase in self-efficacy for service-learning was predicted, the lack of significant findings in the internship group, between groups, and experiential learning overall, were unexpected. The inconsistent findings for self-efficacy in different groups can partially be explained by the measure. This study used the General Self Efficacy Scale (GSE), which evaluated self-efficacy overall. This measure might be measuring a trait, since it is evaluating characteristics that are relatively constant over time and, thus, more difficult to change. Whereas other

studies have used more specific measures that appear to evaluate self-efficacy as a state, which are more able to vary, especially in the short time span of a semester. For example, in Barbee, Scherer and Combs' (2003) study, they found a positive relationship between participation in service-learning courses in pre-practicum counseling students and counseling self-efficacy. In that case, the outcome measure was specific to the specific course's goals, which made identifying change easier. Thus, if the current study had used a more specific self-efficacy measure, such as the community service self-efficacy measure (Reeb, Katsuyama, Sammon, & Yoder, 1998), or a measure used to assess career self-efficacy (Betz & Hackett, 1981) other significant results might have emerged.

Not using a specific self-efficacy measure may also explain why amount of service hours did not significantly predict change in self-efficacy. It is possible that although being involved in these activities has an impact on their career self-efficacy, it may not have affected their overall self-efficacy in only a semester's time frame.

**Civic responsibility.** Attitudes about citizenship and civic responsibility have been studied extensively in the experiential learning literature (Celio et al., in press; Conway et al., 2009). Research indicates that students involved in experiential learning programs increase in their attitudes about citizenship and civic responsibility, and studies evaluating these attitudes have found moderate effect sizes (Conway et al., 2009).

Surprisingly, enrollment in experiential learning courses, either internship or service-learning, did not predict change in civic responsibility. These findings are



somewhat inconsistent with the literature. Several reviews provide evidence supporting changes in citizenship and civic responsibility overall from pre to post testing (Billig, 2006; Perry & Katula, 2001; Yates & Youniss, 1996). However, because internship courses are often focused more on career development, to this author's knowledge, civic responsibility has not been evaluated as an outcome, so no precedent has been set for how these courses affect civic responsibility. It is possible that involvement in internship courses do not focus enough on the importance of civic responsibility, so students are not primed as much to be aware of change.

Service-learning students may not have experienced significant change in civic responsibility for a variety of reasons. The first is the lack of sensitivity of a measure to evaluate change over the course of just one semester. Second, there might be a ceiling effect. Many students started with a fairly high sense of civic responsibility (experiential learning students' mean=3.86/5, service-learning mean=3.88/5 and internship students mean= 3.84/5) and made a positive increase in their scores (to 3.92, 3.92, 3.9, respectively) but since students had such high scores at pre testing, it made it difficult for the change to be significant. Third, most of these students were in their final years of their undergraduate education at Loyola and likely had experienced courses focused on social justice, even if they were not experiential learning, in the past. As evidenced by their high scores, students already were high in civic responsibility, perhaps having been affected much earlier in their undergraduate career. Fourth, although the point of this evaluation was to be inclusive of different types of service-learning and internship courses, it is possible that a more specific civic

responsibility scale that related to where they did their service would have resulted in significant effects (Conway et al., 2009). Although this outcome variable was useful for a larger, university-wide evaluation of experiential learning program, individual courses may be more specific in designing evaluations that measure their particular learning objectives. Conway and colleagues (2009) suggest targeting particular outcomes and designing service learning experiences appropriately. A more environmentally oriented service-learning course rooted in biological sciences, or an internship at a corporate bank would not seem to relate directly to general civic engagement, thus it would be difficult to create opportunities for change.

Despite the finding that no immediate effects were found from involvement in experiential learning programs, for either service-learning or internship groups, sleeper effects may exist. Fenzel and Peyrot (2005) found that participation in service or service-learning programs in college has long-term positive effects on young adults' attitudes toward social and personal responsibility, the importance of personal political participation, and continued service involvement through volunteer service and holding a job in a service field. These effects extend for 1-6 years after graduation (Fenzel & Peyrot 2005).

**Attitudes about diversity.** Being enrolled in an experiential learning course, regardless if it was service-learning or internship, did not significantly affect attitudes about diversity. As indicated in the previous sections, measure sensitivity and specificity, and ceiling effects could have contributed to the lack of significant effects. However, the current evaluation's findings are somewhat consistent with the

literature. Moely and colleagues found in their 2002 study of college students that student attitudes about diversity did not change over the course of a semester in an experiential learning program. The authors in that study suggested the possibility that students felt that the items on the diversity scale may not have been sensitive enough to assess changes in conceptualizations of race, social class, and personal identity which students experience through their community work. The authors suggested that additional work to elaborate scale items to measure more aspects of racial awareness and identity would help to clarify the measurement question (Moely et al., 2002a).

Of all the outcome measures, attitudes about diversity may be the most likely to suffer from social desirability effects. It is likely that most college students know the politically correct stance to take on diversity and their answers may not reflect their true feelings. New approaches are being developed, such as the item count technique, to correct for the social desirability bias with self-report measures (Holbrook & Krosnick, 2010). Self-report data can be useful but it is preferable that they be complemented by other information drawn from peers, teachers, parents, or independent observers.

Although faulty measurement is a possibility in the lack of clear results, the failure to find effects may reflect an experiential learning program limitation rather than a measurement problem (Moely et al., 2002a). Race and social class differences are difficult to discuss and, therefore, difficult to understand. In many experiential learning courses, the training and reflection sessions may not systematically deal with race and social class. Discussions may not deal with societal institutions that maintain

group inequities, or with personal issues of identity (Tatum, 1997). Further, experiential learning experiences often maintain the power dynamic between white college students and the individuals with whom they work (tutoring elementary or secondary students from low-income, more ethnically diverse families, for example) (Moely et al., 2002a). Thus, it is possible that in this study, and others that did not find effects in attitudes about diversity, students might not have been sufficiently encouraged either at the university or in their service experiences to think about race and class, and what diversity means in their personal interactions.

**Attitudes about school and learning.** As with the previous two measures, enrollment in an experiential learning course, regardless if it was an internship or service-learning course, did not predict change in attitudes about school and learning. This is surprising, as attitudes about school and learning are often some of the most frequent and most positive outcome measures in the experiential learning field (Conway et al., 2009).

Data support that evaluating students in a formal way, such as using a measure like this one, is important in understanding students' feelings about experiential learning; it is not enough to rely on students' testimonials and self-reports to assess the quality of their learning and the meeting of learning objectives (Moely et al., 2002a). Thus, although no effects were found, attempting to assess them in a formal way is an important step in understanding how students perceive the particular course and school overall. The issues regarding measure sensitivity and specificity, as well as ceiling

effects, mentioned in prior sections remain problems in this outcome measure, as well.

### **Service-learning vs. internship**

The finding that service-learning students and internship students were not significantly different from each other in any of the outcome measures in this sample is not entirely surprising. In examining the placements of these students, many of the internship students were involved in internships in non-profit institutions, at which some service-learning students were volunteering. Although the average number of hours that students in academic internships were almost four times higher than the average number of hours that service-learning students were required to do (112 vs. 34 hours), the content of the actual direct service could have been very similar.

### **Engagement behaviors: Hours**

Another objective of this dissertation was to examine the benefits of engagement behaviors, such as direct-service hours, on student outcomes. Completing more service hours predicted a positive significant change from pre to post in attitudes about diversity. In addition, students who participated in more than 20 hours of service increased their scores on attitudes about school and learning significantly more than students who completed 20 or less hours. Neither self-efficacy nor civic-responsibility scores were impacted significantly by hours.

These findings are supported somewhat in the literature. For example, the duration of service-learning activities has been found to be positively related to valuing school,, social responsibility, and locus of control (Billig & Brodersen, 2007).

Other studies that examined hours did so retrospectively, examining service hours as an undergraduate as a predictor of behaviors after college. Fenzel and Peyot (2005) examined effects of service through surveying alumni and found that alumni who had completed more than 10 hours in a service-learning course in college were more likely to participate in a service immersion experience, be employed in a service-related job, be a member of a community organization, and performed more community service and indicated a greater personal commitment to help others. Astin, Sax, and Avalos (1999) found that performing at least 6 hours of volunteer work per week during the last year of college almost doubles the likelihood that a college student will continue to volunteer after leaving college. These findings may indicate a “sleeper effect” in experiential learning that could emerge if students are surveyed not only immediately after the semester, but a few years after.

Neither self-efficacy nor civic responsibility were affected by hours. Some argue that a semester-long service experience is not enough time to create meaningful change in communities (Bickford & Reynolds, 2002) or to understand the impact of service-learning pedagogy (Howard, 2003; Koth, 2003). Self-efficacy and civic responsibility may have not been affected by a semester long service project, but research suggests that more sustained service may yield better effects (Myers-Lipton, 1996). In fact, Melchior and Orr (1995), in their study of the national Learn and Serve program, found that program duration was associated with multiple positive outcomes for students. Further exemplifying the importance of longevity, Kraft and Krug (1994) found that 6 to 8 weeks of experience in service-learning with field work once a week

was not long enough to produce desired outcomes for students. Thus, it may be possible that both multiple semesters of experiential learning, and perhaps surveying students months or years after the semesters have concluded, as suggested above, could yield more positive and significant effects.

The current study's findings suggest potentially that there may be no "magic number" for increasing student outcomes, as was suggested in the literature (National Service-Learning Clearinghouse 2002). In examining the qualitative responses from students about the content of their service, it is possible that hours may not be interchangeable for amount and quality of experience at the sites; one student's 40 hours of doing administrative work may not be interchangeable with another student's 40 hours of tutoring. In fact, Blyth and colleagues (1997) cautioned that "the field should be very cautious in implementing service programs that require or mandate so many hours of service in the absence of teaching methods that allow students to interpret and learn from the experiences they encounter" (Blyth, Saito, & Berkas, 1997, p. 52) Sustained involvement with meaningful service experiences (Fredricks & Billig, 2008) may be the strongest predictor of all, but is a predictor that would be difficult to measure quantitatively. These issues should be examined in future studies.

### **Engagement attitudes and degree of interest**

Understanding the relationship between self-reported feelings of interest and engagement on student outcomes was another objective. Students who reported that they feel engaged in the course at the end of the semester significantly increased in civic responsibility scores over the course of the semester. That is, the students who

reported feeling more engaged in the course experienced a significant increase from pre to post testing in civic responsibility (Table 4). Student scores in self-efficacy, civic responsibility, and attitudes about school and learning exhibited a significant quadratic relationship with engagement. In other words, either very high or very low scores of engagement predicted positive increases in those three outcomes.

Interest in the subject matter was measured at pre-testing and students who were more interested in the course topic were significantly more likely to increase in their civic responsibility, attitudes about diversity, and attitudes about school and learning (Table 4).

These findings are consistent with the literature. Moely and colleagues (2002a) found that following an experiential learning course, students who experienced high satisfaction with their course and with their service experience also experienced increases in social justice attitudes, appreciation for diversity and civic attitudes. Further, these findings make sense in the context of Moely, Furco, and Reed's (2008) study examining student interest and attitudes and positive learning outcomes and civic attitudes. They evaluated students from seven colleges and universities and found that students who expressed positive preferences for the activities in their course showed more positive learning outcomes and attitude change. Moreover, they noted that students engaged in their courses who perceive their service activity as interesting and personally important will persist, initiate positive actions, and engage in autonomously-determined activities. These actions are likely to result in satisfaction with the service experience, a high degree of relevant and self-



determined learning, as well as feelings of personal well-being (Moely et al. 2008). Finally, Astin and colleagues (2000) multi-site study of over 22,000 students found that the single most important factor associated with a positive service-learning experience appears to be the student's degree of interest in the subject matter. They suggest that interest is an especially important determinant of the extent to which the service experience enhances understanding of the "academic" course material, and that the service is viewed as a learning experience. The authors note that these findings provide strong support for the notion that service learning should be included in the student's major field (Astin et al., 2000). Through having experiential learning courses in the student's major, students are less likely to see the course as a burden, as indicated in some of the qualitative data, and more likely to feel interested in the course subject. The correlation between interest and engagement was high (.38,  $p < .01$ ; see Table 3), so it is likely that if these courses are in the student's major, they are likely to be engaged in the course material as well.

## **Reflection**

The last major objective of this dissertation was to understand the degree to which reflection influences outcomes. Parts of the current study's findings reinforce the important role that reflection is assumed to play in enhancing learning by connecting the course material to the service experience. Reflection has the ability to provide "the transformative link between the action of serving and the ideas and understanding of learning" (Eyler et al., 1996, p.14). Experiential learning, when reflected on correctly, has the potential for students to question and confront social inequities and to begin to

deconstruct their own lifelong attitudes as they become more socially just members of society (Baldwin, Buchanan & Rudisill, 2007).

In this study, frequent reflection proved to be a positive aspect of the experiential learning process. More frequent reflection predicted higher scores in self-efficacy, civic responsibility, and attitudes about school and learning.

Reflection impacting change in several of the outcomes is consistent with the work done in the field. Students who participated in reflection at least weekly benefited significantly more than students who only participated once or twice a month in personal and social values (Mabry, 1998). However, similar to the current study's findings, amount or variety of reflection did not affect outcome (Mabry, 1998). In Eyler and Giles' study (1999) their data suggested that reflection helped students gain a deeper understanding of what they learned and helped them to apply learning to real-life situations and develop increased problem-solving skills. They also demonstrated that reflection was a good predictor of openness to new ideas, the ability to see issues in a new way, and the ability to analyze issues systemically. Billig, Root, and Jesse (2005b) found that service-learning approaches that featured cognitively challenging activities and reflection were associated with students being more likely to value school, feel more efficacious, engage in school and enjoy subject matters, and acquire more civic knowledge and more positive civic dispositions. Reflection activities that are designed well and implemented thoughtfully allow students to acquire a deeper understanding of the world around them and of how they can make positive contributions to society (RMC Research, 2003). Other benefits of

reflection tied to the cultivation of meaning include the facilitation of greater caring, the development of closer relationships with others, a breaking down of barriers and building of bonds with others from different backgrounds, and a heightened sense of connection and belonging (Andersen, 1998).

Whenever students have direct contact with members of marginalized groups there is an excellent opportunity for changing stereotypical attitudes and beliefs because students naturally begin to think about the people they serve, and are generally open to reflective activities about their own stereotypes (Conway et al., 2009). Activities could be designed to capitalize on that openness. For example, identifying students' implicit stereotypes using the Implicit Association Test (Project Implicit, 2008), available on their website. Instructors could also employ techniques suggested by Galinsky and Moskowitz (2000) in which students think about the world from their clients' perspectives using a stereotype reduction technique as a way to "debias" social thought. Galinsky and Moskowitz found that perspective-taking decreased stereotyping, and increased overlap between representations of the self and representations of the people that the students were helping.

Reflection in this study, for the most part, had a positive effect on student outcomes. However, in the case of hypotheses 11a-d, this was not always true. Students who had reflection in their courses increased over time, but students who had no reflection in their courses also increased over time, significantly in the case of civic responsibility and attitudes about diversity. Further, the students who did not report having any reflection started with lower scores on all of the outcome measures and

increased their attitudes by more; the 53 students without reflection increased in self-efficacy by .07, civic responsibility .21, attitudes about diversity .18, and attitudes about school and learning, .14. Alternately, the 225 students who reported having reflection reported an increase of .03 on self-efficacy, .03 in civic responsibility, a decrease of .02 in diversity and an increase of .01 in attitudes about school and learning (Table 6).

Given the literature, and the other results presented, these findings are puzzling. Other studies support the finding that students who have any sort of reflection can benefit. A study of the Generator Schools (Blyth, Saito, & Berkas, 1997) revealed students who did not engage in reflection typically had less socially responsible attitudes than those who did. Those who reflected the most were more engaged in school (Blyth, Saito, & Berkas, 1997). Moreover, Waterman (1993) found that students who engaged in a process that featured more reflection had stronger self-confidence and social responsibility outcomes than those who did not. Finally, Leming (2001) concluded that reflection allowed youth to form identity in community service settings, particularly with regard to feeling a sense of purpose, social relatedness, and moral-political awareness.

In the current study, 225 students reported some sort of reflection, and only 53 did not endorse any reflection. Self-report might explain some of the results. Students were asked if they participated in a list of reflection activities and it is possible that they were involved in some sort of reflection and did not report it. This situation is likely, since almost many courses at Loyola – even non-experiential learning courses --

involve some sort of reflection on the coursework. This lack of reporting is also likely considering the discrepancy between the size of the two groups. This issue could be solved in future evaluations by collecting syllabi, in which instructors report if they include reflection in their courses.

If these effects are accurate, it could be explained by earlier cited literature. Making students aware of the lack of change in the community that they served following their service may minimize their perceptions of their own self-efficacy, their feelings of civic responsibility, attitudes about diversity and attitudes about school and learning (Parker-Gwin & Mabry, 1998). Specifically, working in a diverse community that one has never had experience with may be uncomfortable, and if the reflection does not address the issues that emerge (Moely et al. 2002a), it may result in the decline in attitudes about diversity.

Without proper selection of students, appropriate training, orientation or reflection, service can result in ineffective and sometimes harmful results (Eby 1998). Hondagneu-Sotelo and Raskoff (1994) note that many students assume a "white-knight" persona, seeing themselves as saviors to the detriment of greater learning.

Without synthesizing the experience correctly, students can be affected negatively. Research documents how students may use their experiences with community projects to reinforce prior stereotypes (Hondagneu-Sotelo & Raskoff 1994). Despite the potential of experiential education to do good work and have good intentions, poorly executed courses can give students an incomplete understanding of complex social problems by defining community needs in terms of what students

have to offer (Eby, 1998) and replicating social inequities (Flower, 1997; Herzberg, 1997; Hessler, 2000). Service with poor reflection also has the potential to create anxiety in students. Unlike movies, it is difficult for service experiences to end with a happy ending where problems are easily solved. Being actively involved with underserved communities can cause a certain amount of personal discomfort for the student. If these feelings of anxiety and frustration are not effectively dealt with through reflection, students could fall back on stereotypes, or a desire not to work in these settings again (Hondagneu-Sotelo & Raskoff 1994).

### **Quality Reflection**

For the purposes of this study, understanding if use of any reflection affected outcomes was important. However, future evaluations should consider assessing the quality of reflection. Challenging reflection typically means that the activities go beyond the basics of summary of events and examination of feelings to eliciting more advanced cognitive skills such as analysis, problem solving, and critique (Billig & Fredricks, 2008). Cognitive challenge can be defined as presenting the learner with a problem or situation that the learner cannot tackle with his/her existing cognitive structure. Instructors should engage students in meta-cognition, defined as thinking about thinking or being conscious of one's own thinking and reasoning processes (Billig and Fredricks, 2008). Challenge within the service-learning context also involves relating experiences to various social and civic issues in order to understand connections to public policy and civic life. Reflection should involve asking students to learn more about issues, investigate potential causes and solutions, weigh alternatives,

resolve conflicts among themselves, consider how to persuade others, and manage complex tasks (Root & Billig, 2010)

In addition, timing of reflection is important. High-quality reflection occurs before, during, and after the service is performed. Before the service, the emphasis is on students examining their beliefs and assumptions about issues and service populations. During the weeks the students are engaged in service activities, the reflection practice focuses on sharing with and learning from peers, receiving feedback from teachers, asking questions, and solving problems. Finally, after service, reflection can allow students to revisit their initial attitudes and assumptions and compare them to their current beliefs. Students can also evaluate project outcomes, for themselves and the service recipients, and discuss how they will apply what they have learned (Toole & Toole, 1995).

The current study suggests that, in some ways, the more rigorous the reflection in service-learning, the better the learning outcomes. In extensive interviews with experiential learning students at universities across the country, Eyler (2000) found that quantity and quality of reflection were modest but significant predictors of almost all of the outcomes examined except interpersonal development (leadership, communication skills, working well with others). In particular, they were associated with academic learning outcomes, including deeper understanding and better application of subject matter and increased complexity of problem and solution analysis. They were also predictors of openness to new ideas, problem-solving and critical thinking skills. Overall, their research showed that

challenging reflection helped to push students to think in new ways and develop alternative explanations for experiences and observations (Eyler, 2000).

### **Qualitative Findings**

Through open-ended questions, this study found that the students' career development is often very affected by participation in experiential learning. According to the National Association of Colleges and Employers (NACE), 76.3 percent of employers responding to their 2009 annual Job Outlook survey indicated they preferred to hire students with experience (National Association of Colleges and Employers, 2009). Experience appears to be the decisive differentiating factor among graduates and appears to be a trend that has continued since the downturn in the economy in the early 1990s. For example, former US Secretary of Labor Robert Reich stated that for all new jobs being created, the percentage of positions requiring some vocational training was about 85 percent (Watson, 1995). Moreover, the competition for the best jobs in any market, not just a declining one, remains important, and experience remains a key factor that any entry-level professional can offer a prospective employer (Fleetwood & Shelly, 2000). In fact, Gault, Leach, and Duety (2010) concluded that experiential education plays a vital role in enhancing the career preparation and marketability of undergraduates in the entry-level job market. Internships and service-learning programs provide students (and faculty) with a means of bridging the gap between career expectations developed in the classroom and the reality of post-graduation employment. This study provides empirical evidence to support earlier theory-based research suggesting interns are better prepared to enter the job market (Groves, Howland,



Headly, & Jamison, 1977; Hite & Bellizzi, 1986), and enjoy significant advantages in obtaining full-time job offers (Gault et al., 2000).

The current study's findings are consistent with Astin and colleagues (2000) research, which noted that experiential learning operates in at least two ways: to encourage students initially pursuing non-service careers to switch their choice to service career, and to reinforce an initial choice of a service career. They note that students often choose career paths based on limited knowledge of themselves or the world of work, or simply because of what their parents or friends suggest. Involvement in experiential learning programs can introduce new possibilities to such students, and their vocational choices can potentially broaden or become more defined.

### **Limitations and Future Directions**

The approach taken in the present study summarizes student attitudes over a number of courses involving several different disciplines and different kinds of experiential education activities. Positive changes for such a broad sampling of students, courses, and sites may reflect the manner in which experiential learning is implemented at the university, with strong staff support connecting faculty, students, and community agencies. However, this research approach has limitations.

### **Loyola University Sample**

First, although the Center for Experiential Learning does not track the number of students who enroll in these courses, it is likely that the number who logged into the website to take this survey is only a percentage of the overall total. Finding a way to assess the attitudes of all the students in these courses could increase the confidence and the power of these results. Second, even though over one-thousand

students filled out some part of these surveys, only 279 students completed both pre and post surveys. If the 268 students who just filled out pre-surveys also completed post, or if the 292 students who completed just post also completed pre-testing, the results presented here could be more representative of the students in these courses. Understanding what hindered students from completing both pre and post testing would be valuable to future evaluations.

Third, integrating information from class syllabi would be useful in assessing these courses. This study relied heavily on student self-report on variables that the instructors likely track in their own courses, including amount and types of reflection offered in the course and completed by the student, number of service hours required, and number of service hours students completed. For example, the findings regarding “any reflection” or “no reflection” should be evaluated with caution. Most, if not all, courses at this university include some sort of reflection on the course topic in the form of class discussions, papers, blackboard comments, or reflection essays. Thus, it is highly unlikely that any of these courses had no reflection at all. Since this score was self-reported by the students, it is likely that it is inaccurate.

Using more objective measures of class content informed by the instructors would minimize the outliers found in the analyses in these categories and more accurately reflect what is occurring in the classroom. It is recommended that potential instructors submit these values to the Center for Experiential Learning so that they have the ability to track consistency in these courses.

Fourth, although students reported to a limited degree the tasks they were asked to complete at their service sites, future evaluations would benefit from categorizing these types of tasks and analyzing these data to understand with what types of tasks and in which settings students flourish. Some students reported doing mainly administrative tasks at certain sites and commented that they wished they could have had more community contact. Moreover, it would be desirable to examine the benefits to students who served individually at service-sites in comparison to students who completed group projects.

Understanding where and what the students did at their service sites are particularly important in the comparison between service-learning and internship students. The two groups were combined in the present analyses both because it is important to understand the effects of experiential learning overall, and because many of the students in internship courses were completing their service hours at non-profit or governmental organizations, sometimes the very same places that service-learning students were completing their service. Recognizing that the content of the service-learning and internship courses could be different, and that internship courses often require more hours, it would be beneficial to have a better record of the location of service to examine if the location of the service or the type of course that makes a difference.

Fifth, the age of the student could have an effect on more than just potential for growth. A focus group at the end of the 2008-2009 school year highlighted the issue that Loyola students often view the civic engagement core requirement

negatively. Many students leave these courses for the last semester of their senior year, as evidenced by the advanced student status demographic. While the experiential learning courses could be, and often are, wonderful segues to paid employment or professional references, it can also become something a student is too busy to truly engage in because he or she is trying to complete a requirement. However, if these courses are not required or strongly recommended, the students who are the most likely to enroll in them as an elective are the ones who are also most likely to engage in similar types of volunteer work without the framework of a course. An alternate way of structuring these courses could be requiring their fulfillment during their sophomore year. This way all students can experience the core values of the university, but also feel less time compressed because they are in the middle of their education.

**Stanford University Sample.** Unfortunately, in the Stanford evaluation, not enough students filled out the evaluation to get an accurate understanding of the effects of the service-learning and service-focused courses. In doing the evaluation of the Stanford university students, it appeared that there are fewer experiential learning courses, and since they are often electives, fewer students enroll in them.

Although incentives are eschewed at that university, there must be a better way to encourage, but not coerce, students to evaluate their courses in these specific ways. At Stanford, general course evaluations need to be completed before a student is granted access to his or her course grade, and it would be desirable that a similar

program could be installed for more specific evaluations. Perhaps in response to these necessary evaluations, many students commented that they felt ‘over-surveyed.’

Lack of responses can be attributed to the aforementioned lack of students taking these courses and sense of over-surveying, but also to understanding university culture. Because this researcher is not currently affiliated with the university, the social norms and the motivators for completing surveys were not as well known. If this survey is to be used more widely, a better understanding of student experience is strongly suggested. Although the survey was sent out by the director of the service programs at Stanford, perhaps students would have been more responsive if it were sent out by someone they were more familiar with, such as the director of the public service center or their own instructor. Further, although debatably coercive, having course instructors aware of the survey and encouraging the students to complete it could have positive effects on student response rate.

### **Both Samples**

A limiting factor in the design of the study is an issue that many program evaluations confront. In experiments in the laboratory, the researcher can control when the treatment is given and when the subject is evaluated. This issue is not as easy in program evaluation. In the case of the current study, it would have been ideal to assess the students before they received any of the ‘treatment’ (i.e., attended any classes for their experiential learning course). It would also have been desirable to have students complete the post-testing immediately after their last class or when their last project was completed. However, this researcher had to be more flexible.

Class rosters with emails were not complete until a week into the semester (or two weeks into the quarter, as Stanford has a “shopping” period), and were sent to this researcher at that time. Immediately following receiving the class list, the email invitation was sent out. Few students responded immediately, so the survey had to be left open for longer than desired (2 weeks), to amass enough responses to get the power necessary for analyses, as well as get a diverse sample of students. Extended the time that the survey was open for responses was similar for the post survey; it stayed open for the last week of class and the week after classes concluded. The students who respond first to surveys may be different than the students who respond after a few reminders. Future studies should analyze the differences between these groups.

Further, because the survey was sent out later than desired and was open for longer in both the beginning and end of the semester/quarter, the ‘dosage’ of the ‘treatment’ (i.e., number of classes attended) could vary from student to student. Future studies could also examine these differences in dosage in terms of outcome effects.

### **Implications**

Cumulatively, the results indicate that experiential learning students do not benefit in personal, social and civic outcomes simply from their enrollment in experiential learning courses alone, although self-efficacy improves in service-learning courses. The following sections outline how each of the outcome variables was affected and how instructors could encourage this change in the future.

**Self-efficacy**

Self-efficacy is divided into two cognitive constructs: (1) personal self-efficacy and (2) outcome expectancy (Bandura, 1997). Personal self-efficacy is defined as “judgments about how well one can organize and execute courses of action required to deal with prospective situations that contain ambiguous, unpredictable, and often stressful elements” (Bandura, 1977, p. 201). Outcome expectancy is “a person’s estimate that a given behavior will lead to certain outcomes” (p. 201). Bandura noted that individuals who have low self-efficacy have low aspirations, have weak commitments to goals, dwell on personal deficiencies, and shy away from difficult tasks. However, those individuals who possess a strong sense of self-efficacy set challenging goals while maintaining a strong commitment to them. They face failures and setbacks by redefining their efforts. Furthermore, these individuals approach challenging tasks as assignments to be conquered rather than as threats to be avoided. Thus high self-efficacy in students is to be encouraged.

The current study suggests that if instructors are interested in increasing student self-efficacy in their experiential learning students, they should have them enroll specifically in service-learning courses, and participate frequently in reflection.

**Civic responsibility**

As indicated in sections above, civic responsibility influences both current and future attitudes and behaviors about and toward the community positively. If instructors want to increase student civic responsibility, they should have students participate

frequently in reflection. Students who are more engaged in the course increase significantly in civic responsibility, so perhaps giving more choice in service sites, or another tactic to increase engagement, should be employed. It is difficult to control interest in a course, but perhaps creating a diverse amount of experiential courses that would appeal to students of different majors and interests could be beneficial. Further, creating an academic system where students are allowed more electives where they could choose these courses out of interest could assist in increasing civic responsibility as well.

### **Attitudes about diversity**

Ideally, attitudes about diversity lend themselves positively to tolerance and empathy for others. In an increasingly diverse country and world, allowing college students opportunities to work with people different than themselves could benefit society as a whole. More service hours, and presumably, more contact with the community, improves student attitudes about diversity. Perhaps it is the contact with the community over an extended amount of hours that leads students to develop a more open attitude to working and spending time with others different from them. Students who are already interested in the course topic when they begin the course also seem to increase significantly in attitudes about diversity. Thus, if instructors are hoping to increase students' attitudes about diversity, they should require more hours at a service site (the courses in this study had a mean of 60 hours per semester), and require reflection. Interest in the course at the beginning is also important to benefitting from these courses, so employing techniques suggested above (e.g.,



creating a diverse amount of experiential courses that would appeal to students of different majors and interests, creating an academic system where students are allowed more electives where they could choose these courses out of interest) would be useful.

### **Attitudes about school and learning**

Understanding and measuring attitudes about school and learning gives insight into whether the experiential component of the course is accomplishing its goals. Students with high levels of attitudes about school and learning feel as if their school work is relevant to their life outside of school, find courses more intellectually stimulating, and makes them think about life outside of school in new ways (Furco et al., 1999). Attitudes about school and learning relate to school as the student currently experiences it, but also could influence their future attitudes for both themselves and friends or family members (e.g., if they see that this course is useful, they will encourage their friends or family members to take these types of courses).

Instructors can encourage better attitudes about school and learning by requiring more than 20 hours of direct service, creating opportunities for frequent reflection, and creating environments where students will both be interested in the course topic and engaged in the course material.

### **Conclusion**

Parts of the current evaluation can be used for evaluations at other schools for experiential learning courses, but could be improved given the suggestions discussed in this study. In short, this study provides information on more than just the outcomes of service experiences, reflection, and level of engagement and interest. It also contributes to

the current efforts to reconceptualize learning outcomes and processes by showing how students make sense of the new ideas, attitudes, people, and experiences that they are encountering through the service experience. Ultimately, the findings of the current study should inform our understanding and expectations of experiential learning courses and point to directions to how both the courses and the evaluations could be strengthened in the future.

APPENDIX A:  
INITIAL REQUEST TO LOYOLA UNIVERSITY CHICAGO STUDENTS

Dear students:

Congratulations on taking advantage of a community-based, experiential learning course this semester! We hope that it proves to be a valuable one both academically and personally, and that it enriches your professional readiness and marketability as well.

As you begin your semester of service-learning, the Center for Experiential Learning (CEL) would like to offer you the opportunity to inform us about your attitudes towards experiential learning, your prior community-based experiences, and your values. Your responses are important to us! Data gathered from your responses and those of other Loyola service-learning students will be used in ongoing development and evaluation of the service-learning program, and may also be used to support Center for Experiential Learning research into the effects of internships and similar community-based experiences on student learning.

Your confidentiality will be strictly guarded in all of these uses. Please go to the following web address to respond to the survey:

[https://surveys.luc.edu/opinio5/s?s=23553&i=\[ID\]&k=\[KEY\]&ro=\[REOPEN\]](https://surveys.luc.edu/opinio5/s?s=23553&i=[ID]&k=[KEY]&ro=[REOPEN])

Thank you again for your participation, and best wishes for your new semester.

APPENDIX B:

IRB LETTER UPON ENTERING LOYOLA'S SERVICE-LEARNING OPINIO SITE

Dear Student,

You are being asked to participate in research conducted by the Center for Experiential Learning. Your participation in this research, should you agree to participate, will be in the form of web-based surveys to be completed before and after your service-learning experience. The follow up (i.e. post-service) survey will be sent to participants at the end of the semester.

The purpose of this research is to evaluate Center for Experiential Learning programs. You will be asked to answer some questions about your attitudes, skills and values-based competencies, community-based experience, and level of satisfaction with the Center for Experiential Learning program in which you participated. If you choose to participate in this research, your responses pre- and post-service will be compared as part of the study design. Information gathered from your responses to these surveys will be used to assess and ultimately improve students' community-based experiences.

By completing this survey, which may take up to 20 minutes, you are consenting to participate in the assessment of the Center for Experiential Learning. By providing your consent and name, you also agree to allow the investigator to view your academic transcript and grade point average. You may choose not to respond to any question or to withdraw participation from the survey at any time without any further consequence. Your participation in this study is entirely voluntary. Your decision to participate or not to participate will in no way affect your course grade, your evaluations, or your relationship with your instructor(s) or the investigators.

Researchers will ensure that your name and other identifying information provided in this questionnaire are kept confidential. In order to maintain confidentiality, your name and email address will be removed from your individual survey responses and replaced by a number. Researchers will report the results of the survey in summary form, with no personally identifiable information. All individual survey responses will be password protected on one computer for the duration of the research, and will be promptly destroyed once the project is complete. The summary report may be shared with Loyola University staff and faculty.

You will not directly benefit from this evaluation of the Center for Experiential Learning. Other students, staff, and faculty may benefit from the evaluation because we will learn what aspects of the Center for Experiential Learning programs are working well and which parts need improvement. There is minimal risk to you as a result of this evaluation.

If you have any questions about the purpose of this evaluation, how responses will be used, or any issue related to this survey, please contact Chris Skrable, Service-Learning Coordinator, at (773) 508-2380. You can also call Loyola University's Compliance Manager at (773) 508-2689, should you have questions about your rights as a research participant.

By completing this survey, you are affirming that you are at least 18 years old and consenting to participate in the research of the Center for Experiential Learning. Thank you for taking time to assist us in evaluating and researching experiential learning programs at Loyola University Chicago.

Sincerely,

Christopher A. Skrable (Service-Learning Coordinator



APPENDIX C:  
IRB LETTER UPON ENTERING LOYOLA'S ACADEMIC INTERNSHIP OPINIO  
SITE

Dear Student,

You are being asked to participate in research conducted by the Center for Experiential Learning. Your participation in this evaluation, should you agree to participate, will be in the form of web-based surveys to be completed before and after your internship experience. The follow-up (i.e. post-internship) survey will be sent to participants at the end of the semester.

The purpose of this research is to evaluate Center for Experiential Learning programs. You will be asked to answer some questions about your attitudes, skills and values-based competencies, community-based experience, and level of satisfaction with the Center for Experiential Learning program in which you participated. If you choose to participate in this research, your responses pre- and post-internship will be compared as part of the study design. Information gathered from these surveys will be used to assess and ultimately improve students' community-based experiences.

By completing this survey, which may take up to 20 minutes, you are consenting to participate in the assessment of the Center for Experiential Learning. By providing your consent and name, you also agree to allow the investigator to view your academic transcript and grade point average. You may choose not to respond to any question or to withdraw participation from the survey at any time without any further consequence. Your participation in this study is entirely voluntary. Your decision to participate or not to participate will in no way affect your course grade, your evaluations, or your relationship with your instructor(s) or the investigators.

Researchers will ensure that your name and other identifying information provided in this questionnaire are kept confidential. In order to maintain confidentiality, your name and email address will be removed from your individual survey responses and replaced by a number. Researchers will report the results of the survey in summary form, with no personally identifiable information. All individual survey responses will be password protected on one computer for the duration of the research, and will be promptly destroyed once the project is complete. The summary report may be shared with Loyola University staff and faculty.

You will not directly benefit from this evaluation of the Center for Experiential Learning. Other students, staff, and faculty may benefit from the evaluation because we will learn what aspects of the Center for Experiential Learning programs are working well and which parts need improvement. There is minimal risk to you as a result of this evaluation.

If you have any questions about the purpose of this evaluation, how responses will be used, or any issue related to this survey, please contact Louise Deske, Academic Internship Coordinator, at (773) 508-3952. You can also call Loyola University's Compliance Manager at (773) 508-2689, should you have questions about your rights as a research participant.

By completing this survey, you are affirming that you are at least 18 years old and consenting to participate in the research of the Center for Experiential Learning. Thank you for taking time to assist us in evaluating and researching experiential learning programs at Loyola University Chicago.

Sincerely,

Louise M. Deske (Academic Internship Coordinator)

APPENDIX D:  
IRB LETTER UPON ENTERING STANFORD'S OPINIO SITE

Dear Student,

You are being asked to participate in research conducted by the Haas Center. Your participation in this research, should you agree to participate, will be in the form of web-based surveys to be completed before and after your service-learning experience. The follow up (i.e. post-service) survey will be sent to you at the end of the semester.

Please go to the following web address to respond to the survey:

<https://surveys.luc.edu/opinio5/s?s=24704&i=697215&k=rFyl&ro=>

The purpose of this research is to evaluate Haas Center service-learning and service preparation courses. You will be asked to answer some questions about your attitudes, skills and community-based experience, and level of satisfaction with the course in which you participated. If you choose to participate in this research, your responses pre- and post-service will be compared as part of the study design.

Information gathered from your responses to these surveys will be used to assess and ultimately improve students' community-based experiences.

By completing this survey, which should take 5-10 minutes, you are consenting to participate in the assessment of the Haas Center. By providing your consent and name, you also agree to allow the investigator to view your academic transcript and grade point average. You may choose not to respond to any question or to withdraw participation from the survey at any time without any further consequence. Your participation in this study is entirely voluntary. Your decision to participate or not to

participate will in no way affect your course grade, your evaluations, or your relationship with your instructor(s) or the investigators.

Researchers will ensure that your name and other identifying information provided in this questionnaire are kept confidential. In order to maintain confidentiality, your name and email address will be removed from your individual survey responses and replaced by a number. Researchers will report the results of the survey in summary form, with no personally identifiable information. All individual survey responses will be password protected on one computer for the duration of the research, and will be promptly destroyed once the project is complete. The summary report may be shared with Stanford University staff and faculty.

You will not directly benefit from this evaluation of the Haas Center service programs. Other students, staff, and faculty may benefit from the evaluation because we will learn what aspects of the Center for Experiential Learning programs are working well and which parts need improvement. There is minimal risk to you as a result of this evaluation.

If you have any questions about the purpose of this evaluation, how responses will be used, or any issue related to this survey, please contact Karin Cotterman, Associate Director for Engaged Scholarship at 650-736-1650. If you are not satisfied with how this study is being conducted, or if you have any concerns, complaints, or general questions about the research or your rights as a participant, please contact the Stanford Institutional Review Board (IRB) to speak to someone independent of the

research team at (650)-723-2480 or toll free at 1-866-680-2906. You can also write to the Stanford IRB, Stanford University, Stanford, CA 94305-5401.

By completing this survey, you are affirming that you are at least 18 years old and consenting to participate in the research of the Haas Center. Thank you for taking time to assist us in evaluating and researching experiential learning programs at

Stanford University

Sincerely,

Haas Center Staff



APPENDIX E:  
PRE-EXPERIENCE SURVEY

*Definitions:*

**Service-learning course:** An academic course that had a community-service component. This can consist of having required direct service hours or results in a class or group project aimed at helping community members or an organization, or a combination of both.

**Service-focus/preparation course:** An academic course focused on public service and/or helps build skills for public service fieldwork and internships; does not include direct service to the community.

1) Class year:

2) Age:

3) Gender :

4) Race/ethnicity:

5) Major:

6) I am currently involved in (check all that apply):

\_\_\_\_ service-learning course

\_\_\_\_academic internship

\_\_\_\_ service-focus/preparation course

\_\_\_\_community-based federal

work-study

7) Check all that apply:

\_\_\_\_Part Time Student

\_\_\_\_Full time Student

\_\_\_\_Commuter

\_\_\_\_On-campus student

\_\_\_\_Off-Campus, not commuter

\_\_\_\_Work full time (40 hrs per wk)

\_\_\_\_ Work pt time (11-20 hrs per wk) \_\_\_\_ Work pt time (1-10 hrs per wk)

- 8) In college, not counting the current semester, how many of the following classes/activities have you been involved in (#):

\_\_\_\_ Service-learning courses      \_\_\_\_ Academic Internships

\_\_\_\_ Community-based Federal Work Study (# of semesters worked)

\_\_\_\_ Extra-curricular groups ---Name of group(s): \_\_\_\_\_

- 9) Did you take service-learning courses (classes with community service involved) in high school? If so, how many? \_\_\_\_

- 10) Did you have a community service requirement in high school? If so, how many hours were you required to have at the end of 4 years? \_\_\_\_

If you are taking more than one of the following: service-learning course, service-focus course or academic internship course, please only select ONE to answer the following questions about:

- 11) What is the name of your service-focus/ service-learning/academic internship course?

- 12) This class (select all that apply):

- a) Meets a requirement for your major
- b) Is an elective
- c) Meets a core requirement

If this course was not a requirement, would you take it? (Yes/No)

13) This course (check all that apply):

- ☐ Has a direct service hour requirement
- ☐ Results in a class or group project aimed at helping community members or an organization, but does not have a direct service-requirement
- ☐ Works with non-profit (for your service-learning/internship, you are working with a non-profit organization, which includes government and the arts)

14) To what degree are you interested in the course topic:

- |                       |                            |
|-----------------------|----------------------------|
| 1(have no interest) – | 5 (talked to friends about |
| topic                 | often/recommend class to   |
| friends)              |                            |

15) Answer the following questions:

1 = Not at all true 2 = Hardly true 3 = Moderately true 4 = Exactly true

- I can always manage to solve difficult problems if I try hard enough. \_\_\_\_
- If someone opposes me, I can find the means and ways to get what I want. \_\_\_\_
- It is easy for me to stick to my aims and accomplish my goals. \_\_\_\_
- I am confident that I could deal efficiently with unexpected events. \_\_\_\_

- Thanks to my resourcefulness, I know how to handle unforeseen situations. \_\_\_\_
- I can solve most problems if I invest the necessary effort. \_\_\_\_
- I can remain calm when facing difficulties because I can rely on my coping abilities \_\_\_\_
- When I am confronted with a problem, I can usually find several solutions. \_\_\_\_
- If I am in trouble, I can usually think of a solution. \_\_\_\_
- I can usually handle whatever comes my way. \_\_\_\_

16) Rate the following from:

(strongly agree(1) to strongly disagree (5))

- It is hard for a group to function effectively when the people involved come from very diverse backgrounds. \_\_\_\_\_
- I prefer the company of people who are very similar to me in background and expressions. \_\_\_\_\_
- I find it difficult to relate to people from a different race or culture. \_\_\_\_\_
- I enjoy meeting people who come from backgrounds very different from my own \_\_\_\_\_
- Cultural diversity within a group makes the group more interesting and effective \_\_\_\_\_

- I do not find courses in school relevant to my life outside of school \_\_\_\_
- I enjoy learning in school when course materials pertain to real life.

\_\_\_\_\_

- I find the content in school courses intellectually stimulating \_\_\_\_
- I learn more when courses contain hands on activities. \_\_\_\_
- The things I learn in school are useful in my life. \_\_\_\_
- Courses in school make me think about real-life in new ways. \_\_\_\_
- Being involved in a program to improve my community is important.

\_\_\_\_\_

- It is important that I work toward equal opportunity (e.g. social, political, vocational) for all people. \_\_\_\_
- It is not necessary to volunteer my time to help people in need \_\_\_\_
- Giving some of my income to help those in need is something I should do. \_\_\_\_
- It is important for me to find a career that directly benefits others. \_\_\_\_
- I think that people should find time to contribute to their community

\_\_\_\_\_

- I plan to improve my neighborhood in the near future \_\_\_\_
- I feel that I can have a positive impact on local social problems. \_\_\_\_
- I am concerned about local community issues \_\_\_\_

APPENDIX F:  
POST-EXPERIENCE SURVEY

*Definitions:*

**Service-learning course:** An academic course that had a community-service component. This can consist of having required direct service hours or a class where there is a group project where you create or present something to an organization or a combination of both.

**Service-focus course:** An academic course where the focus is public service and/or helps you build skills and related preparation for public service fieldwork and internships. Does not include direct-service to the community.

**Reflection essay:** An essay where you are reflecting on the topic of the class, or your service, and your personal reactions to it. Different than a research paper with a reflection component because it does not include research. Could be called a “journal.”

**Research paper/project:** This is a paper with a literature or research review, where there might have been a section for you to reflect on your experience, but the reflection was not the primary focus.

1) What was the name of your course?

2) To what degree are you interested in the course topic:

1

5

10

(have no interest)

(talked to friends about it outside  
of class/recommended the class to  
your friends)



The following questions (#3-11) are to be answered if you had a direct service component in your academic internship or service-learning course, and is not for classes with just a service-focus:

- 3) What did you do for your service/internship? (e.g., where was it, what did you do there? Was it the same every time or did you have varied tasks?)
- 4) If you did direct-service was the name of the site you did your service/internship?
- 5) Was this the first time you did a service/internship experience there? (yes/no)
- 6) How many service/internship hours were *required* for this course?
- 7) How many service/internship hours did you *complete*?
- 8) How many hours *per week on average* did you spend at your service/internship site?
- 9) How many weeks were you at the service/internship site (i.e., not the amount of weeks in the course, but amount of weeks you went to the service site)
- 10) How many hours per week did this class meet?

11) To what degree did you feel engaged in this service project:

1	5	10
(not meaningful)	(appreciate the work done, but won't continue there)	(thought about project often, want to continue to be involved with the organization)

12) What type of reflection did you do for class (check all that apply):

a) Reflection Essays/Journals: How many?

How useful were these reflection essays/journals?

1	5	10
Not useful at all	Helped me synthesize experience	Necessary

b) Research Papers/projects: How many?

Was there a reflection (personal experience) section? Yes/No

How useful were these research papers/projects?

1	5	10
Not useful at all	Helped me synthesize experience	Necessary

c) Online reflections (Blackboard): How many?

Did you comment on other peoples' posts? Yes/No

How useful were these online reflections?

1	5	10
Not useful at all	Helped me synthesize experience	Necessary

d) In-class discussion about experiences at service sites? Yes/No

How useful were these in class discussions?

1	5	10
Not useful at all	Helped me synthesize experience	Necessary

e) Meet with professor/supervisor to talk about the course? Yes/No

How often? (1-15 times)

How useful were these meetings?

1	5	10
Not useful at all	Helped me synthesize experience	Necessary

f) Other (facebook group, etc):

13) How often were you participating in reflection activities

1	5	10
Never	every class period they were offered	

14) Answer the following questions:

1 = Not at all true 2 = Hardly true 3 = Moderately true 4 = Exactly true

- I can always manage to solve difficult problems if I try hard enough. \_\_\_\_
- If someone opposes me, I can find the means and ways to get what I want. \_\_\_\_
- It is easy for me to stick to my aims and accomplish my goals. \_\_\_\_

- I am confident that I could deal efficiently with unexpected events.  
\_\_\_\_\_
- Thanks to my resourcefulness, I know how to handle unforeseen situations. \_\_\_\_\_
- I can solve most problems if I invest the necessary effort. \_\_\_\_\_
- I can remain calm when facing difficulties because I can rely on my coping abilities\_\_\_\_\_
- When I am confronted with a problem, I can usually find several solutions. \_\_\_\_\_
- If I am in trouble, I can usually think of a solution. \_\_\_\_\_
- I can usually handle whatever comes my way. \_\_\_\_\_

15) Rate the following from (strongly agree(1) to strongly disagree (5))

- It is hard for a group to function effectively when the people involved come from very diverse backgrounds. \_\_\_\_\_
- I prefer the company of people who are very similar to me in background and expressions.\_\_\_\_\_
- I find it difficult to relate to people from a different race or culture. \_\_\_\_\_
- I enjoy meeting people who come from backgrounds very different from my own\_\_\_\_\_
- Cultural diversity within a group makes the group more interesting and effective \_\_\_\_\_

- I do not find courses in school relevant to my life outside of school  
\_\_\_\_\_
- I enjoy learning in school when course materials pertain to real life.  
\_\_\_\_\_
- I find the content in school courses intellectually stimulating \_\_\_\_\_
- I learn more when courses contain hands on activities. \_\_\_\_\_
- The things I learn in school are useful in my life. \_\_\_\_\_
- Courses in school make me think about real-life in new ways. \_\_\_\_\_
- Being involved in a program to improve my community is important.  
\_\_\_\_\_
- It is important that I work toward equal opportunity (e.g. social, political, vocational) for all people. \_\_\_\_\_
- It is not necessary to volunteer my time to help people in need \_\_\_\_\_
- Giving some of my income to help those in need is something I should do. \_\_\_\_\_
- It is important for me to find a career that directly benefits others. \_\_\_\_\_
- I think that people should find time to contribute to their community  
\_\_\_\_\_
- I plan to improve my neighborhood in the near future \_\_\_\_\_
- I feel that I can have a positive impact on local social problems. \_\_\_\_\_
- I am concerned about local community issues \_\_\_\_\_

16) Please agree or disagree with each of the following statements about the effects of your service/internship experience:

1(Strongly Agree)

5(Strongly Disagree)

- This experience assisted me in defining which profession(s) I am or am not interested in.
- This experience helped me develop skills which will be useful in my future career.
- This experience makes me more marketable in the profession I plan on pursuing.
- I was satisfied with this course.
- I was satisfied with my service experience.
- I was satisfied with the amount and degree of reflection.
  - I would like more/less reflection.

17) Has this service/internship experience created new opportunities for you (e.g., a job, another internship, etc)? Explain.

18) Any other comments?

APPENDIX G:  
OUTCOME MEASURES

The General Self Efficacy Scale (Schwarzer & Jerusalem, 1995)

Answer the following questions:

1 = Not at all true 2 = Hardly true 3 = Moderately true 4 = Exactly true

- I can always manage to solve difficult problems if I try hard enough. \_\_\_\_
- If someone opposes me, I can find the means and ways to get what I want. \_\_\_\_
- It is easy for me to stick to my aims and accomplish my goals. \_\_\_\_
- I am confident that I could deal efficiently with unexpected events. \_\_\_\_
- Thanks to my resourcefulness, I know how to handle unforeseen situations. \_\_\_\_
- I can solve most problems if I invest the necessary effort. \_\_\_\_
- I can remain calm when facing difficulties because I can rely on my coping abilities \_\_\_\_
- When I am confronted with a problem, I can usually find several solutions. \_\_\_\_
- If I am in trouble, I can usually think of a solution. \_\_\_\_
- I can usually handle whatever comes my way. \_\_\_\_

Civic Responsibility Subscale (Furco, Diaz-Gallegos, & Yamada, 1999)

Rate the following from (strongly agree(1) to strongly disagree (5))

- Being involved in a program to improve my community is important.  
\_\_\_\_\_



- It is important that I work toward equal opportunity (e.g. social, political, vocational) for all people. \_\_\_\_
- It is not necessary to volunteer my time to help people in need \_\_\_\_
- Giving some of my income to help those in need is something I should do. \_\_\_\_
- It is important for me to find a career that directly benefits others. \_\_\_\_
- I think that people should find time to contribute to their community \_\_\_\_
- I plan to improve my neighborhood in the near future \_\_\_\_
- I feel that I can have a positive impact on local social problems. \_\_\_\_
- I am concerned about local community issues \_\_\_\_

Academic subscale (Furco et al., 1999)

Rate the following from (strongly agree(1) to strongly disagree (5))

- I do not find courses in school relevant to my life outside of school \_\_\_\_
- I enjoy learning in school when course materials pertain to real life. \_\_\_\_
- I find the content in school courses intellectually stimulating \_\_\_\_
- I learn more when courses contain hands on activities. \_\_\_\_
- The things I learn in school are useful in my life. \_\_\_\_
- Courses in school make me think about real-life in new ways. \_\_\_\_

Attitudes about Diversity Subscale (Moely et al., 2002b)

Rate the following from (strongly agree(1) to strongly disagree (4))

- It is hard for a group to function effectively when the people involved come from very diverse backgrounds. \_\_\_\_\_
- I prefer the company of people who are very similar to me in background and expressions. \_\_\_\_\_
- I find it difficult to relate to people from a different race or culture. \_\_\_\_
- \I enjoy meeting people who come from backgrounds very different from my own\_\_\_\_\_
- Cultural diversity within a group makes the group more interesting and effective \_\_\_\_\_

## APPENDIX H:

RESPONSES TO THE QUESTION “HAS THIS SERVICE INTERNSHIP  
EXPERIENCE CREATED NEW OPPORTUNITIES FOR YOU (E.G., A JOB,  
ANOTHER INTERNSHIP, ETC.)?”

**Future work/internship opportunities:**

- I am going to continue working with my organization in a paid position over the summer
- This internship created a job opportunity for me
- Yes. Upon taking and passing the certification exam, I will be eligible to work as an EMT-B
- Yes, I will be temporarily working there till the end on June, full time taking on new responsibilities and adding to my list of experiences.
- Yes, I was offered the lead tutor position for next semester and have accepted.
- The service organization has allowed me to continue on staff after my class has ended. I plan to stay involved with my organization to expand my experience.
- Yes. Through the service experience, I was/am employed.
- Yes. I am being hired on and paid.
- Yes, I will continue to work for the firm as an intern throughout the summer and I have accepted a full time offer to begin August 1st!
- Yes, I will be taking on a paid internship starting next semester as opposed to a volunteer one.
- Yes, I received a job offer.
- Yes, I am eligible to take the EMT licensure exam, which will allow me to gain experience in the medical field
- Yes, because of the positive interaction with the people at my internship, they have asked me to stay on with them as long as I am in the Chicago area.

- Yes, a possible job opportunity
  - Yes I work at the DOJ OIG till I graduate
  - Was asked to continue to help throughout the summer
  - This has allowed me to continue to work with this non-profit and have greater responsibilities within Starlight. I could have an internship with this non-profit and can also continue to help them on a less schedule
  - They have asked me if I would like to help work their summer program once they get it organized.
  - the director at the boys and girls club offered me a job if i am interested which i think i might pursue in the summer for their summer programs to help kids
  - job opportunity out of school
  - It has opened up the door to continue working with that organization.
  - It has given me an opening with World Relief for future employment
  - It has created a job opportunity; they offered me a summer freelancing job which I intend to accept (I'm volunteering next year, which they knew, so I dont know if they would have offered more)
  - If schedules can work out, I may be getting a work-study job with my service site.
  - I'm going to be still working there after my service learning course is over.
  - I would have been offered a job at my site if there was an open position.
- However, I think this has made me more marketable for similar jobs.

- I will continue working at CRT but most likely not as often; I have told them that I am available whenever they need me.
- i have been offered a full time position at my internship site
- I can now become an EMT-B
- I can become an EMT!
- I am planning on continuing to work with this organization once this class is over.
- A potential job opportunity

#### **Future internship/volunteer opportunity/future involvement**

- An internship, but I don't plan on using them for a reference, nor do I plan on returning.
- just more community service work
- An internship - -my class partner and I are very interested in public health. After learning about the many health care issues and limited assistance refugees receive, we decided to create an independent study for n
- Yes, I now am an intern for a local state senator
- possible job opportunity
- An internship as ECAC.
- Yes, I want to continue volunteering my time to this community of children
- I received an internship opportunity at the Latino Union Chicago.

- A new volunteer opportunity, since I am doing it all year. There is also an internship with the WITS program that, because of my service, I may apply to and be a strong candidate
- no
- I interned at the Society for two semesters doing two different projects; I will continue to volunteer over the summer.
- hopefully internship
- I am going to continue to work with Dr. Amick to expand on projects we did not have time to complete this semester in a 4 credit independent study course. I will be volunteering with the ECAC next semester, therefor
- Yes, my service learning has really enjoyed me and I plan on continuing to maybe get even an internship.
- Yes, I will continue to help put on this event annually now.
- Yes, I will continue the internship and start a new internship with an affiliated company.
- Yes, I was able to get another internship in a place I really wanted.
- Yes, I recieved an internship
- Yes, I have been invited to stay on with the course at ETHS. If I were not going abroad next semester, I would absolutely continue helping with the project. Even for no course credit or compensation.
- Yes, I have an internship till August there.

- Yes this course opened up opportunities for continued volunteering and a topic for an honors thesis. I will also apply similar interests to a study abroad program in Geneva next fall semester.
- Yes they offer internships
- Volunteer opportunities for teaching.
- provided me with a volunteer job
- Potentially a job or internship by virtue of the experience.
- Not immediately, but I plan on using my experience to create more service opportunities.
- My marketing professor last semester suggested I take something pertaining to environmental sustainability because the business world is looking for that. I took her advice and when I put that I've done something in
- More volunteer opportunities
- More volunteer experience.
- It produced an internship from the non-profit organization I pitched at the beginning of the semester.
- It has given me an opportunity to get a research or independent study position next semester.
- I will continue to volunteer with CYP and Danika the director is now a friend more than a boss.
- I will continue to volunteer at LIFT in upcoming semesters.
- I have decided to continue my work at HACC



- I believe it will help me secure an internship for psych 392
- I am going to continue my volunteer services with The British Home. I really enjoyed spending time with the elderly and talking with them. It brought me a different kind of happiness.
- I am continuing to volunteer even though I have completed my hours and I have new references for my resume.
- continued volunteering at site.
- A potential fellowship.

#### **Skill or Career development**

- Possibly. I am interested in pursuing a career in the medical field because I am passionate about helping other people and the best way that I can realize this goal would be through medicine. However, if I am not
- Having the organization LIFT on my resume will be a great supplement and I am able to walk away with a surplus of knowledge about benefits, housing, and other areas that social workers are immersed in.
- It made me think about new career possibilities.
- It can. I can put this experience on my resume, and use the new methods of teaching in my future jobs.
- change in my way of life and opened my eyes to the truth...
- Perhaps. I got into medical school. I don't know how much my service experience was involved with that.
- Experience, potentially another internship.

- I gained valuable experience in my field that can lead to a future job
- Prepared me for medical school
- Not yet, but I will highlight this course on my resume.
- forced me to start doing service for my community
- I have gotten more experience and more skills.
- Helped me greatly into getting into top graduate school in the country for OT because I had so many opportunities to learn new skills related to the profession and so much experience!
- no
- I am hoping that this will lead to job opportunities, although I am currently applying for jobs.
- I can go all over the United States and stay in Catholic Worker houses.
- Yes, of course! This internship has allowed me to experience the real world in regards to the legal profession. It has further helped me to gain work experience.
- hopefully assisted further for grad school
- I have gained excellent references, which will aid me in my job search. I also gained experience in the field of community development financial institutions, which is a field I am now considering.
- Yes. The skill and awareness of becoming a professional nurse. Great recommendation and references, and a job offer.
- Yes. It has helped me develop skills for my future as a performer and worker.

- Yes. Even though it hasn't as of right now, I know that I have gained skills in this experience that I did not have before and make me a much better candidate for a job or another internship in the future because I
- Yes, since I have this experience to put on my resume, I qualify for more jobs. I also am able to use my supervisor as a reference now.
- Yes, I have really enjoyed my experience. I got to see what being a nurse is really like time wise, and also I learned important skills I know I will use in my future.
- Yes it has opened to a path that has me possibly work directly with children which I did not think of doing before
- Since we focused on reporting and writing, I definitely think I will use the skills I learned as I pursue a career in journalism.
- Not directly, but it has given me useful experience for my future career choices.
- Not directly, but I have added my experience to my resume and I have secured a job.
- Not anything specific, but it has enhanced my skill set and given me something to put on my resume that looks good, as well as helped me understand what sort of work I will look for upon graduation
- No, just a valuable learning experience.
- No, but it has given me opportunity to gain more experience with teaching and with working with children.
- No job opportunities, but it has helped me develop as a future nurse.

- no its just given me a wonderful experience
- made my PR skills better
- It will look good on my resume
- It made me realize that I am capable of managing my time well enough to handle internships while taking on a job and a full course load.
- it looks good on my resume
- It has opened my eyes to additional volunteer opportunities.
- It has not created new opportunities, but it has exposed me to working with new populations, which could e useful in the future.
- It has increased my interest in working for non-profit after finishing my service.
- It has created any new opportunities. However, it has given me the opportunity to see what other hidden talents I had that I had no idea. I really enjoyed my service experience.
- It gave me an idea of a career I do NOT want to pursue.
- It gave me a sense of what area of nursing I might want to work in in the future.
- Interships, it gave way to more hours of tutoring and is a good experience to be looked at when i am applying for jobs or internships.
- In taking this course and since it is directly related to my profession, it has given me more experience, something else to put on my resume, and makes me stand out in a crowd since I've developed more skills.
- I was able to talk about my experience in a recent interview
- I think I am more marketable now that I have taken this course.

- I might be interested in working with Centro Romero in the future, but other than that the experience did not open up any more opportunities
- I have not directly received opportunities via the internship from the course, but I believe it has advanced chances of being considered for certain positions.
- I do not want to work in Education
- I do not know if it helped me get a new internship, but I think it may have played a part. It also made a scholarship application stronger.
- I can now say that I went out and collected data.
- Given me insight and given me experience that could help me get a job and trained me to get my license in EMT

#### **Increased interest**

- A minor.
- Yes, It has opened the doors to involving new members and children to help support and contribute to activities and events in the community. Not only did i enjoy being a part of this service, I am also glad to put t
- yes, I am now very interested in conflict resolution. I want to look in grad school options/study abroad options/ ways I can become more involved. I also want to gain a greater awareness of international events.
- Yes. Enhanced love for helping.
- Yes, it made me realize how much I loved helping people with disabilities and how much of an impact I made on them and vice versa
- Yes, I became more interested in examining environmental issues.

- It has got me really interested in the issues of human rights and has helped me get into an anthropology class where we work with refugees.

**References/help get work experience/connections/interview**

- Contacts
- yes, I believe the course would help market anyone for opportunities in social services.
- I am positive to apply for job at this facility.
- The internship experience has created opportunities in networking for the future.
- Yes because I now have a new contact with a teacher that has said will help me down the road.
- This internship experience gave me an opportunity to interview for a RN residency position there. I also interviewed with the manager of the ED. I fell in love with the hospital and the staff members. I hope to
- Yes. I now have contacts in the field I am interested in and have a standing job offer as a special agent.
- yes, submitting an application to the Juvenile Center
- Yes, connections.
- Yes helped create a professional resume
- With my work at Erie, I believe I would be a strong candidate for a job at an Erie site.
- Well I'm welcome back at Safer anytime.
- This internship has allowed me to make contacts within the PDs office.

- strengthened my resume and i have been recommended for hire... we'll see what happens with that
  - possible job- still awaiting interview
  - not really, it was suggested i apply at the va but i already have a contract to work elsewhere
  - New professional relationships
  - Meet new and interesting people that may help further my career.
  - It created a good relationship with my supervisor so I will be returning.
  - I have made new and interesting connections.
- good networking, i may continue for the summer at this internship

APPENDIX I:  
RESPONSES TO THE QUESTION “ANY OTHER COMMENTS?.”



### Positive Comments

- You should be aware that while I love volunteering at Children's Home and Aid and will be continuing my work there long beyond the length of the semester, it was extremely difficult to get started with them. I ended up short on my hours despite putting in extra each week because after we did our initial orientation and training, over a MONTH went by while they were 'finding our mentor matches.' (When I finally did start, they seemed to have no clue who they were going to match me with so I don't exactly buy that.) I'm not sure what the true reason for the delay was, but it made the experience quite frustrating for several of us.
- Please offer vocational opportunities with courses like federal work study and service learning and my major as Sociology here become available count n me, but follow through with the hiring.
- While the time commitment was sometimes a bit straining, this opportunity gave me hands-on experience and knowledge in a field I hope to someday work in.
- This course was wonderful in being able to reflect on our experiences and because of them to further evaluate the importance in the profession we choose and the impact we have on others.
- It was a great experience
- It was a great course, I really enjoyed the hands on activities, and through this course I feel that I have grown both personally and professionally.

- I really enjoyed this course and already have recommended it!
- I loved tutoring at the LCLC. I wish I had tutored there earlier in my career at Loyola. Hopefully, I will be able to find a program like this to do after I graduate and move away from Loyola.
- I loved it! Cannot say enough!! Please continue to offer this course for other students!!
- I loved everything about this course. Going to my service site was sometimes difficult because preschool classes are often canceled on Fridays, which was the day I went. I wanted to play with my little friends!
- I like the service learning, but I do not care for the online. It would of been so much more effective for me if the class met once a week. That way reflection, class interaction, projects, the book all tie together for a great impact and learning opportunity
- The class was very dense, but worth it.
- I would highly recommend not only Ryan Cumming's THEO 192 class, but also LIFT Chicago as a volunteer opportunity.
- This course has been amazing; I was shocked to learn that the pressing issue of refugee resettlement is highly prevalent in our very own Rogers Park community. I've been involved in organizations that help assist people in need in third world countries. But it was through this class that I truly discovered that those very same human rights issues abroad are within blocks of my apartment here on campus.

- My favorite course of the semester
- I think that the service-learning component of a class is an extremely important aspect of an Ignation education. I hope that the program continues to expand in the future!
- I really enjoyed volunteering and think I am going to continue next semester
- Great experience.
- good experience
- Dr. Amick is wonderful and I am so happy I decided to enter this course.
- Very interesting course with very insightful information. Through this class I developed a deeper appreciation for our natural environment and I learned to think more critically about how our actions impact the environment- living and nonliving elements. There should be more case studies in this class so that the philosophical concepts could be applied to current environmental issues.
- This class was great! I always feel that service learning is the best way to learn.
- Overall, a worthwhile experience, even if I do not stay in this major.
- one of my best classes
- Ms. Deske was an amazing teacher!
- Mgmt 335 was by far the most fulfilling class I have taken at Loyola. It was an amazing experience and will be beneficial to me down the road.
- i would have liked the same amount of reflection activites but spread out throughout the course, and not have an 18 page paper due on the last day of class

- I wish there was some programs that we could enact to help correct the injustice.
- I think this amount of hours should be required for everyone, I recommend this class to everyone. Most valuable class of my college experience.
- I really enjoyed service learning in this course, as it pertains to my future career!
- I loved my CRT
- I learned a lot and would recommend this course to others.
- Honestly, I LOVED this internship!!!
- Great class for PR students.
- good experience
- The instructor was very helpful in my internship search and I am very thankful. This was also a very enriching course. Applying the concepts from class to my experiences in the organization made allowed me to gain so much more from it.
- I am glad this course required this because it has pushed me to do something I would not do on my own.
- awesome class. learned things that I simply could not have learned just from a book. I hope to continue my work next semester.
- it was the best experience in my nursing school time.
- I really enjoyed my internship with the CPD and it helped in planning my future. The CPD was a great department and has great employees that were really informative and helpful.

- I love volunteering so I fully enjoyed this huge part of the class, it is what I looked forward to every week.
- CRT has been incredible. It really assisted me in being able to transition from a student to a nurse. I learned so much from being in the ED; there were lots of different patients with multiple signs/symptoms. I also did lots of nursing skills, including CPR, IVs, NG tubes, cardiac monitors, Foleys, assessments, charting, triage, discharge, etc. I could not have had a more positive experience!!!
- Professor Welch is a great man.
- Dr. Green is a great professor with much enthusiasm and passion for his job, life, and community.
- I thought the internship was good. It was not exactly what I expected, but I do appreciate the work I did there and it gave me some insight into state government.
- Great experience :)
- Best thing I have done here.

### **Negative Comments**

- Yeah, everything about the service learning requirement is a complete joke and waste of time. Makes Loyola look bad. Who made these classes up??
- While the course is interesting it did practically nothing in terms of whatever 'civic engagement' is supposed to be. In fact, I still don't know what 'civic engagement' is.

- We hit some road blocks in terms of making this course effective to our nursing education. We weren't allowed to do a lot of hands-on nursing activities. This should change in the future.
- waste of my time. students have a hard enough time here with all of their tests and projects and don't have time to volunteer plus many of them already volunteered when they were in grammar and high school.
- This should not be considered 'civic engagement.' We were all just doing research and data entry for people who are actually employed by CURL. Free assistance to a business should not count as helping the community. This organization is not charitable or doing anything to help the community. Loyola should consider charitable organizations for its civic engagement requirements so they can actually help people in need, or at least work for a charity that helps people.
- This service learning experience was completely disorganized. Our class did not receive the direction for the project until the week before Spring Break. Most of the groups in the class had difficulty contacting people for permission to complete the projects in their selected locations. This project needs to be introduced and groups need to be chosen the first week of class.
- This course (NTSC 180) is the most poorly designed and ineffective course that I have taken in 4 years at Loyola. The course tries to combine three completely unrelated goals: teaching scientific research, doing 'civic engagement,' and learning about environmental sustainability. This course should be about the

environment only and should leave the other parts for science courses or experiences outside of the classroom. Experiential learning is highly overrated (at least to the extent that you try to use a required course to facilitate it). Internships and volunteer opportunities are very important (and I've been involved in plenty of both during my four years at Loyola). However, these differ from

- This class was an inadequate use of my time. It does not even touch on the idea of service based learning.
- The course was not very well run and once we completed our 'service' I didn't feel like we had bettered the community whatsoever.
- It was a very traumatizing experience. I had so much trouble with our non-profit organization and the project with group members and such. I wouldn't want to do this again.
- If a class involves a service component that involves going off campus during class time, students must be informed BEFORE THE START OF THE SEMESTER that they cannot have a class directly after the course requiring a service component. It makes for very late students, low grades and very unhappy professors.
- I hated having to give my time to this project. I hated it. I cannot stress enough how much of a waste of time I felt this requirement was--it was difficult to fulfill and left me no better of a person than when I began. Let me be clear: I have loved my experiences at Loyola. I am leaving LUC a much better

educated, well-rounded person, but in NO WAY did this course contribute to that. My time was wasted, and as a graduating senior with more things on my plate than I could count, it was a frivolous and frustrating experience.

- I found this survey to be largely irrelevant to my class.
- I found it EXTRAORDINARILY difficult to find time to complete service activities, because I was unavailable for most of the service hour opportunities. Class time was fine.
- I don't think that service learning should be a required thing. Or at least shouldn't have to take classes like this one that are of no interest to a student at all. I hated going to my class and i hated the service hours. I have no idea how pulling weeds for 10 hours helped the environment at all. I have done community service consistently since started high school so I didn't need this class to show me the importance of giving back. My time could have been much better spent in an elective for
- i don't feel i got the same experience that many of my classmates got because of the location i was at and the limited opportunities to actually practice nursing care.
- Had Ethics in Education been offered this semester, I would have taken that. I am extremely disappointed that Environmental Ethics is all that was offered this semester to fulfill whatever core requirements it satisfies. I did the work, I went to class, and in no way did I benefit. Thanks, Loyola!



- Dr. White was a very frustrating professor. Class was not clearly outlined.

When we were taking our last test we only had two grades handed back to us.

These accounted for about a quarter of our overall grade. He gave us way too much other work to do so it was hard to focus on our community engagement project. He was clearly interested in course material but made it very unclear as to what he expected us to do for the course. He tried to adapt to the material to our benefit because he saw we had a lot of work but it was still a very hard course. Definitely not a 100 level course.

- Too many journals to write in the course. The only way to get an A is by getting 100% in the course, a 99.99% is an A-, this is not fair and should not be so.
- This class was useless to me. I could not have conceived of a bigger waste of my time and money. I learned nothing and did not personally grow in any way. I would have rather spent my volunteer time doing something constructive like homework or applying for jobs. Abolish this stupid and arcane requirement.
- The partnership between a not-for-profit and a class like this should exist only in a way that is structured around the services that students can provide. This class should be taken over by the social work department so that students with knowledge of social services can be involved.
- My volunteering was kind of unorganized and I wish there had been more on-site supervision/organization. The people I was helping treated me like I was a site supervisor and expected me to organize things and get resources for the organization. I was not capable of this.

- Little Brothers of the Elderly was a very difficult organization to work with.  
People were not being accountable for their actions or lack there of. I would not recommend Little Brother to anyone.
- I would NEVER recommend WGN TV for an internship site to any Loyola Student. The organization values students with hands on experience in broadcasting. Not willing to train or explain what is going on. Sink or swim.
- I wish the number of hours a week required for 6 credit hours was slightly less.
- I think that the internship classes are unfair depending on which professor one receives. Prof C. is unreasonable in the amount of work she requires of her students, while Prof D. and Prof E. give a reasonable amount of work.
- I feel like the service learning requirement was inappropriate given the semester and nature of the class. Many of the volunteer centers given to us closed for the winter shortly after classes started. Many others were unresponsive to emails and phone calls that I made. Also, with the exception of a few documentaries with subsequent discussions, the opportunities for volunteerism almost always fell on weekends or were out of range of public transit. This puts an unnecessary stress on students with jobs and students without cars, like myself. I would often have to travel for an hour to get to my site by public transit. I cannot afford to miss work on the weekends and had assumed that the volunteer opportun
- Trying to teach community service 'theory' in a classroom does not work. It would have been a more productive classroom experience if we spent less

listening to lecture about the theories behind 'why' we do service, and more time working in small groups talking about our actual experiences, and relating them somehow to each other. Community service is a concrete thing. Trying to abstract-ify it with theories and models does not really improve our ability to serve our communities better.

- The final research paper was more of a pain than anything, I feel the reflections were more effective.
- Too much time meeting in class. It cut into the time necessary to help our community partner
- The tests were so over-the-top hard.
- Although reflections are great, after every visit is too much. A reflection on important events is more defining.

APPENDIX J:

LETTER IN SUPPORT OF EVALUATION FROM THE EXECUTIVE FROM  
DIRECTOR OF ILLINOIS CAMPUS COMPACT



*Illinois* | **Campus Compact**

Spencer Foundation

Attn: Initiative on Civic Learning and Civic Action

625 North Michigan Avenue

Suite 1600

Chicago, IL 60611

April 24, 2009

To Whom It May Concern:

I pledge the support of Illinois Campus Compact regarding the research proposal “The effect of participation in experiential education programs on civic responsibility and engagement: An analysis of two universities and creation of a standard evaluation,” in press by Dr. Patrick M. Green and Ms. Christine Celio.

As Dr. Green and Ms. Celio conduct the study, they will be developing an evaluation tool based on best practices and research. Illinois Campus Compact is an organization

of 43 member colleges and universities across the state of Illinois, committed to the civic purpose of higher education. As Illinois Campus Compact is conducting a strategic planning process, there is an initiative to facilitate more assessment of our member campus' civic learning, and Dr. Green's study will contribute significantly to this research need.

We support this research proposal and we are prepared to collaborate with Dr. Green and Ms. Celio as the Co-Principal Investigators. Please feel free to contact me at [kengelke@depaul.edu](mailto:kengelke@depaul.edu) or by phone at (312) 362-7693.

Sincerely,

A handwritten signature in cursive script that reads "Kathy Engelken". The ink is a light brown or tan color.

Kathy Engelken, Executive Director

Illinois Campus Compact

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## VITA

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Ms. Celio is currently a sixth year doctoral student in clinical psychology at Loyola University Chicago. At Loyola, Ms. Celio focused her coursework and research on program evaluation and experiential learning programs. Her master's thesis was a meta-analysis of service-learning programs. She completed her clinical training at the Loyola University Wellness Center, Evanston Northwestern Hospital's adult neuropsychology clinic, and Advocate Illinois Masonic's outpatient clinic. In addition, from 2009-2010 she coordinated a research study at the University of Illinois at Chicago's Institute for Juvenile Research on pediatric bipolar disorder. Ms. Celio is presently completing her internship in Clinical Psychology at the West Los Angeles Veteran's Administration Hospital in Los Angeles, CA.