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An International Service-Learning Experience for Physical Therapy Students: Its Meaning and Effect on Civic Engagement and Leadership Skills

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**AN INTERNATIONAL SERVICE-LEARNING EXPERIENCE FOR PHYSICAL
THERAPY STUDENTS: ITS MEANING AND EFFECT ON CIVIC
ENGAGEMENT AND LEADERSHIP SKILLS**

By

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A Dissertation

Submitted to the Graduate Faculty

of the

University of North Dakota

in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

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This dissertation, submitted by Mary K. Dockter in partial fulfillment of the requirements for the Degree of Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

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This dissertation meets the standards for appearance, conforms to the style and format requirements of the Graduate School of the University of North Dakota, and is hereby approved.

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PERMISSION

Title An International Service-Learning Experience for Physical Therapy
Students: Its Meaning and Effect on Civic Engagement and
Leadership Skills

Department Teaching and Learning

Degree Doctor of Philosophy

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TABLE OF CONTENTS

LIST OF TABLES.....	vi
ACKNOWLEDGEMENTS.....	vii
ABSTRACT.....	viii
CHAPTER	
I. INTRODUCTION.....	1
Purpose of the Study.....	8
Review of Literature.....	8
Theoretical Framework.....	26
Summary.....	30
Summary of the Study.....	31
II. METHODOLOGY.....	35
Research Questions.....	35
Selection of the Sample.....	36
Format of SOLE-Guatemala.....	37
Community and Rural Healthcare.....	40
Instruments.....	40
Procedure and Design.....	43
Data Analysis.....	52
Summary.....	56
III. JOURNAL ARTICLE ONE.....	57
Introduction.....	57
Purpose of the Study.....	61
Literature Review and Theoretical Framework.....	61
Research Questions.....	63
Delimitation of the Study.....	63
Significance of the Study.....	63
Methods.....	64
Format of SOLE-Guatemala.....	65
Community Partner.....	66
Community and Rural Healthcare.....	67
Instruments.....	67
Procedure and Design.....	69
Data Analysis.....	69

	Results.....	70
	Discussion.....	73
	Conclusion.....	77
IV.	JOURNAL ARTICLE TWO.....	79
	Introduction.....	79
	Purpose.....	81
	Conceptual Framework.....	82
	Research Questions.....	84
	Delimitations.....	84
	Significance of the Study.....	85
	Methods.....	85
	Results.....	91
	Discussion.....	97
	Recommendations for Future Study.....	101
	Conclusion.....	101
V.	SUMMARY.....	103
	Study Sample.....	104
	Synthesis.....	108
	Conclusion.....	111
	APPENDICES.....	115
	REFERENCES.....	131

LIST OF TABLES

Table	Page
1. Demographic Characteristics of Students Participating in SOLE and CRHC	64
2. Reason Provided by CRHC Students for Not Participating in SOLE.....	65
3. Means, Standard Deviations, and t -Test Results on Pretest CASQ for CRHC and SOLE.....	70
4. Means, Standard Deviations, and t -Test Results on the CASQ Scales for Students Participating in CRHC.....	71
5. Means, Standard Deviations, and t -Test Results on the CASQ Scales for Students Participating in SOLE.....	72

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ABSTRACT

The purpose of this 2-part study was to investigate the impact of an international service-learning experience (SOLE) on physical therapy (PT) students. The quantitative component compared outcomes relating to civic attitude, interpersonal and problem-solving skills, political awareness, leadership skills, social justice attitudes, and diversity attitudes of PT students who participated in the SOLE to PT students who did not participate. The qualitative portion asked the following questions: 1) What beliefs and attitudes did PT students gain from an international service-learning experience? and 2) Did an international service-learning experience assist the PT student in assuming the role of a servant leader? The subjects were 25 PT students in their second year of a professional master's degree program. Of the 25 students, 12 volunteered for the optional international SOLE in Guatemala and 13 elected to stay on campus and participate in a non-service-learning class (CRHC). All students completed the Civic Attitudes and Skills Questionnaire at the beginning of the spring semester and upon completion of either the SOLE or the CRHC class. The qualitative portion triangulated the information by coding data gathered from a post-SOLE focus group, student journal entries, and researcher observations.

Students involved in the SOLE showed improvements in the sub-scale measuring social justice attitudes. Students not involved in the SOLE showed

increases in the sub-scales measuring both social justice attitudes and leadership skills. Both groups of students showed a decrease in the sub-scale measuring interpersonal and problem solving skills. Data analysis of the focus group and journal entries resulted in the identification of five major themes and 8 subthemes: 1) students need to have their basic physiological needs met (food, sleep, shopping, living arrangements, contact home); 2) students' perception of the characteristics of the people of Guatemala; 3) students' sense of frustration (frustration with the injustices of the healthcare system and living conditions, feelings of helplessness, and frustration with the communication barriers); 4) students' ability to make a difference; and 5) self-actualization. The results of this study support the use of service-learning as a pedagogical method in PT education if students are well-prepared and receive guidance in setting realistic goals.

CHAPTER I

INTRODUCTION

The use of service-learning as an experiential learning strategy has grown significantly in academia over the past decade partly due to its ability to combine academic learning, personal and professional development, and civic engagement (Schumer & Cook, 1999). Educational reformists such as Boyer (1990) suggest that educators need to expand their visions beyond just educating students academically, but rather need to prepare them to "live lives of dignity and purpose" (p. 78). The importance of community involvement has also been emphasized federally with the signing of former President George Bush's National Community Service Trust Act in 1990 and President Clinton's endorsement of the National Community Service Trust Act in 1994.

While many campuses offer service-learning, confusion often occurs between community service and service-learning. By definition, service-learning "is an educational methodology which combines community service with explicit academic learning objectives, preparation for community work, and deliberate reflection" (Gelmon, Holland, Driscoll, Spring, & Kerrigan, 2001, p. v). Service-learning is offered in a variety of formats. Campus Compact (2002) lists six diverse models of service-learning. The examples range from pure service-learning in which students are sent out into the community to serve and are not

typically fixed in any one discipline and service internships which are generally more intense than typical service-learning courses with students working several hours/week in a community setting.

Academic institutions and individual programs committed to civic engagement and service-learning must be able to demonstrate the impact of the projects in order to ensure that students are meeting academic and professional objectives as well as to justify the investments from the institutions and community. The proliferation in service-learning experiences has led to a plethora of research studies utilizing qualitative (Arman & Scherer, 2002; Dunlap, 1998; Hones, 1997; Litke, 2002; Porter & Monard, 2001; Reynolds, 2000; Yates & Youniss, 1996; Yates & Youniss, 1998), quantitative (Astin, Sax, & Avalos, 1999; Bringle & Kremer, 1993; Hamm, Dowell, & Houck, 1998; Johnson & Bozeman, 1998; Markus, Howard, & King, 1993; Moely, McFarland, Miron, Mercer, & Ilustre, 2002; Myers-Lipton, 1996a; Myers-Lipton, 1996b; Myers-Lipton, 1998; Osborne, Hammerich, & Hensley, 1998; Rocha, 2000; Sax & Astin, 1997; Wang, Greathouse, & Falcinella, 1998), and mixed methodologies (Arman & Scherer, 2002; Batchelder & Root, 1994; Giles & Eyler, 1994; Rice & Brown, 1998; St. Clair & McKenry, 1999; Wade & Yarbrough, 1997).

Astin (1993) suggests a taxonomy for service-learning that reflects the different types of student outcomes assessed and various forms of data collected. Outcomes can be described as cognitive or affective. Examples of cognitive outcomes may include critical thinking, problem solving, and decision-making skills. Affective outcomes may include changes in attitude toward

service, populations, and personal values. The type of data collected is described as either behavioral or psychological. Behavioral data refer to observable acts and psychological data refer to the internal state of the student (Astin, 1993). In addition to the various types of outcomes assessed and data generated, research has also focused on the impact of service-learning on faculty, students, community, and the institution (Driscoll, Holand, Gelmon, & Kerrigan, 1996).

While service-learning and community collaboration has seen a tremendous growth, it is still rather new to health education (Connors & Seifer, 1997). In response to the transition from the biomedical model of healthcare to a decentralized system more responsive to community needs, the Pew Health Professions Commission identified a set of 21 core competencies necessary for professionals to improve the health needs of the public in the future (Pew Health Professions Commission, 1998). A sample of the competencies include the ability to embrace a personal ethic of social responsibility and service, improve access to health care for those with unmet health needs, provide culturally sensitive care to a diverse society, practice leadership, and advocate for public policy that promotes and protects the health of the public.

The profession of physical therapy (PT) has seen a growth in service-learning activities in its curriculum over the last five years. Many programs have added this pedagogical approach to enhance the clinical education component and practical experiences while also enhancing the affective qualities of future practitioners (Allaben, Dripchak, Gallery, & Pickard, 2001; Black, 2002; Inacio,

Swanson, Hasikvitz, & Berger, 2000; Little, 2000; Ngo et al. 2001; Svien, 1999; Village & Village, 2001). PT academic programs have had to seek out creative and alternative methods of clinical education as third-party payers have restricted payment on care given by students. Service-learning is a valuable alternative that allows students to practice examination skills, evaluation, diagnosis, prognosis, intervention, screening, and prevention and wellness activities in the community while also meeting community needs.

According to the *Normative Model of Physical Therapist Professional Education, Version 2000 (Normative Model, 2000)*, an expected objective of PT professional education is to prepare graduates who will "demonstrate social responsibility, citizenship, and advocacy, including participation in community and human service organizations and activities" (*Normative Model, 2000, p. 100*). Reynolds (2000) analyzed forced-choice and open-ended responses from PT students who had recently completed a service project. The research results suggested that not only were social responsibility skills improved, but also that several other evaluative criteria categories were enhanced including individual and cultural differences, professional development, communication, education, professional behavior, prevention and wellness intervention, and critical thinking skills.

Preparing healthcare professionals, including PT students, to work with culturally diverse populations is a key objective of professional education. The Normative Model describes the performance of the PT graduate upon entry into professional practice as one who will "display sensitivity to individual and cultural

differences in all professional interactions" (*Normative Model*, 2000, p. 61). Additionally, the PT graduate will "provide culturally competent physical therapy services for prevention, health promotion, fitness, and wellness to individuals, groups, and communities" (*Normative Model*, 2000, p.91). St. Clair and McKenry (1999) analyzed the relationships among short-term international nursing clinical immersion experiences, cultural self-efficacy, and cultural competence. In their study, cultural self-efficacy was defined as the achievement of certain skills (i.e. communication, cultural knowledge) necessary to work effectively with clients of various cultures and was measured with the Cultural Self-Efficacy Scale (CSES). Cultural competence was assessed through observation, field note transcriptions, journal writing, and by the results of the CSES. Statistically significant differences were found in the achievement of cultural self-efficacy for the students who completed the international clinical experiences as opposed to those who stayed in the United States ($p < .05$). Qualitative analysis further revealed that the differences were related to the ability of the students with the international experience to overcome their ethnocentrism as well as their ability to integrate the clients' diverse practices and beliefs into the students' Western health care interventions.

In 2001, the University of Mary in Bismarck, North Dakota proclaimed itself as "America's Leadership University" with its new focus on developing servant leaders for the 21st century (*A Plan for Growth through Change and Commitment, 2001-2006*, 2001). The University's Program in PT states its mission is "to prepare autonomous practitioners for the profession of physical therapy who are

leaders in service through evidenced-based practice, education, and scholarly activity..." (*Graduate Studies Bulletin, 2003-2005, 2003, p. 53*). With these objectives in mind, the PT faculty developed an international service-learning experience (Service-Oriented Leadership Experience or SOLE), in collaboration with occupational therapy (OT) faculty and students, in the spring of 2002. The concept for this course was modeled after the Service Oriented Field Experience (SOFE) created by faculty at Regis University (Alexander, Atkinson & Burton, 1999).

The Asociacion Nuestros Ahijados, or God's Child Project, was established in 1983 by Atkinson (1998). Its purpose was to offer poor children and families in Guatemala a permanent way to break out of poverty. The program "addresses present and future needs by providing food, shelter, clothing, education, medical care, structure, guidance and support..." (p. 32). During fall 2001, the University of Mary contacted Atkinson and formed an initial partnership in order to provide students an opportunity to learn by service while also meeting the needs of the Guatemalan poor.

During spring semester 2002, seven PT students and eight occupational therapy (OT) students enrolled in a one-credit course at the University of Mary. An OT faculty member and I designed the course. The primary purpose of the course was to prepare students prior to their work in Guatemala. Specific teaching and learning strategies included required reading and discussions both in-house and on-line with Atkinson, panel discussions with people who had previously participated in service activities in Guatemala, a visit with a young

woman who was born and raised in Guatemala, group and individual research on existing health and educational services offered in Guatemala, fundraising, and procurement of healthcare supplies to bring on their visit.

In May 2002, seven PT students from the class of 2002 and I embarked on a 10-day trip to Guatemala. Eleven PT students did not participate in this elective offering and instead engaged in a four-credit course entitled Community and Rural Healthcare (CRHC). The eight OT students went on a separate visit in November 2002. While in Guatemala, the students performed PT services at four facilities, educated staff on wellness activities for clients throughout the lifespan, and traversed the hilly terrain to care for clients unable to walk down to the God's Child Clinic. All students were asked to maintain a journal; however, no guidelines were set and the journals were not reviewed. Upon return, the students summarized the experience during a presentation to University of Mary faculty and students. Course evaluations were extremely positive, and anecdotal evidence revealed that the students felt the experience was very valuable. The assessment of the project lacked analysis of specific student outcomes in terms of cognitive and affective impact on the students.

Due to the success of the inaugural offering of SOLE-Guatemala, OT and PT faculty offered the experience in 2003. During fall 2002, the PT class of 2003 was introduced to the idea of the spring/May term offering and 12 students voiced willingness to proceed. The students in the SOLE participated in a one-credit spring "pre-course" followed by a 10 day visit to Antigua, Guatemala in May 2003 (Appendix A). The students who remained on campus (n =13)

participated in CRHC. This course provided the students with opportunities to engage in community education and limited service to local agencies; however, no reflective process was attached to this course (Appendix B).

Purpose of the Study

The purpose of this study was to investigate the impact of an international service-learning experience (SOLE) on physical therapy students. Specifically, the study analyzed the outcomes related to civic attitude, interpersonal and problem-solving skills, political awareness, leadership skills, social justice attitudes, and diversity attitudes. The study was written in a two-article format with both qualitative and quantitative methods of analysis of student outcomes.

Review of Literature

Service Learning Defined

Educational reformist Boyer (1994) issued a call for higher education institutions to renew their historic commitment to service and citizenship. In an attempt to answer this call and in recognition of the benefits of experiential education, colleges and universities are developing service-learning programs (Sullivan, 1999). While there are many definitions of service-learning, a prevailing characterization of this educational methodology is the need to link academic learning objectives with community service (Gelmon, Holland, Driscoll, Spring, & Kerrigan, 2001). Furthermore, reflection is a necessary component for the student to learn and reflect upon the community context in which the service is provided and link the service to their academic work (p. v). Students are encouraged to merge their values and goals and academic coursework to real-

life situations (Eyler, 2002). Service-learning is intended to counter the thought that learning is often artificial and disconnected to life outside the ivory tower (Eyler & Giles, 1999).

Another important component of service-learning that differentiates it from community service is the concept of reciprocity between the student needs and the community partner. Service-learning avoids placing students in community settings based solely on desired student outcomes; rather the community agency defines the need (Sullivan, 1999). Seifer and Maurana (2000) describe nine principles of partnership in developing and sustaining successful partnerships.

The principles are:

- 1) partners have an agreed upon mission and measurable outcomes for the partnership;
- 2) the relationship has trust and respect as its foundation;
- 3) the partnership builds upon strengths and works on areas in need of improvement;
- 4) the relationship balances power and allows the sharing of resources;
- 5) communication is clear and open;
- 6) roles are developed and agreed upon ahead of time;
- 7) feedback is ongoing and mutual;
- 8) partners share credit for all accomplishments;
- 9) relationships take time to develop and progress (p. 9).

While the differentiation between community service and service-learning is not always clear, there are many people involved in higher education who believe service is an important adjunct to academic learning.

Curriculum Variations

Campus Compact (2002) lists six models of service-learning; pure, discipline-based, problem-based, capstone courses, service internships, and action research. Pure service-learning courses send students out into the community to serve and are not typically fixed in any one discipline. The discipline-based model places students in the community throughout the course and has them reflect on their experiences on a regular basis using course material as the basis for their evaluation and understanding. In the problem-based model, students act as consultants to a community partner and make recommendations or design solutions to problems. Capstone courses are designed for students in their final year. Students combine the knowledge they have accumulated throughout their coursework with relevant service to synthesize theory with practice. Service internships are generally more intense than typical service-learning courses with students working several hours/week in a community setting. They are differentiated from traditional internships as students engage in on-going reflection and are focused on the goal of student learning and community need. Finally, a newer approach to service-learning is action research. Students work closely with faculty members to learn research methods while acting as change agents for community partners.

The wide disparity in pedagogical methods has been found to impact student outcomes. Interviews have revealed that students stress the importance of what they actually do in the community as well as the need for relationships and the challenge of integrating academic study and service with reflective activities (Eyler & Giles, 1999). Additional analysis revealed the need to carefully plan the opportunities to include sustained community involvement and intellectual challenge (p. 167).

An important consideration in quality service-learning courses is the placement in the community. Eyler and Giles (1999) found that placing the student in a community setting in which the student can be productive and provide useful service to the partner was most consistently associated with positive outcomes of a personal and interpersonal nature. In their studies, it was a positive predictor of measures of tolerance and stereotyping, spiritual growth, reward in helping others, leadership and communication skill and the ability to work with others (p. 170). Batchelder and Root (1994) noted that several characteristics of the service-learning experience affected the cognitive, moral, and ego development of undergraduate students. High quality of on-site supervision appeared to increase the complexity of thought and awareness of variability involved in dealing with social problems. Instructional quality (combination of autonomy, in-class reflection, and instructor support) and the relationship with the site supervisor influenced students' statement of resolve to act despite acknowledging uncertainty of the success of their action (Batchelder & Root, 1994).

Intensity and duration of service-learning has been found to influence student outcomes. Wang, Greathouse, and Falcinella (1998) assessed the enhancement of self-esteem of grade school and high school students as compared to control groups in three diverse service-learning options. Results on self-esteem enhancement and academic performance were mixed causing the researchers to infer that longer service-learning opportunities and older students had better results. Astin, Sax, and Avalos (1999) concurred that duration of service has an effect on outcome. Their results showed that spending six or more hours per week doing volunteer work doubled the students' chances of being involved in volunteer work in the years after college as compared to students who did not participate. The intensity of volunteering also made a difference in long-term outcomes. Students who volunteered "frequently" in high school were more than twice as likely to be involved to some degree in volunteer service nine years later as compared to those who did not volunteer in high school (64% versus 30%) (Astin et al., 1999). Mabry (1998) examined how time spent in service and contact with service beneficiaries impacted students self-reported civic and academic outcomes. She concluded that students should spend at least 15 to 19 hours in their service activities in order to show an increase in civic attitudes.

According to Eyler and Giles (1999), application refers to the degree to which students can tie classroom learning to experiences in the community. In their research, application played a significant role in nearly all student outcomes assessed. It was a strong predictor of problem solving, critical thinking, student

report of amount of learning and deeper understanding of subject matter, and understanding of complexity of issues.

Another variant in curriculum is the level of diversity of the community partner. Eyler and Giles (1999) measured diversity by asking students if they had the opportunity to work with people from diverse ethnic groups during their service-learning experience. In their study, nearly two-thirds of the students reported having that opportunity at least fairly often. Diversity was a predictor of most measures of stereotype reduction, tolerance, and personal development (p. 178). Diversity also played a role in predicting outcomes such as openness to new ideas, issue identification skill, ability to see social issues in a new way, and commitment to social justice. It was not clear what role diversity played in students' report of learning and application of subject matter.

Other factors in service-learning curricula that may influence student outcomes include student involvement in previous volunteer experience or additional service at the same time and requiring service-learning versus making it optional (Eyler & Giles, 1999). Some service-learning benefits are strengthened by the addition of volunteer service and students who choose more service are more likely to describe it as valuable. Eyler and Giles (1999) list several rationales for requiring service. Service is part of civic duty and aids in the development of citizenship; it leads to skills and knowledge outside of normal classroom learning; and well-integrated service-learning leads to personal development, learning and application of knowledge, and critical thinking ability.

Reflection

"Critical reflection is a process specifically structured to help examine the frameworks that we use to interpret experience; critical reflection pushes us to step outside of the old and familiar and to reframe our questions and our conclusions in innovative and more effective terms" (Eyler, Giles, & Schmiede, 1996, p. 13). While information relating to specific techniques for reflective activities has been limited (Eyler, 2002; Eyler et al., 1996; Schmiede, 1995), there is some evidence to support the need to incorporate quality reflective activities in order to fully integrate service and academic learning (Eyler & Giles, 1999; Mabry, 1998; Myers-Lipton, 1996a).

Journals, discussion groups, and assigned writing have all been promoted as tools for reflection (Eyler et al., 1996). With the advent of the computer age, on-line service-learning courses have been suggested (Bennet & Green, 2001). Eyler (2002) presents a map for use in planning reflective activities. The tool assists in organizing reflection activities and takes into consideration both the audience and the timing. She suggests a preservice reflection in which the students write or discuss their assumptions, issues to be addressed, and goals. Surfacing the assumptions may allow the student to see potential conflicts within themselves and their peers about difficult social problems. This first step prepares students to engage in the needed questioning for intense reflection. Eyler (2002) reports that the key to effective reflection during service is continuity. Actions must be continuously processed, challenged, and linked with academic learning. One approach is to have students think in terms of "what"

(describe their experience), "so what" (discuss what it means to them), and "now what" (identify steps to use the information in their future) (Olson & Bush, 1997). Finally, students should be encouraged to assess their experiences and identify issues still unresolved in a post-reflection activity (Eyler, 2002).

Schmiede (1995) has also advocated the use of focus groups as a form of reflection. Focus groups are a type of qualitative methodology originating in the field of market research (Worthen, Sanders, & Fitzpatrick, 1997). In a study by Schmiede (1995) at Vanderbilt University, focus groups were used both to encourage reflection as well as to triangulate data obtained from open-ended questions on a survey. Participants' focus group and survey responses were scored and compared to determine the difference between the two methodologies (n = 15). The study did not present a strong case for triangulation (27% replication rate), but 40% of participants were found to solve problems at a higher level of complexity in the focus groups as compared to the surveys (Schmiede, 1995).

Student participants involved in volunteerism, in an intensive two-year service-learning program, and nonparticipants were compared on their level of modern or symbolic racism (Myers-Lipton, 1996a). Modern racism is not based on personal interaction, but rather is rooted in abstract thoughts of justice and negative feelings. The results generally supported their hypothesis that students in the service-learning section showed a greater decrease in modern racism as compared to both the nonservice-learning students and volunteers. A major

difference between the nonservice-learning and the service learning groups was the integration of the service with academic coursework and intensive reflection.

Eyer and Giles (1999) surveyed 1,131 students and found that both the amount and quality of reflection directly impacted student outcomes. Written and oral reflection were most consistently associated with academic learning outcomes including deeper understanding of subject matter, increased knowledge of social agencies, and greater use of subject matter knowledge in solving problems. Students also reported increased learning, increased intellectual stimulation, and increased motivation with the use of discussion as reflection. Written reflection alone was not significant for those characteristics. Additional outcomes improved by oral reflection were issue identification skills and critical thinking skills. In addition, Eyer and Giles (1999) compared the quantity and quality of reflection; courses that continuously connected the service to academics were linked to greater improvements in problem-solving, critical thinking, and complexity of students' problem analysis and issue understanding skills (p. 174). Eyer and Giles (1999) posit that the self-exploration and dialogue with faculty, which often occurs in journals, may be useful for the students in helping them understand themselves better as well as assisting them in problem solving and looking at the world differently.

An additional pedagogical variation affecting student outcomes is the amount and type of feedback given on their reflections. Greene and Diehm (1995) randomly assigned 24 service-learning students into two groups: one received written responses on their journal writing from the instructor (n = 11) and

one in which the weekly entries only received checkmarks ($n = 13$). There was a significant difference ($p = .04$) between groups in the degree to which students perceived that the service recipient contributed to the students' educational experience with the feedback group perceiving a greater contribution. Several other comparisons did not reach statistical significance including career choice as a consequence of the experience ($p = .077$), students' perceptions of the value of the learning experience ($p = .36$), students' reports that they "felt good" about being part of the visiting group associated with the class ($p = .80$), and students' feeling that the visits were important to them individually, aside from the group ($p = .86$) (Greene & Diehm, 1995).

Affective Outcomes

Several research studies have evaluated personal outcomes of service learning experiences such as sense of personal efficacy, personal identity, spiritual growth, and moral development (Astin, Sax, & Avalos, 1999; Driscoll, Holland, Gelmon, & Kerrigan, 1996; Giles & Eyler, 1994; Gray et al., 1998; Markus, Howard, & King, 1993; Osborne, Hammerich, & Hensley, 1998; Wade & Yarborough, 1996; Wang, Greathorse, & Falcineilla, 1998; Yates & Youniss, 1997). Other research studies have focused on the ability to work with others, leadership, and communication skills (Driscoll, et al., 1996, Giles & Eyler, 1994; Gray et al., 1998; Wade & Yarborough, 1996). Additional studies have analyzed the numerous potential social outcomes from service learning such as reduction of stereotypes and cultural understanding (Astin, Sax, & Avalos, 1999; Bringle & Kremer, 1993; Driscoll et al. 1996; Dunlap, 1998; Eyler & Giles, 1999; Giles &

Eyler 1994; Gray et al. 1998; Greene & Diehm, 1995; Hones, 1997; Johnson & Bozeman, 1998; Myers-Lipton, 1996a; Myers-Lipton, 1996b; Osborne et al., 1998), a sense of social responsibility and citizenship skills (Astin, Sax, & Avalos, 1999; Batchelder & Root, 1994; Driscoll, et al., 1996; Eyler & Giles, 1999; Giles & Eyler, 1994; Gray et al., 1998; Kahne, Westheimer, & Rogers, 2000; Myers-Lipton, 1998; Rocha, 2000), commitment to service (Astin, Sax, & Avalos, 1999; Driscoll et al., 1996; Eyler & Giles, 1999; Giles & Eyler 1994; Markus, Howard, & King, 1993), and involvement in service after graduation (Astin, Sax, & Avalos, 1999; Youniss & Yates, 1997).

Due to earlier positive results from service learning in education, the federal government provided programs and incentives for schools to initiate or expand their programs (Gray et al., 1998). In 1990, the Bush administration established the Commission for National and Community Service. The Clinton administration followed suit in 1993 with the National and Community Service Trust Act that established the Corporation for National and Community Service (CNS). The CNS contained three initiatives: Learn and Service America, Americorps, and the National Senior Service Corps.

Gray et al. (1998) provided a comprehensive analysis of the Learn and Serve America with a concentration on higher education. To address student outcomes from service learning, two sets of surveys, as well as site visits, were administered. The first survey was returned from 2,172 undergraduates from 42 different institutions. This survey revealed statistically significant, albeit modest, gains in a wide variety of student outcomes. Students participating in service

reported higher net gains than students who did not participate in measures of civic responsibility (commitment to helping others, promoting racial understanding) and measures of life skills (perceptions of leadership abilities and opportunities, social self confidence, interpersonal skills and acceptance of other races and cultures). Some limitations to this portion of the study were the low response rate (21%) and the focus on all aspects of volunteerism rather than a concentration on service-learning alone (Gray et al., 1998).

The second survey from the LSAHE study involved students who had recently completed a service-learning course (n = 725) and students who had recently completed a similar course that did not include a service-learning component (n = 597). Multiple linear regression was used after controlling for sex, age, race, student status (full or part-time), employment status, degree being sought, and institution type. Results concluded that outcomes for academic and professional skills were statistically non-significant while the differences between the two groups in the areas of life skills and civic participation were statistically significant regardless of which other covariates were included or excluded from the models (Gray et al., 1998).

The researchers further analyzed the effects of service-learning on specific outcomes of civic participation by applying the Wilcoxon sign-rank test to each component question (Gray et al., 1998). When all schools in the aggregate sample were compared, results indicated that involvement in political activity was not significantly associated with service-learning ($p > .05$) while current and expected involvement in addressing social problems, current and

expected involvement in campus activities, and expected involvement in service were all significantly associated ($p < .05$) (Gray et al., 1998).

Youniss and Yates (1997) followed 160 primarily black, junior students from a Catholic high school in a year-long case study. While the students served in a local homeless shelter, the researchers collected data from questionnaires, essays, discussion groups, and observations. Essays and discussion groups revealed that students were encouraged to reflect on stereotypes of homelessness ("I expected it to be lots dirtier, dirty people...And that's what most people think of the homeless, that they'd be dirty," p. 52). Cognitive and emotional engagement was expressed primarily with emotional statements of sadness, ("The worst moment came at the end of the day when John asked me to go wake up two guys and tell them to go. I hated having to do that putting them out of the nice warm building into the cold. After several hours of trying to help people feel better, it took 5 minutes to make me feel I made two men feel worse," p. 59) anger ("...I was really pissed off about coming to the kitchen for an entire year and seeing absolutely nothing change," p. 60), and satisfaction in the form of gratitude from the shelter residents ("when a man came back and thanked me," p. 60). The authors did not find that service learning transformed the high school juniors into political activists (Youniss & Yates, 1997). Essays and discussions revealed that students started to initiate a political identity. They experienced a sense of their own agency and a sense of responsibility. Additionally, the researchers surveyed 121 alumni of the school. Of the 68 alumni who had not done volunteer service during high school, 29% had

volunteered after high school. Of the 51 alumni who had volunteered during high school, 68% had volunteered after graduation. A chi-square test revealed that volunteering after high school graduation was statistically predicted by having volunteered in high school ($p < .05$). Astin, Sax, and Avalos (1999) also concluded that the amount of time a student volunteers in college could have a substantial effect on future volunteerism.

Eyler and Giles (1999) found that through focus groups, interviews, and surveys, a frequently reported positive outcome from service-learning was the opportunity to interact in meaningful ways with people of diverse cultures (p. 54). An increased appreciation and tolerance toward other cultures, increased personal self efficacy and spiritual growth, increased leadership skills and the ability to work well with others were all characteristics enhanced by service-learning when compared to students who did not experience service-learning (Eyler & Giles, 1999). While the authors conceded that a true measure of active citizenship would entail a longitudinal study, their data did support a willingness to participate in service. Furthermore, values, knowledge, skills, efficacy, and commitment, the five essential elements of citizenship (p. 156), were all well supported in their data (Eyler & Giles, 1999).

Most research studies involving service-learning have shown that civic and personal values have generally been significantly positively affected in students involved in service-learning. While some early studies used small populations from single settings (Giles & Eyler, 1994; Markus, Howard, & King, 1993), more recent studies support these findings using larger sample sizes from

diverse institutions (Astin & Sax, 1998; Eyler & Giles, 1999; Gray et al., 1998). Additionally, there has also been evidence that involvement in service and improved civic attitudes remain after graduation (Astin, Sax, & Avalos, 1999; Youniss & Yates, 1997).

Cognitive Outcomes

While much of the research on civic attitudes and personal outcomes with service-learning has been positive, cognitive outcomes, especially those associated with course grades and grade point averages, have been mixed. One of the difficulties with measuring outcomes in academic learning is the variability in how learning is defined.

Many students enjoy service learning courses. Eyler and Giles (1999) found that 58% of surveyed students (n = 1,131) felt they had learned more in their service-learning courses when compared with other classes, 20% reported they learned less, and 24% reported they learned about the same amount. Furthermore, 65% of the students who answered positively reported they learned more than in regular classes. Gray et al. (1999) also found that service-learning respondents reported higher levels of satisfaction with their courses (n = 725) than comparison respondents (n = 597). These results varied by institution type. While students from comprehensive universities, liberal arts colleges, and research universities all rated service-learning courses as above average, those differences did not appear from students at community colleges. Gray et al. (1999) dispelled the possibility of students rating the service-learning courses higher because of a perceived possibility of a higher grade. Their research

revealed there was no difference in expected or received grades between the two respondent types across all institutional types.

In a study utilizing an experimental and control group in an undergraduate political science course, students in service-learning sections were more likely to agree that they performed up to their potential in the course than students in traditional sections ($p < .05$). Students in service-learning sections were also significantly more likely to report that they "learned to apply principles from this course to new situations" than students in the control group ($p < .05$). There was not a significant difference in the mean ratings between the two groups with the questions "I deepened my interest in the subject matter of this course" or "I learned a great deal from this course" ($p > .05$) (Markus, Howard, & King, 1993). Kendrick (1996) used similar methodologies in a more recent study. Out of eight learning indicators, all but one resulted in higher means for students in the service-learning sections; however, only three indicators were statistically significant ($p < .05$). This contrasted to Markus, Howard, and King's (1993) study in which the service-learning students had higher means on every indicator and statistically significant differences on six of eight measures.

While studies have shown that students generally like service-learning courses better than traditional courses and feel they learn more, research on course grades have been mixed. One consideration is that students with higher academic potential may self-select into service-learning sections. This has been verified in previous research studies (Fitch, 1991; Sorow & Dreyden, 1990). Gray et al.'s (1999) analysis revealed that students in the self-selected service-

learning courses reported slightly higher grade point averages as compared to the control group (3.16 and 3.06 respectively). Other characteristics found to predispose students to self-select service-learning were student involvement in volunteer service previously, leadership ability, involvement in religious activities, tutoring other students, and being a woman (Astin & Sax, 1998).

Course grades are a common measure of academic learning. In the study by Markus, Howard, and King (1993), all students took the same mid-term and final examinations; however, students in the service-learning sections had a mean course grade of 7.47 compared to 6.42 for the control group, a statistically significant difference ($t = 2.66, p < .01$). Shastri's (1999) results also indicated that students in service-learning courses receive higher grades when compared to students in non-service-learning sections. In contrast, Kendrick (1996) found no statistically significant differences in final course grades between service-learning and non-service-learning students ($p > .05$). Breaking the final grades down into component parts revealed no significant differences on mean quiz scores between groups but service-learning students earned significantly better scores on essay questions ($p < .05$).

In a longitudinal study conducted by Astin and Sax (1998), all 10 outcomes under academic achievement were positively influenced by service-learning. The study divided the type of service into four separate categories including education, human needs, public safety, and environment. Each of the outcome measures was positively influenced by at least one type of service participation, seven of 10 outcomes were positively influenced by at least two

types of service, and all but four outcomes were positively influenced by three or more types of service. Examples of outcomes included college grade point average, time devoted to studying, retention, and increase in discipline knowledge. Their research showed undergraduate involvement in service enhanced academic development (Astin & Sax, 1998).

Service-Learning in Physical Therapy Education

While the amount of research in service-learning has increased in the last few decades and student participation has involved grade school to graduate level students in diverse fields, research in the area of physical therapy (PT) education has been limited. Several recent studies describe creative ways of incorporating service-learning into PT curricula but only describe anecdotal evidence that students' learning was enhanced (Allaben et al., 2001; Inacio et al., 2000; Little, 2000; Ngo et al., 2001; Peacock & Blatt, 1999). Village and Village (2001) collected five years of evaluations from a PT course in geriatrics that incorporated service-learning. Ninety-nine percent of students ($n = 178$) reported that they benefited and that future students would also gain from the experience. In addition, 65% of the adult volunteers believed they also benefited from the project.

With the increase in cultural diversity in the United States, teaching cultural competency is a current challenge for PT educators. Qualitative analysis has revealed that PT students gained cultural competency and sought to develop PT interventions in line with appropriate and identified cultural differences in their service-learning experience in a homeless shelter (Black, 2002). Reynolds

(2000) also noted that several PT educational objectives were enhanced in students who planned and participated in a service-learning experience. An analysis of qualitative data revealed that social responsibility skills were enhanced as well as communication, education, prevention and wellness intervention, professional development, incorporation of individual and cultural differences, and critical thinking.

International service-learning opportunities are another type of service-learning experience. Utsey and Graham (2001) used several qualitative methods of data collection including audiotaped interviews, observations, student journals, and videotapes during a 1-week interdisciplinary medical mission trip. Data analysis resulted in four major themes including adaptation to the environment, collaboration with peers and team members, development of cultural sensitivity, and development of a holistic approach to patient care. Results indicated students developed higher-level thinking and problem-solving skills in addition to cultural sensitivity and collegiality with various healthcare professionals.

Theoretical Framework

Experiential Learning

Learning through experience is not a new concept. Lave and Wenger (1991) describe "legitimate peripheral participation" as a concept similar to the apprenticeship method and as a crucial characteristic of situated learning. They posit "learners inevitably participate in communities of practitioners and that the mastery of knowledge and skill requires newcomers to move toward full participation in the sociocultural practices of a community" (p. 29). All PT

students currently participate in a type of apprenticeship, or clinical rotation, during their educational program. That type of model is based on the concept of a master-apprentice relationship. While Lave and Wenger (1991) acknowledge this type of model, they also discuss the type of learning taking place when students are given access to practice in a social community. Learners begin with peripheral tasks, based on their comfort level and knowledge, and gradually move toward fuller participation in the community. The various settings in Antigua, Guatemala, served as the social setting. The students started the experience with activities within their comfort level and gradually moved to more skilled activities and became more central to the settings.

Learning through experience is embedded in Dewey's (1916, 1938) extensive writings on pedagogy and epistemology. While experience is paramount to learning, Dewey (1938) noted:

The belief that all genuine education comes about through experience does not mean that all experiences are genuinely or equally educative. Experience and education cannot be directly equated to each other. For some experiences are mis-educative. Any experience is mis-educative that has the effect of arresting or distorting the growth of further experience. An experience may be such as to engender callousness; it may produce lack of sensitivity and of responsiveness. Then the possibilities of having richer experience in the future are restricted (pp. 25-26).

Dewey (1938) described two components necessary for quality experiences: agreeableness and effect on later experiences. The educator must find experiences that meet the present need but can "live fruitfully and creatively in subsequent experiences" (p. 28). He further proposed two principles that explain how experiences are educative. The first, principle of continuity or the

experiential continuum, is the idea that all experiences must build upon previous ones and must be aimed at the growth and development of the individual. The second, principle of interaction, proposed that objective and internal conditions must be factored into all experiences. When taken together, "they form what we call a situation" (p. 42). He stated, "An experience is always what it is because of a transaction taking place between an individual and what, at the time, constitutes his environment..." (1938, p. 43). As the learner grows, his environment expands to encompass a larger world.

Kolb (1984) continued to develop the theory of experiential learning with his concept of the experiential learning cycle. He suggested that for effective learning to occur, the learner must engage in a concrete experience, reflect on that experience, create concepts and theories that explain the reflections, and develop a plan to experiment with their reconceptualized thinking.

Servant Leadership

Servant leadership was a term first coined by Greenleaf (1971). He differentiated the leader-first and servant-first style in the following way:

The servant-leader is servant first...It begins with the natural feeling that one wants to serve, to serve first. Then conscious choice brings one to aspire to lead. He is sharply different from the person who is leader first, perhaps because of the need to assuage an unusual power drive or to acquire material possessions (p. 13).

The servant-leader attempts to make sure that those being served will have their highest needs met and will grow as individuals (1971).

Much of the servant-leader philosophy is based on stories of the Bible. Blanchard (1998) writes of Jesus being the ultimate servant-leader in words and

action. Jesus built a team of disciples, united with a clear vision, to go out and serve the people. The story of Jesus washing his disciples' feet (John 13:13-17) is a prime example of servant-leadership in action (1998).

Service-learning has roots in the philosophy of the servant-leader. Lad and Luechauer (1998) discuss five pathways that may be part of the road to being a servant-leader. The first is the cognitive path, or gathering new insight through intellectual means. The second is the experiential path which entails learning by taking risks and reflecting on what is being learned. Thirdly, the spiritual path, is characterized by a search for meaning and purpose. The fourth path, organizational, states that the organization must serve the larger community and the individuals in the organization must be enabled to serve. And finally, the community path connects service to the community (Lad & Luechauer, 1998).

Greenleaf (1971) faulted the American educational system for delivering an "anti-leadership vaccine" (p. 164). He described three faults of the current educational system. The first is its neglect of preparing leaders with potential. The second is his perception of an attitude of social mobility. He suggests that rather than upwardly mobilize the disadvantaged into upper classes; education should prepare them to return to their communities to serve their people. His third concern is the confusion over the teaching of values over values clarification. Rather than teach about values, educators should teach students to elucidate their current choices (1971).

Block (1998) offers a persuasive essay detailing how servant-leadership may offer a transitional path from leadership to citizenship. He posits that society should de-emphasize the centrality of leadership. Rather, citizens should be accountable for the well-being of the whole.

Motivation Theory

Human behavior is affected by many variables including biology, culture, and circumstances. Motivations are only one class of determinants of behavior (Maslow, 1943). Maslow (1943, 1954) contributed to the theories of human behavior by viewing human needs in a hierarchy, ascending from lowest to highest needs. When one set of needs is met, it is no longer a motivator; the unmet needs then act as motivators. The hierarchy is as follows: physiological needs such as food, water, shelter, and sleep; safety needs; belongingness or love needs; esteem or ego-status needs; and self-actualization needs. The last stage, self-actualization, is defined by Maslow (1943) as the "desire for self-fulfillment, namely, to the tendency for him to become actualized in what he is potentially" (p. 382). While Maslow's (1954) concepts were originally intended to describe human behavior, business managers have adapted the principles to help them understand, predict, and potentially influence employee motivation (Thinkers, 1999).

Summary

Service-learning, as a form of experiential learning, has been found to be beneficial for college students. Research has shown enhanced outcomes in affective areas such as personal efficacy, leadership, attitudes and tolerance

towards diversity, and commitment to service both in the short term and longitudinally. Research on cognitive outcomes has been mixed, especially in the area of improved grades. The addition of service-learning in PT education has increased, both as an adjunct to the didactic curriculum and as an alternative to traditional clinical education. While initial research has been positive, it is limited at this time.

Summary of the Study

The purpose of this study was to investigate the impact of an international service-learning experience (SOLE) on physical therapy students. The dissertation was written in a two-article format with two methods of analysis of student outcomes.

Phase 1

The first phase of the study used a survey to compare outcomes of students who participated in the SOLE-Guatemala and students who remained on campus and completed a course which offered community education activities but was not a true "service-learning" experience.

Phase 2

The second phase used qualitative methods to triangulate information gained from the survey. Upon return from Guatemala, I collected data from focus group interview sessions with the students who participated in the service-learning experience. Secondly, the students' journals were analyzed and statements and phrases grouped into themes and categories. Additionally, I relied on my personal journal and observations of events throughout the

experience. Creswell (1994) advocates an approach that incorporates various and multiple methods of data collection.

Research Questions for Phase 1

The following research questions were investigated in the first phase of this study:

1. Were there differences between pre and post scores for students who participated in an international service-learning course (experimental group)?
2. Were there differences between pre and post scores for students who did not participate in an international service-learning course (control group)?
3. Were there differences on posttest scores between the experimental and control groups?

Research Questions for Phase 2

The following research questions were investigated in the second phase of this study:

1. What beliefs and attitudes did PT students gain from an international service-learning experience?
2. Did an international service-learning experience assist the PT student in assuming the role of a servant leader?

Delimitation of the Study

This quasi-experiential study was delimited to second year PT students from the University of Mary (N=25). Twelve students voluntarily participated in the SOLE-Guatemala course in the spring and May term of 2003: 13 PT students

participated in the four-credit Community and Rural Health care class during May 2003.

Limitations of the Study

Limitations in the study included the small sample size (n=12) as well as the small sample of male students who participated in the SOLE-Guatemala class (n=3). It was assumed that the students answered the pre and post surveys to the best of their abilities and were honest in their journal entries and focus groups.

Significance of the Study

Service-learning has seen a significant increase in popularity in many elementary, high school, and collegiate classrooms over the past decade. While PT education has also noted a recent surge, much of the evidence has primarily been anecdotal. The service learning experiences have ranged from pro-bono PT clinics (Allaben, Dripchak, Gallery, & Pickard, 2001; Black, 2002; Inacio, Swanson, Haskvitz, & Berger, 2000), pairing of PT students with elderly residents in the community (Village & Village, 2001), self-designed service-learning projects with under-served, disadvantaged, or cross cultural populations (Reynolds, 2000), and international mission trips to developing countries (Ngo et al., 2001; Svien, 1999). As third-party payers are decreasing their payments and increasing restrictions for students during clinical education experiences, service learning may see a continued growth in PT education. It is then imperative to gather multiple forms of data and perform empirical assessments on the projects to ensure students continue to meet expectations of the profession.

With the newly proclaimed title "America's Leadership University" and a dedicated commitment to professional competence, service, and the Benedictine values (*A Plan for Growth through Change and Commitment, 2001-2006*), service-learning is a natural fit at the University of Mary. The PT program embarked on its inaugural international service-learning experience in the spring of 2002. Anecdotal evidence suggested that students gained valuable growth in affective outcomes such as cultural diversity acceptance, awareness of social issues, and commitment to service; however, empirical evidence was not gathered. It is vital to study the impact of the program in order to incorporate possible changes and ensure student growth in future service-learning experiences.

CHAPTER II

METHODOLOGY

The purpose of this study was to investigate the impact of an international service-learning experience (Service-Orientated Leadership Experience or SOLE) on physical therapy (PT) students. The dissertation was written in a two-article format with two methods of analysis of student outcomes. Phase one compared outcomes of students who engaged in SOLE to the students who remained on campus and participated in a course entitled Community and Rural Health Care (CRHC). This course offered students a chance to participate in community education but did not have a reflective component attached to it. All second-year PT students at the University of Mary completed a survey in early 2003 and at the completion of May term. The second phase triangulated the information gathered in phase one by asking students if, how, and why they thought they were impacted by the experience. Upon return from the SOLE-Guatemala, the students participated in a focus group. I also analyzed their required journals.

Research Questions

Phase 1

1. Were there differences between pre and post scores for students who participated in an international service-learning course (experimental group)?

2. Were there differences between pre and post scores for students who did not participate in an international service-learning course (control group)?
3. Were there differences on post test scores between the experimental and control groups?

Phase 2

1. What beliefs and attitudes did PT students gain from an international service-learning experience?
2. Did an international service-learning experience assist the PT student in assuming the role of a servant leader?

This chapter contains the description of the sample, the format of the SOLE and CRHC, the instruments, and the methods used to collect and analyze the data.

Selection of the Sample

The sample consisted of 25 students from the second-year of a professional master's PT program at the University of Mary, Bismarck, North Dakota. All students were told about the SOLE offering during fall 2002 and were given the opportunity to voluntarily participate. Twelve students (9 females, 3 males) participated in the SOLE-Guatemala class. That left 13 students (7 females, 6 males) on campus enrolled in the CRHC class during spring 2003. All students had completed four semesters of academic work in the PT program as well as an eight-week clinical experience. The clinical experiences were spread throughout the United States and were in outpatient and/or hospital settings. The students were currently enrolled in May term classes to be followed by two nine-

week clinical experiences prior to graduation. All students were Caucasian. The mean age of the students in SOLE was 24.0 years and the mean age of the students in CRHC was 24.9. The mean grade point average from the previous four semesters was 3.52 for the students in SOLE and 3.80 for the students in CRHC.

Format of SOLE-Guatemala

SOLE-Guatemala, a concept derived from a course entitled Service Oriented Leadership Experience or SOFE (Alexander, Atkinson, & Burton, 1999), was divided into two phases: phase one was a one credit preparatory class from January to April 2003 (Appendix A). The class met six times for two hours each time. In addition to the 12 PT students, six occupational therapy (OT) students were also enrolled in the SOLE-Guatemala. A faculty member from OT and I coordinated the class. During that time, the students completed assigned reading of two books as well as required in-class and on-line discussions about the readings. In addition, guests from the community presented their experiences from past mission trips to Guatemala, and a young woman, previously from Guatemala, recounted her life story. The students, in groups, were required to research the present healthcare, social, and educational programs in Guatemala and present their findings to the class. Also during this time, the students raised funds and collected healthcare supplies for their international trip. Students were encouraged to fundraise to help defray the cost of the trip (approximately \$1600) but it was not mandatory. The donated

healthcare supplies came from various individuals, PT departments throughout the state, hospitals, and home medical equipment companies.

During the spring, I was in frequent contact with Atkinson and the Volunteer Coordinator at the God's Child Program in Guatemala. We discussed the specific itinerary, objectives, and timeline for the service-learning experience. During May 2002, the PT students were active performing examinations and treatments in a special education school, nursing home, hospital, outpatient clinic at the God's Child Program's central building (the Dreamer Center), and in clients' homes. These sites provided an excellent variety of experiences for the students and reciprocally were pleased with the level of service they had received.

The 12 students met all precourse expectations as well as necessary shots, passports, and payments prior to their enrollment in the May term two-credit SOLE. Plane tickets were purchased and the SOLE took place May 5-15.

The students and I stayed in host family homes throughout the SOLE. This provided the opportunity for additional involvement with various Guatemalan families. During the first day, students were given a tour of the Dreamer Center and Antigua, the history and current status of the God's Child Project, safety tips, and a schedule. The volunteer coordinator had divided the students into four groups. They were scheduled to work at a site in the morning, go back to their host families for lunch, and return to a different site in the afternoon. Evenings were open for journaling, e-mail and phone calls home, and/or socializing. During the weekend, the God's Child Project had arranged an overnight trip to

Panajchel and Chichicastenango for sightseeing, shopping at an open-air market, and relaxation. The last day was reserved for a trip to a nearby water park followed by a closing ceremony with the God's Child staff.

The students worked at several sites arranged by the Volunteer Coordinator. These included a special education school, a government funded hospital, a government funded nursing home, a private nursing home, a HIV/AIDS hospice, and the Dreamer Center. After the second day at the hospice, we elected to discontinue our time at this site due to our frustration with the lack of cooperation by their staff. There were also some variations in the schedule near the end of the stay as several of the students became ill and were not able to participate. I spent my time traveling between the groups, assisting where needed.

Students performed PT examinations, evaluations, interventions; followed through with preset treatment regimens; and educated staff and families in PT interventions, and prevention and wellness activities. Students were required to use their creativity and critical thinking skills, as many of the modalities and equipment were either different or not available at the sites.

During the trip, I set aside specific times to meet and reflect with the students as a group. The students posted on-line daily journals and questions for their classmates remaining on campus. Upon return home, the students presented a summary of their experiences to students and faculty from the University of Mary.

Community and Rural Healthcare (CRHC)

Community and Rural Healthcare is a four-credit capstone course offered during the May term for second year PT students (Appendix B). The course was divided into three main sections, each approximately one week in duration: 1) rural healthcare experience 2) seminar with speakers from various community and rural referral agencies, and 3) community education service project (Roller, 2001). During week one, students were assigned to various rural communities in North Dakota to complete a field experience. While there, they interviewed diverse organizations and professions that compose the rural healthcare environment. Upon return, students collaborated with their group to summarize their findings. They then generated recommendations for their assigned community. During the second week, students spent time at a local homeless shelter. They performed a needs assessment for a proposed future healthcare clinic and performed musculoskeletal screenings throughout the week. During the last week, students participated in a seminar with various speakers from diverse areas of healthcare representing future referral sources.

Instruments

There were two consent forms: one for phase one (Appendix C) and another for phase two (Appendix D). After receiving approval from the University of North Dakota and University of Mary's Institutional Review Boards in January 2003, a consent form for phase one was given to all 2nd year PT students prior to the precourse administration of the survey. All students signed the consent forms (n = 25). The second consent form was for the SOLE-Guatemala students

and was given prior to the service trip. It described the focus group and the journal analysis. While all students in the SOLE group (n = 12) signed the consent forms, only nine eventually handed in their journals and participated in the focus group.

Moely, Mercer, Ilustre, Miron, and McFarland (2002) developed the Civic Attitudes and Skills Questionnaire (CASQ) to measure attitudes, skills, and behavioral intentions that might be affected by service-learning participation. The 45-item self-assessment consists of six scales as determined by factor analysis and takes approximately 20 minutes to complete. Students indicate their agreement or disagreement with each item by marking a scale from 1 (completely disagree) to 5 (agree completely). The six scales, brief description, and percent of score variance accounted for by each are as follows:

1. Civic Action (16.9%): Respondents indicate their intentions to become involved in the future in some community service or action.
2. Interpersonal and Problem-Solving Skills (7.1%): Respondents evaluate their ability to listen, work cooperatively, communicate, make friends, take the role of the other, think logically and analytically, and solve problems.
3. Political Awareness (5.4%): Respondents evaluate themselves on items concerning awareness of local and national current events and political issues.
4. Leadership Skills (3.9%): Respondents evaluate their ability to lead and their effectiveness as leaders.

5. Social Justice Attitudes (3.7%): Respondents report level of agreement with items expressing attitudes concerning causes of poverty and misfortune and how social problems can be solved.
6. Diversity Attitudes (3.0%): Respondents describe their attitudes toward diversity and their interest in relating to diverse cultures.

Moely, et al. (2002) supported the validity of the CASQ by examining relationships to measures of social desirability, attitudes about race, motivational beliefs, and respondents' demographic characteristics. Internal consistencies (Cronbach's coefficient alpha) for the six scales ranged from .69 to .88. Test-retest correlations were .70 or higher for all scales with the exception of interpersonal and problem-solving skills (.56 and .62 for Samples 1 and 2).

The goal of the focus group was to generate an open and interactive discussion about their experiences in Guatemala. According to Gelmon, Holland, Driscoll, Spring, and Kerrigan (2001), focus groups are a guided conversation in which everyone should participate. The following sample of questions were used as a guide for the focus group (Gelmon, et al., 2001, p. 43-43; Eyler, Giles, & Schmiede, 1996, p.147).

1. Take a moment and think about the goals you had set for this experience.
What was the most important goal?
2. Think about the above goals we discussed. Did you accomplish them?
What factors contributed to your meeting or not meeting the objectives?
What challenges did you encounter and how did you overcome them?

3. Describe your views about how important issues in society need to be addressed. What did you learn about the culture and society of Guatemala in general from this experience? What issues did you observe or hear about?
4. What are your perceptions about political and social issues facing the people of Guatemala? What are some possible solutions to these issues?
5. If you wanted to get personally involved in solving these problems in society, what would you do?
6. What from this experience has impacted you as a citizen?
7. Describe connections between the service-learning work and the academic portions of the PT program.
8. What are guidelines for community involvement that you think people in general should know in order to be effective in community action? What skills or knowledge are necessary to be effective? Is this the same for physical therapists?
9. What impact has this experience had on you personally as well as on your future as a PT?

Procedure and Design

Phase 1

After Institutional Research Board (IRB) approval, I provided an informed consent and administered the CASQ in mid-January to all 2nd year PT students during a regularly scheduled PT class. The students enrolled in the SOLE-Guatemala course began their precourse in mid-January, the students in the

CRHC class did not begin until early May. Participation in this study was voluntary. However, to increase participation, I placed all completed surveys in a lottery for a chance to win gift certificates at local eating establishments. The surveys contained individual and anonymous student identification numbers to permit individual-level comparisons of pre and postcourse responses. Students were ensured that their answers would remain anonymous. The cover sheet of the precourse survey also included demographic questions relating to their previous level of involvement with service-learning and, for the students who elected not to participate in SOLE, a question asking their reasons (Appendix E). At the completion of May term, students who participated in the initial administration of the CASQ were asked to again complete the survey.

Phase 2

The questions posed for the second phase of this study required qualitative and open-ended responses. The purpose of qualitative research is to develop concepts that sensitize readers to cultures, describe multiple realities and interpretations, develop grounded theory, and develop perspectives of the participants (Bailey, 1997). Maxwell (1996) further describes five main purposes in which qualitative research is best suited:

1. Understanding the meaning of the events, situations, and actions for the participants in the study. In addition to the physical events and behavior, the researcher is also interested in how the informants make sense of this and how their understandings influence their actions.

2. Understanding the context within which the participants act and the influence this context has on their behaviors. Qualitative research typically involves much smaller sample sizes than quantitative thus enabling the researcher to preserve the individuality of each participant.
3. Identifying unanticipated phenomena and influences, and generating new grounded theories about this later. A common use of qualitative research has been to assist survey and experimental researchers. They initially conduct an exploratory study to aid in the development of a questionnaire or identify variables for further experimentation.
4. Understanding the process by which events and actions take place. A major strength of qualitative research is to get at the processes that led to the outcomes. Experimental or survey research (quantitative) is often poor at identifying the process.
5. Developing causal explanations. Traditionally, it has been thought that only quantitative studies can identify causal relationships. This has been strongly disputed by qualitative researchers and recently, both quantitative and qualitative researchers dispute this claim suggesting that the questions asked are different thus yielding diverse results.

Creswell (1998) describes his adaptation of Guba and Lincoln's basic set of beliefs or assumptions most qualitative researchers use to approach their studies. The assumptions are related to the nature of reality (ontological issue), the relationship of the researcher and the object being researched (epistemological issue), the role of values in a study (axiological issue), the

language of the research (rhetorical issue), and the process of research (methodological issue). The qualitative researcher believes that individuals involved in the research situation construct their own realities. The researcher must report the multiple realities, including that of the researcher, the subjects, and the audience interpreting the study. The qualitative researcher's epistemological assumption is that the researcher interacts with those they study, whether they live with or observe informants or actually collaborate with them. Regarding the axiological assumption, the qualitative researcher admits his or her values and biases and that his or her voice is represented in the interpretation and presentation of the data. The rhetorical assumption of the qualitative researcher focuses on literary forms of writing. First-person "I" and stories are present in qualitative write-ups as well as definitions that emerge from the study rather than being defined by the researcher prior to the study. Finally, the above noted assumptions are combined to define the methodological assumption. The qualitative researcher starts inductively, developing categories and themes from the informants versus specifying them in advance. The initial design may evolve and emerge throughout the process (Creswell, 1998). The timing contrasts to quantitative research in that data collection and data analysis are not discrete stages. The analysis has been described as a loop-like pattern of multiple times of revisiting the data as additional questions emerge, new connections discovered, and a deeper understanding of the material is gained (Frechtling, Sharp & Westat, 1997).

I determined this phase of the study best fit the description of a case study. A case study is an exploration of a "bounded system" or a case over time through detailed, in-depth data collection involving multiple sources of information rich in context. The system is bounded by time and place (Creswell, 1998, pg. 61). Stake (1994) further differentiates diverse types of case studies. This study can be described as an intrinsic case study in which the purpose is not to understand or test abstract theory or to develop new theoretical perspectives; instead, the objective is to better understand the intended organization or case (Stake, 1994).

A benefit of case study methodology rests in the possibility of making new discoveries. A concern is whether the results can be generalized to other groups. If a case study employs properly executed methods, the results should not only provide greater understanding of the particular case or event, but also provide an understanding about similar cases (Berg, 1998). While the results may not provide explanations for all behavior of similar groups of people, they allow an understanding of why certain people might behave in certain ways in certain situations.

Research validity in qualitative studies is an issue that should be dealt with in both the research design and analysis of data. Creswell (1998) discusses eight techniques to improve trustworthiness of qualitative research:

1. Persistent observation in the field include building trust and rapport with the participants. This prolonged engagement allows the researcher to

filter out information important to the study. I had known all students in the SOLE at least two years.

2. Multiple and diverse sources and methods allow the researcher to triangulate the data. This study used a survey for Phase 1 and journal analysis, focus groups, and personal observations for Phase 2.
3. Peer review or debriefing is used in much the same way as interrater reliability in quantitative research. The peer debriefing sessions assist the researcher by asking questions about methods, meanings, and interpretations. One of the faculty members who assisted with the focus group acted as a peer reviewer. She was well acquainted with the students and the SOLE. She was consulted throughout the process and gave clarity to my interpretations.
4. Using negative case analysis, the researcher revises initial hypotheses as the study advances. My initial hypotheses dealt with attitudes I thought the students would have regarding social justice and future commitment to service. As the study unveiled, I realized frustration became a major emotion realized by the students.
5. The researcher clarifies all potential bias so the reader can understand the researcher's position and all assumptions that may affect the outcomes. I discuss my position in the next paragraph.
6. The researcher takes back the data, analyses, interpretations, and conclusions back to the participants. These member checks allow participants the ability to judge the accuracy of the information. I sent the

first draft of Chapter 4 to the 12 students who completed the SOLE. I received comments back from two students. Both of the students replied that the analysis accurately reflected the experience and offered no further suggestions for change.

7. The researcher describes in thick detail the setting and participants so the reader can decide if the outcomes can be transferred to other settings. The SOLE and student participants were described in detail.
8. External consultants can examine the methods and product in order to assess accuracy. The four members of my research committee acted as external consultants.

Subjectivity is typically considered something the researcher must keep out of the study. Qualitative researchers claim that subjectivity is a part of all research studies, from choosing the topic to interpretation, and discuss how it can be monitored and contribute to research (Glesne, 1999). Glesne (1999) recommends the researcher become aware of relevant emotions to assess when subjectivity is being threatened. I recognized prior to the trip that it was going to be difficult not to compare the outcomes from the May 2003 SOLE to the outcomes from the SOLE in May 2002. I realized I had strong hopes for the students to have a powerful experience and became frustrated with periodically poor and unprofessional attitudes. It became vital for me to write about my feelings in a daily journal so I could better assess what might hinder my objectivity and effectiveness as teacher and researcher.

Within two weeks upon return from the service trip, time was scheduled with the participating SOLE-Guatemalan students and two fellow faculty members with experience in conducting focus groups. In order to encourage open conversation and to limit the possibility that the students would be influenced by my presence, I did not participate in the focus group. One faculty member facilitated the group and another took notes on an overhead projector. The focus group was audio recorded for purposes of clarification in case the notes were unclear; however, problems with the equipment prevented the second session from being recorded. Students self-selected fictitious names to de-identify themselves on written and audio-recorded data. Two 60-minute sessions were held two days apart. Day one was to get the students comfortable with the format and the facilitators and day two was to clarify and add to the information gained from day one. Throughout the sessions, participants were periodically asked to check the notes to ensure their responses were accurately represented. In addition, at the beginning of the second session, typed notes from the first session were handed out to the students for checking and clarification.

In addition to the focus group, the second phase of the study entailed journal analysis. During the SOLE-Guatemala spring precourse, students were given guidelines for their journal writings. During the SOLE, I read and gave feedback to all student journals at least one time. Eyler, Giles, and Schmiede (1996) concluded from their research that effective reflection should contain the four "C's" – continuous, connected, challenging, and contextualized. The class

contained activities to help prepare the students for effective reflection during their international travel including a discussion and activity using the questions “what” (describe their experience), “so what” (discuss what it means to them), and “now what” (identify steps to use the information in their future) developed by Olson and Bush (1997). During the experience, students were given the following reflection questions as well as feedback twice during the experience:

1. During conflict situations that you encountered during this experience in Guatemala, a) what did you learn about yourself? b) what did you learn about working with people, colleagues, and clients that would help you in future practices?
2. While you worked at the different practice settings, many of you expressed poor conditions related to work in a specific setting or with specific conditions. a) What biases came forth that you may or may not have known you held (This is not asking about prejudices but rather your personal preferences to live a certain way. An example would be that everyone was shocked people lived in cardboard and tin houses. You were not necessarily condescending to others, but did have a bias about that type of living condition.) b) How did you deal with those biases? c) What emotions did you go through? d) How did you deal with those emotions? (For example, how did you come to terms with the frustration you experienced knowing you had no control over resources?) e) How do these experiences prepare you for future practice?

3. During this experience, each of you had a lot of opportunities to plan, organize and make decisions as a group a) Describe the level of difficulty you experienced in making decisions as a group? b) How did team leadership occur in making decisions related to choosing intervention? c) What benefits and drawbacks occur as a result of spending intense time with colleagues?
4. What are your perceptions of the benefits and limitations of this type of experience? (Moses, 2003)

Upon return from Guatemala, the consenting student's journals (n = 9) were collected, copied, and analyzed.

Data Analysis

Phase 1

Survey results for the pre and postcourse CASQ were entered into a SPSS program. Means and standard deviations were established for the results of the six scales of the CASQ for the SOLE-Guatemala students and the CRHC students. Independent t-tests were performed to determine if significant differences existed between the groups on the pretest. A repeated measures ANOVA for pre and posttest scores for each of the six dependent variables were then performed on both the experimental and control group to determine if significant differences existed between pre and posttest scores for the students who participated in SOLE and the students who remained on campus. MANCOVA was performed to determine if there were significant differences on

the posttest scores for the two groups, covarying out the pretest results

Significance level was set at .05.

Phase 2

Following the completion of the focus groups and copying of the journals, I read through the raw data several times to gain a feeling for the context of the data as a whole, remind myself of the general location of information, and to assess what information occurred repeatedly (Krueger, 1998). The transcripts of the focus group and journals were analyzed in aggregate. Qualitative analysis software is a rapidly growing field with many types of programs available to assist the researcher (Glesne, 1999; Krueger, 1998; Miles & Huberman, 1994); however, since I did not have access to such a computer program, I conducted a manual analysis of the data. Content analysis, as described by Berg (1998), is an examination of the "artifacts of social communication" (p. 223). I used descriptive codes with minimal interpretation (Miles & Huberman, 1994) in the initial stage to attach units of meaning to the data from the focus group and journal entries. I determined I had completed the coding process when the themes became repetitious (Berg, 1998). A good portion of the data from the students' journals was not used in the analysis as I noted the content to be merely descriptive and documentary rather than reflective in nature (i.e. what they ate, what they bought, how much something cost, etc.). For the next step, I placed large sheets of paper on the floor and identified general categories across the top. I began rewriting the phrases into the categories based upon the codes, making sure to document the source in the event I needed to revisit the original

context (Krueger, 1998). As the process continued, I found I had to revise the categories if they became too broad, add new ones for coded data that did not fit, and delete categories that did not seem to fit (Miles & Huberman, 1994). Upon completion, I had constructed 35 categories including the following:

1. Challenges
2. Communication
3. Contact home
4. Culture
5. Food
6. Frustration/Helpless
7. God's Child Organization
8. Group dynamics
9. Hope
10. Host family
11. Housing
12. Injustices
13. Miss home
14. Nerves/Expectations
15. Overcome challenges
16. Overall impression
17. People – Elderly/Kids
18. Personal ability to solve problems
19. Profession/PT skills

20. Plans
21. Professional impact
22. Sad
23. Safety/Scared
24. Self Actualization
25. Sick/Coping
26. Skills needed for service
27. Sleep
28. Social activities/Shopping
29. Successes
30. Societal issues/Solutions
31. Suggestions for future service
32. Supplies needed
33. Guatemalan's PT skills
34. Travel
35. Views of Guatemala

During the next step, I identified links and patterns from the categories and developed five major themes with sub-categories. At this point, I discussed my initial interpretations with one of the faculty members who had conducted the focus groups. She helped to add clarity to my conclusions and validated my findings. I used both in vivo codes and sociological constructs for the major themes (Strauss, 1987). According to Strauss (1987), in vivo codes are the literal terms used by the participants and sociological constructs are formulated

by the researcher and generally are derived from the researcher's scholarly knowledge and knowledge of the field under study. The themes, with subthemes in parenthesis, included: (1) physiological needs (food, sleep, shopping, living arrangements, contact home), (2) people of Guatemala, (3) frustration (frustration with the injustices of both the healthcare system and living conditions, feeling of helplessness, and frustration with communication barriers), (4) making a difference, and (5) self actualization.

Summary

The purpose of this study was to investigate the impact of an international service-learning experience on physical therapy students. The study was conducted in two phases. Phase one investigated differences on the results of the pre and postcourse Civic Attitudes and Skills Questionnaire (CASQ) between SOLE-Guatemala students and students in the non-service learning Community and Rural Healthcare class. Specifically, the CASQ measures students' attitudes on six scales including civic action, interpersonal and problem-solving skills, political awareness, leadership skills, social justice attitudes, and diversity attitudes. The second phase of the study triangulated the information by coding data gathered from a post-trip focus group and student journal entries.

CHAPTER III
JOURNAL ARTICLE ONE
INTRODUCTION

The use of service-learning as an experiential learning strategy has grown significantly in academia over the past decade, partly due to its ability to combine academic learning, personal and professional development, and civic engagement (Schumer & Cook, 1999). Educational reformists such as Boyer (1990) suggest that educators need to expand their visions beyond just educating students academically, but rather need to prepare them to “live lives of dignity and purpose” (p. 78). The importance of community involvement has also been emphasized federally with the signing of former President George Bush’s National Community Service Trust Act in 1990 and President Clinton’s endorsement of the National Community Service Trust Act in 1994.

Academic institutions and individual programs committed to civic engagement and service-learning must be able to demonstrate the impact of the projects in order to ensure students are meeting academic and professional objectives, as well as justify the investments from the institutions and community. The proliferation in service-learning experiences has led to a plethora of research studies utilizing qualitative (Arman & Scherer, 2002; Dunlap, 1998; Hones, 1997; Litke, 2002; Porter & Monard, 2001; Reynolds, 2000; Yates & Youniss, 1996;

Yates & Youniss, 1998), quantitative (Astin, Sax, & Avalos, 1999; Bringle & Kremer, 1993; Hamm, Dowell, & Houck, 1998; Johnson & Bozeman, 1998; Markus, Howard, & King, 1993; Moely, McFarland, Miron, Mercer & Ilustre, 2002; Myers-Lipton, 1996a; Myers-Lipton, 1996b; Myers-Lipton, 1998; Osborne, Hammerich, & Hensley, 1998; Rocha, 2000; Sax & Astin, 1997; Wang, Greathouse, & Falcinella, 1998), and mixed methodologies (Arman & Scherer, 2002; Batchelder & Root, 1994; Giles & Eyles, 1994; Rice & Brown, 1998; St. Clair & McKenry, 1999; Wade & Yarbrough, 1997).

Physical therapy (PT) programs have seen a growth in service-learning activities in their curricula over the last five years. Many programs have added this pedagogical approach to enhance the clinical education component and practical experiences while also enhancing the affective qualities of future practitioners (Allaben, Dripchak, Gallery, & Pickard, 2001; Black, 2002; Inacio, Swanson, Haskvitz, & Berger, 2000; Little, 2000; Ngo et al. 2001; Svien, 1999; Village & Village, 2001). PT academic programs have had to seek out creative and alternative methods of clinical education as third-party payers have restricted payment on care given by students. Service-learning is a valuable pedagogical method that allows students to practice examination skills, evaluation, diagnosis, prognosis, intervention, screening, and prevention and wellness activities in the community while also meeting community needs.

According to the *Normative Model of Physical Therapist Professional Education, Version 2000* (Normative Model), an expected objective of PT professional education is to prepare graduates who will "demonstrate social

responsibility, citizenship, and advocacy, including participation in community and human service organizations and activities" (*Normative Model*, 2000, p. 100). Preparing healthcare professionals, including PT students, to work with culturally diverse populations is another key objective of professional education. The Normative Model describes the entry-level PT graduate as one who will "display sensitivity to individual and cultural differences in all professional interactions" (*Normative Model*, 2000, p. 61). Additionally, the PT graduate will "provide culturally competent physical therapy services for prevention, health promotion, fitness, and wellness to individuals, groups, and communities" (*Normative Model*, 2000, p.91).

In 2001, the University of Mary in Bismarck, North Dakota proclaimed itself as "America's Leadership University" with its new focus on developing servant leaders for the 21st century (*A Plan for Growth through Change and Commitment, 2001-2006*, 2001). The University's Program in PT states its mission is "to prepare autonomous practitioners for the profession of physical therapy who are leaders in service through evidenced-based practice, education, and scholarly activity..." (*Graduate Studies Bulletin, 2003-2005*, 2003, p. 53). With these objectives in mind, the PT faculty developed an international service-learning experience (Service-Orientated Leadership Experience or SOLE), in collaboration with occupational therapy (OT) faculty and students, in the spring of 2002. The concept for this course was modeled after a course entitled Service Oriented Field Experience or SOFE created by faculty at Regis University (Alexander, Atkinson, & Burton, 1999).

In May 2002, seven PT students from the class of 2002 and I embarked on a 10-day trip to Guatemala; eleven PT students did not participate in this elective offering. Course evaluations were extremely positive and anecdotal evidence revealed that the students felt the experience was very valuable. However, assessment of the project lacked analysis of specific student outcomes in terms of cognitive and affective impact on the students.

Due to the success of the inaugural offering of SOLE-Guatemala, OT and PT faculty offered the experience in 2003. During fall 2002, the PT class of 2003 was introduced to the idea of the spring/May term offering and 12 students voiced willingness to proceed. The students in SOLE participated in a one-credit spring precourse followed by a 10 day visit to Antigua, Guatemala in May 2003 (Appendix A). The students who remained on campus (n =13) participated in Community and Rural Healthcare (CRHC). This course provided students opportunities to engage in community education and limited service to local agencies; however, no reflective process was attached to this course (Appendix B).

Based on themes from Dewey's work, Giles and Eyler (1994) suggested several important questions requiring further study. Among those questions were whether service-learning promotes development of social intelligence and if student outcomes vary dependent upon the type of experience. Those questions helped to form the purpose of this study.

Purpose of the Study

The purpose of this phase of the study was to investigate the impact of an international service-learning experience (SOLE) on PT students. Specifically, this study analyzed the outcomes related to civic attitude, interpersonal and problem-solving skills, political awareness, leadership skills, social justice attitudes, and diversity attitudes by comparing the results of the Civic Attitudes and Skills Questionnaire (CASQ) between students who participated in SOLE and students who participated in CRHC.

Literature Review and Theoretical Framework

Advocates of service-learning trace the history of experiential learning back to the works of Dewey (Giles & Eyler, 1994). Dewey proposed the use of interesting, worthwhile projects as a way of learning from experience (Dewey, 1933). He further promoted a link between school and the community in preparing students to become active citizens (Dewey, 1916). More recently, Kolb (1984) suggested that for effective learning to occur, the learner must engage in a concrete experience, reflect on that experience, create concepts and theories that explain the reflections, and develop a plan to experiment with their reconceptualized thinking.

There are many variations of service-learning opportunities offered in undergraduate and graduate education. The wide disparity in pedagogical methods has been found to impact student outcomes. Studies have shown that variations such as placement quality, intensity of reflection, diversity of the community partner (Eyler & Giles, 1999), level and quality of supervision

(Batchelder & Root, 1994), and duration and intensity of the experience (Astin, Sax & Avalos, 1999; Wang, Greathouse & Falcinella, 1998) all effect outcomes in service-learning.

Most research studies involving service-learning have shown that civic and personal values have generally been significantly positively affected in students involved in service-learning. While some early studies used small populations from single settings (Giles & Eyler, 1994; Markus, Howard, & King, 1993), more recent studies support these findings using larger sample sizes from diverse institutions (Astin & Sax, 1998; Eyler & Giles, 1999; Gray et al., 1998). Additionally, the research shows that involvement in service and improved civic attitudes remain after graduation (Astin, Sax, & Avalos, 1999; Youniss & Yates, 1997).

While the amount of research in service-learning has increased in the last few decades and students ranging in grade level from elementary to graduate school have been involved, research in the area of PT education has been limited. Qualitative studies revealed PT students gained cultural competency and sought to develop PT interventions in line with appropriate and identified cultural differences in their service-learning experience in a homeless shelter (Black, 2002). Additionally, social responsibility skills, communication, education, prevention and wellness intervention, professional development, incorporation of individual and cultural differences, and critical thinking all were enhanced in another study (Reynolds, 2000).

Research Questions

This study compared outcomes of students who participated in the SOLE and students who remained on campus and participated in CRHC, a course which offered community education activities but was not a true “service-learning” experience. The following research questions were investigated:

1. Were there differences between pre and post scores for students who participated in an international service-learning course (experimental group)?
2. Were there differences between pre and post scores for students who did not participate in an international service-learning course (control group)?
3. Were there differences on posttest scores between the experimental and control groups?

Delimitation of the Study

This quasi-experimental study was delimited to second year PT students from the University of Mary (N=25). Twelve students voluntarily participated in the SOLE course in the spring and May term of 2003 and 13 students participated in the four-credit CRHC class during May 2003.

Significance of the Study

Service-learning has seen a significant increase in popularity in many elementary, high school, and collegiate classrooms over the past decade. While PT education has also noted a recent surge, much of the evidence has been anecdotal. With the newly proclaimed title “America’s Leadership University” and a dedicated commitment to professional competence, service, and the

Benedictine values (*A Plan for Growth through Change and Commitment*, 2001-2006), service-learning is a natural fit at the University of Mary. The PT program embarked on its inaugural international service-learning experience in the spring of 2002. Anecdotal evidence suggested that students gained valuable growth in affective outcomes such as cultural diversity acceptance; awareness of social issues; and commitment to service; however, empirical evidence was not gathered. It was vital to analyze the effectiveness of the program in order to achieve success and ensure growth in future service-learning experiences.

Methods

Selection of the Study Sample

The sample consisted of 25 graduate students from the second-year PT class at the University of Mary, Bismarck, North Dakota. All students were told about the SOLE offering during fall 2002 and were given the opportunity to voluntarily participate. Twelve students (9 females, 3 males) participated in the SOLE class. The remaining 13 students (7 females, 6 males) on campus enrolled in the CRHC class during spring 2003. Self-reported volunteer hours during high school and college varied widely between the two groups. The range was 20-400 hours for the CRHC students and 20-2200 hours for the SOLE students (see Table 1).

Table 1. Demographic Characteristics of Students Participating in SOLE (N = 12) and CRHC (N = 13) (Standard Deviation in parentheses)

	All Students	SOLE	CRHC
Ethnicity			
White	100%	100%	100%
Mean Age	24.5 (2.1)	24.0 (1.5)	24.9 (2.6)
Mean Grade Point	3.7 (.3)	3.5 (.3)	3.8 (.2)

Table 1. cont. Demographic Characteristics of Students Participating in SOLE (N = 12) and CRHC (N = 13) (Standard Deviation in parentheses)

	All Students	SOLE	CRHC
Mean Hours Previous Volunteer Hrs.*	260.0 (333.0)	364.6 (432.2)	145.9 (104.8)

*as reported by the students as approx. volunteer hours

In addition, on the precourse survey, students enrolled in CRHC were asked to check off suggested reasons for not participating in SOLE as applicable to their situations (see Table 2).

Table 2. Reason Provided by CRHC Students for Not Participating in SOLE (N = 13)

Reason	Frequency*	%
Concern for Safety	1	8
Family did not want me to go	2	15
Not Interested	3	23
Financial reasons	11	85
Other**	4	31

*students could check more than 1 answer

**answers included time constraints, parental obligations

Format of SOLE-Guatemala

SOLE-Guatemala was divided into two phases: phase one was a one credit preparatory class from January to April 2003. The class met six times for two hours each time (Appendix A). In addition to the 12 PT students, six occupational therapy (OT) students were also enrolled in the SOLE. A faculty member from OT and I coordinated the class. During that time, the students completed assigned reading of two books as well as required in-class and on-line discussions about the readings. In addition, guests from the community presented their experiences from past mission trips to Guatemala and a young

Guatemalan woman, who is now a resident of Bismarck, described her life story. The students, in groups, were required to research the present healthcare, social, and educational programs in Guatemala and present their findings to the class. Also during this time, the students raised funds and collected healthcare supplies for their international trip. Students were encouraged to fundraise to help defray the cost of the trip (approximately \$1600) but it was not mandatory. The donated healthcare supplies came from various individuals, PT departments throughout the state, hospitals, and home medical equipment companies.

The 12 students met all precourse expectations as well as necessary vaccinations, passports, and payments prior to their enrollment in the May term two-credit SOLE. During the two week experience, I set aside specific times to meet and reflect with the students as a group. I also gave feedback on the students' required daily journals. The students posted on-line daily journals and questions for their classmates remaining on campus. Upon return home, the students presented a summary of their experiences to students and faculty from the University of Mary. This information is analyzed in another study.

Community Partner

The Asociacion Nuestros Ahijados, or God's Child Project (GCP), was established in 1983 by Atkinson (1998). The purpose is to offer poor children and families in Guatemala a permanent way to break out of poverty. The program "addresses present and future needs by providing food, shelter, clothing, education, medical care, structure, guidance and support..." (p. 32). The GCP, based in Antigua, Guatemala, coordinated the diverse healthcare sites

the students would volunteer in during the experience. The settings included a special education school, two nursing homes, hospital, and outpatient clinic at the GCP.

Community and Rural Healthcare (CRHC)

Community and rural healthcare is a four-credit capstone course offered during the May term for second year PT students (Appendix B). The course is divided into three main sections, each taking approximately one week: 1) rural healthcare experience; 2) seminar with speakers from various community and rural referral agencies; and 3) community education service project (Roller, 2001). During week one, students were assigned to various rural communities in North Dakota to complete a field experience. While there, they interviewed diverse organizations and professions that compose the rural healthcare environment. Upon return, students collaborated with their group to summarize their findings. They then generated recommendations for their assigned community. During the second week, students spent time at a local homeless shelter. They performed a needs assessment for a proposed future healthcare clinic and performed musculoskeletal screenings throughout the week. During the last week, students participated in a seminar with various speakers from diverse areas of healthcare representing future referral sources.

Instruments

After receiving approval from the University of North Dakota and University of Mary's Institutional Review Boards in January 2003, all 2nd year PT

students signed a consent form prior to the precourse administration of the CASQ (Appendix C).

Moely, Mercer, Ilustre, Miron, and McFarland (2002) developed the Civic Attitudes and Skills Questionnaire (CASQ) to measure attitudes, skills, and behavioral intentions that might be affected by service-learning participation. The 45-item self-assessment consists of six sub-scales as determined by factor analysis and takes approximately 20 minutes to complete. Students indicate their agreement or disagreement with each item, such as "individuals are responsible for their own misfortunes," by marking a scale from 1 (completely disagree) to 5 (agree completely). Random statements make up the six -scales which include civic action (plans for future involvement in service), interpersonal and problem solving skills (ability to work well with others), political awareness (knowledge of local and national issues), leadership skills (ability to guide others), social justice attitudes (awareness of how society can influence the fate of individuals), and diversity attitudes (appreciation of people of diverse backgrounds). Internal consistencies (Cronbach's coefficient alpha) ranged from .69 to .88 (Moely, Mercer et al., 2002). Data from students who completed pre and posttests but did not participate in service-learning were used to estimate test-retest stability. Partial pre and posttest score correlations on the six scales ranged from .56 to .81 (Moely, Mercer, et al., 2002). Test-retest correlations are .70 or higher for all scales with the exception of interpersonal and problem-solving skills (.56 and .62 for two samples). Moely, Mercer, et al. (2002) also established validity by examining relationships to measures of social desirability,

attitudes about race, motivational beliefs, and respondents' demographic characteristics.

Procedure and Design

Participation in this study was voluntary. However, to increase participation, all completed surveys were placed in a lottery for a chance to win gift certificates at local eating establishments. The surveys contained individual and anonymous student identification numbers so as to permit individual-level comparisons of pre and postcourse responses. Students were ensured that their responses would remain anonymous. The cover sheet of the precourse survey also included demographic questions relating to their previous level of involvement with service-learning and, for the students who elected not to participate in SOLE, a question asking their reasons (Appendix E). At the completion of May term, students who participated in the initial administration of the CASQ were asked to again complete the survey.

Data Analysis

Survey results for the pre and post-course CASQ were entered into a SPSS program. The raw data was combined and means and standard deviations were established for each of the six scales of the CASQ for the SOLE students and the CRHC students. Independent t-tests were performed to determine if significant differences existed between the groups on the pretest. Paired t-tests were performed for both the control and experimental groups to determine if significant differences existed between the pre and posttest scores for both groups. A MANCOVA was performed to determine if there were

significant differences on the posttest scores for the two groups, covarying out the pretest results. Significance level was set at .05 for all statistical tests.

Results

An independent t-test was calculated comparing the mean scores on the pretests for the students in SOLE and CRHC. Only one difference was found on the scale measuring interpersonal and problem solving skills with the students in CRHC scoring higher than the students in SOLE (see Table 3).

Table 3. Means, Standard Deviations, and t -Test Results on Pretest CASQ for CRHC (N = 13) and SOLE (N = 12)

Scale	Group	Mean	SD	t	p*
Civic Attitudes	CRHC	4.18	.52	1.09	.29
	SOLE	3.93	.64		
Interpersonal and Problem solving skills	CRHC	4.42	.38	2.74	.01
	SOLE	4.01	.35		
Political Awareness	CRHC	3.66	.72	1.91	.07
	SOLE	3.10	.76		
Leadership Skills	CRHC	3.68	.34	.90	.38
	SOLE	3.55	.36		
Social Justice Attitudes	CRHC	3.07	.41	-.39	.70
	SOLE	3.14	.46		
Diversity Attitudes	CRHC	3.28	.37	-.06	.95
	SOLE	3.29	.30		

*2-tailed test

Paired samples t-tests were calculated to compare the mean pretest to posttest scores on the CASQ scales for the CRHC students (see Table 4). Two out of the six scales showed significant increases from the pre to the posttest including leadership skills ($t(12) = -2.44, p < .05$) and social justice attitudes ($t(12) = -6.93, p < .01$). The scale relating to interpersonal and problem solving skills

showed a significant decrease from pre to posttest ($t(12) = 7.55, p < .01$). No significant differences were found from pre to posttest on the remaining three scales.

Paired samples t-tests were also calculated to compare the mean pretest to posttest scores on the six CASQ scales for the SOLE students (see Table 5). A significant increase was found from the pre to posttest for the scale relating to social justice attitudes ($t(11) = -4.14, p < .01$). The scale relating to interpersonal and problem solving skills showed a significant decrease from pre to posttest ($t(11) = 5.94, p < .01$). No significant differences were found for the remaining four scales.

Table 4. Means, Standard Deviations, and t -Test Results on the CASQ Scales for Students Participating in CRHC (N = 13)

	Pretest		Posttest		t	p
	M	SD	M	SD		
1. Civic Action	4.18	.52	4.04	.20	1.11	.29
2. Interper. Prblm Solve Skills	4.42	.38	3.72	.34	7.55	.00
3. Political Awareness	3.66	.72	3.51	.44	.93	.37
4. Leadership Skills	3.68	.34	4.05	.41	-2.44	.03
5. Social Justice Attitudes	3.07	.41	4.18	.29	-6.93	.00
6. Diversity Attitudes	3.28	.37	3.36	.48	-.64	.54

Table 5. Means, Standard Deviations, and t -Test Results on the CASQ Scales for Students Participating in SOLE (N = 12)

	Pretest		Posttest		t	p
	M	SD	M	SD		
1. Civic Action	3.93	.64	3.83	.46	1.00	.34
2. Interper. Prblm Solve Skills	4.01	.35	3.54	.22	5.94	.00
3. Political Awareness	3.10	.76	3.35	.41	-1.46	.17
4. Leadership Skills	3.55	.36	3.77	.49	-1.28	.23
5. Social Justice Attitudes	3.14	.46	3.94	.50	-4.14	.00
6. Diversity Attitudes	3.29	.30	3.22	.39	.54	.60

A one-way MANOVA was calculated examining the effect of group (CRHC and SOLE) on the six scales of the posttest CASQ. No significant effect was found ($\Lambda(6,18) = .81, p > .05$). None of the six scales of the posttest were significantly influenced by service-learning (SOLE) or no service-learning (CRHC).

A between-subjects MANCOVA was then calculated to examine the effect of group on the CASQ posttests, covarying out the effect of the pretests. The civic attitudes pretest was significantly related to the civic attitudes posttests ($F(1,17) = 9.94, p < .01$). The political awareness pretest was also significantly related to the political awareness posttests ($F(1,17) = 6.01, p < .05$).

An ANCOVA was then performed to determine if the pretest scores, specifically the civic attitudes and political awareness scales (identified covariate), influenced the effect of group (SOLE and CRHC) on the posttest scores. Civic attitudes pretests were significantly related to civic attitudes

posttests ($F(1,22) = 29.38, p < .01$). The main effect for group was not significant on the civic attitudes posttest ($F(1,22) = 1.22, p > .05$) with students in CRHC not scoring significantly higher on the posttest ($M = 4.04, SD = .20$) than students in SOLE ($M = 3.83, SD = .46$) (see Tables 4 & 5). Political awareness pretests were significantly related to political awareness posttests ($F(1,22) = 11.87, p < .05$). The main effect for group was not significant on the political awareness posttest ($F(1,22) = .06, p > .05$) with students in CRHC not scoring significantly higher on the posttest ($M = 3.51, SD = .44$) than students in SOLE ($M = 3.35, SD = .41$) (see Tables 4 & 5).

Discussion

The present study attempted to investigate the effects of an international service-learning experience on PT students. Specifically, the study compared results from the CASQ between students involved in SOLE to students in CRHC. PT students who participated in an international service-learning experience showed a significant increase from pretest to posttest scores on the scale measuring social justice attitudes. A group of similar students, who did not participate in the international experience but instead participated in a class that did incorporate some volunteer work with a local homeless shelter, showed a significant increase in pretest to posttest scores on scales measuring both social justice attitudes and leadership skills. My findings were not consistent with the results found by Moely, et al. (2002) in which students involved in service-learning showed a significant increase in scores on the scales measuring civic action, interpersonal and problem solving skills, leadership skills and social

justice attitudes. Students not involved in service-learning showed little change in scores on any of these scales (Moely, McFarland, et al., 2002). A major difference in this study as compared to mine is the number of students participating. Moely, et al., (2002) had 217 students in the service-learning section and 324 in the non-service-learning group as compared to 12 and 13 students respectively in mine. My results also contradicted results in previous studies in which civic values were improved in students participating in service-learning experiences (Astin & Sax, 1998; Eyler & Giles, 1999; Giles & Eyler, 1994; Gray et al., 1998; Markus, Howard, & King, 1993). With the limited number of participants, the ceiling effect (high pretest scores) may have been a major factor in my study.

Social justice attitudes, measuring respondent's agreement with items expressing attitudes concerning causes of poverty and how social problems can be solved (Moely, Mercer, et al., 2002), were improved in both the service-learning and non-service-learning students. Eyler and Giles (1999) found that students who interacted with diverse populations had a greater ability to see social issues in a new way, and a greater commitment to social justice than students who did not have that experience. Both sets of students were able to interact with culturally diverse people who were also experiencing poverty. In the SOLE, students first studied and researched, then interacted with the poor families in Guatemala. In CRHC, students interviewed people who were homeless. They also compared and contrasted their findings with each other. For many students, this was their first opportunity to interact with people of

diverse social class and race. During a discussion involving both sets of students following the completion of their classes, much of the conversation revolved around reasons for poverty and homelessness and potential methods for combating the issues.

Students involved in CRHC showed a significant increase in the scale measuring leadership skills. While school success does not necessarily correlate to leadership skills, it is interesting to note that the only significantly different demographic variable between the two groups was GPA. An independent t-test comparing the mean GPA during the first two years of PT school between students in CRHC and SOLE found a significant difference between the means of the two groups ($t(23) = 2.87, p = .01$). The mean of the control group (CRHC) was significantly higher ($M = 3.79, SD = .17$) than the mean of the experimental group (SOLE) ($M = 3.52, SD = .28$). Other studies did not support my findings and found that students with higher academic potential self-selected into service-learning sections (Fitch, 1991; Serow & Dreyden, 1990). Gray et al.'s (1999) analysis revealed that students in the self-selected service-learning courses reported slightly higher grade point averages as compared to the control group (3.16 and 3.06 respectively). Anecdotally, faculty and participating students in my study noted that students in CRHC seemed to be more conversational and more willing to engage in discussion than students in SOLE.

Interestingly, both groups of students showed a significant decrease in interpersonal and problem solving skills. This was also the only scale that had a significantly different pretest result with the students in CRHC scoring higher than

the students in SOLE. Some of the specific questions composing this scale include: I can think logically in solving problems, I try to find effective ways of solving problems, and I can think analytically in solving problems. While this does not precisely measure self-efficacy, it does measure a student's perception of their ability to solve problems. Previous studies measuring students' sense of power and self-efficacy after service-learning experiences have shown either no change or an actual decrease from precourse to postcourse (Markus, Howard & King, 1993; Miller, 1997). While this result may be thought of as a negative outcome, it may be a change from idealism to realism when considering societal issues. Batchelder and Root (1994) found that students involved in service-learning experiences showed a greater awareness of the multiple and varied issues involved in dealing with social issues. While the students in CRHC had a shorter experience with the homeless shelter, they were also able to interact with the students in the SOLE through an on-line discussion board. This allowed both sets of students to compare and contrast their experiences.

While the present study did not yield strong support for the use of international service-learning experiences, it did assist in answering Giles and Eyer (1994) suggested questions requiring further study. Among those questions were whether service-learning promotes development of social intelligence and if student outcomes vary dependent upon the type of experience. Students involved in SOLE and CRHC both showed significant increases in pretest to posttest scores in social justice attitudes. Additionally, students in

CRHC, which offered a short period of interaction with people who are homeless, also showed a significant improvement in leadership skills.

Conclusion

The current study has implications for both PT programs and higher education in general. The study lends support to previous studies that showed improvement in students' ability to understand causes of social issues and how social problems can be solved. It did not show a significant difference in outcomes between students who participated in an international service-learning experience compared to students who had a brief interaction with people in a homeless shelter.

An important finding was the actual decrease in both groups' perception of their ability to solve problems. A consideration for faculty members preparing to undertake a service-learning experience may be to prepare the students to set realistic goals. Students may have thought the social problems too overwhelming to solve versus concentrating on the areas where they could make small differences.

PT programs are continually challenged to find alternative methods of teaching students valuable clinical skills, while also encompassing methods to improve cultural competence, prevention and wellness, and social responsibility expertise. Service-learning may be a valuable addition to traditional clinical education and pedagogical methods, whether in the surrounding community or in an international setting.

Further studies need to be conducted both quantitatively and qualitatively to assess outcomes of alternative methods of service-learning on affective, cognitive, and clinical skills on PT students. In addition to comparing alternative types of service-learning courses, additional studies should be conducted comparing experimental and control groups.

CHAPTER IV
JOURNAL ARTICLE TWO
INTRODUCTION

Gardner (1990) reports that in the face of the many issues the United States is confronting such as AIDS, terrorism, and nuclear conflict, it is in urgent need of leaders. He describes issues such as lack of "motivation, values, social cohesion, renewal" as potential hindrances to leadership development (p. xiii). Furthermore, Greenleaf (1971) faulted the educational system in its neglect of preparing leaders with potential. Academic institutions have responded by doubling the number of colleges with leadership training in the last decade (Reisberg, 1998). Servant-leadership, one type of leadership, is defined as serving others first as top priority (Greenleaf, 1971). Service-learning, a pedagogical method that partners academic learning and community engagement, is one path towards servant-leadership (Lad & Luechauer, 1998).

Service-learning, while embedded in educational philosophy for many decades, is still rather new to health education (Connors & Seifer, 1997); however, it has shown significant growth in academia over the past several years (Schumer & Cook, 1999). In response to the transition from the biomedical model of healthcare to a decentralized system more responsive to community needs, the Pew Health Professions Commission identified a set of 21 core competencies necessary for professionals to improve the health needs of the

public in the future (Pew Health Professions Commission, 1998). A sample of the competencies include the ability to embrace a personal ethic of social responsibility and service, improve access to health care for those with unmet health needs, provide culturally sensitive care to a diverse society, practice leadership, and advocate for public policy that promotes and protects the health of the public.

The delivery of culturally competent care is often inadequate in the education of rehabilitation professionals (Leavitt, 1999). According to the Normative Model, the physical therapy (PT) graduate upon entry into professional practice will "display sensitivity to individual and cultural differences in all professional interactions" (*Normative Model*, 2000, p. 61). Additionally, the PT graduate will "provide culturally competent physical therapy services for prevention, health promotion, fitness, and wellness to individuals, groups, and communities" (*Normative Model*, 2000, p.91). In a study of nurses engaged in a short-term international clinical experience, statistically significant differences were found in the achievement of cultural self-efficacy for the students who completed international clinical experiences as opposed to those who stayed in the United States ($p < .05$) (St. Clair & McKenry, 1999). Qualitative analysis has revealed that PT students gained cultural competency and sought to develop PT interventions in line with appropriate and identified cultural differences in their service-learning experience in a homeless shelter (Black, 2002). Reynolds (2000) also noted that several PT educational objectives were enhanced in students who planned and participated in a service-learning experience. An

analysis of qualitative data revealed that social responsibility skills were enhanced as well as communication, education, prevention and wellness intervention, professional development, incorporation of individual and cultural differences, and critical thinking.

The University of Mary in Bismarck, North Dakota unveiled their new title of "America's Leadership University" in 2001 and described their commitment to the Benedictine values, professional competence, and service as the backbone of leadership development (*A Plan for Growth through Change and Commitment*, 2001-2006). With these components in mind, the PT program at the University of Mary initiated an international service-learning experience in spring 2002. The concept for this course was modeled after a similar course entitled Service Oriented Field Experience (SOFE) created by faculty at Regis University (Alexander, Atkinson, & Burton, 1999). Anecdotal evidence suggested that students gained valuable growth in affective outcomes such as cultural diversity acceptance, awareness of social issues, and commitment to service; however, empirical evidence was not gathered. Due to the success of the initial offering, the course was offered again in May 2003. It was vital to analyze the impact of the program in order to produce changes and ensure growth in future service-learning experiences; therefore, the following study was conducted.

Purpose

The purpose of this study was to describe an international service-learning experience (Service-Orientated Leadership Experience or SOLE) in which PT students served the needs of clients in a third-World country.

Conceptual Framework

Experiential Learning

Learning through experience is not a new concept. Lave and Wenger (1991) describe "legitimate peripheral participation" as a concept similar to the apprenticeship method and as a crucial characteristic of situated learning. They posit "learners inevitably participate in communities of practitioners and that the mastery of knowledge and skill requires newcomers to move toward full participation in the sociocultural practices of a community" (p. 29). All PT students currently participate in a type of apprenticeship, or clinical rotation, during their educational program. That type of model is based on the concept of a master-apprentice relationship. While Lave and Wenger (1991) acknowledge this type of model, they also discuss the type of learning taking place when students are given access to practice in a social community. Learners begin with peripheral tasks, based on their comfort level and knowledge, and gradually move toward fuller participation in the community.

Learning through experience is embedded in Dewey's (1916, 1938) extensive writings on pedagogy and epistemology. Dewey (1938) described two components necessary for quality experiences: agreeableness and effect on later experiences. The educator must find experiences that meet the present need but can "live fruitfully and creatively in subsequent experiences" (p. 28). He further proposed two principles that explain how experiences are educative. The first, principle of continuity or the experiential continuum, is the idea that all experiences must build upon previous ones and must be aimed at the growth

and development of the individual. The second, principle of interaction, proposes that objective and internal conditions must be factored into all experiences.

When taken together, "they form what we call a situation" (p. 42). He states, "An experience is always what it is because of a transaction taking place between an individual and what, at the time, constitutes his environment..." (1938, p. 43). As learners grow, their environment expands to encompass a larger world.

Servant leadership

Service-learning has roots in the philosophy of servant-leadership. Lad and Luechauer (1998) discuss five pathways that may be part of the road to being a servant-leader. The first is the cognitive path, or gathering new insight through intellectual means. The second is the experiential path which entails learning by taking risks and reflecting on what is being learned. The spiritual path is characterized by a search for meaning and purpose. The organizational path posits that the organization must serve the larger community and the individuals in the organization must be enabled to serve. And finally, the community path connects service to the community (Lad & Luechauer, 1998).

Greenleaf (1971) faulted the American educational system for delivering an "anti-leadership vaccine" (p. 164). He differentiates the leader-first and servant-first style in the following way:

The servant-leader is servant first...It begins with the natural feeling that one wants to serve, to serve first. Then conscious choice brings one to aspire to lead. He is sharply different from the person who is leader first, perhaps because of the need to assuage an unusual power drive or to acquire material possessions (p. 13).

The servant-leader attempts to ensure that those being served will have their highest needs met and will grow as individuals (1971).

Motivation Theory

Human behavior is affected by many variables including biology, culture, and their circumstances. Motivations are only one class of determinants of behavior (Maslow, 1943). Maslow (1943, 1954) contributed to the theories of human behavior by viewing human needs in a hierarchy, ascending from lowest to highest needs. When one set of needs is met, it is no longer a motivator; the unmet needs then act as motivators. The hierarchy is as follows: physiological needs such as food, water, shelter, and sleep; safety needs; belongingness or love needs; esteem or ego-status needs; and self-actualization needs. The last stage, self-actualization, is defined by Maslow (1943) as the "desire for self-fulfillment, namely, to the tendency for him to become actualized in what he is potentially" (p. 382).

Research Questions

The following research questions were investigated in this study:

1. What beliefs and attitudes did PT students gain from an international service-learning experience?
2. Did an international service-learning experience assist the PT student in assuming the role of a servant leader?

Delimitations

This study was delimited to 12 PT students who were in their second-year of a professional master's degree program at the University of Mary in Bismarck, North Dakota during the academic year 2002-2003. The students volunteered to participate in the elective Service Oriented Leadership Experience (SOLE) during

May 2003. Of those 12, nine students volunteered their journals for analysis and 10 students participated in a focus group.

Significance of the Study

As third-party payers are becoming more restrictive in their payment of care performed by students, PT educators must become more creative in designing practice situations for their students. Service-learning is not only a valuable alternative, but also combines the experience with opportunities to practice social responsibility, citizenship, advocacy, and participation in community and human service organizations and activities, all objectives of PT professional education (*Normative Model*, 2000, p. 100). Furthermore, as the call for leadership training in America's youth increases, service-learning may assist the student in assuming the role of servant leader.

Methods

Design

The characteristics of qualitative research were best suited to this study. The purpose of qualitative research is to develop concepts that will sensitize readers to cultures, describe multiple realities and interpretations, develop grounded theory, and develop perspectives of the participants (Bailey, 1997). While quantitative researchers tend to be interested in whether and to what extent x causes variance in y, qualitative researchers tend to ask how x plays a role in causing y and what the process is that connects x and y (Maxwell, 1996). My goal was to extract the meaning of the service-learning experience from the PT students and discern how they felt about their role in service.

This qualitative case study entailed journal and focus group analysis. A case study is an exploration of a "bounded system" or a case over time through detailed, in-depth data collection involving multiple sources of information rich in context. The system is bounded by time and place (Creswell, 1998, pg. 61).

Format of Service Oriented Leadership Experience (SOLE)

The SOLE-Guatemala is divided into two phases: phase one was a one credit preparatory class from January to April 2003. The class met six times for two hours each time (Appendix A). In addition to the 12 PT students, six occupational therapy (OT) students were also enrolled in the SOLE. A faculty member from OT and I coordinated the class. During that time, the students completed assigned reading of two books as well as required in-class and on-line discussions about the readings. In addition, guests from the community presented their experiences from past mission trips to Guatemala and a young Guatemalan woman, who is now a resident of Bismarck, gave her life story. The students, in groups, were required to research the present healthcare, social, and educational programs in Guatemala and present their findings to the class. Also during this time, the students raised funds and collected healthcare supplies for their international trip. Students were encouraged to fundraise to help defray the cost of the trip (approximately \$1600) but it was not mandatory. The donated healthcare supplies came from various individuals, PT departments throughout the state, hospitals, and home medical equipment companies.

The 12 students met all pre-course expectations including shots, passports, and payments prior to their enrollment in the May term two-credit

SOLE. During the two week experience, I set aside specific times to meet and reflect with the students as a group. I also gave feedback on the students' required daily journals. The students posted on-line daily journals and questions for their classmates remaining on campus. Upon return home, the students presented a summary of their experiences to students and faculty from the University of Mary.

Community Partner

The Asociacion Nuestros Ahijados, or God's Child Project (GCP), was established in 1983 by Atkinson (1998). The purpose is to offer poor children and families in Guatemala a permanent way to break out of poverty. The program "addresses present and future needs by providing food, shelter, clothing, education, medical care, structure, guidance and support..." (p. 32). The GCP, based in Antigua, Guatemala, coordinated the diverse healthcare sites in which the students would volunteer during the experience. The settings included a special education school, two nursing homes, a hospital, and an outpatient clinic at the GCP.

Participants

Twelve Caucasian students (9 females, 3 males) participated in the SOLE. All students were in their last year of the 26 month Master's in PT program. The mean age was 24.0 years (SD = 1.5) and the mean grade point average for two academic years in the graduate PT program was 3.52 (SD = .30).

Data Collection

During the spring pre-course, students were given guidelines for their journal writings. Eyler, Giles, and Schmiede (1996) concluded from their research that effective reflection should contain the four "C's" – continuous, connected, challenging, and contextualized. The class contained activities to help prepare the students for effective reflection during their international travel including a discussion and activity using the questions "what" (describe their experience), "so what" (discuss what it means to them), and "now what" (identify steps to use the information in their future (Olson & Bush, 1997). During the SOLE, I read and provided feedback to the students' writings to challenge them to think of issues in a more critical way (Eyler, Giles, & Schmiede, 1996).

The goal of the focus group was to generate an open and interactive discussion about their experiences in Guatemala. According to Gelmon, Holland, Driscoll, Spring, and Kerrigan (2001), focus groups are a guided conversation in which everyone should participate. Questions for the focus group were adapted from Gelmon et al. (2001, p. 43-44) and Eyler, Giles, and Schmiede (1996, p.147) (Appendix F).

Procedure and Design

The Institutional Review Board at the University of North Dakota approved the study; all students in SOLE were given an informed consent form prior to the service trip (Appendix D). The informed consent form contained a description of the focus group and journal analysis.

Within two weeks upon return from the service trip, time was scheduled with the participating SOLE-Guatemalan students and two fellow faculty members with experience in conducting focus groups. In order to encourage open conversation and to limit the possibility that the students might be influenced by my presence, I did not participate in the focus group. One faculty member facilitated the group and another took notes on an overhead projector. The focus group was audio recorded for purposes of clarification in case the notes were unclear; however, problems with the equipment prevented the second session from being recorded. Students self-selected fictitious names to conceal their identity on written and audio-recorded data. Two 60-minute sessions were held two days apart. Day one was to get the students comfortable with the format and the facilitators, and day two was to clarify and add to the information gained from day one. Throughout the sessions, participants were periodically asked to check the notes to ensure their responses were accurately represented. In addition, at the beginning of the second session, typed notes from the first session were handed out to the students for verification and clarification.

Data Analysis

Following the completion of the focus groups and the copying of the journals, I read through the raw data several times. The transcripts of the focus group and journals were analyzed in aggregate. I manually coded the data, using key words and phrases, and identified links and patterns from the focus group and journal entries (Glesne, 1999). These initial links were placed into 35

categories. The categories were further developed into major themes with sub-categories. Content analysis resulted in the identification of five major themes and eight subthemes. The first theme, students' need to have basic their basic physiological needs met, included the subthemes of food, sleep, shopping, living arrangements, and contact home. This theme centered on the students' need for personal comforts. The second, students' perception of the characteristics of the people of Guatemala, encased several of the 35 categories such as culture, their host families, and people/elderly/kids. The third, students' sense of frustration, was a strong theme and included the subthemes of frustration with the injustices of the healthcare system and living conditions, feelings of helplessness, and frustration with the communication barriers. Examples of categories that constituted this theme included challenges during the experience, communication barriers, frustration/helplessness, injustices, sadness, societal issues/solutions, and sick/coping skills. The students' ability to make a difference, the fourth theme, emerged from the categories of successes, group dynamics, plans, hope, the God's Child Organization, and the students' overall impression of the experience. And finally self-actualization, the fifth theme, was one of the 35 categories. Because of the quantity and quality of codes that fit into this category, as well as various other categories that overlapped such as professional impact and solutions to societal issues, I made self actualization one of the major themes.

Glesne (1999) recommends that the researcher become aware of personal emotions and biases to assess when subjectivity is being threatened. I

recognized prior to the trip that it was going to be difficult not to compare the May 2003 SOLE to the SOLE in May 2002. I realized I had strong hopes for the students to have a powerful experience and became frustrated with attitudes I perceived as whiny or complaining. It became vital for me to write about my feelings in a daily journal so I could better assess what might hinder my objectivity and effectiveness as teacher and researcher.

Results

Content analysis resulted in the identification of five major themes: (1) students' need to have basic their basic physiological needs met, (2) students' perception of the characteristics of the people of Guatemala, (3) students' sense of frustration, (4) students' ability to make a difference, and (5) self-actualization.

Physiological Needs

During the spring pre-course, students studied and practiced reflective journaling. While they were told that it would be important for future reference and memory to document daily activities including food that they ate; noises, sights, and sounds; and entertainment in which they engaged, they were also asked to reflect on the meaning of daily events. It became apparent that food, the students' sleep schedule, and their contact with people back home were very important as noted by the frequency and quantity of these entries. Several subthemes emerged including food, sleep, shopping, living arrangements, and contact home. It should be noted that at least seven of the twelve students became ill at one time during the 10 day experience, certainly impacting their writings.

Food

It became clear that many of the students had difficulty adapting to the Guatemalan food and craved the comforts of food from back home. Three meals per day were prepared and served by the students' respective host families.

Many of the students voiced displeasure with the food. Quotes such as this were common:

Tonight we didn't have the greatest supper. We had what we thought were tamales with a chunk of bone with a tad of chicken? We did have ramen noodle soup that saved the day...Hopefully they got the hint and won't serve that type of food again. It was a great cultural experience though and I am glad I had the opportunity to at least try it. I quickly realized it wasn't for me but at least I know it and got a taste of their culture. (Marla, journal entry day 3)

Many students reported feelings of guilt about leaving food that they did not like on their plates. They realized that the host family took time and effort to prepare the food and had also witnessed first-hand, many for the first time, people who had no food.

Sleep

Several students complained that their sleep routines were interrupted because of difficulty adapting to the level of noise going on throughout the night (firecrackers, trucks, dogs). Students noted the importance of taking naps during down times and I observed students taking naps during most times that we spent traveling in vehicles.

Shopping

While all students purchased many Guatemalan souvenirs and voiced excitement over bringing the gifts back for their friends and family, some voiced concern over the bartering process and its effect on the economy.

I had a thought today. People are so poor and need so much money but yet we (tourists) are bartering to get things so much cheaper, when actually they are pretty cheap to start with. So, in a way, aren't we just contradicting what we want to do? Are we just cheating people and adding to their poverty on account of our selfishness? (Cathy, journal entry day 7)

Although the people expect bartering, I feel somewhat bad about it. I don't think I really believe what they say as far as how much it costs them to make and how long it takes to make. I wonder if they feel it's a slap in the face when I offer an extremely low bid. (Jill, journal entry day 7)

Living Arrangements

The students had been told by past participants what their housing situations would be like and had seen many pictures but still had some difficulty adjusting to the impoverished host families' houses. By Guatemalan's standards, our host families would be considered middle class.

The couple we are staying with appears very nice but their home is nothing like I expected. Only the bedroom and kitchen really have a ceiling and the other areas do not. (Rachel, journal entry day 1)

Outside our bedroom door is a little room with a dining room table, fridge, and a TV. A very tiny room. Next we walk this dark pathway to the bathroom, in the meanwhile, looking up and seeing no roof. Just the open sky, right over their house. At this point I realize we will definitely be roughing it the next 10 days. (Cathy, journal entry day 1)

Contact Home

Students were expected to post daily journal entries and questions on an established on-line website for their classmates in the United States. Most also took advantage of this time to e-mail and/or phone their friends and family back home. For two students, this experience was their first airplane trip and thus, first time away for a substantial time and distance. The trip was scheduled over the Mother's Day holiday prompting most students to call home during that time. It was apparent that contact home was an important value for most students.

Characteristics of the People of Guatemala

A second theme was the students' perception of the characteristics of the people of Guatemala. While students were mortified over the conditions of the country and the facilities, they were amazed at the constantly smiling and genuine people of Guatemala. It was observed that even though the students noted the unsanitary conditions of the Guatemalan people they encountered, they were not afraid to touch and work with them. Several students noted that the people, especially the children, seemed very happy and content even though they have far less material goods than we do. Another student noted how a man showed hospitality:

This pleasant gentleman gave up his chair and found another a stool for us to sit on. Funny how we are in one of the worst places and the back area – out with the chickens, but this man is still being hospitable. These people literally have nothing, yet are hospitable in any way they can be. (Rachel, journal entry day 9)

Students' Sense of Frustration

The data demonstrated that the students had a considerable amount of frustration during the experience. This theme included the subthemes of frustration with the injustices of both the healthcare system and living conditions, feelings of helplessness, and frustration with the communication barriers. Frustration was present in all student journals and was a focal point during the focus groups.

Injustices

There was also a woman tied to her chair and a post. She was trying desperately to get up. I asked someone if I could untie her and then I realized what I had said – to untie a human being, how awful. Another lady was folded over in her chair and everyone just left her. What was wrong with these people? (Rachel, journal entry day 4)

Wow! I was absolutely appalled! There were 59 residents and hardly any room. I saw cots outside so maybe they bring those in at night. The building we were in wasn't so bad; however, once we stepped out into the other area I got sick to my stomach. The residents were placed outside in the dirt and filth with the chickens and the buildings they slept in were terrible. (Marla, journal entry day 2)

Helplessness

Often times the group would think of ideas to help, but the peoples' conditions were too far advanced or the place didn't have the equipment. I would say that was the most frustrating part of the trip. (Allison, journal entry 2 days post-trip)

Many students detailed the "roller coaster of emotions" they felt. They recounted feeling very productive one day only to see their work undone the next.

Yesterday, one group did a lot of wheelchair positioning with foam and gave people braces and they were so happy! Today, we went again and we saw some foam in the dirt pit in a corner (garbage?) and one man didn't have his but one woman had some who wasn't supposed to! It was very frustrating because if we do all this stuff and after one day, it's not continued, these people will never feel better and be miserable. We were

only there for 1½ hours and that was plenty. (Cathy, journal entry day 5 and repeated during focus group under “challenges”)

Last day for visits to the sites and many of us have been frustrated by the minimal impact we’ve done. I try to keep in mind the patients see and understand we’ve come from a different country to help and that itself is reassuring. (Randy, journal entry day 9)

On one of the last days, the students voiced their frustrations and a group meeting was held with the students, the volunteer coordinator, and me. Comments from this meeting demonstrated that this was a significant event for many students. Entries very similar to this were seen in many journals:

...people’s frustrations were voiced to (the volunteer coordinator). People are feeling that basically we are here to give the therapists a break and we’ll do their job for a few hours. Along with that, we start to think that what we do today won’t be continued in the long run so what’s the point? He gave us a great pep talk saying that what we do does make a difference and it’s very hard to break the ring of poverty because that’s what people do here. I think we all felt better after that and tomorrow being our last day of working, we are going to teach staff suggestions and programs to be done so our work can be continued in the future. (Cathy, journal entry day 8)

Communication Barriers

Very few students spoke even basic Spanish. Interpreters were provided however, the translators were not trained in medical terminology. Some students initially voiced anger at the translator but then realized that the frustration must have been mutual and that they could have taken more responsibility to learn Spanish beforehand.

Students’ Ability to Make a Difference

Even though the frustration and helplessness theme was quite prevalent, students did reveal small successes. Students realized the importance of a

healing presence and felt that they were successful due to the appreciation of the patients.

I am looking forward to tomorrow and believe that the close of this trip will end positively. Looking back I think about the smiles I saw and the people I met and deep down know that I made a difference here in these last 10 days, for those that I have met have made a difference in me. (Rachel, journal entry day 8)

Little things matter such as affection, time, touch and being there made a difference. Even if they couldn't understand you, it wasn't all what you do to them but how you were with them. (focus group comment)

Self-Actualization

As the trip came to a close, many of the student entries included appreciation for what they had and feelings of guilt over the materialism in our society.

Yet here I lie in my 12'x12' room staring at pale peach cement walls and a ceiling made from 2'x4's painted faded yellow wondering if I should wear Capri's or pants tomorrow. There are thousands out there wondering whether they'll eat tomorrow. What a thought. I feel selfish and materialistic as I secretly wish I was in my own bed with central air on full blast. (Jill, journal entry day 2)

It was amazing! They were so happy with what most would think was garbage! It really makes me realize how much I take for granted. (Marla, journal entry day 5)

Discussion

As society calls for future leaders, many colleges are responding with leadership development. Service-learning may be one path towards servant-leadership. Service-learning has also been found to have positive effects on PT educational goals such as cultural competence. With this in mind, the PT program at the University of Mary offered a service-orientated leadership experience (SOLE) to Guatemala in May 2003. This experience allowed

students the chance to serve patients, in a variety of settings, in a third-World country.

Data from student journals and post-trip focus groups indicated five major themes and several subthemes: students' need to have their basic physiological needs met; students' perception of the characteristics of the people of Guatemala; students' frustration with the injustice of the substandard medical system and living conditions endured by the people, and frustration with the feeling of helplessness; students' ability to make a difference; and self-actualization.

My first of two research questions was formulated prior to the analysis of the information. I was interested in finding out what beliefs and attitudes the students gained from the service-learning experience. While in previous studies students reported improvement in critical thinking skills and clinical competence in their service-learning activities (Inacio, Swanson, Haskvitz, & Berger, 2000; Ngo et al., 2001; Reynolds, 2000), these themes did not surface in my study. Physical therapy skills were only briefly mentioned in the contexts of amazement that seemingly little acts, such as massage or refitting a cane, could elicit such gratitude, and frustration that they could not do more. Students did realize that being physically present and offering a healing touch are both important in all therapeutic interactions.

I formulated my second research question during data analysis. It was apparent to me that the students wanted to serve others. I was interested in finding out if the service-learning experience assisted the student in assuming

the role of servant leader. The definition of a servant-leader is someone who puts serving others first as top priority (Greenleaf, 1971). According to several comments received during the focus group, students believed that serving others was extremely important for a successful experience. Some of the student goals described during the focus group included: to make a difference for as many people as possible, provide a service to those not normally getting service, teach skills to continue when we are gone, make a lasting impression, improve life for people in Guatemala, and bring happiness.

As noted in the student journals and focus groups, students felt that they made a difference for many individuals in Guatemala. They empathized with the people and gained a greater level of appreciation for their own situations. It was noted, however, that the students felt frustration and a sense of helplessness during their 10-day experience. Why was this a strong theme?

Blanchard and Hodges (2003) ask, "Self-serving or servant-leader: Which are you?" (p. 22). They propose that we come into this life as babies with self-serving hearts and it is only with growth and maturity that we are able to see that life is more about what we give rather than what we get. It appeared that the students had service in mind when setting out on the experience, but became frustrated when they were not able to help as much as they envisioned. The many journals with entries including issues of personal comforts such as lack of sleep, unhappiness with food and lodging, and need for contact home suggest that some students had difficulty becoming fully engrained in serving others as opposed to serving themselves. It appears that the students, when placed in a

third-world country, had difficulty adjusting when their physiological needs were not met. According to Maslow (1954), human needs can be viewed as a hierarchy, ascending from physiological needs to the need for self-actualization. The frustration arose with the disequilibrium between the students' need to have their basic needs met and their goal of serving others.

Frustration and a decreased sense of power to effect change are not limited to this study. Miller (1997), in a study of 327 undergraduate students, found a decreased sense of power in students who participated in a semester long service-learning course. Markus, Howard, and King (1993) found no difference between students in a service-learning course and a control group on the question "I feel that I can make a difference in the World."

Eyler and Giles (1999) found that placing the student in a community setting where the student can be productive and provide useful service to the partner was most consistently associated with positive outcomes of a personal and interpersonal nature. It will be imperative during future pre-trip activities to assist students to set reasonable goals in order for them to feel that their time is beneficial and valuable to the Guatemala people. This pre-trip experience could be in the format of a preservice reflection in which students write or discuss their assumptions, issues to be addressed, and goals. Surfacing the assumptions may allow students to see potential conflicts within themselves and their peers about difficult social problems (Eyler, 2002).

The SOLE did prove to be a powerful experience and allowed PT students the opportunity to practice their skills, learn about a diverse culture, and give

them first-hand knowledge of social justice issues. Most students did reach higher levels of Maslow's (1954) hierarchy when they wrote of self-realization and self-fulfillment. Statements detailing their acknowledgment of what they took for granted in their own lives were common.

Recommendations for Future Study

A need exists for further studies, especially in PT education, which would yield both quantitative and qualitative data. The present experience, while including a semester-long precourse, was only 10 days of actual service in Guatemala. Does the length of the experience impact outcomes? Do international experiences impact students differently than in-country experiences? In this study, students volunteered for SOLE rather than remaining on campus for an alternate experience. Further studies are also needed to analyze outcomes of students randomly selected into service-learning and non-service learning PT courses.

In addition, it is important to continue the study of methods of leadership development in higher education. It would be valuable to assess graduates of SOLE to determine their level of commitment to servant-leadership.

Conclusion

PT programs need to continue to find the best methods of educating students both academically and clinically. As society calls for future leaders, it is imperative for PT programs to find ways to develop leadership skills in their graduates. Service-learning is one path towards servant-leadership and is a good fit in a profession that strives to serve others. Service-learning is a valuable

method of experiential learning; however, students need to be primed to set appropriate and achievable goals and also need to be prepared as best as possible for unknown living situations.

CHAPTER V

SUMMARY

The purpose of this study was to investigate the impact of an international service-learning experience (Service-Orientated Leadership Experience or SOLE) on second-year physical therapy (PT) students. The concept for this course was derived from a similar course entitled Service Oriented Field Experience (SOFE) created by faculty at Regis University (Alexander, Atkinson, & Burton, 1999). The dissertation was written in a two-article format using two methods of analysis of student outcomes. During phase one, I compared outcomes related to civic attitudes and skills of students who engaged in the SOLE to the students who remained on campus and participated in a course entitled Community and Rural Health Care (CRHC). CRHC offered students a chance to participate in community education but did not have a reflective component attached to it. All second-year PT students at the University of Mary completed a survey in early 2003 and at the completion of the May term. The second phase complemented the information gathered in phase one by compiling and analyzing data from post-trip focus groups, reflective journals, and personal observations. This analysis allowed me to determine if, how, and why the students thought they were impacted by the experience.

Study Sample

The study sample consisted of 25 graduate students from the second-year PT class at the University of Mary, Bismarck, North Dakota. All students were told about the SOLE during fall 2002 and were given the opportunity to voluntarily participate. Twelve students (9 females, 3 males) participated in the SOLE ($M = 24.0$ years, $SD = 1.5$). That left 13 students (7 females, 6 males) on campus ($M = 24.9$ years, $SD = 2.6$) who were enrolled in the CRHC class during spring 2003.

Phase 1

There has been a plethora of studies analyzing outcomes of students involved in service-learning experiences. Researchers have analyzed cognitive outcomes, such as grade point averages, as well as affective outcomes, such as student attitudes towards diverse cultures and the data generated have been described as either behavioral or psychological (Astin, 1993). I was interested in investigating if the students involved in the SOLE showed greater improvements in attitudes, skills, and behaviors that might be influenced by service-learning than students participating in CRHC. I chose the Civic Attitudes and Skills Questionnaire (CASQ), a 45-item assessment consisting of six scales including civic attitude, interpersonal and problem-solving skills, political awareness, leadership skills, social justice attitudes, and diversity attitudes (Moely, Mercer, Ilustre, Miron, & McFarland, 2002). The following three research questions were addressed:

1. Were there differences between pre and post scores for students who participated in an international service-learning course (experimental group)?
2. Were there differences between pre and post scores for students who did not participate in an international service-learning course (control group)?
3. Were there differences on posttest scores between the experimental and control groups?

Students who participated in the SOLE showed a significant increase from pre to posttest score on the scale measuring social justice attitudes. Students who participated in CRHC showed a significant increase from pre to posttest on the scales measuring leadership skills and social justice attitudes. Both sets of students showed a significant decrease from pre to posttest on the scale measuring interpersonal and problem solving skills. There were no differences between the two groups on the posttest scales.

Phase 2

In the second phase of this study, I wanted to discover the meaning of the service-learning experience from the students involved and discern how they felt about their role in service. The characteristics of qualitative research were best suited to this portion of the study. In addition to my personal observations during the experience, I used student journals and focus groups to gain insight from the students.

Content analysis resulted in the identification of five major themes and eight subthemes: (1) students' need to have basic their basic physiological needs

met (food, sleep, shopping, living arrangements, and contact home), (2) students' perception of the characteristics of the people of Guatemala, (3) students' sense of frustration (frustration with the injustices of both the healthcare system and living conditions, with feelings of helplessness, and with the communication barriers), (4) students' ability to make a difference, and (5) self-actualization.

Prior to data analysis, I was primarily interested in knowing what beliefs and attitudes the PT students gained from the SOLE. While the students experienced frustration at various times throughout the experience, they empathized with the Guatemalans and gained a greater level of appreciation for their own situations. Students did realize that being physically present and offering a healing touch was important in all therapeutic interactions. The students were amazed at how appreciative the people were with the acts of service they received. Overall, the students learned a great deal about their ability to work with people of diverse backgrounds and situations. This particular comment from a student's journal summed up many of the students' writings:

This experience so far has been one that I will treasure always and I am very proud of my accomplishments. Knowing the level of poverty, dirtiness and unsanitary conditions that most of these people live in doesn't matter in the end and at the beginning I thought it might. I was afraid that I wouldn't want to show affection or touch the people too much for fear that I may become infected with something. However seeing the smiles on their faces was enough to change my perspective of these people and where they came from and the conditions they live in don't matter anymore. They are human and deserve to be given a chance. (entry from student journal day 8)

A second question emerged during the SOLE and was reinforced when I reread my personal journal. Because of the significant amount of pre-experience volunteer hours the students had reported and the fact that they

volunteered for this experience, it was apparent both prior to and during the experience that the students wanted to serve others; therefore, I was surprised by the amount of frustration the students conveyed. I was also disturbed by what I perceived as petulant behavior by the students. The students spoke of their goal of servant leadership prior to and during the experience so I was curious as to why there appeared to be conflict between their goals, what they experienced, and how they behaved. Therefore, my second question was if the international service-learning experience assisted the PT student in assuming the role of a servant leader.

The definition of a servant-leader is someone who puts serving others first as top priority (Greenleaf, 1971). According to several comments during the focus group, students believed that serving others was extremely important for a successful experience. Some of the student goals described during the focus group included: to make a difference for as many people as possible, provide a service to those not normally getting service, teach skills to continue when we are gone, make a lasting impression, improve life for people in Guatemala, and bring happiness to others.

Students did exhibit compassion for the Guatemalan people; however, the students also noted a great deal of frustration with their perceived inability to make more of a difference. It became clear to me that the students very much wanted to become servant leaders but became discouraged when they were not able to serve as much as they had envisioned. The many journals with entries documenting displeasure with lack of personal comforts such as lack of sleep,

unhappiness with food and lodging, and need for contact home suggested that some students had difficulty becoming fully engrained in serving others as opposed to serving themselves. It appeared that the students, when placed in a third-World country, had difficulty adjusting when their physiological needs were not met. According to Maslow (1954), human needs can be viewed as a hierarchy, ascending from physiological needs to the need for self-actualization. The frustration arose with the disequilibrium between the students' need to have their basic needs met and their goal of serving others.

Synthesis

Approaching this study both quantitatively and qualitatively allowed me to seek the answers to questions from several angles. I became especially intrigued with the connection between leadership, especially servant leadership, and service-learning.

Prior to data analysis, I hypothesized that students in the SOLE would show improvements from pretest to posttest in all areas assessed by the Civic Attitudes and Skills Questionnaire (CASQ); furthermore, I hypothesized that the students in SOLE would have greater posttest means than the posttest means of students in CRHC. During the SOLE, however, I was troubled with the students' behavior. The students complained about food and living arrangements and appeared to spend more time wanting to shop than wanting to serve. Students also had a very difficult time initiating interactions with the people of Guatemala and seemed to wait for me to make the first move when put into a clinical situation.

After the students and I returned to the United States from Guatemala, the students in the SOLE and CRHC convened to discuss the similarities and differences between poverty and homelessness in the United States and in Guatemala. The students who participated in CRHC dynamically discussed the issues while the students in SOLE were more reserved. It was during this time that I begin to have doubts about what I had previously hypothesized.

I learned many things from the data analysis. First of all, the groups were dissimilar. In addition to the significantly different mean GPAs between the two groups; the CRHC students were more willing to engage in discussion than the students in the SOLE. This occurrence may explain why the students participating in CRHC had a significant improvement in the scale measuring leadership skills while the students in the SOLE did not. Previous studies (Fitch, 1991; Serow & Dreyden, 1990) have shown that students with higher academic potential may self-select into service-learning sections. Three of the students, all of whom did very well academically, elected to stay back and participate in CRHC because of family and private business obligations.

I was surprised that the pretest to posttest scores in the scale measuring interpersonal and problem solving skills decreased for both groups. I had assumed both sets of students would realize that they had the ability to make small differences in the lives of people. The exercise of complementing the numerical data with data from the journals and focus groups helped me to realize that the students in the SOLE felt that the problems they saw were too overwhelming to address. They were frustrated when they were unable to solve

problems and make long-term differences. In the conversations I had with the students in CRHC, this inability to make a difference seemed to be a common issue. Previous studies measuring students' sense of power and self-efficacy after service-learning experiences have shown either no change or an actual decrease from precourse to postcourse (Markus, Howard & King, 1993; Miller, 1997). While this result may be thought of as a negative outcome, it may be a change from idealism to realism when considering societal issues. Batchelder and Root (1994) found that students involved in service-learning experiences showed a greater awareness of the multiple and varied issues involved in dealing with social issues. While the students in CRHC had a shorter experience in the homeless shelter, they were also able to interact with the students in the SOLE through an on-line discussion board. This interaction allowed both sets of students to compare and contrast their experiences.

On the CASQ, social justice attitude was defined as a measurement of the respondent's agreement with items expressing attitudes concerning causes of poverty and how social problems can be solved (Moely, Mercer, et al., 2002). The scales measuring social justice attitudes were improved in both the service-learning and non-service-learning students. Eyler and Giles (1999) found that students who interacted with diverse populations had a greater ability to see social issues in a new way and a greater commitment to social justice than students who did not have that experience. Both sets of students were able to interact with culturally diverse people who were also experiencing poverty. In the SOLE, students first studied and researched, then interacted with the poor

families in Guatemala. In CRHC, students interviewed people who were homeless. Students in both groups also compared and contrasted their findings with each other. For many students, this experience was their first opportunity to interact with people of a diverse social class and race. During a discussion involving both sets of students following the completion of their classes, much of the conversation revolved around reasons for poverty and homelessness and potential methods for combating the issues.

One of the major themes from the qualitative analysis was the students' perception of the characteristics of the people of Guatemala. The students in the SOLE repeatedly acknowledged the warmth of the people and the importance of establishing a therapeutic relationship. One of the subthemes under the major theme of frustration was frustration with the injustices of both the healthcare system and living conditions. Students in the SOLE were horrified over the living conditions and healthcare system in Guatemala.

Conclusion

I have learned many important things from this study and am thankful that I approached it from two different perspectives. My original plan was only to conduct quantitative analysis. I feel I would have missed substantial ideas from a single-technique approach. I look forward to continuing research in this area including investigating the impact of service-learning on long-term servant leadership both personally and professionally, and the effects on future professional practice (i.e., cultural competence, reflective practice). I would also like to compare the outcomes of students involved in service-learning in diverse

settings (international as compared to in-country) and in various lengths of experiences. Further studies are also needed to analyze outcomes of PT students selected randomly into service-learning and non-service-learning sections. A limitation in this study was the high pretest scores exhibited by both groups. The ceiling effect, along with the small sample size, made statistically significant differences difficult to achieve. For future studies, I will investigate other outcome tools in addition to the CASQ. Additionally, I feel it is also imperative to investigate the impact of service-learning experiences on the people served.

I am already incorporating several ideas gleaned from this research into the planning stages of a SOLE in 2004. One of the major changes will be a stronger emphasis on the process and importance of reflection. While reflection is important for this particular experience, it is also an essential component for professional practice. Many students had difficulty transferring their emotions and feelings into written word and tended to merely document events. Practice reflective writing during the spring precourse may help the students in this element of the SOLE. In addition to the required reflection journal, I will also guide group oral reflection during the experience. My role will be to assist the students by providing both written and verbal feedback.

One of the reflection activities may serve a dual purpose. Students in the SOLE may have set themselves up for disappointment by setting unreasonable expectations. Pre-trip reflection and discussion as to what they may plausibly accomplish may help students avoid frustration and disappointment. If students

engage in thorough study and research into the history of Guatemala's social and political struggles, as well interview past participants, they may be more inclined to set achievable goals. My goal will be to guide students to realize that success can be measured in many ways including making a child smile, talking with others about the experience upon return home, and making monetary contributions in the future.

It is also imperative to set the framework that this is a service-learning mission and not a clinical experience. Many of the healthcare workers at the Guatemalan sites did not realize what PTs could do and were not comfortable asking for help. I realized early on that not all students were at ease taking the initiative to jump in; some needed guidance and a gentle push. Even though I felt I had prepared the students adequately as to what to expect and fully anticipated them to be ready for immediate service, I now realize that they still need reassurance and modeling. I am now cognizant that students come into this experience at many different levels of maturity and development and have diverse amounts of experiences with service. Unfortunately, with 12 students and several different sites, I was not able to provide on-site supervision at all times. In the future, I would recommend additional PT clinician supervision.

I truly believe service-learning, in its many distinct forms, is an effective pedagogical method. I believe it serves students well now, as well as in their futures. The American Physical Therapy Association's (APTA) recently developed and adopted Professionalism in Physical Therapy: Core Values which provides a valuable map for educators as they strive to develop future health

care providers who will embody core values in everyday practice (American Physical Therapy Association [APTA], 2003; Bezner, 2004). The document, as developed during an APTA consensus conference, identifies and defines seven core values that are essential to professionalism in PT: accountability, altruism, compassion and caring, excellence, integrity, professional duty, and social responsibility (APTA, 2003). I feel that service-learning is a methodology that allows educators the ability to combine academic learning with experiences that promote these core values.

I strongly recommend PT faculty incorporate some aspect of service-learning into their curriculum, whether locally, nationally, or internationally. What an amazing phenomenon to make not only a lasting difference in students, but also to make a change for the better in the world! The following quote from a student involved in the SOLE is one that motivates me to work diligently to plan future quality service-learning opportunities:

I am looking forward to tomorrow and believe that the close of this trip will end positively. Looking back I think about the smiles I saw and the people I met and deep down know that I made a difference here in these last 10 days, for those that I have met have made a difference in me. (entry from student journal, day 10)

APPENDICES

Appendix A
Service Oriented Leadership Experience Syllabus

Date: Spring 2003

Discipline	Physical Therapy Professional Program
Course No.	HPS 602.1
Credit Hours	1 Spring Term; 3 May Term
Course title	Service Orientated Field Experience
Coordinator	Mary Dockter, PT, M.Ed. mcdoc@umary.edu
Instructors	Terry Anderson (tander@umary.edu) Pat Atkinson (ahijados@conexion.com.gt) (Director of the God's Child Project)
Office Telephone	355-8045
Email	mcdoc@umary.edu
Website	www.umary.edu/~mcdoc (link to webcourse)
Office Hours	Monday 9-11, Tuesday 1-3, Thursday 1-3 (please make appointment to verify)

PreRequisites/Relationship to Curriculum Design

Pre-requisites are acceptance in the PT Professional Program and successful completion of all course work prior to the 2nd year; 2nd semester. This capstone course is placed during the spring and May session of the second year to allow time for seminar, field trips and class presentations. This course is the last academic class of the Physical Therapy didactic curriculum. It follows the course in administration to give the student exposure to administrative and practice aspects of physical therapy in rural health care environments. Diversity, legal issues, autonomy as they relates to physical therapy service delivery in a Third World country are emphasized.

Course Description

This course presents students with an overview of the recent social and economic conflicts in Guatemala and how this compares to cultures and communities within the United States. Students will be encouraged to question and dissect these theories, and formulate their own understandings and explanations as to the causes of social conflict and socioeconomic inequities. Students will also be exposed to aspects of social, educational, and healthcare management while experiencing first-hand the cultural diversity. As a capstone course, students are expected to synthesize the skills learned during the Physical Therapy Program and apply them to a service learning environment.

Course Outcomes or Terminal Behavior Objectives

At the completion of this course, the student will:

1. Examine Guatemala and its unique Maya-Latina culture. (*discussions (in class and on-line)*)
2. Analyze how the needs of Guatemala's poor are addressed by health, social welfare, and educational services. (*independent research, presentations, discussions*)
 - 1) Incorporate an understanding of religious and cultural differences when engaged in physical therapy practice. (*service learning*)(3.8.3.2. and 3.8.3.34.)
 - 2) Promote health and wellness by educating Guatemalans utilizing appropriate educational methods. (3.8.3.13.) (*service learning*)
 - 3) After performing a needs assessment, provide PT interventions appropriate to the situation. (*service learning*)(3.8.3.28. and 3.8.3.33.)
 - 4) Obtain community resources by advocating for the poor to facilitate effective patient care. (3.8.3.40.)
3. Analyze the history of recent social justice challenges and efforts in Guatemala. (*In class and on-line discussions*)
4. Internalize your effect on Guatemalan families by acting as a servant leader while participating in service learning. (*service learning, pre-and post trip reflections/journaling, discussions, and presentations*) (3.8.3.49.)
5. Compare and contrast the patterns of social and economic conflicts as they apply to the culture and diversity of our own country. (*panel discussions, on-line discussions*)

Stage One: Orientation Course

This course will take place during the spring semester prior to the international field experience.

Major Assignments

❖ Reading and Reflection

Students will be asked to read and journal on 2 books. The journals will be handed in on 3 occasions for feedback. Specific guidelines will be issued for each of the books. There will be 4 on-line reflection discussions with classmates, faculty, and students who have previously participated in this course. The following two books (in order) will be required reading for this course. Students will be given discussion questions which we will use to explore the content of each book. The books are available in the library, the bookstore, or individual purchase.

- 1) *The Spirit Catches You and You Fall Down*. Fadiman, A.
Publisher: Farrar Straus & Giroux; ISBN: 0374525641
- 2) *I, Rigoberta Menchu: An Indian Woman in Guatemala*, Menchu, Rigoberta, August 1987, Verso Books; ISBN: 0860917886.

It is also recommended that students read a Guatemalan travel guide to familiarize themselves with specific information about the land, people, and culture of Guatemala.

❖ Presentations

You will be required to do three presentations.

- 1) Site Analysis and Intervention Proposal. In interdisciplinary groups, students will be issued one of the 4 sites to analyze. Documentation of clients seen and description of the sites will be available. Students are also encouraged to contact Pat Atkinson and students who have previously taken the course. Students will present a general description of the site and clients as well as suggestions for intervention (from each discipline) and recommended equipment/supplies to take.
- 2) Services presentation. Students will be grouped with a student(s) of another discipline and will be asked to research how health, social welfare, or educational services are performed in Guatemala.

- 3) God's Child Organization Discussion. Students will be divided into 3 groups. Each group will lead a discussion on an assigned component of the God's Child Program (past, present, future). These will take place throughout the semester.

Stage Two: Field Experience in Guatemala, Central America

The second stage of the course will involve a seven to ten day trip to Guatemala, Central America. This trip will be highly structured and learning-intensive and may involve:

- ❖ Implementation of intervention **(required of all participants)*
- ❖ Daily journaling and reflection of experiences and feelings
- ❖ Collaboration with service providers
- ❖ Daily collaboration with students in home country through web course.
- ❖ Cultural exploration activities such as side-trips to the Pacific beach, mountainous highlands, Indian markets, coffee plantation, Lake Atitlan, and Chichicastenango, as permitted by time-in-country scheduling.

Stage Three: Closure

- ❖ The closing project for this course requires an actual presentation by students of the results of their service projects as well as recommendations for future projects. Students are also encouraged to submit an article for publication (journals, church bulletins, campus newsletters, etc).

Learning Activities

- ❖ Seminar-lecture and discussion
- ❖ On-line discussions
- ❖ Selected Readings
- ❖ Service Oriented Field Trip
- ❖ Collaboration with other healthcare disciplines, students, clients, non-profit agency
- ❖ Personal Journaling and Reflection

Components of Leadership Addressed

- ❖ Graduate Competencies (scholarship, valuing, environmental contexts, professional development)
- ❖ Benedictine Values (hospitality, community, respect for persons, service)
- ❖ This course does have a service learning component.

Assessment

*Major Assignments receive the following weighting of total points:

Pre-Course Prep (passport, shots, forms, etc.)	5%
Presentations (service agencies, sites)	20%
Personal Journals/Online Participation	25%
Participation in Field Experience	25%
Stage3 (synthesis presentation)	25%

In addition, students must successfully complete the Physical Therapy Program Comprehensive Examinations in order to receive a grade in this course.

*Instructor from discipline will be responsible for evaluation

The minimal performance level in this course is as follows:

See Academic & Professional Standards Policy in Student Handbook Although 70% is passing, it is expected students perform at 90% or above in this class.

Failure to meet the minimum academic and professional standards results will result in failure of the course and dismissal from the program. Due process is outlined in the **Student Handbook**.

Assessment is weighted as follows:

The percentage of the total points achieved will determine the letter grade assigned to each student. The grades will be assigned according to the following scale:

- A. 90-100%
- B. 80-89%
- C. 70-79%

Additional Costs

In addition to University tuition, students will incur the cost of the airline ticket, housing/food (\$65/day), shots, passports, documents (US airport Departure tax \$40, Guatemala Departure Tax \$25), personal expenses (entertainment, Sunday meals, personal/group insurance, toiletries, medical, souvenirs), and participation in optional field trips. Students from each discipline will be responsible for the trip expenses of one faculty member from that discipline.

Attendance Policy:

As this class is built on discussions with others in the class as well as the guests invited to present, attendance at all meetings is mandatory. Any unexcused absence will result in a reduction in the final grade by 5%.

Policy for Late Assignments

Assignments will be on time. Late assignments will result in a 5% reduction of total points for each day the assignment is late.

Statement on Misconduct

See Student Handbook for information on cheating; plagiarism; and professionalism.

TENTATIVE TOPIC OUTLINE

Session 1: Jan. 14 8-10:00

Introduction to the course, on-line course specifics, reflection, logistics of the trip, fund raising, international travel

- ❖ "letters home"
- ❖ videos of presentations (check out)
- ❖ Assignment of Presentation Groups and Topics

Session 2: Jan. 28

Exploring Diversity, introduction to sites, and servant leadership

- ❖ On-line discussion of When the Spirit Falls (1-28 to 2-4 1st half) and (2-4 to 2-11 2nd half)
- ❖ Book Journals due 2-4 (1st half); 2-11 (2nd half)

Session 3: Feb. 11 8-10:00

Discussion on the Book When the Spirit Falls, Case Analysis
Discussion on Past/History of God's Child Organization

Session 4: Feb. 25 8-10:00

Presentations on Site Analysis and Intervention Proposal

- ❖ On-line discussion of I, Rigoberta Menchu: An Indian Woman in Guatemala (1st half) and (2nd half)
- ❖ Book Journals due

**Session 5: March 11 6-8:00pm Mexican Potluck -

Daphne Ghorbani - guest facilitator

Discussion on the Book I, Rigoberta Menchu: An Indian Woman in Guatemala
Discussion on present God's Child Program

Session 6: March 25 8-10:00 Student Presentations

Guest Speaker from Guatemala

- ❖ Reflection for next session

Session 7: April 15 8-10:00

Services Presentations

Session 8: April 22 8-10:00

closure/summary

Discussion on future of God's Child

Appendix B
Community and Rural Healthcare Syllabus

SYLLABUS

Date: May 2003

Discipline	Physical Therapy Professional Program
Course No:	PTH 602
Credit Hours	4
Course Title	Community and Rural Health Care
Coordinator	Jodi Roller, PT, Ed.D
Office	N138
Telephone	355-8183
Email	rollerj@umary.edu
Website	www.umary.edu~rollerj
Instructors	Mary Dockter, PT, M.Ed. mcdoc@umary.edu Steve Ziegler, PT. M.Mgmt. sziegler@umary.edu

PreRequisites Acceptance in the PT Professional Program

Course Description

The Community and Rural Health Care Course is designed to familiarize the student to aspects of rural and community health care that concern the broader health care environment where the field of physical therapy resides. It covers administration, practice, and community and cultural issues in the settings of acute rural hospitals, nursing homes, home health agencies, schools, hospice organizations and wellness programs. Students are introduced to various referral agencies where they may refer patients. This capstone course is placed during the May session of the second year to allow time for seminar, field trips and class presentations and to utilize information provided in administration.

Relationship to Curriculum Design:

This course is the last academic class of the Physical Therapy didactic curriculum. It follows the course in administration to give the student exposure to administrative and practice aspects of physical therapy in rural health care environments. Professionalism as it relates to physical therapy service delivery in rural environments is emphasized with regard to diversity, safety, ethical and legal practice, prevention and wellness, and autonomy.

Terminal Behavioral Objectives

At the completion of this course, the student will:

1. Refer patients to a variety of sources in the broad health care environment for the purpose of providing comprehensive care. Seminar attendance and assignment (environmental contexts) 3.8.3.41.
2. Evaluate how safety, ethical and legal issues are regarded and practiced in rural areas and in a different culture. Rural experience and cultural experience(environmental contexts) 3.8.3.4., 3.8.3.5.
3. Analyze how principles of management in the provision of physical therapy are applied to individuals, organizations, and communities in the rural area. Rural Experience (environmental contexts) 3.8.3.43.
4. Evaluate learning theories in the education of patients, students, and colleagues in the rural area and among people of different socioeconomic and cultural backgrounds. Rural Experience (environmental contexts) 3.8.3.13.
5. Evaluate the cost effectiveness of physical therapy services in the rural area. Rural experience (environmental contexts)
6. Assess the health needs of a community or culture by screening for impairments and functional limitations and delineating prevention and wellness needs. Service project (environmental contexts; professional competence)
7. Design and market a health and wellness program for a rural community. Service project (environmental contexts; professional competence) 3.8.3.33. 3.8.3.34. 3.8.3.45.
8. Analyze data gathered, from personal interviews, internet, research etc.) about the delivery of health care services in various rural environments.. Rural experience (environmental contexts; professional competence)
9. Assess the need of the physical therapist's role of consultant and case manager in a rural area. Rural experience; consultation project(environmental contexts; professional competence) 3.8.3.46
10. Devise methods to improve the healthcare delivery system to better meet the needs of a rural area. Rural Experience (environmental contexts; professional competence)
11. Collaborate with others in analysis and evaluation of findings. Rural Experience; Service Project (environmental contexts; professional competence)
12. Interact with health care providers for the purpose of coordinating activities to facilitate efficient and effective patient care. Seminar (environmental contexts; professional competence) 3.8.3.40

Major Assignments

1. Students will attend all sessions of the seminar during the third week of the May Session.
2. Students will choose 2 articles that are related to two different topics and discussed in the seminar (1 article for each topic.) Students will then write a paper comparing and contrasting the information discussed in the class and the information in the articles
3. Students will spend **at least two days**, working in teams, in an assigned rural site where they will gather information on various aspects of rural health care. (see terminal behavior objectives) Each team will compile their findings and submit a written team report to the rural area and a copy to Steve Ziegler by May 9.
4. Students will meet with members of other teams in a "round table" and compare their data. Each discussion will be monitored by a faculty member who will formally assess participation and achievement of objectives.
5. In self-selected teams of two to four, students will **research and deliver** a "creative" presentation on a health care topic to a community organization. Students will provide written justification for the need of their projects; evidence of marketing; and a summary of evaluations due May 18.

6. Students will each attend two or more of the community presentations of fellow classmates. These will be assigned after the schedule for presentations is available. Peer evaluation will be the responsibility of students attending these presentations.
6. Presentation groups will present to the class on outcomes and evaluations of presentations.
7. Students will provide consultation to the 1st year students. They will be assessed by the student with whom they consulted and provide a self-assessment on their consultation skills.
8. Communicate with students who are in Guatemala. Each student signs up (Mary's door) for two days and handles all correspondence requested for those days.
9. Students will pass the written and lab comprehensive tests prior to receiving a grade for this course.

Learning Activities

Seminar-lecture and discussion from multiple disciplines
 Selected Readings
 Field trip to rural area to gather data
 Data evaluation and analysis by team collaboration
 Round table discussion
 Collaboration in research and development of a special topic
 Community education presentation
 Consultation experience
 Guatemala Communication and Collaboration

Components of Leadership Addressed

Students are expected to practice the Benedictine values of respect; hospitality; community and perform the activities with an attitude of service when working with each other and with members of the community in various projects. This course is a course about environmental contexts; every object addresses this competence. The only other competence address is professional competency. Service learning is present in this course during the second week. Students perform a needs assessment and develop a plan for a community site. They deliver the plan, present the plan and market their presentations

Assessment

The percentage of total points will determine the letter grade assigned to each student. The grades will be assigned according to the following scale:

- A 90-100%
- B 80-89%
- C 70-79%
- D 60-69%

See Academic & Professional Standards Policy in Student Handbook Although 70% is passing, it is expected students perform at 90% or above in this class.

Major Assignments receive the following weighting of total points:

Seminar Evaluations & Paper	35%
Participation in Roundtable	5%
Group Report on Field Trip	25%
Ruth Meier's Experience	35%

Textbooks:

See reading list.

Attendance

Attendance at all PTH 602 meetings is mandatory. Unexcused absences will result in one full grade deduction per absence.

Policy for Late Assignments or Missed Exams

Assignments will be handed in on time. Late assignments will result in a 5% reduction of total points for each day the assignment is late.

Statement on Professional Behavior

It is expected students will act professionally in all venues of this course. Students are generally unsupervised by faculty in their communications with the community. It is expected students will do the following:

- Be on time to all appointments.
- Adequate and congenial communication with community participants.
- Thank you notes to those who helped you complete the course
- Endeavor to go deeper than the individual assignments i.e., explore, ask questions, delve deeper for the answers; strive to connect new information to physical therapy career.
- Be innovative and creative in your presentations; present with energy and self confidence
- Maintain a positive attitude

TOPIC OUTLINE

****All discussions are held in Butler Hall unless otherwise indicated**

WEEK 1

May 6

May 6&7

May 8

Students leave for Guatemala

Rural Visits

9:00 AM **Harold Schafer Board Room-Refreshments**

Round Table Discussion about Rural Visits Immediately After:
Discussion of Ruth Meier's Objectives; Review Syllabus PM: On your own to get organized for Ruth Meier's Project. Yet to schedule: Tour of Ruth Meier's organization; Q & A with personnel

Ruth Meier's Project-schedule on your own-but need to report the main events to Jodi Roller

WEEK 2

WEEK 3

May 19

May 20

8:00-9:00

9:00-10:00

10:00

12:00-1:00

4:00

4:30-5:30

7:45-5:00 **Lab Comprehensives**

1:00 **Focus Group for Guatemala students**

See Table: All lectures at Butler Center unless otherwise indicated

Ghana Africa:

Barb Nash will report on the physical therapy outlook in a 3rd World Country-where she has been twice for Wheels for the World.

Medicare

Everyone needs more experience with Medicare; Steve Ziegler will introduce the Medicare project that will take two more sessions during this seminar. Students will be responsible to get answers to certain Medicare questions and relate to the class WHERE they got the answers and HOW they got the answers.

Worker's Compensation

Peggy Haug will speak on the organization and qualifications for Worker's Compensation and give an overview of the documentation necessary for payment of services.

Telemedicine **3rd floor HPC**

Kollette Trottier & Yvette Maloney will demonstrate how to use the telemedicine system and discuss how it has been used.

Dave Hansen

Dave Hansen will speak to the group on loan consolidation.

Panel-

Job Opportunities and Procedures to get a job-presented by those who have recently done so-University of Mary Physical Therapy Alumni

May 21	
8:00-9:00	Pediatric Reimbursement Issues <i>Heather Lundeen will present on the variations of reimbursement for the pediatric population versus adult.</i>
9:00-10:00	Maternal & Child Health <i>Mary Dasovick will speak on the maternal child and health organization; referral process and qualifications.</i>
10:00-11:00	Developmental Disabilities <i>Vicci Pederson from the State Department of Developmental Disabilities will explain the services of this agency including the referral process and qualifications of DD.</i>
1:00	Hospice <i>Collette Rudolph from St.Alexius Hospice will present aspects of administration and organization of hospice as well as issues of grief, dying and death issues.</i>
2:30	HIPPA <i>The second year students will join us for this lecture on HIPPA and what it means to you by Mike Mullen who is the State HIPPA person.</i>
4:00	Focus Group for the Guatemala students only
May 22	
8:00	Medicare presentations
9:00	Financial Planning <i>Perry Bohl will give you a presentation on personal financial planning.</i>
10:00-11:00	Legislative Issues <i>Jack McDonald, the lobbyist for NDPTA, and an attorney will speak on legislative procedures for practice issues.</i>
11:00-12:00	Medicare presentations
2:30-3:00	Special Education; CHIP <i>Jodi Roller will give an overview of the Special Education funding situations; the process of the IEP.</i>
3:15	Spirituality and Leadership in Health Care <i>First Year students will join us for this presentation by Fr. Paul Becker, the pastor of the Church of Corpus Christi and the former chaplain for Trinity Health Systems. He spoke to last years students and had extraordinary reviews.</i>
May 23	
10:00-12:00	Guatemala Panel <i>The students who went to Guatemala will present and lead discussion on their experiences.</i>
May 26	
May 27	
10:30	Consultation project with first year students-on campus in PT lab
12:00	Focus Group for Ruth Meier's students
2:00-3:30	Leadership in Physical Therapy (Butler Center) <i>Karen Rasmussen is coming from her Private Practice in Minot to talk about several issues. Among them: Taking on a Leadership Position in Physical Therapy, innovation, peer review, documentation. Karen has been involved in the NDPTA for several years and was one of the leaders in obtaining direct reimbursement. She is the organization's main liaison with Workers' Comp and heads up the peer review system.</i>
May 28	Written Comp. 8:00-12:00

Suggested Readings:

- Zoch G. Working with Recruiters. *PT Magazine* April 1998:26-28.
- Woods E. Quality of Life: Physical Therapy in Hospice. *PT Magazine*. January 1998:38-45.
- Johnson C. Physical Therapy and Domestic Violence. *PT Magazine*. January 1997:52-59.
- Clark TJ, Smith-McKenna LS, Jewell MJ. Physical Therapists' recognition of battered women in clinical settings. *Phys Ther*. 1996;76;12-18.
- Woods E. Making Tracks toward a healthier community. *PT Magazine*. June 1995:40-52.
- Wynn K. Portraits in Leadership. *PT Magazine*. October 1996:28-35.
- Grey P, Kovacek P. *PT Magazine*. February 1997:26-39.
- Davolt S. New Niches in Physical Fitness. *PT Magazine*. March 1997:32-41..
- Lawrence L. Hundreds of Miles in a Split Second. *PT Magazine*. October, 1998:46-49.
- Wynn K. Marketing Matters. *PT Magazine*. December, 1998:25-30.
- Davolt S, Woods E. Profiles in Wellness. *PT Magazine*. December, 1998:32-44.
- Zoch G. Working with Recruiters. *PT Magazine*. April 1998:26-28.
- Cooperman J, Scott R. Liability Awareness-Ethics Code Violations Explained. *PT Magazine*. February, 1998:24-26.
- Rollins G. New Era of Home Care. *PT Magazine*. April, 1999:26-32.
- Lancey D. Worker's Compensation Update. *PT Magazine*. April, 1999:24-25.
- Woods, E. Niches in Women's Health. *PT Magazine*. June 2000: 30-39.
- Wynn-Gilliam, K. Association at work: Policy in action-APTA fighting for patients' rights. *PT Magazine*. June 2000.
- Guyer and Griffith. Succeeding in the state legislature. *PT Magazine*. March 2001 page 44.
- Herrick, A., Marketing for Success. *PT Magazine*. October 2000. Page 52.
- McManus, C. The Wellness program. *PT Magazine*. March 2000. Page 36.
- Massey, B., Putting ourselves out there. *Pt Magazine*. September 2001 Page 50.
- Cooper, B. Service Matters: Here are some commone-sense tips for uncommon service to all your customers. *PT Magazine*. Page 38.
- Wynn-Gilliam, K. Political Therapy: Make your voice Heard. *PT Magazine*. Page 36.

Appendix C
Consent Form Phase 1

**An Investigation of the Impact of an International Service-Learning
Experience on Physical Therapy Students**

The following information is provided to help you decide whether you wish to participate in the present study. You should be aware that you are free to decide not to participate or to withdraw at any time without affecting your relationship with this program, the instructors, or the University. The purpose of this study is to investigate the impact of an international service-learning experience on physical therapy students. Data will be collected using a brief survey at the beginning of the spring semester. Then, the same survey will be given during May term. The 2 surveys are the only data collected in this portion of the study and are what you are consenting to at this time. Each survey takes approximately 20 minutes to complete. The surveys will be color coded to separate the students who are participating in the SOLE course from those who do not. You will be asked to code the surveys to permit individual comparisons while maintaining anonymity.

Do not hesitate to ask questions about the study before participating or during the study. I would be happy to share the findings with you after the research is completed. Your pre-survey will be coded in order to match it to your post-survey. Your name will not be associated with the research findings in any way. If this study is later submitted for publication, a by-line will indicate the participation of all students in the class. Please sign the consent form to acknowledge you have been given all information regarding this study and you agree to participate. A copy of this form will be given to you to keep. The consent form and surveys will be kept in separate locked cabinets for a minimum of 3 years after completion of this study. If this research is not continued, the data will be destroyed. To express my appreciation for your participation, 3 gift certificates of approximately \$10 each will be awarded through a drawing among those who complete the survey. Fill out the page on the front of the survey upon completion - this page will be filed separately from your survey, so that your name will not be associated with your survey.

Signature

If you have questions about the research, please call:
Mary K. Dockter, PT, M.Ed.
701-355-8045 mcdoc@umary.edu
Doctoral Student University of North Dakota
If you have any other questions or concerns, please call the Office of Research and Program
Development at UND at 701-777-4279.

Date

Dr. Richard Landry
701-777-3582
Research Advisor

Appendix D
Consent Form Phase 2
**An Investigation of the Impact of an International Service-Learning
Experience on Physical Therapy Students**

The following information is provided to help you decide whether you wish to participate in the present study. You should be aware that you are free to decide not to participate in some or all of this phase of the study or to withdraw at any time without affecting your relationship with this program, the instructors, or the University. The purpose of this study is to investigate the impact of an international service-learning experience on physical therapy students. Data will be collected in two ways. Within 1-2 weeks of your return from the international experience, 2 focus groups (large group) interviews will be conducted to assess your attitudes about service and your experiences in Guatemala. The focus groups will be conducted by another faculty member and will take approximately 60 minutes each. Another faculty member will take notes. The sessions will be taped for clarification purposes. Students will be issued fictitious names to ensure confidentiality. In addition, data will be gathered from your journals. Upon return from Guatemala, I will assist you in copying the written pages of your journal so that you can have it back immediately. Your names need not be on the written pages to ensure your anonymity.

Do not hesitate to ask questions about the study before participating or during the study. I would be happy to share the findings with you after the research is completed. Your name will not be associated with the research findings in any way. There are minimal to no known risks anticipated with this study however, due to the very nature of focus group participation, students may experience emotional reactions with disclosure. Campus counseling is available free of charge to students if this is experienced. If this study is later submitted for publication, a by-line will indicate the participation of all students in the class. Please sign the consent form to acknowledge you have been given all information regarding this study and you agree to participate. A copy of this form will be given to you to keep. Data and informed consent forms will be kept separately in a locked storage cabinet for a minimum of 3 years. If research is not continued, the data will be destroyed.

Signature

If you have any questions about this research, please contact:

Mary K. Dockter, PT, M.Ed.
701-355-8045 mcdoc@umary.edu
Doctoral Student University of North Dakota

If you have any other questions or concerns, please call the Office of Research and Program Development at 777-4279.

Date

Dr. Richard Landry
(701) 777-3582
Research Advisor

Appendix E
Cover Sheet Survey

Please answer the questions below as honestly and frankly as you can. Do not put your name on the form, but in order to let me compare your answers with those you may give on later surveys, I will ask you to write your favorite animal followed by a number between 1-500. Record this answer in a safe place as that is number I will again ask you for on the post-test. The surveys are color-coded to separate the students who participate in the SOFE from those who do not. Your answers to this survey will be confidential and will be seen only by me.

If you have any questions about the research, please don't hesitate to contact me. Thanks you for your cooperation.

Favorite Animal and Number Between 1-500 please record for safekeeping in another place _____

1. **Have you taken a service learning course in the past?** Yes No Undecided

2. **If yes, please indicate the number of service learning courses taken in:**

___ Elementary School ___ Middle School ___ High School ___ College

3. **How many total hours have you spent engaged in volunteer activity:**

___ In high school? ___ in college? ___ through religious organizations?

4. **If you have chosen NOT to participate in the SOFE-Guatemala course, why did you choose so? Check all that apply:**

_____ concern for safety

_____ not interested

_____ do not like to travel

_____ family did not want me to go

_____ financial reasons

_____ other _____

Appendix F Focus Group Sample of Questions

Focus Group Guidelines

Today we will be conducting a focus group to try and find out all participants' attitudes, thoughts, and feelings about the service experience you were involved in. Some guidelines we will need to follow include:

- In order to maintain anonymity, everyone will first issue themselves a fictitious name. Please write your "name" on the provided card and place in front of you so you can be referred to by that name.
- In order to obtain everyone's opinions, we will be using the nominal technique. After a question has been asked, we will go around the room one by one. You may pass however, we would like all to participate. In order to allow enough time for all, you will have 1 minute. After 1 minute, we will go to the next person. We will continue to go around the room until all answers have been exhausted.
- There are no "right" or "wrong" answers - we would expect everyone to show respect for everyone's opinions.
- Carol will be taking notes on the overhead. After each question has been asked, you will be asked to take a moment and review the notes to make sure your answers have been correctly represented as well as to add to or clarify the information.
- As this will be tape recorded, we ask that only one person speak at a time.
- Please turn off all cell phones and pagers

Focus Group sample of questions (adapted from Gelmon et al. p. 43-43) and Eyler, Giles, and Schmiede (1996, p.147). Items in bold represent scales from Civic Attitudes and Skills Questionnaire

1. Take a moment and think about the goals you had set for this experience. What was the most important goal? (5 minutes)
2. Think about the above goals we discussed. Did you accomplish them? What factors contributed to your meeting or not meeting the objectives? What challenges did you encounter and how did you overcome them? (10 minutes) **(Interpersonal and Problem Solving Skills, Leadership Skills)**
3. Describe your views about how important issues in society need to be addressed. What did you learn about the culture and society of Guatemala in general from this experience?

What issues did you observe or hear about? (10 minutes) (**Political Awareness, Social Justice Attitudes, Diversity Attitudes**)

4. What are your perceptions about political and social issues facing (the people of Guatemala) or (people who are homeless). What are some possible solutions to these issues? (10 minutes) (**Political Awareness, Social Justice Attitudes, Diversity Attitudes**)
5. If you wanted to get personally involved in solving these problems in society, what would you do? (10 minutes) (**Civic Action, Leadership Skills**)
6. What from this experience has impacted you as a citizen? (10 minutes) **Civic action, Political Awareness, Leadership Skills, Social Justice Attitudes**
7. Describe connections between the service-learning work and the academic portion of the PT program? (10 minutes)
8. What are guidelines for community involvement that you think people in general should know in order to be effective in community action? What skills or knowledge are necessary to be effective? Is this the same for physical therapists? (10 minutes) **Civic Action, Political Awareness, Leadership Skills**
9. What impact has this experience had on you personally as well as on your future as a PT? (10 minutes) **Interpersonal and Problem Solving Skills, Civic Action, Political awareness, Leadership Skills, Social Justice Attitudes, Diversity Attitudes**

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