NURSING STUDENTS’ SELF EFFICACY

NURSING STUDENTS’ SELF EFFICACY FOLLOWING PARTICIPATION
IN A SERVICE LEARNING TEACHING ACTIVITY

A dissertation submitted

by

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This dissertation has been accepted for the faculty of

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We hereby certify that this dissertation, submitted by your name, conforms to acceptable standards and fully fulfills the dissertation requirements for the degree of Doctor in Education from College of Saint Mary

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TABLE OF CONTENTS

ABSTRACT .............................................................................................................10

CHAPTER I
INTRODUCTION .....................................................................................................11
The Problem ........................................................................................................12
Significance of the Study .....................................................................................12
Nursing Education ..............................................................................................12
Service Learning .................................................................................................14
Mission Statement .............................................................................................15
Purpose ..............................................................................................................15
Research Questions ..........................................................................................15
Quantitative Research Questions .....................................................................15
Qualitative Research Questions ........................................................................16
Limitations/Delimitations ..................................................................................16
Strengths ............................................................................................................17
Assumptions ......................................................................................................18
Operational Definitions .....................................................................................18
Summary ............................................................................................................20

CHAPTER II
REVIEW OF LITERATURE ................................................................................21
Theoretical Perspective .....................................................................................21
CHAPTER IV

RESULTS..............................................................................................48

Response Rate.................................................................................48

Data Analysis....................................................................................49

Quantitative Analysis.....................................................................49

Research Question #1-Descriptive Analysis ..............49
Nursing Students’ Self Efficacy 7

Research Question #1 -Inferential Analysis ...............51
Research Question #2 -Descriptive Analysis..............53
Research Question #2 -Inferential Analysis..............55

Qualitative Analysis.........................................................58
Summary.............................................................................63

CHAPTER V
CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS........65

Initial Perspective...............................................................65
Assumptions......................................................................67
Conclusions......................................................................67
Implications for Nursing Education.................................68
Recommendations for Future Research.............................69
REFERENCES......................................................................70
APPENDICES........................................................................79
LIST OF TABLES

1. Literature Review of Nursing Education...............................................................23
2. Literature Review Related to Service Learning......................................................27
3. Literature Review Related to Academic Mission.................................................29
4. Literature Review Related to Self Efficacy..........................................................33
5. Pre-and Post-service Learning Survey Reliability..............................................41
6. Qualitative Validity Criteria.................................................................................46
7. Paired Samples Statistics for Number of Questions on Pre-content Assessment Tool and Post-content Assessment Tool........................................... 49
8. Paired Sample Statistics for Subcategory of Learning and Subcategory of Teaching.............................................................................................................50
9. 
10. Paired t-Test Analysis of Questions Where Scores Were Significantly Higher in Post-content Assessment

11. Paired Samples Statistics for Sum Total Scores on Pre-service Learning Survey and Post-service Learning Survey

12. Paired Samples Statistics for the Service Learning Subcategories of Learning, Teaching, and Service

13. Paired t-Test Analysis of Post-service Learning Survey Scores

14. Paired t-Test Analysis of Items Where Scores Were Higher on the Post SL Survey

15. Number of References for Themes Related to Post-service Learning Survey

16. Participants’ Assignments in Clinical Settings-Group Statistics
LIST OF FIGURES

1. Shortridge-Baggett & van der Bijl Self Efficacy Model.................................14
2. Smid Literature Review Map.................................................................22
3. Defining Focus of Service Learning.......................................................26
4. Variables Model: Nursing Students’ Participation in Service Learning Teaching Activity.........................................................36
5. Nursing Students’ Self Efficacy after Participation in Service Learning Teaching Activity.................................................................44
6. Explanation of Giorgi Analytical Comparison of Phenomenological Methods...60
Abstract

The role of nurse as teacher plays a significant part in maintaining wellness of clients. Students must build professional confidence in their ability to teach health care content. Students learn content, skills and attitude so they can teach content, skills and impact clients’ health. Nursing literature supports service learning as an effective means of preparing students for active, professional community roles. This mixed method quasi-experimental study examined whether or not nursing students experienced increased self efficacy related to client teaching following participation in a service learning teaching activity. Quantitative research questions explored potential relationship of increased content knowledge and increased awareness of service learning as a means of learning after participants completed a service learning teaching activity. Participants scored significantly higher on post-content assessment then on pre-content assessment (t = -4.268, df = 41, p = 0.000). Participants scored higher on the post-service learning survey than on the pre-service learning survey (t = -2.148, df = 41, p = 0.041).

Qualitative research explored possible increase in student effectiveness in client teaching after participating in a service learning teaching activity. Attitude, content, knowledge and skills were identified as qualitative themes. When principles of nursing education are combined with service learning nursing students are better prepared to teach as nurses in a community setting. Longitudinal research studies are needed to explore the effectiveness of service learning when introduced at the beginning of a nursing
curriculum when students have multiple opportunities to experience self efficacy related to skills needed in a community setting.
CHAPTER I

“I do not pretend to teach her how, I ask her to teach herself, and for this purpose I venture to give her some hints” (Nightingale, 1859, Preface).

INTRODUCTION

In the early 1990s higher education began to reassess skills graduates needed to become active participants in a global community where possessing information played a very small part of solving major social problems. Boyer (1990) challenged faculty to realize their obligations outside of the classroom. There were academic and civic dimensions of learning to be developed for changing student populations and emerging needs of society. Educators were asked to account for what was taught in the classroom and how relevant it was to society. No academic discipline could ignore the impact of changing societal issues or the influence education could have in preparing graduates to be better citizens. The pedagogy of service learning evolved as a way to connect the academic world of teaching and civic responsibilities owed to communities. “Most students experience education....as an isolated set of content capsules that do not promote the development of abilities needed by an integrated professional or a contributing citizen” (Bartels, 1998, p. 11). One might describe this movement as the restructuring of the academic ivory tower.

Changes in health care delivery systems as well as the increasing complexity of health care demanded that nursing educators create a learning environment that would
prepare nurses to practice in varied health care settings. Traditionally nursing has placed
itself at patients’ bedsides. The goals of patient comfort and return to a healthy state were
the yardstick notches by which nursing measured its value, purpose, and success. As
health care shifts to community settings with a greater emphasis of maintaining health, 
“practicing nurses must retool for non-institutional roles and responsibilities. Nursing 
faculty must reflect and redesign nursing education to adequately prepare new 
practitioners for their roles in this configured health care system” (Buchanan, 1999, p. 6).

The Problem

In an effort to provide clinical learning experiences which promote preventative 
health care, nursing faculty must value the concept of empowering not only clients but 
also students (Faller, Dowell, & Jackson, 1995). Within the framework of nursing 
education, service learning, and academic mission; educators are able to present students 
with the means to enhance professional confidence as skills are practiced and repeated. A 
sense of self efficacy is enhanced when students experience repeated success and 
perceive their worth or value as a professional. The problem is to determine if nursing 
students experience self efficacy in their ability to teach health care content following 
participation in a service learning teaching activity.

Significance of the Study

Nursing Education

The role of nurse as teacher plays a significant part in maintaining wellness of 
clients. Students must build professional confidence in the ability to teach health care
content. “Teaching students to provide care for acutely ill clients in hospitals, and sending them home with discharge instructions is not enough. Nursing care must address illness prevention, health promotion, and lifestyle modification for individual clients and this must be done at all levels of practice” (Hurst & Osban, 2000, p. 185). To begin, students must acquire knowledge, skills and attitudes in order to teach and influence
clients’ attitudes. Knowledge becomes credible to students when derived from evidence-based practice and scientific evidence. Skills needed for health care teaching included therapeutic communication, assessment of client needs and organization of content for presentation. Cronenwett, Sherwood, Barnsteiner, Disch, Johnson, Mitchell, Sullivan, and Warren (2007) summarized that students’ attitudes must include acknowledging the importance of what is taught, being open to clients’ needs, and having confidence in the ability that content taught will make a difference in client health. Lenz and Shortridge-Baggett (2002) explained that the basic premise of the self-efficacy model developed by Alfred Bandura (1977) could be supported when nursing students utilized a health promotion teaching methodology to influence client health. Students presented with knowledge, skills, modeling behavior, and efficacy expectations experienced increased professional confidence in the ability to teach. Knowing the expected client learning outcome, students were able to recognize successful teaching. In reflection, students who experienced a positive level of self-efficacy were more likely to repeat the teaching behavior, therefore creating the self-efficacy cycle.

Lenz and Shortridge-Baggett (2002) summarized the adapted Self Efficacy Model introduced by Shortridge-Baggett and van der Bijl (1996) by illustrating the possibility that teacher’s efficacy expectations and outcome expectations could influence the outcome of the teaching and student self-efficacy (see Figure 1.).
Figure: 1. Shortridge-Baggett & van der Bijl Self Efficacy Model*

PERSON
Student/community partnership,
facilitated by faculty
Knowledge,
skills,
modeling behavior
Efficacy
Expectations
BEHAVIOR
Action
OUTCOME
SELF EFFICACY:
Action likely to be repeated
Expectations of outcomes
REFLECTION
REFLECTION
REFLECTION

Adapted from Shortridge-Baggett & van der Bijl (1996)*
“Further research is warranted in samples of nursing students who are learning diverse sets of skills to further test the applicability of self efficacy theory in nursing education” (Ford-Gilboe, Laschinger, Laforet-Fliesser, Ward-Griffin, & Foran, 1997, p. 218).

Service Learning

Service learning supports students’ opportunities to achieve personal, professional, and curricular goals to contribute to the overall college experience, and to benefit the community through acts of service (Mueller & Billings, 2009). The service learning model consists of three basic concepts: 1) curricular activities connect academic learning with community service; 2) active participation promotes civic responsibility; and 3) both students and community benefit. The concept evolved into emphasizing “reciprocal educational relationship” enhanced community focus in curricula and prepared a reflective practitioner with a sense of civic responsibility (Bailey, Carpenter,

Mission Statement

While mission or focus of an academic institution articulates value of education and service in various ways, two concepts are inherent in higher education. Students are educated to serve themselves and to serve the global community. Service learning creates visible connections between the school and the broader community (Bentley & Ellison, 2002).

Purpose

In an effort to build professional confidence in nursing students’ ability to teach health care content, and to encourage learning through service; the purpose of this mixed method quasi-experimental study was to explore nursing students’ self efficacy related to client teaching following participation in a service learning teaching project.

Research Questions

The following questions were developed.

Quantitative Research Questions

1.
Will students demonstrate greater knowledge related to selected teaching content by scoring higher on post-content assessment than on pre-content assessment?

2. Will students record higher scores related to the service learning process on a post-service learning survey than recorded on a pre-service learning survey?
Two hypotheses will be tested.

Hypothesis #1. Students will score higher on the post-content assessment tool than on the pre-content tool.

Hypothesis #2. Students will record higher scores on the post-service learning survey than on the pre-service learning survey.

These hypotheses were consistent with information noted in the literature review.

Qualitative Research Question

1. How will nursing students describe their ability to complete client teaching after participating in a service learning teaching project?

Students described their reflection verbally and in writing after completing the service learning teaching activity. Data results were studied considering conceptual models of self efficacy in nursing education (Shortridge-Baggett & van der Bijl, 1996) and service learning (Sigmon, 1996). Review of analyzed data would determine if there was support for service learning as an effective education method for increasing student self efficacy related to teaching clients. Morin (1982) noted the need for nursing educators to further study the relationship between learning styles and teaching methods.

“Future studies could identify characteristics of learning styles unique to nurses as well as develop a reliable and valid tool for measuring them” (p. 125).
Limitations and Delimitations

Participants were nursing students enrolled in a private college located in the Midwest. As a cohort group, students were enrolled in the maternal child-nursing course during the academic semester when data was collected. Data collection was completed in the first six weeks of the semester. Preliminary information obtained from the participant
group indicated that many participants had volunteer experience but few participants had knowledge of how service learning differed from volunteering (See Appendix D. Previous Volunteer and or Service Learning Participation). Due to placement of this course in the overall nursing curriculum participants had limited knowledge of the nursing role in client teaching. During the time the project was completed some participants were assigned to maternity clinical settings and others to pediatric clinical settings.

Strengths

This project allowed for review of basic teaching concepts as well as the opportunity to build upon the nursing role in client teaching. Student learning objectives included components of a service learning teaching activity. Participants verbalized limited knowledge of service learning as a method of learning, and therefore were less likely to have predetermined expectations of the service learning experience. A timeframe of six weeks to complete the service learning activity permitted participants a clear point of reflection on teaching clients. McCarthy (1996) recognizing the importance students place on feeling good about accomplishing something, explained that development of short term service learning projects requires assessing motivation and needs of students as well as the expressed needs of the selected community. A sense of accomplishment or making a difference becomes an important predictor of student involvement in service. “Determining an appropriate balance of challenge and support to students involved is necessary for learning to occur” (p. 115).
Nursing Students’ Self Efficacy 18

Assumptions

The following assumptions were made related to participants and research study.
Assumption One: Participants would participate in service learning project and data collection process.
Assumption Two: Participants would carefully read the pre-and post-content assessment tools and pre-and post-service learning surveys answering the questions or items honestly.
Assumption Three: Given instruction, the participants would complete the service learning teaching activity as directed.

Operational Definitions

Client: an entity who is a recipient of nursing care which can include individuals, families, groups and communities (Berman, Synder, Kozier, & Erb, 2008).
Community: a collection of people who share some attribute of their lives and interact with each other in some way. This collection of people may live in the same area, attend a common church and/or share common interests (Berman, et al., 2008).
Learning: a change in human nature or competence that persists over a period of time and cannot be explained by growth. Learning represents a change in behavior (Berman, et al., 2008)
Nursing student: college or university student who is developing an identity as a nurse
and as a person (Idczak, 2007).

Nursing education: curriculum that has been regulated to ensure that graduates are competent to safely care for the public (Hawkins, 2000).
Reflection: process of deriving meaning and knowledge from experience that occurs before, during, and after a service learning project. Effective reflection engages both teachers and students in a thought provoking process that consciously connects learning with experience. Reflection is the use of critical thinking skills to prepare for and learn from service experiences (Learn and Serve America’s National Service Learning Clearinghouse, 2008).

Self efficacy: a judgment or perception of one’s ability to carry out a particular course of action. The most powerful input to self efficacy is successful performance of a behavior (Pender, Murdaugh, & Parsons, 2006, p. 42).

Service learning: a structured learning experience, which combines community service with explicit learning objectives, preparation and reflection. Students engaged in service learning provide community service in response to community-identified concerns and learn about the context in which service is provided, the connection between their service, their academic coursework, and their roles as citizens (Seifer, 1998).

Teaching: a system of intentional activities intended to produce specific learning. The teaching learning process involves active interaction between teacher and learner where each participant communicates information, emotions, perceptions and attitudes to the other (Berman, et al., 2008).

Therapeutic communication: planned communication with a specific purpose when the nurse demonstrates trust and caring for client(s) (Blais, Hayes, Kozier, & Erb, 2006).

Volunteer activity: an activity completed to meet a societal need but not associated with intentional learning or an academic course.
Nursing Students’ Self Efficacy 20

Summary

Chapter I described a framework for studying nursing students’ self efficacy related to client teaching following participation in a service learning teaching activity. A preliminary literature review in the areas of nursing education, service learning, mission and self efficacy supported the significance of this mixed method quasi-experimental research study. Two quantitative research questions were developed. An area of qualitative data to be studied was discussed. Limitations, delimitations, assumptions and operational definitions were established.
CHAPTER II

REVIEW OF LITERATURE

Chapter II reviews research studies and academic writing in areas of nursing education, service learning, mission, and self efficacy. The researcher studied literature to determine: 1) changes in nursing education that met changing health care environment and student population; 2) service learning as a possible pedagogy for enhancing student learning in a community setting; 3) role of academic institutions’ missions in support of education and learning; and 4) possible relationships among nursing education, service learning and mission that promoted student self efficacy.

Theoretical Perspective

“Educators should turn their efforts to preparing highly skilled professionals who are accountable to the consumers they serve, to their colleagues and to themselves” (Kelly, 1986, p. 88). E. Bevis and Jean Watson (1989) challenged nursing faculty to change the teaching focus from transmitting information to that of engaging students more fully in the learning process. Hoefler (1993) recommended that educators identify students’ attitudes toward various competencies while in the nursing program and as new graduates. These powerful mandates left faculty wondering just what type of teacher-student interaction would best enhance student learning. Classroom questions would need
to result in analyzed information rather than facts committed to memory. Educators were encouraged to embrace students in learning partnerships where learning resulted from an active process rather than passive acceptance. This paradigm change reflected the need for a shift from a teacher-dominated environment to learner-centered teaching focus (Bevis & Watson, 1989; Bevis & Murray, 1990; Myrik & Tamlyn, 2007). “A shift in
focus to reflecting, learning, connecting, and thinking together with students is occurring” (Brown, Kirkpatrick, Mangum, & Avery, 2008, p. 283). Hawks & Hromek described person-centered education where the teacher facilitated learning “by sharing responsibility for learning and providing resources”, and students developed and carried out a program of learning with a “focus on self discipline and lifelong learning” (1992, p. 231). In this facilitated environment, learning should greatly influence the behavior of the student. Figure 2 illustrates areas of literature review and possible relationships to be studied.

Figure 2. Smid Literature Review Map

Changes in nursing education needed for effective nursing in changing health care system
Service learning projects and college/university mission statements impact nursing education
Participating in service learning activities increases self-efficacy

Nursing students participating in service learning teaching activity experience or increase self
Nursing educators pursued pedagogies that were more flexible in centering learning in the community rather than within walls of classrooms. Health promotion activities in community settings required students and faculty to reflect and respond to community-identified needs as members of interdisciplinary teams. There was a need for clinical experiences in settings where the goal was to improve client health wherever
clients were found and where skills such as therapeutic communication, organization, and active listening were used (Tagliareni, & Sherman, 1999). In partnership, faculty and students were empowered to pursue various learning strategies, which required higher level thinking skills. “Possession of these skills is essential not only for transition from student to practitioner but also for the safe and effective care of clients in today’s healthcare environment” (Kostovich, Poradzisz, Wood & O’Brien, 2007, p. 26). Faller, Dowell & Jackson, 1995) stressed the need for clinical experiences where a greater focus was on primary healthcare. Nursing educators refocused curricula from acute care illness based settings to community settings with a preventative care focus. “Students must be placed in settings where they learn and practice skills related to decision making and empowerment of clients within the community. The move to nontraditional learning sites is the crucial component in making the paradigm shift” (p. 348). Table 1 provides a summary of literature reviewed related to nursing education.

Table 1

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<th>Category</th>
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<th>Topic/Question</th>
<th>Findings</th>
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<tr>
<td>NUR ED</td>
<td>Brown, S., Kirkpatrick, M., Mangum, D., &amp; Avery, J.,</td>
<td>Literature Review of Nursing Education</td>
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Narrative pedagogy—usefulness in nursing education—way to expand pedagogical literacy of nurse educators. Paradigm shift from passive to more active, self directed, participative learner; nursing faculty shifting from teacher-dominated to learner centered teaching approach.
### Table 1 (Continued)

Gaines, C., Jenkins, S., & Ashe, W., (2005)


Narrative-meet challenges of providing skills-specific community experiences to undergraduate and graduate level nursing students

Narrative-to provide students the opportunity to demonstrate synthesis and application of knowledge and skills

Narrative-strategies needed that require higher levels of critical thinking
skills

Explore the effect of the curriculum revolution on the prevailing ethos of the post curriculum revolutionary era in nursing education

Project promoted relations with communities and positive perceptions of nursing

Empowerment in education originates when teachers provide the environment, proper tools and resources that enables students to contribute at a higher level of
functioning that includes increasing responsibility and autonomous decision making, and feelings of self worth

Critical thinking skills essential for safe effective care

Educators must strive to ensure that current nursing curricula reflect dynamic that democratizes rather than autocratizes, cultivates rather than curtails, liberates rather than oppresses and honors rather than dismisses students
Table 1 (Continued)

Clinical experiences with focus on primary health care
Students learn/practice skills i.e. decision making and empowerment of clients in community setting

Self efficacy people’s judgments of their capabilities to organize and execute courses of
Self efficacy influences how people think, feel, motivate themselves and act. Action required to attain designated types of performances.

NUR ED Tagliareni, M., & Sherman, S., (1999)

Improve client health in settings where clients are found. Needed skills: therapeutic communication, organization, active listening, commitment to maintenance and health promotion goals.
NUR ED: Literature reviewed related to Nursing Education.

Service Learning

In light of a refocus of nursing education and nurses in community settings, service learning pedagogy was a logical means of promoting student learning and professional growth. In an attempt to clarify the service learning process, Robert Sigmon (1996) described the focus of the project using word emphasis. The first part of the model “service LEARNING” puts an emphasis on student learning. This process could include acquiring new knowledge, identifying preconceived ideas/stereotypes, and
community needs. Student learning is primary. When the emphasis becomes “SERVICE learning” the student provides a prepared action for community-identified need in a selected community partnership setting. Service outcomes for the community are most important. The final part of the process, “SERVICE-LEARNING” is a shared emphasis where reflection by both students and community partners is important. Reflection by students considers not only the learning value of the experience but also if the experience is valued enough to be repeated. The community partner considers whether the community need has been effectively and efficiently met. Combined reflection will often determine if a continued partnership or similar partnerships will be pursued. Service and learning goals have equal weight benefiting both the student and the community (Sigmon, 1996, p. 10). Figure 3 describes a model of Eylers and Giles (1999) defining the focus of relationships among components of a completed service learning activity.

Figure 3. Defining Focus of Service Learning *
SELF EFFICACY

Action likely to be repeated

service LEARNING

Student focus for knowledge, skills,

Adapted from Sigmon (1996) * in Eyler and Giles (1999)
Seifer (n.d.) described impact/benefit relationship in service learning as having five important stakeholders: students, faculty, educational programs, community organizations, and community members. Even when service learning activities are short term or one time events they can have impact if students continue to participate in service activities during their college career (Reed, Jernstedt, Hawley, Reber, & DuBois, 2005).

Outcomes of service learning experiences for students often go beyond initially intended outcomes. In reflective activities such as journaling and focus groups students expressed increased comfort levels working with groups of people that previously they would have avoided or been uncomfortable around (Hunt, 2007; Astin, & Sax, 1998). Table 2 provides a summary of literature reviewed related to service learning.

SL Seifer, (n.d.) Emphasis on Reflection is critical, web site reflective practice facilitates student connection between service and learning. Service-learning has far reaching impacts, important stake holders (students, faculty, education programs, community organizations and...
community
members
Table 2 (Continued)
SL Reed, Jernstedt, Effects of small Findings support
Hawley, Reber, & scale, short term short term
DuBois, (2005) service-learning experiences with
experiences on some of the same
college benefits as long term
undergraduates SL

SL Hunt, (2007) Explore lived Understanding lived
experiences of experience of SL in
nursing students in underserved
service learning population allows
clinical placement for more informed
application of the
pedagogy

SL: Literature reviewed related to Service Learning.
Rubin (1996) noted that if service learning models are to be effective they must complement the university culture including the environment of learning and the mission of the institution. A service learning program cannot be driven by one person or one department of a university if it is to have an impact on the community. Curricular service learning becomes a visual means of articulating a college mission to current and prospective students and community. Colleges sponsored by religious orders find strong congruence between mission statements and service learning. A paper presented by Dr. Maryanne Stevens, RSM (2005) and further articulated by Jennifer Reed-Bouley (2007) discussed four hallmarks of Mercy Higher Education, “regard for the dignity of the human person, academic excellence and lifelong learning, education of the whole person, and promotion of compassion and justice towards those with less, especially women and children” (p. 9). Working together nursing education, service learning, and academic mission provided a means for increased student effectiveness in community settings.
“Walking the Talk” (O’Rourke, 2008) is historically relevant in Mercy institutions where the first Sisters of Mercy in Ireland were referred to as “walking nuns” because of their presence among people in the community. Mary McAuley Gillgannon, RSM (1961) wrote about the importance of service when she described the role of Mercy nurses in the Crimean War “…the Sisters of Mercy had an important contribution to make…realizing that a person is composed of both body and soul, they sought to relieve both corporal and spiritual ills” (p. 2). Mary Sullivan, RSM (2006) reminded faculty of the importance of good example by modeling, personally and corporately, all the values an institution seeks to promote through educational and other endeavors (p. 26). “The challenge these words [i.e., mission statement] present to Mercy educators may not have fully dawned upon us. We are to be and do what we teach. If we wish to teach mercifulness, we must speak and act mercifully towards others” (Sullivan, 2006, p. 23). This point was validated in an article by Redding (2006) when she wrote, “nursing educators focus on the socialization process of individuals entering nursing programs as well as the image of the profession” (p. 66). The socialization process is evident during service learning reflections when students share what they learn, their personal beliefs, and biases (Redding, 2006).

Table 3 Literature Reviewed Related to Academic Mission

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<th>Topic</th>
<th>Findings</th>
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<td>Mission</td>
<td>Stevens, M.</td>
<td>Core of identity of Respect, academic</td>
<td>Mercy Higher excellence/lifelong</td>
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<td>(2005)</td>
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<td>Education learning,</td>
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compassion and

justice, mind, body,

spirit
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Reed-Bouley, J.,
Reed-Bouley, K.
(2007)

Gillgannon,
M. (1961)


SL-students engage in service experiences but risk not really understanding them.

Sisters of Mercy—important contribution to make.

Faculty must teach by example.

Nursing educators focus on socialization process.

Effectiveness of SL models in universities

SL educates the
whole person-
addressing both the
cognitive and
affective dimensions
of learning

Person is composed
of body and soul,
sisters sought to
relieve both
corporal and
spiritual ills

“The challenge
these words present
to Mercy educators
may not have fully
dawned upon us.
We are to be and do
what we teach. If we
wish to teach
mercifulness, we
must speak and act
mercifully towards
others”
Socialization process evident during SL reflection when students share learning and personal beliefs and biases.

Models must compliment not only university culture but also environment of learning and service-mission of the college.
Self efficacy was defined as a temporary and malleable characteristic which could be applied to a situation and or task. When self efficacy, sometimes compared to self-esteem, is experienced it is likely the client will repeat the behavior again successfully.

When promoting healthy behavior with clients, Pender, Murdaugh and Parsons (2006) identified the most powerful influence to self efficacy as the client’s successful performance of a behavior. When nurses provided positive feedback clients were more likely to repeat behaviors successfully. The authors continued by identifying five factors that facilitate self efficacy and behavior change. First, models must be available with which clients can identify. Second, learners must have the opportunity to observe the desired behavior with attention to specific aspects needed to complete the behavior. Third, clients must have the knowledge and skills to reproduce the behavior. Fourth, clients must perceive benefits from imitating target behaviors. Fifth, learners must have the chance to rehearse expected behaviors. To motivate clients to approach difficult tasks as challenges rather than threats, Lenz and Shortridge-Baggett adjusted Alfred Bandura’s
Self Efficacy Model of Person, Behavior and Outcome and discovered clients increased the likelihood of self efficacy when repeating the desired behavior successfully. In the current study these examples were used to explain the process needed to encourage self efficacy in nursing students by substituting nursing students where clients are mentioned.
Nursing Students’ Self Efficacy 32

and nursing educators where nurses are mentioned. The adapted model as discussed in Chapter I included efficacy expectations—what students could expect to experience, information sources—information which assisted students to complete behaviors and outcome expectations—what students could expect from the behaviors. When expectations were explained and information sources provided by faculty, behavior that resulted was focused and meaningful. When outcome expectations were clear, students could identify whether or not the desired outcome was achieved. “Educators have long recognized that students’ beliefs about their academic capabilities play an essential role in their motivation to achieve, but self conceptions regarding academic performance initially proved difficult to measure in a scientifically valid way” (Zimmerman, 2000, p. 82).

Students who experienced self efficacy as part of a service learning activity often experienced the bigger picture of the role of the nurse, citizen, and member of the community as it related to health care and social justice (Seifer & Vaughn 2002; Lashley, 2007). Astin and Sax (1998) described significance in academic outcomes as a result of participating in education-related service. “These findings could also be interpreted as strong evidence for the efficacy of cooperative learning: students become better students by helping to teach others” (p. 257).
Table 4

Literature Reviewed Related to Self Efficacy

<table>
<thead>
<tr>
<th>Category</th>
<th>Author/Year</th>
<th>Topic</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE</td>
<td>Zimmerman, (2000)</td>
<td>Self efficacy as related to self concept</td>
<td></td>
</tr>
<tr>
<td>SE</td>
<td>Astin &amp; Sax, (1998)</td>
<td>How will student’s educational and personal development be affected</td>
<td></td>
</tr>
<tr>
<td>SE</td>
<td>Lashley, (2007)</td>
<td>Service brings teacher and learner in a relationship that is more equalitarian and less hierarchical</td>
<td></td>
</tr>
</tbody>
</table>

SE: Literature reviewed related to Self Efficacy.
Self conceptions regarding academic performance initially proved difficult to measure in a scientifically valid way.

Students, not the teacher, must make the connection between the service activity and learning if they are to remember it.

Participating in service during undergrad years substantially enhances the student’s academic development and
sense of civic responsibility

Program provided direct benefit to community and promoted student self discovery, knowledge and understanding
Summary

In Chapter III a literature review in nursing education, service learning, academic mission, and self efficacy as related to students’ learning was completed. The summary of literature supported continued study to determine if a relationship exists between nursing students’ self efficacy in client teaching and participation in a service learning teaching activity.
CHAPTER III

METHODS

Chapter III describes the research study framework. Research design, sample population, and instrumentation will be presented. Variables will be identified and explained. Means of data collection and analysis will be established.

Design

The purpose of this mixed method quasi-experimental study was to explore nursing students’ self efficacy related to client teaching following participation in a service learning teaching project.

Participants (nursing students) were pre-tested on related content and understanding of service learning, presented with the content and objectives for the activity, completed the service learning teaching activity, and then post-tested on related content and understanding of service learning. Participants reflected and provided qualitative data on the service learning activity verbally in classroom focus groups and by completing written responses to open ended questions.

Variables
The researcher identified an independent variable; service learning teaching activity, to study whether or not it would influence dependent variables; increased content knowledge, increased service learning awareness, and increased confidence in teaching ability when an intervening variable; self efficacy service learning model was introduced. Two confounding variables; limited community experience and limited experience in health care teaching were listed as possibly affecting the independent variable and therefore affecting the overall outcome of the study. Creswell (2008)
described the confounding variables as having characteristics or attributes that will likely influence the independent variable yet cannot be directly measured. Figure 4 presents the variables model and anticipated relationships among identified variables.

Figure 4.
Variables Model: Nursing Students Participation in Service Learning Teaching Activity

Intervening Variable:
Self-efficacy-service learning model implemented

Independent Variable:
-service learning teaching activity

Confounding Variables:

-limited community experience

-limited experience in health care teaching
Dependent Variables:
Content knowledge
SL awareness
Confidence in teaching ability

Sample

A purposive sample of 42 students enrolled in a nursing program at a Midwestern women's college participated in this research study. Participants were enrolled in the maternal nursing course during the semester data were collected. Mean age of participants was 23. Thirty-nine participants were full time students and twenty-three participants were parents. Sixty percent of the participants had previous volunteer experience but only 45% had previous service learning experience.

Ethical Considerations

Application for Exempt Research was submitted to the Institutional Review Board (IRB) of College of Saint Mary. Materials submitted included: 1) description of the study; 2) copy of informed consent letter; 3) pre-and post-content assessment; and 4)
Nursing Students’ Self Efficacy 37

pre-and post-service Learning survey. The IRB approved the research study and assigned an exempt status number. (See Appendix A. IRB Approval Letter, Informed Consent, and Rights of Research Participants.) After reviewing the project’s course content objectives, coordinators and faculty gave support to the study. Taylor (2005) reminded the researcher that in phenomenological research the purpose is to describe the experience of others. The researcher made continued effort through bracketing to remove personal experiences and feelings about the project in order that data would be collected objectively. Moustakas (1994) describes bracketing as part of data analysis when the preconceived ideas of the researcher must be put aside to better understand the experience of research participants.

The service learning teaching project and purpose for the research study was introduced at the beginning of the semester. Students were given the opportunity to participate in the service learning teaching activity and the research study or just the service learning teaching activity, which was identified as part of the course activities. The researcher explained that participation or nonparticipation in the research project would in no way reflect the students’ course grade or academic standing in the course. The Rights of the Research Participant and the Informed Consent forms were distributed and explained. Students (participants) were informed that names would not be used in data analysis or reporting of the research study. Each participant was assigned a numeric code. The numeric code was utilized to track participants’ responses on completed tools and surveys. No participant risk was identified. Potential benefit for participation included increased student confidence in teaching health care content to clients.
Each participant was given a signed copy of the informed consent form and a copy of Rights of Research Participants.

Instrumentation

After reviewing current issues related to maternal child health care, the researcher selected subject content that was part of a larger county/state/nation wide initiative to educate the community regarding safe sleep environments for infants. This initiative was developed in response to an increased number of infant deaths related to Sudden Infant Death Syndrome (SIDS). This project had support in private and public venues with published resources, which included teaching tools and media. The message was consistent: a safe sleep environment is one where the infant sleeps on its back in a crib free of articles such as toys and blankets, and in a smoke free room. Focus of this initiative was proactive education for anyone who cares for infants. The message was significant, worthwhile, and important (Sudden Infant Death Syndrome (SIDS): Safe Sleep Environment, Mission, n.d.). Literature indicated that the community viewed nurses as credible and trustworthy teachers (Development, 2006). SIDS teaching was relevant to theory course objectives and the clinical/community setting.

The Curriculum for Nurses: Continuing Education Program on SIDS Risk Reduction was selected as the base curriculum for this service learning teaching project. A continuing education program developed for nurses by the National Institute of Child Health and Human Development was piloted in the summer of 2006 by Ogilvy Public
Relations Worldwide, Inc. (Ogilvy Public Relations Worldwide, n.d.). After suggested revisions were completed, the program was approved for continuing education credit by the Maryland Nurses Association (Continuing Education, n.d.) and made available to the
public through the office of the National Institute of Child Health and Human Development. This validation process was confirmed by documentation received from Maryland Nurses Association dated June 10th, 2008. Maryland Nurses Association was the official provider of nursing continuing education for the SIDS Risk Reduction program. No report of reliability by means of test retest, internal consistency or use of software program such as SPSS was done to determine if questions measured what was intended by completion of the continuing education program (See Appendix B. Maryland Nurses Association Learning Directed Activity-SIDS CE Pilot Testing Report).

Maintaining integrity of the continuing education program and considering student learning objectives, the researcher selected program sections to be used during the service learning teaching activity orientation. Using a multiple choice format, pre and post-content assessment tools were developed and matched item for item to identify content areas where there was a difference in post-content scores. The researcher categorized each item as a learning, teaching, or service question. Of the ten items, four (items 1, 2, 5, and 6) were identified as learning questions that would determine if students learned new information about SIDS. Five questions (items 3, 4, 7, 8, and 9) were teaching related to determine if students knew either how to present the material or areas that would prevent teaching from being effective. Only one item (item 10) was related to providing the service that resulted in presenting the teaching. The content assessment tool was limited to ten items so it could be completed in approximately ten minutes (See Appendix C. Pre-assessment Content and Post-Assessment Content Related to Sudden Infant Death Syndrome). The level of testing should correlate with the
expected course outcomes and course placement in a nursing program (Partusch, 2008).
The researcher reviewed various informal tools previously used to assess student understanding of service learning. The researcher developed a pre-and post-service Learning Survey. Participants completed the six items on the survey using a Likert scale of 1 (strongly disagree) to 7 (strongly agree) to score their understanding of service learning. Pre-and post-survey items were paired to reflect sub-topics of learning, teaching and service. Two open-ended questions were included on the post-service assessment survey to obtain qualitative data related to teaching learning objectives (See Appendix D. Pre-Assessment Survey for Service Learning and Post-Assessment Survey for Service Learning).

Reliability

Methods to establish reliability of the pre-and post-content assessment tool and the pre and post-service learning survey were reviewed. Cronbach’s alpha coefficient of reliability determines how well a selected set of items consistently measures a single dimensional perspective in what the set of items is trying to accomplish. The UCLA academic technology service explained that Cronbach’s alpha can be written as a function of the number of test items and the average inter-correlation among the items. The more items being compared the greater the likelihood they will measure the same underlying one-dimensional construct. High inter-item correlation suggests high or “good reliability”. Multi-dimensional constructs or tools will generally have low or even negative Cronbach’s alpha (www.ats.ucla.edu/stat/Spss/faq/alpha.html).

Cronbach’s alpha coefficient was not utilized to determine the reliability of the
pre-and post-content assessment tool. The tool consisted of ten items with multiple
choice options. The multi-dimension tool included items related to learning, teaching, and service. Neither pilot testing nor test retest was included in the design of the study.

Reliability for the adapted pre-service learning and post-service learning survey was established by using Cronbach’s alpha coefficient. The researcher was striving to achieve an internal consistency in the overall pre-service learning survey and post-service learning survey as well as sub categories, learning, teaching, and service in each survey. Reliability of the pre-service learning and post-service learning surveys was positive. This finding is consistent with previous statements from UCLA technology services. Table 5 compares Cronbach’s alpha for the pre-service learning survey and post-service learning survey as well as the subcategories listed. Number of items in the survey and each subcategory are identified by N.

<table>
<thead>
<tr>
<th>Table 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-and Post-service Learning Survey Reliability</td>
</tr>
<tr>
<td>Survey</td>
</tr>
<tr>
<td>Pre-Survey Tool</td>
</tr>
<tr>
<td>Post-Survey Tool</td>
</tr>
<tr>
<td>Subcategories</td>
</tr>
<tr>
<td>Pre SL Learning</td>
</tr>
<tr>
<td>Post SL Learning</td>
</tr>
</tbody>
</table>
Pre SL Teaching .845 2
Post SL Teaching .700 2
Pre SL Service .832 2
Post SL Service .591 2
Validity

Validity of pre-and post-content assessment tools was established with the input of a panel of experts who were nursing educators. Written comments related to changes in wording and format of the assessment tools were received and adjustments completed prior to implementation. In a similar arrangement, validity of pre and post-service learning surveys was established with the input of a panel of experts who were experienced in the service learning process as it related to academic course work. Written comments related to changes in wording and format of the service learning surveys were received and adjustments completed prior to implementation.

The researcher continued the design process with careful review of nursing course objectives and service learning objectives. Available private and public publications were researched. Possible community partners were identified.

Data Collection

As described in Ethical Considerations, the process of informed consent was completed prior to the beginning of the service learning teaching activity. Of 54 students invited to participate, 42 students signed consent forms and completed all components of the research project. Instruments were presented to the participant group at the time of administration so participants could not respond with predetermined answers. Participants
completed instruments individually during the same class session. The researcher and course faculty verified attendance forms, names on instruments, and reflection questions prior to coding.

Procedure for data collection followed the researcher’s adapted model titled:

Figure 4. Nursing Students' Self Efficacy after Participation in Service Learning
Teaching Activity Model. This model included the three components of Bandura’s Self Efficacy model as illustrated by Shortridge-Baggett and van der Bilj and incorporated components of Sigmon’s service learning model. Refer to Chapter II to review specifics of both models. Various components of the model are numbered to show how it is used throughout the data collection process. For example, in step number one and two the participants introduced to the project receive knowledge, skills and efficacy expectations which enhance the ability to be successful (see Figure 5).

Each participant completed a pre-content assessment and a pre-service learning survey during classroom orientation to the project. “If faculty do not elicit students’ prior knowledge and help them to question its accuracy, the students will reject or misunderstand the more adequate understandings that faculty wish to teach” (Reed-Bouley, 2006, p. 47). Content, guidelines for the service learning project, and reflection questions were presented in a classroom format. Guidelines for the project included: 1) Opportunity for clinical learning through clinical objectives; 2) Activities to consider before completing the service learning activity; and 3) Written assignment guidelines. During the classroom presentation, the researcher demonstrated use of the teaching materials and discussed possible questions and situations that could occur when students taught the material. A preassembled folder of Safe Sleep Environment materials was given to participants for use when completing the teaching activity with a client of their choice. Students were encouraged to ask questions about content and materials provided (See Appendix E. Guidelines for Service Learning Project). These activities fulfilled items 1, 2 and 4 in the model where focus was student learning and preparation for a
successful teaching activity.
Nursing Students’ Self Efficacy After Participation in Service Learning Teaching

Activity *and**

BEHAVIOR
SERVICE
learning
Action (# 3)
OUTCOME
SERVICE
LEARNING
Student-community
benefit (# 5)
REFLECTION
(# 6)
SELF EFFICACY
Teaching activity
likely to be repeated
(# 7)
service
LEARNING**

Knowledge,
skills,
Efficacy
expectations
(# 2)

PERSON*

Student/community
partnership,
facilitated by faculty
(# 1.)

Outcome
expectations
(# 4)

Adapted from Shortridge-Baggett & van der Bijl (1996)* and Sigmon (1996) **

Students were encouraged to receive assistance as needed from the researcher or
course faculty. McEwen (1996) stressed in order to enhance learning there must be an
appropriate level of challenge to the project as well as support to prevent student
frustration and/or stagnation.

A time frame was established to complete the service learning teaching activity in
the model where the focus was meeting a community need. Students were informed that
verbal and written reflection of the activity and completion of post-content assessment
and post-service learning survey would occur on clinical seminar day. Items 5, 6 and 7
on the model will be discussed in Chapter IV.
Data Analysis

Quantitative Analysis

Quantitative research attempts to validate objective descriptions or events by controlling variables. In this study, quantitative analysis was pertinent because the researcher followed a process common to quantitative descriptive research. Taylor (2005) described this process in the following way. First, the researcher developed research questions. Second, data sources were identified. Third, methods and procedures for conducting the research were identified. Finally, statistical procedures were used for the analysis of data. To describe a current relationship or trend, a paired t-test statistical calculation allowed the researcher to compare data collected prior to the implementation of the intervening variable and after implementation of the variable. Analysis would be used to study possible relationships between nursing education, service learning, mission and self efficacy.

The Statistical Package for the Social Sciences (SPSS) software package was used to analyze the quantitative data. SPSS allowed for predictive analysis of pre and post assessment and survey items. “Predictive analytics helps to connect effective action by drawing reliable conclusions about current conditions and future events” (SPSS, n.d.).

Qualitative Data Analysis

“The qualitative approach is inductive, with the purpose of describing multiple
realities, developing deep understanding, and capturing everyday life and human perspectives” (Taylor, 2005, p.101). Qualitative data was retrieved from open ended questions placed on the post-service learning survey. Verification of qualitative data was completed by a research assistant. An audit trail was completed by the research advisor to
review original data for accuracy. Method triangulation was completed with qualitative statements retrieved from the written responses to open ended questions, focus group discussion, and the summary presentation. Horizontalization and categorical aggregation of data were completed to identify themes and relationships between the participation in the service learning teaching activity and self efficacy related to teaching client care. Data retrieved met the quality primary criteria of credibility, authenticity, dependability, and confirmability (Lincoln & Guba, 1985; Polit & Beck, 2008).

Table 6

Qualitative Validity Criteria

Primary Criteria Procedures During Study

Credibility Use of open-ended questions
Audit trail completed

Authenticity
Written responses
Focus group discussion
Summary presentation

Dependability Horizontalization
Categorical aggregation of data
Confirmability

Peer review

Member check
NVivo-7 software was selected to analyze qualitative data. This software allowed for analysis of relationships between people (participants of this study), processes (service learning teaching activity) and concepts (self efficacy related to teaching).

Summary

The research study structure was explained in Chapter III. The study design included a pre-and post-test method. Participants were described as part of a purposive sample. Development of study instruments was explained. Ethical considerations regarding IRB approval and informed consent of study participants were reviewed. No risk to participants was identified. The possible relationships among independent, confounding, intervening and dependent variables were presented in narrative and figure format. Data collection was explained and related to the student self efficacy model. Finally, methods used for data analysis of quantitative and qualitative data were presented.
CHAPTER IV

RESULTS

The purpose of this mixed method quasi-experimental research study was to explore nursing students’ self efficacy related to client teaching following participation in a service learning teaching project. This chapter addresses the following research questions:

1) Will students demonstrate greater knowledge related to selected teaching content by scoring higher on the post-content assessment than on the pre-content assessment?

2) Will students record higher scores related to the service learning process on the post-service learning survey than recorded on the pre-service learning survey?

3) How will nursing students describe their ability to complete client teaching after participating in a service learning teaching project?
Response Rate

Forty-two participants, enrolled in a maternal-child nursing course, completed all components of the adapted model presented in Chapter III, Figure 4, which represents 100% of the purposive sample. Data collection took place for eight weeks, starting with course orientation and was completed with clinical seminar day when focus groups and summary presentations were completed. All participants were female, with a mean age of 23 years. Thirty nine participants were full time students and twenty three participants were parents. Sixty percent of the participants had previous volunteer experience while 45% of the total had previous service learning experience. A small number of participants reported both volunteer and service learning experience (See Appendix D. Previous
Nursing Students’ Self Efficacy 49

Volunteer and or Service Learning Participation). During the timeframe of the study, participants were assigned by the course coordinators to various clinical groups with either a maternity focus or a pediatric focus.

Data Analysis

Quantitative Analysis

Research Question One: Will students demonstrate greater knowledge related to selected teaching content by scoring higher on the post-content assessment than on the pre-content assessment?

Descriptive Analysis

Paired samples statistics were completed on data collected related to the number of questions correct on pre-content assessment tool and the number of questions correct on post-content assessment tool. The mean score of 42 participants increased from 7.3333 to 8.4524 with standard deviations of 1.38034 and 1.41770 respectively (See Table 7 Paired Samples Statistics for Number of Questions Correct on Pre-content Assessment Tool and Post-content Assessment Tool).

Table 7
Paired Samples Statistics for Number of Questions Correct on Pre-content Assessment Tool and Post-content Assessment Tool
<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Paired Samples Mean N Std. Deviation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number Correct Pre-content Tool</td>
<td>7.3333</td>
<td>42</td>
<td>1.8034</td>
</tr>
<tr>
<td>Number Correct Post-content Tool</td>
<td>8.4524</td>
<td>42</td>
<td>1.4170</td>
</tr>
</tbody>
</table>
Paired samples statistics were completed in the subcategories of learning and teaching. In the subcategory of learning the mean score of 42 participants increased from 2.6429 to 2.9524 with standard deviations of 0.87851 and 0.73093 respectively. In the subcategory of teaching the mean score of 42 participants increased from 3.7857 to 4.6429 with standard deviations of 0.89812 and 0.57685 respectively. Paired samples statistics could not be completed in the subcategory of service because there was only one item on the pre-and post-content assessment tool (See Table 8 Paired Samples Statistics for Subcategory of Learning and Subcategory of Teaching).

Table 8
Paired Samples Statistics for Subcategory of Learning and Subcategory of Teaching

<table>
<thead>
<tr>
<th>Paired Sample Mean N Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subcategory of Learning</td>
</tr>
<tr>
<td>Pre-content 2.6429 42 0.87851</td>
</tr>
<tr>
<td>Post-content 2.9524 42 0.73093</td>
</tr>
<tr>
<td>Subcategory of Teaching</td>
</tr>
<tr>
<td>Pre-content 3.7857 42 0.89812</td>
</tr>
<tr>
<td>Post-content 4.6429 42 0.57685</td>
</tr>
</tbody>
</table>

The analysis of paired samples statistics supported the research question that
students would score higher on post-content assessments than on pre-content assessment after participating in a service learning teaching activity.
Inferential Analysis

SPSS software program was used to perform a paired t-test statistical analysis to infer information about the population. SPSS is a modular product for statistical data analysis.

Statistical analysis of post-content assessment scores determined scores were significantly higher than pre-content assessment scores with a paired t-test of -4.268, degrees of freedom at 41 and level of significance with $p = 0.000$. Statistical analysis of the subcategories of learning and teaching demonstrated significance in the subcategory of teaching with a paired t-test of -5.545, degrees of freedom at 41 and level of significance with $p = 0.000$. The subcategory statistical analysis of learning was not significant with a paired t-test at -1.673, degrees of freedom at 41 and level of significance with $p = 0.102$. Because there was only one item regarding subcategory of service there was not significant statistical data to report (See Table 9 Paired t-Test Analysis of Post-content Assessment Scores).

Table 9

Paired t-Test Analysis of Post-content Assessment Scores
Post-content Assessment Scores t df.

Total Score -4.268 41 0.000*

Sub Score

Learning -1.673 41 0.102

Teaching -5.545 41 0.000*

*Scores significant at level of less than 0.05
Three questions were identified as having a higher score on the post-content assessment than on the pre-content assessment. One of the questions was in the subcategory of learning and the other two questions were in the subcategory of teaching. The question related to learning (item #5) presented the SIDS risk reduction guidelines, which were introduced in 1992. Students were asked to identify SIDS percentages that had decreased since the guidelines were introduced. Students would identify that the information was based in research findings, which would increase the value of the information for them and for teaching to parents. Statistical analysis of item #5 in the subcategory of learning produced a paired t-test of 3.964, degrees of freedom at 41 and level of significance with $\alpha=0.000$. Item #4 in teaching described the factors that could lead to SIDS death. These factors would be included in teaching done with parents and be credible information based on research. Statistical analysis of item #4 in the subcategory of teaching produced a paired t-test of 4.635, degrees of freedom at 41 and level of significance with $\alpha=0.000$. The third question (item #8) identified factors, which affected the likelihood that parents would follow recommendations related to a safe sleep environment. These recommendations represented important information students would include in a teaching plan. Statistical analysis of item #8 in the subcategory of teaching produced a paired t-test of 4.287, degrees of freedom at 41 and level of significance with $\alpha=0.000$ (See Table 10 Paired t-Test Analysis of Questions Where Scores Were Significantly Higher in Post-content Assessment and Appendix D Post-content Assessment Tool).
Table 10

Paired t-Test Analysis of Questions Where Scores Were Significantly Higher in Post-content Assessment

Paired Items  t  df .

Subcategory

Learning: Item #5  3.964  41  0.000*

Teaching: Item #4  4.635  41  0.000*

Teaching: Item #8  4.287  41  0.000*

*Items significant at less than 0.05

Summary of Research Question One: Participants will score higher on the post-content assessment tool following participation in a service learning teaching activity is supported by both descriptive and inferential analysis of data. The hypothesis that students when presented with content, demonstrated teaching behavior, explained service
learning and the importance of client teaching discussion will demonstrate increased
knowledge of content was retained.

Research Question Two: Will students record higher scores related to the service
learning process on the post-service learning survey than recorded on the pre-service
learning survey?

Descriptive Analysis

Paired samples statistics were completed on data collected related to the number
of items where higher scores were recorded on the post-service learning survey than on
the pre-service learning survey. The mean score of 42 participants increased from
Nursing Students’ Self Efficacy 54

34.1429 to 36.4524 with standard deviations of 6.93021 to 4.44589 respectively (See Table 11 Paired Samples Statistics for Sum Total Scores on Pre-service Learning Survey and Post-service Learning Survey).

Table 11

Paired Samples Statistics for Sum Total Scores on Pre-service Learning Survey and Post-service Learning Survey

<table>
<thead>
<tr>
<th>Paired Samples Mean N Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre SL Survey Total Score 34.1429 42 6.93021</td>
</tr>
<tr>
<td>Post SL Survey Total Score 36.4524 42 4.44589</td>
</tr>
</tbody>
</table>

Paired samples statistics were completed in the service learning subcategories of learning, teaching and service. In the subcategory of learning the mean score of 42 participants increased from 12.0238 to 12.4524 with standard deviations from 2.30046 to 1.59576. In the subcategory of teaching the mean score of 42 participants increased from 10.7857 to 11.4762 with standard deviations of 2.59958 to 2.28717 respectively. In the subcategory of service the mean score of 42 participants increased from 11.3333 to 12.5238 with standard deviations of 2.57253 to 1.45230 respectively (See Table 12 Paired Samples Statistics for the Service Learning Subcategories of Learning, Teaching and Service).
Table 12

Paired Samples Statistics for the Service Learning Subcategories of Learning, Teaching and Service

<table>
<thead>
<tr>
<th>SL Paired Samples Mean N Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subcategory Learning</strong></td>
</tr>
<tr>
<td>Pre SL Survey  12.0238  42  2.30046</td>
</tr>
<tr>
<td>Post SL Survey  12.4524  42  1.59576</td>
</tr>
<tr>
<td><strong>Subcategory Teaching</strong></td>
</tr>
<tr>
<td>Pre SL Survey  10.7857  42  2.59958</td>
</tr>
<tr>
<td>Post SL Survey  11.4762  42  2.28717</td>
</tr>
<tr>
<td><strong>Subcategory Service</strong></td>
</tr>
<tr>
<td>Pre SL Survey  11.3333  42  2.57253</td>
</tr>
<tr>
<td>Post SL Survey  12.5238  42  1.45230</td>
</tr>
</tbody>
</table>

Analysis of paired samples statistics supported the research question that students would record higher scores related to the service learning process on the post-service learning survey then on the pre-service learning survey.

Inferential Analysis

SPSS software program was used to perform a paired t-test statistical analysis to
infer information about the population. SPSS is well-suited for research studies where survey type tools are used to collect data.
Nursing Students’ Self Efficacy 56

Statistical analysis of service learning survey data determined post-service learning scores were higher than pre-service learning scores with a paired t-test of -2.114, degrees of freedom at 41 and level of significance with $p = 0.041$. Statistical analysis of the subcategories of SL-learning, SL-teaching and SL-service demonstrated in the subcategory of service with a paired t-test of -2.971, degrees of freedom at 41 and level of significance with $p = 0.005$ (See Table 13 Paired t-Test Analysis of Post-Service Learning Survey Scores).

Table 13

Paired t-Test Analysis of Post-Service Learning Survey Scores

Post SL Survey Scores $t$ $df$.

<table>
<thead>
<tr>
<th></th>
<th>$t$</th>
<th>$df$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td>-2.148</td>
<td>41</td>
<td>0.041*</td>
</tr>
<tr>
<td>Subcategories</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning</td>
<td>-1.059</td>
<td>41</td>
<td>0.296</td>
</tr>
<tr>
<td>Teaching</td>
<td>-1.620</td>
<td>41</td>
<td>0.113</td>
</tr>
<tr>
<td>Service</td>
<td>-2.971</td>
<td>41</td>
<td>0.005*</td>
</tr>
</tbody>
</table>

* Scores significant at level of less than 0.05

Four of the six statements listed in the service learning survey; item #1) subcategory of learning, item #5) subcategory of teaching and item #3) and item #4)
subcategory of service demonstrated significantly higher recorded scores. In each of the following statements the participants recorded a score based on a Likert scale of 1 = strongly disagree to 7 = strongly agree. The number 4 was recorded as neither agree or disagree. Item #1, subcategory of learning, articulated that service performed helped learning course content. Statistical analysis of item #1 in the subcategory of learning
produced a paired t-test of -2.148, degrees of freedom at 41 and level of significance at = 0.038. Item #5, sub-category of teaching, referred to appreciation for diversity as a result of participating in service learning. Statistical analysis of item #5 in the subcategory of teaching produced a paired t-test of -2.595, degrees of freedom at 41 and level of significance at = 0.013. Item #3, subcategory of service, referred to participation in service learning as a positive contribution to the community. Statistical analysis of item #3 in the subcategory of service produced a paired t-test of -2.789, degrees of freedom at 41 and level of significance at = 0.008. Item #4 referred to participation in service learning and future activity in community projects. Statistical analysis of item #4 in the subcategory of service produced a paired t-test of -2.728, degrees of freedom at 41 and level of significance at = 0.009 (See Appendix D Post-Assessment Survey of Service Learning and Table 14 Paired t-Test Analysis of Items Where Scores Were Higher on the Post SL Survey).

Table 14

Paired t-Test Analysis of Items Where Scores Were Higher on the Post SL Survey

<table>
<thead>
<tr>
<th>Paired Items</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>SL Learning #1</td>
<td>-2.148</td>
<td>41</td>
<td>0.038 *</td>
</tr>
<tr>
<td>SL Teaching #5</td>
<td>-2.595</td>
<td>41</td>
<td>0.013 *</td>
</tr>
</tbody>
</table>
SL Service #3 - 2.789 41 0 .008*

SL Service #4 - 2.728 41 0 .009*

* Items significant at level of less than 0.05.
Nursing Students’ Self Efficacy 58

While only the total post SL survey score and the subcategory of service was statistically significant it was noted that each of the four questions previously listed supported service learning as an effective means of learning. Italicized words used in SL pre-and post-survey are those the researcher identified as significant in support of the research question. Italicized words were not used in original tool.

Statement #1: The service work I will perform will help me to learn the course content. (Subcategory Learning)

Statement #5: I will have a greater appreciation for diversity as a result of participating in service learning in this class. (Subcategory Teaching)

Statement #3: I believe my participation in this service learning activity will be a positive contribution to the community. (Subcategory Service)

Statement #4: Participating in a service learning project in the course makes it more likely that I will be active in community projects in the future. (Subcategory Service)
Summary of Research Question Two - Will students record higher scores related to the service learning process on the post-service learning survey than recorded on the pre-service learning survey is supported with descriptive and inferential analysis data. The hypothesis that students presented with content, demonstrated teaching behavior, explained service learning and discussion of the importance of client teaching, will indicate a greater appreciation for service learning as a method of learning was retained.

Qualitative Research

Research Question Three: How will nursing students describe their ability to complete client teaching after participating in a service learning teaching project?
NVivo-7 software was selected to analyze qualitative data. This software allowed for analysis of relationships between people (participants of this study), processes (service learning teaching activity) and concepts (self efficacy related to teaching). NVivo-7 software analyzed qualitative data collected from the written responses of an open ended question placed at the end of the Post Assessment Survey for Service Learning.

Two open ended questions were: 1) What was the client willing to do or change after your teaching? and 2) What did you learn from teaching this information? While both questions were discussed in focus groups and summary presentations made on the clinical seminar day, only question 2 was analyzed with NVivo-7 software program. The decision to analyze data in this way was made because the focus of the study was to determine what students learned from teaching the information. Further research could include clients’ perceived learning. The responses to open ended questions were reviewed utilizing Giorgi’s (1985) process of reviewing phenomenological data. Giorgi reviewed data by first reading all the data to get a sense of the whole document. In this study forty statements were read. Two participants left the open ended question unanswered. Secondly, Giorgi discriminated units from the participants’ description of the phenomenon. The researcher reviewed the comments for descriptive terms used by the participants to describe their teaching. The third step Giorgi utilized was the articulation of the comments or data into meaningful units. The researcher determined there were commonly occurring comments related to learning or knowledge, teaching or skills, and service or attitude. Giorgi synthesized all of transformed units to produce a consistent
statement which is expressed on a general level. The researcher used NVivo software
Nursing Students’ Self Efficacy

program to synthesize the data to identify the themes related to the post-service learning survey (See Figure 6. Explanation of Giorgi Analytic Comparison of Phenomenological Methods).

Figure 6.
Explanation of Giorgi Analytic Comparison of Phenomenological Methods

Step
Person Process

1. Giorgi Reading document to get a sense of the whole situation

   Researcher Forty statements were read

2. Giorgi Discriminating units from participants’ description

   Researcher Descriptive terms describing teaching

3. Giorgi Articulating comments into meaningful units

   Researcher Determining commonly occurring comments

4. Giorgi Synthesizing all transformed units

   Researcher

   NVivo software to synthesize and identify themes related to post SL Survey
Of the statements analyzed by NVivo forty-one references were identified with one of the four themes. Eight references, 6.49%, referred to attitude toward teaching. Samples of student statements included “... that I can make a difference” (x4), “… I love to teach”. Twelve references, 7.42%, referred to content taught. Samples of student statements included “Info about SIDS” (x8) and “Nothing in the crib”. Sixteen references, 19.56 %, referred to the theme of knowledge. Samples of student statements included, “How important the information is…”, “Everyone’s different…”, and “People
Nursing Students’ Self Efficacy really want what’s best for their baby”. Finally, five references, 3.89%, related to skills needed or learned in relation to teaching. Samples of student statements included “...have to teach according to the person and their situation”. The number of references (16) related to knowledge was significant as it represented a change in students’ understanding of the process of service learning (See Table 15 Number of References for Themes Related to Post-service Learning Survey).

Table 15

Number of References for Themes Related to Post-service Learning Survey

<table>
<thead>
<tr>
<th>Themes</th>
<th>Number of References</th>
<th>Coverage by %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>8</td>
<td>6.49</td>
</tr>
<tr>
<td>Content</td>
<td>12</td>
<td>7.42</td>
</tr>
<tr>
<td>Knowledge</td>
<td>16</td>
<td>19.56</td>
</tr>
<tr>
<td>Skills</td>
<td>5</td>
<td>3.89</td>
</tr>
</tbody>
</table>

Triangulation of data included focus group discussions on the clinical seminar day which strengthened the identified themes. The following statements were presented during the focus group discussion on the clinical seminar day and strengthened the identified themes. The discussion in these focus groups completed the steps 5, 6 and 7 as identified in Figure 4. Nursing Students’ Self Efficacy after Participation in Service Learning Teaching Activity. Refer to Chapter III, Figure 4. Italicized words or phrases in
student comments are those the researcher identified as significant in support of Research Question #3.
When the question was asked in student focus groups: Do you feel your teaching was accepted? Students were positive and eager to share their experiences with the group. The following are examples of student comments.

Student A. “Yes, I was nervous at first but then I got into it and felt very helpful.”
Student B. “I definitely feel that my teaching was accepted—the mom was happy to learn about Nothin’ But Baby. She loved the sleep sack.”
Student C. “The teaching was accepted as well as I felt I could hope for. I felt awkward teaching someone something when I have no children of my own.”
Student D. “I felt that my teaching was accepted….I am confident that she understood and will follow through with the guidelines that were taught.”

The researcher identified words in italics which were positive and demonstrated self efficacy in relation to teaching.

As mentioned in Chapter III, participants were assigned to both maternity and pediatric clinical settings during the timeframe of data collection. Using SPSS, group statistics determined no significant difference in data collected from students in maternity settings and students in pediatric settings. This data supported the use of this teaching pedagogy in various clinical settings. (See Table 16 Participants’ Assignments in Clinical Settings-Group Statistics).
Table 16

Participants’ Assignments in Clinical Settings-Group Statistics

<table>
<thead>
<tr>
<th>Category</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Sig(2tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre SL Sum of Learning</td>
<td>0.118</td>
<td>Maternity 2</td>
<td>11.5000</td>
<td>2.54015</td>
</tr>
<tr>
<td>Pediatric</td>
<td>20</td>
<td>12.6000</td>
<td>1.9029</td>
<td></td>
</tr>
<tr>
<td>Post SL Sum of Learning</td>
<td>0.171</td>
<td>Maternity 2</td>
<td>12.1364</td>
<td>1.95900</td>
</tr>
<tr>
<td>Pediatric</td>
<td>20</td>
<td>12.8000</td>
<td>1.00525</td>
<td></td>
</tr>
<tr>
<td>Pre-content Number Correct</td>
<td>0.083</td>
<td>Maternity 22</td>
<td>7.6818</td>
<td>1.39340</td>
</tr>
<tr>
<td>Pediatric</td>
<td>20</td>
<td>6.9500</td>
<td>1.27630</td>
<td></td>
</tr>
<tr>
<td>Post-content Number Correct</td>
<td>0.572</td>
<td>Maternity 22</td>
<td>8.5455</td>
<td>0.96250</td>
</tr>
</tbody>
</table>
Research Question Three is supported with data derived from NVivo Node Summary Report and further validated with student comments during focus group discussion. Students were able to describe their ability to complete client teaching after participating in a service learning teaching project.

Summary

Data analysis was presented to support both quantitative and qualitative research questions in Chapter IV. Statistical analysis provided through SPSS software program determined there was an increase in post-content assessment scores following
participation in a service learning teaching activity. Analyzed data resulted in positive support for Research Question #1. Participants scored higher on the post-content assessment tool following participation in a service learning teaching activity. Statistical analysis provided through SPSS software program determined there was an increase in response scores in the post-service learning survey. These resulted in positive support for Research Question #2. Participants scored higher on the post-service learning survey after participating in a service learning teaching activity. The hypotheses were retained. When students have content presented, teaching behavior demonstrated, service learning explained and discuss the importance of client teaching they: 1) scored higher on post-content assessment than on pre-content assessment tool, and 2) recorded higher scores on the post-service learning survey than on the pre-service learning survey.

Qualitative data analyzed using NVivo software provided a node summary report, which included four recurrent themes: attitude, knowledge, content, and skills. Participants’ written and verbal responses to open ended questions supported Research Question #3. Participants were able to describe their ability to complete client teaching after participating in a service learning teaching project. Triangulation of qualitative data and presentation of discussion in the focus groups supported the quantitative data and the research questions. Self efficacy statements related to teaching clients made by participants in focus groups and group presentations were identified in both written and verbal comments.
CHAPTER V

CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

Initial Perspective

Nursing as a profession will continue to work in the community where clients will be met in their homes, at their jobs and in community settings. Nurses with strong self efficacy are able to provide nursing care in an ever changing environment. “Persons with high levels of efficacy, compared to those with low levels, mentally rehearse success rather than failure at a task, set high goals, and make a firm commitment to attain them, perceive more control over personal threats, and are less anxious in the face of day-to-day challenges” (Pender, et al., 2006, p. 212). The ability to teach clients is a significant role nurses assume in the community. Given this expanded role, nursing educators must identify pedagogies that provide students with the knowledge to be effective nurses in a changing health care environment. Service learning is an effective method to provide this knowledge and to support student confidence in what they can accomplish.

Service learning starts with a focus on students, shifts to the community and ultimately looks at the benefit to both students and the community. Service learning in nursing education involves development of community partnerships and providing students with the means to interact professionally in the community. This pedagogy can
increase students’ self efficacy in knowledge and skills.

By definition self efficacy enhances the nursing role. When self efficacy is present positive behavior is more likely to be repeated as students enjoy the feeling of success and wish to experience it again. When the behavior is associated with community need, repeating the behavior enhances the community. Therefore, service learning activities
should go hand in hand with nursing education starting with simple learning objectives and building to more complex activities as students’ nursing knowledge grows. Graduates would then respond to the needs of the community because they have built professional confidence in their ability to make a positive difference. In a college when the graduate is successful and visible in the community, the mission is alive and the college is strengthened.

The purpose of this mixed method quasi-experimental study was to expand the existing knowledge regarding the relationship of nursing education and service learning as an effective pedagogy of expanding students’ self efficacy related to client teaching. Three research questions were examined.

1) Will students demonstrate greater knowledge related to selected teaching content by scoring higher on a post-content assessment than on a pre-content assessment?

2) Will students record higher scores related to the service learning process on the post-service learning survey that recorded on the pre-service learning survey?

3) How will nursing students describe their ability to complete client teaching after participating in a service learning teaching project?
The researcher adapted a model which considered the Shortridge-Baggett and van de Bijl Self Efficacy Model (1996) and the model of service learning developed by Sigmon (1996) to test the research questions. The independent variable, service learning teaching activity was identified to study whether or not it would influence dependent variables which were: 1) increased content knowledge, 2) increased service learning awareness and 3) increased confidence in teaching ability. The intervening variable, self efficacy service learning model was introduced. Two confounding variables; limited
community experience and limited experience in health care teaching were listed as having the potential to affect the independent variable.

Assumptions

The following assumptions are implicit to any conclusions based on the findings of the current study. It is assumed:

1) participants participated in service learning project and data collection process.
2) participants carefully read the pre and post test tools and answered the questions or items honestly.
3) given direction, the participants completed the service learning teaching activity as expected.

Conclusions

The stated hypotheses were retained. Quantitative analysis of data supported the research questions presented. Participants scored higher on post-content assessment tool than on pre-content assessment tool. Participants scored higher on post-service learning survey than pre-service learning survey. Similar findings were noted in a study reported by Bentley & Ellison (2002) where data indicated students verbalized service learning helped them learn material for class. Qualitative data analysis supported that participants
communicated both verbally and in writing positive statements regarding client teaching following participation in a service learning teaching activity. “In service learning activities, reflective practices are crucial for all parties to understand more fully the consequences of their positions and behaviors, and their impact on communication about what matters” (Sigmon, et al., 1996, p. 40).
Implications for Nursing Education

When principles of nursing education are combined with the structure of service learning, nursing students are better prepared nurses to function professionally in the community setting. “Students begin to view themselves as professional nurses as they gain confidence in their ability to use communication skills and psychomotor skills to assist others in making valuable lifestyle changes” (White, 1999, p. 71). The role of nurse as teacher of preventative health care is strengthened when students provide service in a community setting. A positive self efficacy encourages the student to continue to strengthen skills needed in a professional role. This study encouraged students’ ability to feel confident in teaching clients. This educational approach encouraged student empowerment and developed a professional who felt confident in nontraditional health care settings. Nurse educators assume a greater responsibility for community involvement and developing learning experiences which are not rigid and conventional but fluid in both learning content and learning outcomes. Students, educators, and community partners work for the common goal of healthier community populations. “In summary, the literature provides evidence that although nursing students have had exposure to health promotion learning experiences, research is needed to examine ways to broadening their skills in this area. Bandura’s theory of self efficacy appears to be a useful framework both for guiding learning experiences and examining development of these skills during professional education” (Laschinger, 1996, p. 38).
Recommendations for Future Research

Opportunities for service learning activities should be provided throughout the nursing curriculum offering various levels of complexity starting at the beginning of nursing programs. When the parameters for service learning projects are introduced at the beginning of nursing programs, students will have more opportunities to enhance psychomotor skills and professional communication while developing their nursing role. Nursing educators need to establish a sound foundation on which to present service learning concepts within curriculum strands. From this foundation a pattern of service learning activities can be developed for each level of a curriculum. Pre-and post-content assessments can be completed with each experience. With a similar format students would have an opportunity to enhance skills and develop a sense of self efficacy which could be more accurately measured when they completed the nursing program. A longitudinal study would more accurately measure levels of self efficacy. In essence nursing educators need to “walk to talk” to continue to empower nursing’s future.
Nursing Students’ Self Efficacy 70

References


Nursing Students’ Self Efficacy 71


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Nursing Students’ Self Efficacy 77


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Appendix A

IRB Approval Letter

Informed Consent

The Rights of Research Participants
January 22, 2008

Mary Kay Smid
College of Saint Mary
7000 Mercy Road
Omaha, NE 68106

Dear Mary Kay,

The Institutional Review Board at College of Saint Mary has granted approval of your request, “Students' Perceived Ability to Teach Following Service Learning Activity,” at the January 21, 2008 meeting. The Committee has assigned approval number CSM 08-04. The approval expires in one calendar year, January 22, 2009.

Attached is the “Rights of Research Participants” document. You are required to give each IRB research participant a copy of the document. Congratulations on your IRB approval and best wishes as you conduct your research!

Sincerely,

Peggy L. Hawkins, PhD, RN, BC, CNE
Professor

Chair, Institutional Review Board

IRB # CSM 08-04

Date Approved 1/22/08

Valid Until: 1/22/09

7000 Mercy Road • Omaha, NE 68106-2606 • 402.399.2368 • FAX 402.399.2654 • www.csm.edu
You are invited to take part in this

STUDENTS’ PERCEIVED ABILITY TO TEACH FOLLOWING SERVICE LEARNING ACTIVITY

IRB#: CSM 08-04
research study.
The information in this form is meant to help you decide whether or not to take part.
If you have any questions, please
Why are you being asked to be in this research study?
because you are currently enrolled in NUR 201/271 and participating in the service learning project "Nothin' But Baby, A Safe Sleep Program for Infants" during
the spring of 2008.

What is the reason for doing this research study?

This research project is designed to explore students’
perceived
ability
to
teach
following
participation
in
a
service
learning
activity.

What
will
be
done
during
this
research
study?

Each
participant
will be asked to complete a pre-assessment and post assessment tool related to Sudden Infant Death Syndrome. Each participant will be asked to complete a
pre-assessment and post assessment related to service learning activity.

What are the possible risks of being in this research study?

There
are no known risks to you from being in this research study.

What are the possible benefits to you?

You may
benefit from participating in this research study by having an opportunity to reflect upon knowledge gained concerning Sudden Infant Death Syndrome, service learning and the
satisfaction of contributing to educational research. However, you may not get any benefit from being in this study.

What are the possible benefits
to other people?

Possible benefits to nursing education could include an advancement of knowledge in the area of students’ perceived ability to teach.
following a service learning activity.

What are the alternatives to being in this research study?

Instead of being in this research
You can choose not to participate. What will being in this research study cost you? There is no cost to
you to be in this research study.

Will you be paid for being in this research study?

You will not be
paid
or
compensated
for
being
in
this
research
study.

What
should
you
do
if
you
have
a
problem
during
this
research
study?
Your welfare is a major concern of every member of the research team. If you have a problem as a direct result of being
in this study, you should immediately contact one of the people listed at the end of this consent form.

Initials

________

Page 1
How will information about you be protected?

Reasonable steps will be taken to protect your privacy and the confidentiality of your
study data.
In the reporting of data you will be assigned code identification such as Nursing Student A. The only persons who will have access
to your research records are the study personnel, the Institutional Review Board (IRB), and any other person or agency required by law. The information from
this study may be published in scientific journals or presented at scientific meetings but your identity will be kept strictly confidential.

What are
your rights as a research subject?

You have rights as a research subject. These rights have been explained in this consent form and
The Rights of Research Participants that you have been given. If you have been given. If you have any questions concerning your rights, talk to the investigator or call
the
Institutional
Review
Board
(IRB),
television
(402)399-2658.

What
will
happen
if
you
decide	on
to
be
in
this
research
study
or
decide
to
You can decide not to be in this research study, or you can stop participating once you start?
study
(“withdraw”)
at
any
time
before,
during,
or
after
the
research
begins.
Deciding
not
to
be
in
this
research
study
or
deciding
to
withdraw
will
not affect your relationship with the investigator or with the College of Saint Mary. You will not lose any benefits to which you are entitled.
If the research team gets any new information during this research study that may affect whether you would want to continue being in the study
you will be informed promptly.

Documentation of informed consent

You are freely making a decision whether to be in this research
study.
Signing this form means that (1) you have read and understood this consent form, (2) you have had the consent form explained to you.
you have had your questions answered and

you have decided to be in the research study and

you are 19 years of
If you have any questions during the study, you should talk to one of the investigators listed below. You will be given
a copy of this consent form to keep.

Signature of Participant Date Time

My signature certifies that all the elements of


informed consent described on this consent form have been explained fully to the subject. In my judgment, the participant possesses the legal capacity to give
informed consent to participate in this research and is voluntarily and knowingly giving informed consent to participate.

Signature of the Investigator Date
Principal Investigator:
Mary Kay Smid, MSN, RN, CNE

IRB # CSM 08-04

(402) 399-xxxx
Participating Personnel:
Dr. Peggy Hawkins, PhD, RN, BC, CNE
Date Approved 1/22/08
THE RIGHTS OF RESEARCH PARTICIPANTS*

AS A RESEARCH PARTICIPANT ASSOCIATED WITH COLLEGE OF SAINT MARY YOU HAVE THE RIGHT:

1. TO BE TOLD EVERYTHING YOU NEED TO KNOW ABOUT THE RESEARCH BEFORE YOU ARE ASKED TO DECIDE WHETHER OR NOT TO TAKE PART IN THE RESEARCH STUDY. The research will be explained to you in a way that assures you understand enough to decide whether or not to take part.

2. TO FREELY DECIDE WHETHER OR NOT TO TAKE PART IN THE RESEARCH.

3. TO DECIDE NOT TO BE IN THE RESEARCH, OR TO STOP PARTICIPATING IN THE RESEARCH AT ANY TIME. This will not affect your relationship with the investigator or College of Saint Mary.

4. TO ASK QUESTIONS ABOUT THE RESEARCH AT ANY TIME. The investigator will answer your questions honestly and completely.

5. TO KNOW THAT YOUR SAFETY AND WELFARE WILL ALWAYS COME FIRST. The
investigator will display the highest possible degree of skill and care throughout this research. Any risks or discomforts will be minimized as much as possible.

6. TO PRIVACY AND CONFIDENTIALITY. The investigator will treat information about you carefully and will respect your privacy.

7. TO KEEP ALL THE LEGAL RIGHTS THAT YOU HAVE NOW. You are not giving up any of your legal rights by taking part in this research study.

8. TO BE TREATED WITH DIGNITY AND RESPECT AT ALL TIMES.

9. THE INSTITUTIONAL REVIEW BOARD IS RESPONSIBLE FOR ASSURING THAT YOUR RIGHTS AND WELFARE ARE PROTECTED. IF YOU HAVE ANY QUESTIONS ABOUT YOUR RIGHTS, CONTACT THE INSTITUTIONAL REVIEW BOARD CHAIR AT (402) 399-2400.

*ADAPTED FROM THE UNIVERSITY OF NEBRASKA MEDICAL CENTER , IRB WITH PERMISSION
Appendix B

Maryland Nurses Association

Learning Directed Activity-SIDS CE Pilot Testing Report
The Back to Sleep campaign, sponsored by the National Institute of Child Health and Human Development (NICHD), aims to raise awareness about the role of back sleeping in reducing the risk of sudden infant death syndrome (SIDS). Part of this campaign is the development and implementation of a continuing education (CE) program for nurses on SIDS risk reduction.

In June and July 2006, Ogilvy Public Relations Worldwide, Inc. (Ogilvy) assisted NICHD in pilot testing the current draft of the CE manual. Pilot testing was conducted to help inform the content and format of the manual—with an eye toward making any necessary improvements.

Ogilvy coordinated pilot testing of the CE manual with 10 nurses by leveraging relationships already established with nursing organizations that are also NICHD partners. Ogilvy provided each pilot tester with a color copy of the manual, along with a cover letter outlining instructions for completion of the program and pilot test, the pretest, the post-test, the program evaluation, and the pilot test evaluation. We then conducted follow-up with each nurse to ensure completion of the program and return of the test and evaluation materials.
All ten pilot testers responded with feedback. Most nurses took about 60 minutes to complete the program. Feedback was largely positive, with many comments on how well-written and well-designed the CE manual was. Many of the nurses liked the takeaway messages. Some nurses commented, however, that information in the manual was repetitious, and stated that some information was not very clear or beneficial (see
Appendix A). These comments provided guidance for improvements we made to the content of the CE manual, which included deleting some of the material that several nurses found to be repetitive. The SIDS Deaths by Race/Ethnic Origin chart was clarified to convey the information more intuitively. We also revised some of the pre-and post-test questions and updated information in the resources section.

*Attachment H -Maryland Nurses Association Learner Directed Activity -SIDS CE

Pilot Testing Report Received June 10, 2008.
Appendix C

Pre-Assessment and Post Assessment Content

Related to Sudden Infant Death Syndrome
Pre-content Assessment related to Sudden Infant Death Syndrome

This pre-assessment is designed to measure baseline knowledge about SIDS, risk-reduction recommendations for SIDS, and how to communicate the recommendations to parents and caregivers. Some questions may have more than one answer.

1. Which of the following statements about SIDS is true?
   A. SIDS is the leading cause of death of infants between one month and one year of age.
   B. SIDS is completely preventable.
   C. Most infants seem sick before they die from SIDS.
   D. SIDS is caused by immunizations.

2. Which of the following is NOT a SIDS risk-reduction recommendation?
   A. Do not smoke around infants.
   B. Place infants on their back to sleep.
   C.
Do not use blankets or stuffed toys in the sleeping area.

D.

Keep infants warm by wrapping them tightly in blankets.

3.

Common reasons for not complying with the back sleeping recommendations include:

A.
Fear of aspiration or choking.

B.

Relatives recommend the prone position.

C.
Concern about a flattened skull (plagiocephaly).

D.

All of the above.

4.

Current SIDS research supports a theory that describes the convergence of factors that lead to SIDS deaths. The theory is called:

A.
Vulnerable infant model.

B.

Critical development theory.

C.

Triple risk model.

D.

Double risk theory.

5.
Since the release of the American Academy of Pediatrics Task Force on SIDS risk reduction guidelines in 1992, the SIDS rate in the United States has decreased by:

A. 30%
B. 50%
C. 70%
D. 15%

6.

SIDS rates remain disproportionately high in which of the following ethnic groups?

A. African Americans.

B. American Indians/Alaska Natives.

C. Hispanics.

D. Both A and B.
7. Which of the following constitutes a safe sleeping environment for an infant?

A. Soft sleeping surfaces.
B. A firm mattress with stuffed toys around the sides.
C. Loose bedding, such as quilts and comforters.
D. A firm mattress, free of loose bedding and stuffed toys.

8. Research shows that parents are more likely to follow SIDS recommendations when they:

A. Receive specific advice from health care providers.
B. Observe the nursing staff placing the baby on his/her back to sleep.
C. Receive SIDS incidence statistics.
D. Both A and B.

9. When nurses speak to parents and caregivers about SIDS, it is important that their message:

A. Be detailed.
B. Include statistics.
C. Be clear and simple.
D. Include medical terminology.

10. The appropriate time to deliver SIDS risk-reduction recommendations to parents is:

A. Within the first 24 hours after delivery.
B. During pregnancy.
C. At well baby visits.
D. All of the above.

Answers to these questions will be discussed in class.
Nursing Students’ Self Efficacy 90

Post-content Assessment related to Sudden Infant Death Syndrome*

Complete this post assessment, selecting the option which most clearly answers the question.

1. SIDS is:
   A. The sudden and unexplained death of an infant younger than one year of age.
   B. Caused by vomiting and/or choking.
   C. Determined only after an autopsy, an examination of the death scene, and a review of the infants’ and family’s clinical histories.
   D. Both A and C.

2. Which of the following is not a modifiable factor that puts infants at higher risk of SIDS?
   A. Stomach sleeping for naps and at night.
   B. Soft sleep surfaces and loose bedding.
   C. Tummy time when awake.
   D. Maternal smoking during pregnancy.

3. Among parents and caregivers, common reasons for not complying with SIDS risk-
reduction recommendations include:

A. Relatives recommended the prone position.

B. Concern about flattened skull (positional plagiocephaly).

C. Fear of aspiration or choking.

D. All of the above.

4. The triple-risk model describes:

A. The most dangerous environmental stressors associated with SIDS.

B. The convergence of three conditions that may lead to the death of an infant from SIDS.

C. The genetic mutations linked to SIDS.

D. The three most critical developmental periods associated with SIDS.

5. Since 1992, SIDS rates in the United States have:

A. Increased in all populations.

B. Remained constant.
C. Increased among Hispanic infants, but declined in all other populations.

D. Declined in all populations.

6. SIDS rates remain disproportionately high in which of the following ethnic groups:

A. Hispanics.

B. African Americans.

C. American Indians/Alaska Natives.

D. Both B and C.
7. Which of the following constitutes a safe sleeping environment for an infant?
   A. A firm mattress with stuffed toys surrounding the sides.
   B. Soft sleeping surfaces.
   C. A firm mattress, free of loose bedding and stuffed toys.
   D. Loose bedding, such as quilts and comforters.

8. Tummy time, a SIDS risk reduction recommendation is appropriate when:
   A. An infant is drowsy and should be stimulated.
   B. An infant is awake and supervised.
   C. An infant is asleep.
   D. An infant is full after a feeding.

9. When nurses speak to parents and caregivers about SIDS, it is important that their messages:
   A. Be detailed with step by step process.
   B. Include statistics from national reports.
   C. Be clear and culturally appropriate.
   D. Include medical findings from SIDS deaths.

10. The appropriate time to deliver SIDS risk-reduction recommendations to parents is:
    A. Within the first 24 hours after delivery.
    B. During pregnancy.
C. At well baby visits.

D. All of the above.

Appendix D

Pre-Assessment and Post Assessment Surveys for Service Learning

Previous Volunteer And Or Service Learning Participation
Pre-assessment Survey for Service Learning

Read each question; circle your response using the following scale.

1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neither agree or disagree,
5 = somewhat agree, 6 = agree, 7 = strongly agree

1. The service work I will perform will help me to learn the course content.
   1 2 3 4 5 6 7

2. The reflection and analysis of the service I do in this project will enhance my ability to complete a client-teaching project.
   1 2 3 4 5 6 7

3. I believe my participation in this service learning activity will be a positive contribution to the community
   1 2 3 4 5 6 7

4. Participating in a service learning project in the course makes it more likely that I will
be active in community projects in the future.

5.
I will have a greater appreciation for diversity as a result of participating in service learning in this class.

6.
Participation in service learning in this class will help me develop my cultural competence.

Thank you for completing this pre-assessment survey.
Nursing Students’ Self Efficacy 94

Post-assessment Survey for Service Learning

Read each question; circle your response using the following scale.

1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neither agree or disagree,
5 = somewhat agree, 6 = agree, 7 = strongly agree

1. The service work I performed helped me to learn the course content.
   1 2 3 4 5 6 7

2. The reflection and analysis of the service I did for this project enhanced my ability to
   complete a client-teaching project.
   1 2 3 4 5 6 7

3. I believe my participation in this service learning activity was a positive contribution to
   the community
   1 2 3 4 5 6 7

4. Participation in a service learning project in the course makes it more likely that I will
   be active in community projects in the future.
   1 2 3 4 5 6 7

5. I have a greater appreciation for diversity as a result of participating in service learning
   in this class.
6. Participation in service learning in this class helped me to develop my cultural competence.

What was the client willing to do or change after your teaching?

What did you learn from teaching this information?
Previous Volunteer and or Service Learning Participation

Please complete the following questions.

Prior to the Nothin’ But Baby Project have you:

1. Completed volunteer activities in the college or in your community? Volunteer activities are defined as those activities completed to meet a society need but not associated with an academic course in high school or college.
   ______ Yes
   ______ No

2. Completed a service learning activity? Service learning activity is defined as a process associated with course objectives where the student learns content (high school or college) and then complete a service activity in a selected community setting. Students reflect or discuss the outcome of the service and the learning with the teacher and other students.
   ______ Yes
   ______ No
Appendix E

Guidelines for Service Learning Project

Other Reflection Questions
Guidelines for a Service Learning Project

Safe Sleep Program for Infants

This service learning project is an opportunity for the student to make a difference in the health and well being of infants as well as to increase the opportunity to learn more about teaching and communicating with people who care for infants.

Opportunity for clinical learning through clinical objectives:

The student will:

• Identify teaching needs of families with infants related to providing a safe sleep environment.

• Identify individuals or small community groups* where the implementation of the Safe Sleep Program would be appropriate.

• Attend and participate in clinical seminar per schedule to discuss implications of community service. (completed in class).

• Complete the provided Safe Sleep Curriculum as explained and
demonstrated in class at least once during the maternal/child rotation.

*If a community group is selected you must contact the service learning faculty prior to completing the presentation. This will ensure that the appropriate agency requirements have been completed and an agency contact person has been identified. Additional display material will be provided.

- Attend and participate in end of semester clinical seminar to discuss impact of service learning to the community and to the student as a professional. This time will include reflection of both the process and the implications for community education.

Activities to consider before completing the Service learning activity:

- Review teaching tools about Safe Sleep Initiative, which are provided
- Review Unit Objective 2: Teaching Learning in Berman or Hockenberry with special attention to use of therapeutic communication interventions
- Review content related to SIDS which was provided in class
- Consider who would benefit from teaching and how to set up a teaching environment. This project can be completed in a clinical setting or outside of clinical time with community clients.
Written Assignment:

- Complete and turn in reflection questions
- Turn in “Nothin but Baby quiz card” completed by the person you taught
- Materials are due on Clinical Seminar Day.
Reflection

Directions: Students, implement the Nothin But Baby teaching plan with an individual client of your choice and complete the reflection questions. These questions and the quiz (completed by the client) are due to be turned in on the clinical seminar day. I will then complete the paperwork and prepare the service learning certificates. Thank you for being a part of this special program.

Questions
1. Who: Who did you choose to teach? What teaching needs did you identify in the client you taught?
2. What: What questions were asked? What other materials would have been helpful to have when you were teaching?
3. Where: Where did you teach the safe sleep program? Was the infant present when you completed the teaching?
4. How: Do you feel your teaching was accepted? What was the individual/family willing to do to change behaviors after your presentation? (Consider the pre and post information on the quiz form).

Remember you can make a difference!