Instructional Strategies Chosen for the Classroom

in a Process-oriented Curriculum:

A Grounded Theory Study

A thesis submitted to the College of
Graduate Studies and Research
In Partial Fulfillment of the Requirements
For the Degree of Master of Nursing
In the College of Nursing
University of Saskatchewan,
Saskatoon, Saskatchewan

By Shauna Davies, RN, BSN

© Copyright Shauna Leigh Davies, June 2008. All rights reserved.
Permission to Use

In presenting this thesis in partial fulfillment of the requirements for a Postgraduate degree from the University of Saskatchewan, I agree that the Libraries of this University may make it freely available for inspection. I further agree that permission for copying of this thesis in any manner, in whole or in part, for scholarly purposes may be granted by the professor who supervised my thesis work or, in their absence, by the Head of the Department or the Dean of the College in which my thesis work was done. It is understood that any copying or publication or use of this thesis or parts thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the University of Saskatchewan in any scholarly use which may be made of any material in my thesis.

Requests for permission to copy or to make other uses of materials in this thesis in whole or part should be addressed to:

Dr. Sandra Bassendowski  
University of Saskatchewan  
4500 Wascana Parkway  
Regina, Saskatchewan S4P 3A3  
Canada

OR

Dean  
College of Graduate Studies and Research  
University of Saskatchewan  
107 Administration Place  
Saskatoon, Saskatchewan S7N 5A2  
Canada
Abstract

The trend in process-oriented curricula reform began in the mid-1980s and 1990s in response to a call for nursing education to graduate registered nurses that were responsive to a changing society. Many curricula were redesigned from a traditional approach to a process-oriented approach at this time. The purpose of this study is to explore, from a Grounded Theory approach, how instructional strategies are determined within the Canadian classroom setting in a process-oriented curriculum. Interviews were conducted with 17 nurse educators from the Nursing Education Program of Saskatchewan (NEPS). Nurse educators represented courses from all years of the four-year baccalaureate program and all three sites. All interviews were audiotaped and transcribed verbatim with data saturation reached after 13 interviews. Strauss and Corbin’s (1998) Grounded Theory analysis was utilized. Data analysis was assisted with the use of the qualitative data analysis software program Atlas.ti. The understanding of self was an integrating factor in the theory. The theory provides insights into the factors that have determined the types of instructional strategies utilized by full-time faculty within a generic process-oriented curriculum and identifies the support systems these nurse educators feel were or should be in place to assist in their roles. The research has implications for nurse educators, administrators, program planners, and students.
Acknowledgements

I would like to take this opportunity to thank all of the participants of this study for volunteering their time and sharing their experiences teaching in the classroom.

I would like to thank my committee members: Dr. Linda Ferguson and Dr. Glenn Donnelly for their support and guidance throughout the research process. I valued the constructive feedback and learned so much on conducting and writing about research.

A special thank you to Dr. Sandra Bassendowki for undertaking the task of supervising this research project. I appreciate the many hours you have spent reading drafts.

My thesis committee are all truly gifted researchers and mentors.
# Table of Contents

PERMISSION TO USE ........................................................................................................ i

ABSTRACT ......................................................................................................................... ii

ACKNOWLEDGEMENTS ............................................................................................... iii

TABLE OF CONTENTS ............................................................................................... iv

LIST OF FIGURES ......................................................................................................... viii

1. CHAPTER ONE- INTRODUCTION AND REVIEW OF THE LITERATURE
   1.1 Introduction ........................................................................................................ 1
   1.2 Literature Search .............................................................................................. 2
      1.2.1 Themes ..................................................................................................... 3
   1.3 Review of the Literature ................................................................................... 4
      1.3.1 The Curriculum Revolution ..................................................................... 4
      1.3.2 Nurse Educators’ Perceptions ................................................................. 4
      1.3.3 Integration and Synthesis ........................................................................ 6
      1.3.4 Gaps in the current level of research ....................................................... 8
   1.4 Research purpose .............................................................................................. 8

2. CHAPTER TWO- THE RESEARCH METHODOLOGY
   2.1 Research Design ............................................................................................... 10
   2.2 Ethical Considerations .................................................................................... 11
   2.3 The Study Participants .................................................................................... 12
   2.4 Instruments and Procedure ............................................................................. 15
   2.5 Data Analysis .................................................................................................. 17
   2.6 Scientific Rigour ............................................................................................. 18
3. CHAPTER THREE- THE RESULTS

3.1 The Setting .................................................................................................................. 20
3.2 Demographic data ....................................................................................................... 21
3.3 Factors that have influenced the choice of instructional strategies ................. 24
   3.3.1 Defining the curriculum .................................................................................. 24
       3.3.1.1 Teaching-centred instructional strategies ......................................... 28
       3.3.1.2 Student-centred instructional strategies ........................................... 29
3.3.2 Barriers to student-centred instructional strategies ........................................ 31
   3.3.2.1 Market factor demands ........................................................................... 31
   3.3.2.2 Not all courses can be taught in a process manner ............................... 32
       3.3.2.3 A focus on content ............................................................................ 33
   3.3.3 Classroom factors ......................................................................................... 35
3.3.4 Student factors ..................................................................................................... 36
3.3.5 Educational professional development ......................................................... 39
   3.3.5.1 Journal articles ...................................................................................... 39
   3.3.5.2 Workshops ............................................................................................. 39
       3.3.5.3 I teach the way I like to be taught ...................................................... 42
3.4 Support Systems ....................................................................................................... 43
   3.4.1 Peer support .................................................................................................. 43
   3.4.2 Administrative support .................................................................................. 45
   3.4.3 Technical Support ....................................................................................... 47
3.5 Understanding of Self ............................................................................................. 47
3.6 The Theory ................................................................................................................. 49
4. CHAPTER FOUR- DISCUSSION

4.1 Defining the curriculum .................................................................................. 53
4.2 Teacher-centred instructional strategies ......................................................... 55
4.3 Student-centred instructional strategies .......................................................... 57
4.4 Barriers to the student-centred approach ....................................................... 59
    4.4.1 Market factor demands .......................................................................... 59
    4.4.2 Not all courses can be taught in a process manner ............................... 59
    4.4.3 A focus on content ................................................................................. 60
4.5 Classroom factors ........................................................................................... 61
4.6 Student factors ............................................................................................... 62
4.7 Educational professional development .......................................................... 65
    4.7.1 Journal articles ...................................................................................... 65
    4.7.2 Workshops ............................................................................................ 65
    4.7.3 I teach the way I like to be taught ......................................................... 67
4.8 Support Systems ............................................................................................. 68
    4.8.1 Peer support .......................................................................................... 68
    4.8.2 Administrative support .......................................................................... 70
    4.8.3 Technical support .................................................................................. 72
4.9 Understanding of Self .................................................................................... 73
4.10 The Theory .................................................................................................. 76
4.9 Study Limitations ........................................................................................... 76

5. CHAPTER FIVE- RECOMMENDATIONS ............................................................. 78
5.1 Recommendations .......................................................................................... 78
List of Figures

Figure 1. Pictorial representation of how instructional strategies are chosen based on understanding of self...................................................................................................50

Figure 2. Pictorial representation of influences on teacher and student-centred activities .................................................................................................................................51

Figure 3. Pictorial representation of peer support.........................................................................................................................52
CHAPTER ONE

Introduction and Review of the Literature

1.1 Introduction

The trend in process-oriented curricula reform began in the mid-1980s and 1990s in response to a call for nursing education to graduate registered nurses that were responsive to a changing society. When the Nursing Education Program of Saskatchewan (NEPS) was designed in the 1990s and initiated in 1996, the program was designed as a process-oriented curriculum. A recent review of the Nursing Education Program of Saskatchewan found that many nurse educators teach via lecture despite the variety of available instructional strategies (Canadian Association of Schools of Nursing, 2004). In the fall of 2004, I had the opportunity to instruct third year NEPS nursing students on myocardial infarctions with emphasis on materials related to signs and symptoms, diagnosis, treatment, and nursing care. I did not lecture on the material; rather, I delivered information through the use of case studies and group sessions. During the class, the students indicated that they preferred the use of lectures as they felt that they were not learning from other teaching strategies what they needed to know in order to graduate. From the perspective of the students, lectures were the preferred approach. The question remains however as to how NEPS nurse educators choose instructional strategies for use in a classroom setting.

The types of learning activities implemented to achieve the educational goals of the program can define a curricular thrust. A process-oriented curriculum can be described as a shift from teaching content to developing critical thinking skills that will be used in the clinical areas. Rather than focusing on content that needs to be delivered to
the student, the nurse educator implements a diverse range of instructional strategies such as: case studies, group discussion, debate, simulation activities, and lectures to help the students understand the process of delivering care and responding to the needs of the client. Some Canadian curricula have been developed with the focus on specific instructional strategies such as problem-based learning or self-directed learning. The NEPS has not specified the specific instructional strategies to employ for student learning but does define its curriculum as a process-oriented one and thus, for the purposes of this research, the curriculum can be defined as a generic process-oriented curriculum.

Following my experience in the classroom, my interest grew in exploring the factors that have and will continue to play a role in the NEPS nurse educator’s decision of choosing instructional strategies within a process-based curriculum.

1.2 Literature Search

To explore the factors that have played a role in the selection of instructional strategies in a process-oriented curriculum, I conducted a literature search on CINAHL, Medline, ERIC, and PubMed databases in January, February, and September 2005. Terms such as *process-based curriculum* and *process-oriented curriculum* revealed studies dealing with problem–based learning. As problem-based learning is one aspect of a process curriculum, the search terms were broadened to include all aspects of the curriculum. Terms included in the search were *case method, constructivism, content-based learning, critical theory, critical thinking, curriculum development, education research, faculty attitudes, inquiry-based learning, interactive processes, nursing education, outcomes of education, participatory process, reflective teaching, and self-directed learning* in varying combinations to locate empirical research on the subject.
Following the search, sixteen articles were available at time of writing the proposal. These articles were obtained through a manual search of the Health Sciences Library at the University of Saskatchewan, the library at Saskatchewan Institute of Applied Science and Technology (SIAST), Wascana Campus, and accessed through interlibrary loans. In total, nine non-empirical and eight empirical studies were obtained dealing with process-based curricula and instructional strategies employed within the curricula. All nine non-empirical articles were included in this literature review to provide an historical perspective on how process-oriented curricula are accepted and implemented. Of the eight empirical studies, seven are included for discussion within this literature review as all cover the topic of instructional strategies employed in a process-oriented curriculum. The eighth article was not included in the discussion as the article requested opinions of the readership if a curricular change should occur.

1.2.1 Themes

As the purpose of this literature review was to explore the factors that played a role in the decision of choosing instructional strategies within a process-oriented curriculum, all curricula, both problem-based and self-directed learning, were included together to present a full picture of the topic. Both are valid instructional strategies and no single strategy is deemed to be more suitable than the other (Bevis & Murray, 1990). Qualitative and quantitative data are presented together in order to provide an insightful summary of the subject material. Appendix A includes all research literature about the chosen topic. The format of the table was adapted from Pinch (1995) for critiquing the literature and writing a synthesis.
1.3 Review of the Literature

1.3.1 The Curriculum Revolution

The first theme deals with the Curriculum Revolution. These articles are non-empirical and present the authors’ opinions on the topic. Many of the authors are respected within their fields. The Curriculum Revolution was inspired by critical social theory and the need to develop social responsibility within nurse graduates (Bevis & Murray, 1990; Darbyshire, 1993; Harden, 1996; Tanner, 1990). This curricular change resulted from the need to develop a caring environment for the client, student, and nurse educator; to comprehend and critique the beliefs and assumptions that guided traditional education; and to recreate the teacher-student relationship (Bevis & Murray; Darbyshire; Harden; Sutcliffe, 1992; Tanner). In order for change to occur, it is important to implement diverse instructional strategies, support nurse educators through professional developmental programs, and incorporate caring into curricula (Bevis & Murray; Harden; Sutcliffe). The goal of all nursing education programs was to graduate registered nurses with strong critical thinking skills who could effectively respond to change and deliver safe, competent care to clients.

1.3.2 Nurse Educators’ Perceptions

The second theme includes both non-empirical and empirical studies of nurse educator perceptions of a process-based curriculum. Various methodological approaches were utilized within the studies. All of the research studies were qualitative in nature (Creedy & Hand, 1994; Lunyk-Child et al., 2001; Rideout et al., 2002; Schaefer & Zygmont, 2003; Williams, 1999). Two studies addressed nurse educators’ perspectives on specific approaches to curricula, focusing on their individual programs utilizing problem-
based learning or self-directed learning (Lunyk-Child et al.; Williams). A third study reviewed the effectiveness of a faculty development program (Creedy & Hand), while the fourth empirical study analyzed the teaching style of nurse educators and how their teaching style promoted a student centred or teacher centred learning environment (Schaefer & Zygmont). One study focused on student perceptions, comparing graduating baccalaureate students in a problem-based curriculum with those in a conventional nursing program (Rideout et al.). Two other empirical studies focused on literature reviews (Berkson, 1993; Hitchcock & Mylona, 2001). The first included a literature review on the effectiveness of problem-based learning within medical schools (Berkson), while the second literature review focused on what is known about enhancing faculty knowledge in problem-based learning along with the skills needed by the faculty in this approach (Hitchcock & Mylona). The last articles are non-empirical and discuss authors’ experiences implementing a process-oriented curriculum (Alexander, McDaniel, Baldwin & Money, 2002; Johnston & Tinning, 2001; Rentschler & Spegman, 1996; Richardson & Trudeau, 2003) which were useful in presenting a wider perspective on the issues faced by nurse educators.

The qualitative studies from the literature search used purposive sampling within their institutions. Purposive sampling is a data collection method in which the researcher selects study participants on the basis of personal judgement about who will be most representative and speak to the issues (Polit, Beck, & Hungler, 2001). This method is effective in gaining an understanding of the nurse educator’s perspective in this subject area. Two studies included a longitudinal design in which data had been collected over a period of time and the other two used a cross-sectional approach. The benefit of a
longitudinal approach is its ability to demonstrate changes over time, while the cross-sectional design is appropriate for describing the phenomena at a fixed point. Thus, the findings relate to the respective nurse educators at that particular time in their particular institutions. Most of the studies focused on nurse educators’ perspectives on the process curriculum (Berkson, 1993; Rentschler & Spegman, 1996; Schaefer & Zygmont, 2003; Williams, 1999), while three of the studies included students’ perspectives (Lunya-Child et al., 2001; Richardson & Trudeau, 2003; Rideout et al., 2002). The majority of studies focused on nurse educators who taught in the classroom; however, one study focused upon clinical instructors’ perspectives.

Data collection involved the use of open-ended questions in the majority of the studies. Two studies utilized focus groups to obtain their information (Creedy & Hand, 1994; Lunyk-Child et al., 2001). The use of focus groups is a limitation for data collection as participants may not be comfortable expressing their views in front of a group. Thus, one study included individual follow-up interviews with a small sample of study participants (Creedy & Hand), while the other included participant journaling on their experience and in examination of their course outlines (Schaefer & Zygmont, 2003). Data was collected in a setting considered to be comfortable for participants (Lunya-Child et al.; Williams, 1999).

1.3.3 Integration and Synthesis

Common findings within the articles support the premise that nurse educators are able to define their particular curriculum as process-oriented but suggest that nurse educators need development workshops to learn more about various instructional strategies (Creedy & Hand, 1994; Johnston & Tinning, 2001; Lunyk-Child, et al., 2001;
Rentschler & Spegman, 1996; Williams, 1999). The need for faculty development was found in many of the articles (Bevis & Murray, 1990; Creedy & Hand; Darbyshire, 1993; Harden, 1996; Johnston & Tinning; Lunyk-Child et al.; Rentschler & Spegman; Schaefer & Zygmont, 2003; Sutcliffe, 1992; Tanner, 1990; Williams) and supported with empirical evidence by engaging the nurse educator in reflecting on practice, providing opportunities to implement new approaches on a trial basis, and providing feedback and support throughout the change process (Creedy & Hand). These workshops are important in order to ensure that faculty become comfortable teaching with new methods and do not return to teaching content by lecture due to doubts in their ability to teach within the new curriculum as the change is stressful (Berkson, 1993; Creedy & Hand; Lunyk-Child et al; Rentschler & Spegman; Schaefer & Zygmont).

In two studies, following revision to the curriculum, the process-oriented approach was seen to be effective in reducing the theory-to-practice gap in the opinion of clinical nurse educators (Richardson & Trudeau, 2003; Williams, 1999). Berkson (1993) however, found the graduate of a problem-based learning curriculum to be indistinguishable from the graduate of a traditional program. This inconsistency could be due to the length of time that the curriculum has been implemented. Medical schools have utilized the problem-based approach in their curricula since the 1960s; thus Berkson would have more studies and a timeline upon which to base her findings. Rideout et al. (2002) also concluded that there were no significant differences in perceived preparation for nursing practice, perceived clinical functioning, or statistically significant differences in RN scores between students in a problem-based curriculum and those students in a conventional nursing program. Rideout et al. concluded that problem-based learning is an
effective approach for educating nurses as the students expressed high levels of satisfaction and valued the educational method.

1.3.4 Gaps in the Current Level of Research

There is very little research available on factors that have played a role in the decision of choosing instructional strategies in a process-based curriculum. The current literature provides information on the historical background related to the curricular change. The research also identifies that faculty development programs are needed and have been shown to be effective. The current literature indicates that nurse educators need to continue to refine their instructional methods and be consistent with instructional strategies within both problem-based and self-directed learning curricula. No information is available on what instructional strategies are used by nurse educators in a generic process-oriented curriculum, how instructional strategies are chosen, and what factors played a role into their decision of choosing or rejecting instructional strategies.

1.4 Research Purpose

The purpose of this study was to seek a grounded theory that explored the factors that have and will continue to play a role in the nurse educator’s decision of choosing instructional strategies. This grounded theory research was guided by two major research questions: What factors have played a role in the individual nurse educator’s decision of choosing an instructional strategy? What support systems have been or need to be in place for faculty development with respect to instructional strategies chosen for the classroom? Grounded theory is defined as theory generated from data systematically obtained and analyzed through the constant comparative method (Strauss & Corbin, 1998). This grounded theory research has implications for nursing education as it
provides insight into the factors that have contributed to the selection of teaching methods utilized within a generic process-based curriculum, and identifies the support systems these select nurse educators feel have been or should be in place to assist in their teaching roles. Based on the results of this study, further information has been gained on how instructional strategies are chosen, what factors played a role in accepting or rejecting the use of an instructional strategy, as well as recommendations to support nursing faculty teaching in the classroom setting.
CHAPTER TWO

The Research Methodology

2.1 Research Design

Grounded Theory was chosen as the approach for this study in order to comprehend the situation. This approach is used when the focus of the study is the elucidation of a social experience. Grounded Theory explores how people define reality and how their beliefs are related to their actions (Burns & Grove, 2005). In this approach, a researcher does not begin with a preconceived theory in mind. Rather, the researcher begins with an area of study and allows the theory to emerge from the data (Strauss & Corbin, 1998).

Grounded Theory calls for a set of guidelines that includes the simultaneous collection and analysis of data, a three-step data coding process, the use of comparative methods, the use of memo writing, sampling to refine theoretical ideas, and the integration of the theoretical framework (Charmaz, 2000). As the categories are developed and compared, gaps in the data are discovered. These gaps are filled in through the use of theoretical sampling in which specific information is obtained to provide further information on the emerging theory (Charmaz). Theoretical sampling provides an opportunity to compare events, incidents, or happenings to determine how a category varies in terms of its properties and dimensions (Strauss & Corbin, 1998). An on-going literature review was also conducted to help stimulate thinking about the data and to help find examples of similar phenomena.
2.2 Ethical Considerations

Ethics approval was sought and obtained from the Behavioural Research Ethics Board at the University of Saskatchewan (Appendix B). Letters requesting participation in the study were then mailed to all potential participants (Appendix C). An interview was set up with each nurse educator who volunteered to be part of the study. At the time of meeting, participants were given a copy of the list of questions that may be asked during the interview (Appendix D), a copy of the consent form, and time to ask any questions related to the study before taping commenced. Informed consent was obtained from the participants who volunteered to be part of the study. The participants received a signed copy of the consent for their records (Appendix E).

There was a low risk to the participants in this study as the risks would not be greater than those risks encountered in daily life as interviews were conducted in a separate room away from the office such as in the library or on a separate floor. There was no power relationship between the researcher and the participants, as the researcher was not involved in peer evaluations of faculty and all are registered nurses employed in educational institutions. Participants were asked to volunteer for the study. This was not a vulnerable population nor was it a dependent or captive population. All participants were over 18 years of age. Research procedures did not cause fatigue or stress. There was a risk that specific information may be attributed to a participant given the small number of possible participants, so this was clearly stated in the consent form. All efforts have been made to ensure anonymity of participants. All identifying information about the participants was removed from the transcriptions. Interview questions focused on the participant’s career and did not embarrass, humiliate, or cause grief for the participants.
The rights of the participants were not jeopardized. The participant could choose to withdraw from the study at any time with no consequences. However, no participants withdrew from this study. Participants did not receive compensation for their time.

2.3 The Study Participants

This study focused on full-time faculty working in the NEPS at the Regina, Saskatoon, and Prince Albert sites. Part-time faculty who taught in the classroom setting as well as faculty who taught only in clinical or laboratory settings were not included in the study. Participants were recruited using letters to request participation. In July 2006, 55 full-time nurse educators teaching in the classroom setting within the NEPS at the Regina, Saskatoon, and Prince Albert sites were sent a letter requesting participation (Appendix C). In total, 29 letters were sent to College of Nursing, University of Saskatchewan faculty, hereafter referred to as College of Nursing, 30 letters were sent to Saskatchewan Institute of Applied Science and Technology (SIAST) Nursing Division faculty and six letters were sent to First Nations University of Canada Nursing Division faculty.

In August 2006, nurse educators began to reply to the request for participation in the research study. In total, twenty-five nurse educators responded over a three-month period. Twenty-three respondents were contacted thanking them for their response and requesting dates and times that would be suitable for the interview. Two of the respondents declined participation in the study as they worked primarily in the clinical or laboratory setting. Interviews began in the fall of 2006 and continued until February 2007.
At the beginning of the interview process, all participants that were available for interviews in August, September, and October 2006, were selected, as several potential participants were not available for interviews until after December 2006. These participants represented nurse educators teaching at SIAST or the College of Nursing in Regina and Saskatoon sites. The majority of interviews conducted in the first three months, included nurse educators with fewer than five years of teaching experience. The sampling of the nurse educators evolved throughout the research process in order to include individuals who could contribute to the evolving theory whereby they could confirm or disconfirm the emerging theory discovered during the collection and analysis of data. Theoretical sampling was used during the data collection. The remaining participants were chosen based on their experience teaching in the classroom setting, number of years of experience, and location in order to provide additional data on the research subject and to shed any differences dependant on location. These participants included nurse educators who worked in Prince Albert and Saskatoon; the majority worked as a nurse educator for more than five years, and represented all years of the NEPS program.

Participants varied in number of years of experience, courses taught, and site. They represented all three NEPS sites. Interviews were conducted until no new information was obtained from participants and categories became saturated. The interviews were conducted individually with a total of 17 participants, nine nurse educators from SIAST, Wascana Campus; three nurse educators from the College of Nursing, Regina site; two nurse educators from SIAST, Kelsey Campus; two nurse
educators from the College of Nursing, Saskatoon site; and one nurse educator from the First Nations University of Canada, Prince Albert site.

Research time varied at each site depending upon the number of volunteers at each location. However, the research was not disruptive for the participant or class, as interviews took place during available time of the participant in the workday and at a location separate from the office, such as in the library or in a private room on a separate level from the offices. Participants had the opportunity to view questions prior to signing the consent form at the initial meeting; however the participants did not receive a list of the questions prior to the scheduled interview time in order to prepare for the interview. All questions followed the interview guide and participants’ comments. All interviews were taped and transcribed verbatim. The transcripts and tapes will be stored in a locked cupboard by Dr. Sandra Bassendowski at the College of Nursing, Regina Site for at least five years from the completion of the study (2008-2013).

Course manuals from the NEPS were reviewed and focused only on the courses that the participants currently taught in or were previously involved with. In total, 24 faculty and student course manuals from SIAST and First Nations University of Canada were reviewed in order to provide more information on chosen instructional strategies, as the participants commented that strategies were chosen based on course content. The course description, intents of the course, and outline of strategies and approaches for learning, as listed in the faculty and student manuals, were examined to see if the course manuals had suggested or mandated instructional strategies based on course content. In total, six course manuals from the College of Nursing were examined to provide information on the course and chosen instructional strategies as identified in the course
manual. All were NEPS course manuals from years one to four of the program. Eight of the participants were involved in the course outline development for their assigned courses. New nurse educators were provided a copy of the course manual to use throughout the semester in their assigned course.

Current literature and research on this subject was reviewed as another source of data. The literature review was continued during the data collection and analysis phase in order to find any additional research on the concepts revealed during the coding process. Terms included administrative support, barriers, class layout, class size, classroom, congruence, community of practice, factors, identity, integrity, interpersonal relations, learning environment, lecture, low participation, market factors, mentorship, nursing education, nursing faculty psychological factors, organizational power, peer support, student, student-centred, teacher-centred, teaching, teaching material, teaching methods, teaching methods utilization, teaching philosophy, theory practice relationship, workplace culture, and work environment in varying combinations to locate empirical research.

2.4 Instruments and Procedure

Data collection was conducted using open-ended interview techniques that allowed participants to respond to questions in their own words during a face-to-face interview. The interviews varied in length from 20 to 45 minutes. Interview questions were guided by the two major research questions for the study. To obtain further information on the factors that may have played a role in the individual nurse educator’s decision to choose an instructional strategy, questions focused on how long the nurse educator had been teaching in the NEPS, courses taught, class size, instructional strategies used, along with
their understanding of a process-oriented curriculum and the unique roles of the teacher and student. Terms commonly used within teaching literature include instructional strategies, teaching strategies, teaching methods, and teaching techniques. These terms define faculty-centred strategies used to describe the kinds of activities faculty engage in when teaching (Jeffries & Norton, 2005). For the purposes of this research, the term ‘instructional strategies’ included skills such as questioning, discussing, direction giving, explaining and demonstrating, and included methods such as debate, learning contracts, case studies, lecture, and simulation to name a few (Saskatchewan Learning, 1991). To gain additional information on the support systems, questions focused on professional development activities along with supports these nurse educators felt have been or should be in place.

All interviews were recorded and transcribed verbatim. Memos were kept on the participant’s non-verbal communication during the interview in order to provide additional information on how the questions were perceived and answered by the participant. Additionally, memos were kept about the participants, relating to number of years of experience teaching in NEPS, courses currently and previously taught by each participant, and location to aid in the theoretical sampling. Operational notes were kept on the interviews focusing on additional questions to be asked based on interviews and current literature. Theoretical memos were recorded that contained information about the theoretical sampling process and about the developing theory to increase awareness about what to look for, and where, based upon previous interviews and current literature. Summary memos were kept to provide an overview of several notes.
2.5 Data Analysis

In Grounded Theory, sampling of participants, data collection, and data analysis occur simultaneously. This constant comparison approach is used to develop and refine theoretically relevant categories by comparing different views, situations, actions, and experiences; by comparing data within a category; and by comparing a category with another category (Charmaz, 2000). A three-step data coding process was used to assist in this process, which involved open coding, axial coding, and selective coding. Open coding was used in this approach to capture what was going on in the data and to reflect the participant’s own words. One example of the open coding was “I teach the way I like to be taught” which was later developed into a category. A line-by-line comparison approach was followed in order to study the data and base coding on the participants’ views of their realities.

In the constant comparison approach, the data from the second interview was coded with the coding from the first interview in mind, and then the third interview was coded by comparing the previous data set and so forth. The categories were then derived from the data that were constantly compared with previous data so that common categories and variations were determined and condensed (Strauss & Corbin, 1998). This process is referred to as axial coding, for categories are linked at the level of property and dimension. Properties are the general or specific characteristics of a category, while dimensions represent the property on a continuum (Strauss & Corbin). By comparing line-by-line statements, variations were picked up comparing data from the same individuals with themselves. For example, axial coding helped to fit the pieces of the puzzle together when looking at how the nurse educators defined the curriculum, their
wording was compared to the types of strategies used to determine if the approach used was consistent with their definition.

Finally, selective coding was done in which one category was chosen as the core that emerged with highest frequency as there were indicators pointing to this concept and other categories related to it. The code “understanding of self” emerged most frequently in the line-by-line comparison and coding process. Coding continued until saturation was reached, then coding ceased for the category. Appendix F provides a pictorial representation of coding.

Diagrams were used to assist in visually describing the relationship among concepts (Corbin & Strauss, 1998). This data analysis process was assisted through the use of a computer program titled Atlas.ti (2006). This program allowed the researcher to easily code segments in the context of the whole text and provided the researcher with the ability to visually see the relationship of the categories. The Atlas.ti program has been increasingly used in Grounded Theory research projects (O’Callaghan, 2001; Rich, Patashnick, & Chalfen, 2002).

2.6 Scientific Rigour

Credibility, auditability, and fittingness are three main standards of rigour common to qualitative studies (Chiovitti & Piran, 2003). Credibility relates to the trustworthiness of the findings. In order to establish credibility in this study, participants guided the inquiry process. The interview questions were modified according to the incoming information from the participants, which allowed them to guide the inquiry process. Audiotapes of the interviews were transcribed verbatim and the coding reflected the language used by the participants so that the codes, categories, and theory could
remain close to the primary data. Additionally, the researcher kept memos on insights and ideas generated during data analysis and collection. Auditability refers to the ability of another researcher to follow the methods and conclusions of the original researcher (Chiovitti & Piran). The audiotapes, transcripts, field notes, memos, codes, and diagrams of coding process provide an audit trail of all of the decisions the researcher made at every stage of data analysis. Fittingness refers to the probability that the research findings have meaning to others in similar situations and that the developed theory fits the context (Chiovitti & Piran). Demographic data about the participants is presented to the reader along with information on the setting, which allows the reader to assess the transferability of the research findings.
CHAPTER THREE

The Results

The results that follow provide an insight in the factors that played a role into how instructional strategies are chosen for the classroom setting. The section has been organized according to a description of the setting in which the research took place along with the demographic data of the participants followed by the factors that emerged from the data. The chapter concludes with the theory relating to the factors that have influenced the choice of instructional strategies used in the classroom setting.

3.1 The Setting

The NEPS is a four-year nursing degree program that commenced in 1996. It was developed as a result of collaboration between SIAST, Kelsey campus, SIAST, Wascana Campus and the College of Nursing, University of Saskatchewan. The First Nations University of Canada joined in partnership in March 2003. The First Nations University of Canada was established in 1976 as a federated College through a partnership with the University of Regina. The First Nations University of Canada is independently administered and offers post-secondary education in a culturally supported First Nations environment. The first two years of program are taught by SIAST at both Saskatoon and Regina locations, and by the First Nations University of Canada at Prince Albert. Nurse educators employed with SIAST and the First Nations University of Canada may teach in the classroom, lab, or clinical settings. It is expected that the nurse educators employed with SIAST have a Masters degree in nursing and complete a Faculty Certificate Program within three years of hire. The Faculty Certificate Program is considered essential for the nurse educator to complete as it provides on-going education of the values, norms, and
practices of a teaching and learning culture in the post-secondary technical school. The University of Saskatchewan and the First Nations University of Canada requires nurse educators to have completed a Masters degree to teach in the classroom or a PhD if applying for a tenure track position. The nurse educator employed in a tenure-track position may teach in the graduate and undergraduate programs and must participate in scholarly work such as research and professional practice. SIAST and the First Nations University of Canada teach the same nursing courses in years one and two. The University of Saskatchewan teaches year three and four courses at all sites.

3.2 Demographic Data

Interviews were conducted until data saturation was achieved and no new information was obtained from the participants. Data saturation was achieved after 13 interviews with 13 participants; four additional interviews were conducted with four more participants to confirm findings. The interviews were conducted individually with nine nurse educators from SIAST, Wascana Campus; three nurse educators from College of Nursing, University of Saskatchewan faculty, Regina site; two nurse educators from SIAST, Kelsey Campus; two nurse educators from the College of Nursing, University of Saskatchewan faculty, Saskatoon site; and one nurse educator from the First Nations University of Canada, Prince Albert site. All participants were female.

Demographic data collected about the participants revealed that the nurse educators have been teaching full-time within nursing education or the NEPS program between 2 and 32 years. The mean number of years the nurse educators taught equalled 9.32 years, with a median of 7 years and a bimodal distribution of 3 and 10 years. Eight participants, either employed with SIAST or the University of Saskatchewan, have taught
in NEPS since the program commenced. The nurse educators represented a variety of
courses in all years of the program at each site. All have taught in several different
courses during their employment in the NEPS program. Each nurse educator teaches on
average one to two classes per term in the classroom. At SIAST, the nurse educator may
co-teach a course with another nurse educator specifically focusing on their area of
clinical practice. These nurse educators may teach the theory portion of the course in the
classroom and then follow through with the theory in the lab or clinical areas. At the
College of Nursing, the nurse educators may teach classes in the basic undergraduate,
graduate, or Post-Registration BSN Program. The classes may be co-taught or the nurse
educators may guest lecture in other courses. The nurse educators with the College of
Nursing may teach theory courses relating to their clinical background and may supervise
clinical experiences or fourth year senior practica.

The class size for each course varied depending on location and year in the
program. Class size has been increasing regularly since the NEPS began in 1996 as the
numbers of nursing seats available have been increased. In 2007, Saskatoon had a total of
174 seats for students entering the program each year, while Regina had a total of 146
seats, and Prince Albert had a total of 40 seats. Students may take the nursing courses on
a part-time or full-time basis. At the time of the interviews, the class size at SIAST
averaged 120 to 150 students in years one and two and each class may be divided into
separate sections each term such that the class is taught twice in the same day, while class
size in Prince Albert would average 20 to 45 students per term. In years three and four,
class size varied depending on the term, as there are three exit options available to
complete the program. The fourth year nursing student at the College of Nursing may
complete the program in September, December, or April. Class size may increase if post-
registration program students are registered for the courses. Class size varied from 20 to
70 students per term if courses are divided into two sections in separate terms or may
total up to 115 students if taught in one section.

Instructional strategies employed by the nurse educators varied. Course manuals
were reviewed to provide additional information on the types of instructional strategies
utilized in the classroom. In total, 24 course manuals for years one and two were
reviewed including both facilitator (teacher) and student manuals. At the beginning of
each student course manual, there is a written course description outlining the intents,
content, and a list of suggested instructional strategies that the students may participate in
during the course. Types of suggested instructional activities included lectures, group
discussion, application exercises, reflective writing, role modelling, role-playing, the use
of the Internet, case studies, required readings, self-study, audiovisual materials, and
computer software. Several courses included both class and lab time so many of the
instructional strategies listed were employed in the laboratory setting. Class time varied
depending on the course and ranged from one to four hours. Lab times varied depending
on the course and ranged from 1.5 to 3 hours per week, with clinical times extending up
to eight to ten hours per week. In the faculty course manuals, nurse educators were
encouraged to utilize instructional strategies that they felt would best complement the
learning intents; however, there were required readings, activities, and discussions for the
lab portion of the class.

Course manuals for years three and four provided a course description, intents,
and content to be covered over the semester. Instructional strategies utilized included
lectures, the use of case studies, short exams, role-playing, required readings, use of real-life situations, and the use of the Internet. Class time varied depending on the course and ranged between three to four hours, with a clinical portion that ranged from nine to twelve hours.

The Internet was used as a preparatory strategy. Several Internet sites that included the use of journal articles and professional associations were utilized to help prepare the students for the class material. Common websites included the Canadian Nurses Association, the Saskatchewan Registered Nurses’ Association, Registered Psychiatric Nurses Association of Saskatchewan, World Health Organization, and the Centres for Disease Control and Prevention. Electronic journals were also utilized to help prepare the students for the class material and included journals such as the *Journal of Hospital Infection* and *Paediatric Infections Disease* journal.

### 3.3 Factors that have Influenced the Choice of Instructional Strategies

#### 3.3.1 Defining the Curriculum

The majority of nurse educators commonly defined the process-oriented curriculum as student-centred based on principles that the students take an active role in their education, draw upon their experiences, and learn the process to achieve competence. As noted in this definition by an experienced nurse educator,

> Instead of me sitting at the front and telling everybody how it is, it’s more the student participating and based on the belief that students bring experiences and…they can learn the process of how to learn and how to figure stuff out and how to apply things and how to think things through, as opposed to learning the content per se.
The students play an active role in their education as noted by this educator, “you get the students involved, working together, working with each other, working with you. Always creating critical and creative thinking.” An “understanding of the questions you need to ask, the approaches you need to take to go about achieving a goal and the theories and the philosophies behind doing that” helps to develop critical thinking. The ability to ask questions emerged in discussion with several nurse educators who spoke about the skill of “asking good questions” and knowing where to find the answers.

Other nurse educators found it easier to describe the opposite of a process-oriented curriculum as noted in this example, “the easiest way for me to articulate my understanding is, it would be opposite of a process-related curriculum, is very behavioural, is straight lecture, is very imbalanced power base between faculty and the student.” This nurse educator found it easier to describe a process-oriented curriculum by what it is not, “so what I don’t think it is, is standing up and lecturing okay. So it’s then what do I think that a process-oriented curriculum would be more doing things. So other than just teaching purely content, I guess, is getting them involved…maybe setting a foundation of the context… so that they can learn, discover.”

Nurse educators commonly defined their role as a facilitator in learning to assist students in discovering the process of how to learn and apply concepts, without an emphasis on content. The facilitator is someone who supports students in their thinking and encourages full participation. As noted by this nurse educator:

So you’re always looking at the environment that the students are in and deciding what incidental teaching could be used. What examples could be found off the
ward?…How could we relate that to nursing? How could we relate that to the care of the person?”

The nurse educator and students are seen as an equal partners in the learning process as stated by this nurse educator, the students “are expected to bring something to it, not just be the jar that you pour stuff into. There is respect. They are seen as a colleague, that you’re learning together.” The ability to learn from each other was discussed by several nurse educators who stated that in classroom discussions, students might bring a different approach or perspective to the topic being discussed, one that the nurse educator may not have considered previously.

The nurse educator has the “knowledge and the awareness of the content that needs to be covered and design the process of learning in each classroom, in each contact with the students…. Design activities so that the students can be engaged in their own learning…” The challenge then arises for the nurse educator to broaden the students’ perspective on the subject area and help the students learn how to use a variety of resources through exposure to a variety of instructional strategies as noted in this example:

I see the role of the teacher as somebody who has the depth and breadth of knowledge to facilitate the students discovering that knowledge on their own. So in a facilitative way, a guiding kind of way. But also needing to have that broadness and the depth of knowledge to ensure that that discovery happens. The students must actively participate in this process and contribute to their learning by coming to class, doing the required readings, participating in class activities, and being
open to learning the application of the principles without a focus on content. As noted in this statement:

The student, I think in a process-orientated curriculum, needs to have more preparation in terms of pre-class preparation or pre-lab preparation so they’re ready to perform what they need to perform that day. For example, in assessment lab, that is a process-based lab so that they’re actually participating and performing the skills. Practicing the skills. Likewise in clinical, they would have a certain level of preparation prior to entering the care setting.

There is no expectation that the students will have a strong knowledge base on the topic, but through their readings and class preparation, the students will have a basic knowledge of the topic and will be able to discuss the application of principles in various clinical situations or participate in the chosen instructional strategy. As noted by this nurse educator discussing the role of the student, “their role needs to be interactive. Participatory. They need to be engaged and willing to participate…So they need to come to the process with an understanding of what their contributions can be to make the process work.” Ultimately, the students will become more independent in finding answers to problems, thinking through clinical situations, problem-solving solutions, and incorporating research into practice as noted by this nurse educator:

But, the role of the student, I would think to be, is become more independent as far as, you know, figuring out how to find out answers. How to think about things. How to make decisions; solve problems, that kind of thing.

Four nurse educators appeared to have doubts in their understanding of the curriculum as evidenced by laughter when the question was asked, verbally asking for the
question later in the interview or by statements about the depth of their understanding regarding process-oriented curricula. This finding emerged with faculty that were newer to teaching in the NEPS curriculum.

3.3.1.1 Teacher-centred instructional strategies.

How the nurse educator interpreted their role within the curriculum influenced the types of instructional strategies chosen for the classroom. For those with a teacher-centred style, the role of the nurse educator was viewed as delivering content to the students as noted in this statement, “you know I get caught up in the idea that there is so much content that I have to teach and there is. Wanting to cram that in and the best most efficient way to do that is lecture.” In total, eight nurse educators created a teacher-centred style environment in which lecture is the predominant strategy and student takes a passive role by listening to the lecture.

Lecture was primarily the only instructional strategy used to ensure that the students would be taught the intents of the course as it was viewed the nurse educator’s responsibility to make sure that learning about content occurs. As noted in this example, “when I just started teaching in the classroom I was pretty scared. Pretty nervous. Pretty stuck to the podium and my notes and pretty worried about what happens if I get off track.” The focus of the learning centred on the content that the nurse educators felt compelled to cover during class time as noted by this educator who felt that her role was “to make sure that they [the students] have the information that the teacher deems is essential.” The students take a more of passive role in their learning as in many of the courses, class notes are provided for the student as noted in this statement, “I’ve done the note guide for them so that they can follow through with what I’m talking about.”
Nurse educators new to teaching in the classroom used teacher-centred instructional strategies to ensure that all content was delivered to the students. However, two nurse educators were beginning to change to a more student-centred approach due to more experience teaching in the classroom as reflected in this example:

I shared with you that my first year of teaching was pretty much the traditional lecture. Standing up at the front, glued to my notes, afraid to make a mistake or miss something. So I just think that for me, I heard the words being used and I thought well I have no idea what that is and I had to learn about it myself.

This change in approach was due to more experience teaching in the classroom.

3.3.1.2 Student-centred instructional strategies.

A student-centred approach emerged with nurse educators who perceived their role as a facilitator and equal partner in the learning process as stated by this nurse educator, “I think the role is to learn from each other…And I think there is role reciprocity.” Another nurse educator maintains that:

The teacher does have some knowledge about, and more knowledge about whatever the subject is than the students. But that doesn’t mean that my knowledge is more important than their knowledge, what they bring. It’s just that it’s different…

This nurse educator continues by relating examples of life experiences that students bring with them to the classroom. In total, nine nurse educators focused on creating a student-centred learning environment. These nurse educators focused their teaching based upon how the students learn best and readjusted strategies based on learning needs as identified in the classroom. As noted in this example:
Sometimes the students themselves know what will allow them to learn…. It’s amazing because they are your best indicator. They’re like a barometer. Or you know when they keep coming back to a topic that they still don’t get it even though you know we’ve done x, y and z to get them through.

In this approach, the nurse educator focused on caring for the students by getting to know their learning needs and designing instructional strategies based on these needs. Content was not the focus, rather the students were included in their own learning experience and strategies were employed to develop the critical thinking skills and leadership of the students as seen in this example:

One of my favourite things was probably just have them design or describe what their philosophies of nursing were and some of them came up with beautiful things like one girl made a little mini blanket of all the pieces of her nursing beliefs. Another one did a painting that was just awesome. One person used one of those articulating dolls, the little wooden mannequin dolls the artists use and she coloured each piece and each piece had a different role for her in nursing and what it meant. Just to listen to their ability to combine and reflect in that type of way. To take it from that cognitive to the artistic and back to the cognitive and sort of make that interplay.

Types of strategies employed included the use of guest speakers, case studies, journaling, and adjusting time spent on topics relating to student understanding. Students were seen as an equal partner in their learning and student suggested activities were used to help explain the subject matter further as in this situation:
Just being respectful of your students will sometimes just change the way you teach content area. For example…I was giving them this long drawn out example of a real life example that I could draw on and one of the students said, ‘why do you always draw on nursing examples?’… sometimes if you could make us understand it at another level it might be easier… and she used OJ Simpson and his court case as her example. I still to this day use it. It was a perfect example.

The student-centred instructional strategies were used by nurse educators who had more experience teaching the classroom setting or had previous experiences as a student in a process-oriented curriculum or who had mentor that guided them in teaching with a student-centred approach.

3.3.2 Barriers to the Student-centred Approach

3.3.2.1 Market factor demands.

Barriers to the student-centred approach emerged due to market factor demands by partners with the educational program such as the regional health authorities. Certain content identified by the service partners was required to be covered in the educational program. The service partners either sent a letter to the College of Nursing requesting that the students are taught specific components or the information was relayed to the course coordinator in discussion with personnel in the clinical areas. For example, one nurse educator stated, “what I’m teaching has to apply to any nurse in the community…so I can’t get caught up in the task piece and yet you do because I heard the public health nursing supervisors…were upset that I wasn’t teaching the routine of a childhood immunization schedule so I’ve put it in.” This factor emerged in courses with a clinical component in years three and four. The theory and skills required by the students
reflected those skills required by the registered nurses in the clinical settings. One nurse educator felt that if the students would not be using concept maps in the clinical areas, then she should not teach it. This was perceived as a barrier due to the demands that the students complete the nursing program with a certain skill set, rather than with the skills of learning the process. However, such changes also had some benefits for students. A nurse educator related her experiences during the transition to the use of safety needles, which resulted in a needle-stick injury for a few students. The health regional authority sent a letter to the College of Nursing about the incidents, which led to changes in the laboratory setting as students practice with a variety of syringes.

3.3.2.2 Not all courses can be taught in a process manner.

The belief that certain courses cannot be taught in a process manner played a factor in determining the instructional strategy employed. Four courses in the curriculum were identified as courses that cannot be taught in a process manner. These courses dealt with information that was considered to be “black and white” such as in anatomy and physiology or pharmacology. The theory was specific in nature and was deemed to be difficult to teach in a process manner, as the information that was required to be taught was concrete in nature and does not lend itself to discussion or debate. In these theory-based courses, lecture was primarily used so that the student would receive the theory on the subject material with the understanding that the process aspect of the course will be done in the clinical or laboratory settings.

It was believed that in the clinical or lab settings that the students would then be able to start to relate how the body works, how the medication affects the body, and the therapeutic response for the patient, based on assessments and care. There was more time
in the lab for the students to apply the theory that has been presented in class by doing activities such as group assignments, videos, interactive computer programs, and case studies as noted in this interview:

…in the labs and that is where we do more group discussion. Group work. That’s, I think, where the process-oriented maybe comes out a little more….We play some games. We do some crossword puzzles… we do dissections and all those kinds of hands-on things…

The nurse educators would seek assistance from peers on how to teach their assigned courses in a process-manner but would then be told that they could not use a process approach in that course because of the specific nature of the course. This finding would suggest that transmission of workplace culture has played a role in defining the participants’ beliefs and accepted norms.

3.3.2.3 A focus on content.

In years one and two, the nurse educators indicated that time was a consideration in choosing instructional strategies for the classroom. The required learning outcomes for the course, along with detailed class outlines for each day of the course as outlined in the course manual designed by the nurse educators involved in the course, limited the instructional strategy chosen. Lectures were used as this instructional strategy was seen to be the most time efficient. One educator stated that she tried to use debate in class but the strategy took longer than expected as:

There was very, very strong views brought in, which was unfortunate and we really had to have a long, long, long debriefing session… I didn’t get through all my class material, which when we have that… class you finish your section and
then the next day you completely leave it, so you really don’t have time to get
back to it...

This finding is supported in the student course manuals as specific topics to be covered
and activities are listed.

Process-oriented principles have influenced class outlines. Students may be
assigned work such as self-study of topics that are not going to be covered in the
classroom. Students are expected to come to class prepared as noted in this example:

I want them to do the reading ahead of time. I’m not expecting that they’re going
to know everything but I’m expecting that in order to come and discuss anything
[they] have to have a basic knowledge of some sort…

In years three and four, students are not presented with a detailed class outline. However
the topic is listed along with required readings as in this example:

I’ve got a second little document that says these are the concepts that we will
discussing in this class…I’ll try and leave 5 or 10 minutes at the end of class to
answer any questions about stuff we haven’t done.

It is expected that students keep up with the required readings, as not all content will be
covered. This approach is assisted with the use of quizzes prior to class in some of the
year three courses. The quiz may challenge the student on content not covered in the class
session as given in this example by the nurse educator:

I always say to them all of this material you’ve taken in the first two years, you
need to go back to…I will hold you responsible for all this material because I
don’t have time to go back, you have to know it. So the first quiz, they don’t get a
mark for it, but they have to get 80% on it in order to access the quizzes that count.

Nurse educators in all years of the program felt that there was too much of an emphasis on content in the curriculum, which challenged how they could incorporate process-oriented strategies. One nurse educator at the College of Nursing felt that she could not get past the need to focus on the content due to her own beliefs on what the students required; while other nurse educators at both SIAST and College of Nursing felt that the course itself determined the specific content to cover.

3.3.3 Classroom Factors

Limited space and structured classroom layout affected the types of instructional strategies chosen. Several of the nurse educators found it “very hard to establish rapport” with a large number of students while teaching in an auditorium or a classroom in which the chairs and tables are bolted down and facing forward and thus increasingly used lecture to deliver course content. Classroom layout concerns also included the inability to hear questions when asked or the inability to visually see the screen. Due to the size of the classroom, the nurse educator found it difficult for those in the class to hear questions of students sitting at the back of the classroom as suggested in this situation:

Harder to keep everybody interested if somebody at the front is kind of monopolizing, then the people at the back, you know, they can’t even necessarily hear the person at the front and they’re kind of left. It is a challenge to be more interactive in a larger group like that.
Students also may have an obstructed view of the nurse educator due to the construction of the classroom as pillars may be placed throughout the space if the classroom is in a large room.

The use of technology factored into choices as well. Currently, many of the classrooms are equipped with a computer and data projector, which assisted in the use of PowerPoint presentations. Prior to classrooms being equipped with computers and data projectors, the nurse educator was required to pre-book the equipment for the class, and scheduling factored in due to limited number of machines available and high demand for its use by students and nurse educators as in this situation:

It’s those technical things that made it difficult. We had to take all the machines with us each time. We had to book them. That was a nightmare. Booking it in advance. And then sometimes people allowed their students to book them because they had presentations and the students wanted to use PowerPoint.

The position of the screen also affected the quality of the instruction. Nurse educators found that the screen is in a low position and clarity of the projected material is affected by the placement of classroom lights shining directly on the screen. If the nurse educator is using the projector screen in a large classroom, the students at the back of the room may have difficulty viewing the screen in its entirety. This factor emerged in all years of the nursing program.

3.3.4 Student Factors

Student participation played a factor in the decision of which instructional strategy to employ. Low or high student participation reflected the choice of instructional strategy employed. When student participation was high, nurse educators would employ a
variety of instructional strategies to engage the students such as small or large group discussions, debate, and role-playing as in this situation:

It varies on how responsive the particular set of students is to what I’m doing. So this spring, even though it was a class of seventy, it’s been a while since I had a group that was so willing to just get involved and so we had more group discussion.

When student participation was low, lecture or small group activities were commonly used to ensure that the students would receive the content as seen in this example:

Whereas other classes, when you try to engage the whole class in a discussion, it just doesn’t go well, so then I’ll go back to more of the smaller groups’ case studies…so the percentage that it’s lecture versus interactive stuff happening, it varies.

Characteristics of the student group also factored in as the age of the student group was taken into consideration when choosing instructional strategies to ensure that the strategy would match the age and level of maturity of the students. Nurse educators viewed the students as technologically current. The use of technology in the classroom has increased to reflect this change. However one exception emerged. Two nurse educators at the University of Saskatchewan felt that mature students influenced the choice of strategies. One nurse educator believed that it was disrespectful to the students to include gaming as “more and more of our students are mature and they see games as something other than acknowledging that maturity.” The other nurse educator limited the use of technology as she believed that the mature student may not be current on the use of the Internet and how to access available resources. The nurse educator determined the
level of computer knowledge by assessing the common age of the student, along with course level in the nursing program.

Student verbal comments as well as written course evaluations influenced the types of instructional strategies employed. This finding emerged in all years of the program. Some student groups expected the nurse educator to provide detailed course outlines and class notes. As explained by this nurse educator, “they have a sense of security that in a PowerPoint slide there will be three questions on a multiple-choice exam.” Thus the students felt secure in the knowledge that they would have all the necessary information to write the examination. Not all nurse educators provided the students with class notes. The use of class notes was more common in years one and two, and less common in years three and four. This approach varied by nurse educator as one nurse educator felt it was “less of a distraction” if the students had the notes and then could sit and listen to the discussion, while another nurse educator felt that by writing their own notes, students contributed to their learning and this approach led to an increased attendance. Nurse educators would also look at the evaluative comments and adjust the use of instructional strategies for following classes as in this example:

In the past we have always had an outline provided for students so they would have an idea they’re given their schedule and it has maybe this week they will do this topic and maybe next week will be that topic, it follows their course manual but we have always posted notes or an outline for them. And this year I decided not to do that, based on feedback from my other students…
3.3.5 Educational Professional Development

3.3.5.1 Journal articles.

New ideas about classroom activities and instructional strategies were obtained through review of journal articles as in this example:

I like to use humour in the classroom, so I have a collection of articles, anytime I see something about use of humour in the classroom, strategies to bring into your class. Process orientation. I kind of have a little file of articles that I’ve collected on that. I keep reading those to refresh myself and looking for what’s new.

Three nurse educators from years one and two cited the use of journal articles. Each nurse educator was new to teaching in the classroom and used the journal articles to see what was currently being done and found to be effective in the classroom setting as stated by this nurse educator, “I’ve done some reading, research based articles on how nursing students best learn. Either from previous master’s classes or just pleasure reading or what not.” The nurse educator then would seek the advice of a colleague to see if they have tried the strategy and discuss if it was successful for them or how it was implemented as described by this nurse educator, “I read a lot of the nursing education journals and going back to somebody and saying, have you tried that?”

3.3.5.2 Workshops.

In the early stages of program development, the nurse educators at SIAST were introduced to the idea of curriculum change by watching a video on the topic and inviting nursing scholars, such as Em Olivia Bevis or Christine Tanner to discuss process-based learning environment. Three of the study participants were involved with the planning committee. Eight of the participants taught in the first year of the NEPS program. The
nurse educators at SIAST found this introduction to the curriculum change to be very beneficial as the guest lecturers shared their experiences teaching in a process-based curriculum and a collaborative curriculum. Several other workshops and activities were arranged to introduce the nurse educators to instructional strategies.

Upon hire to the NEPS program, new nurse educators attend an orientation to the program along with site-specific information. Nurse educators hired with SIAST are required to complete the Faculty Certificate Program. The Faculty Certificate Program was developed in partnership with the University of Regina with a goal of helping to prepare the nurse educators for their role as educators in a post-secondary technical school. The Faculty Certificate Program consists of an initial three-week summer institute, six additional courses and a final summer institute. Courses in the three-year program include evaluation, instructional design, technology in education, professional and instructional skill, and adult development and leadership.

Nurse educators hired with the University of Saskatchewan also attend an orientation workshop, which introduces the educator to the curriculum. Those nurse educators who will be teaching the classroom attend a workshop hosted by the Gwenna Moss Centre for Teaching Effectiveness as stated by this nurse educator, “when I started teaching for the university, I attended some of the Gwenna Moss teaching learning sessions. Some of the teaching sessions were incredibly valuable because they role modeled engagement, teacher/student engagement in the class.” The participants of the study found the Gwenna Moss Centre to be useful and informative to their practice. The Regina site nurse educators found that it was an effective resource, however it was difficult to access due to its location in Saskatoon.
Other professional development workshops attended by the nurse educators included workshops specifically related to teaching, while others focused on topics related to nursing. Nurse educators with SIAST began to attend conferences held by the Canadian Association of Schools of Nursing following their partnership with the University of Saskatchewan, as they were not able to participate prior to their collaboration. Five nurse educators at SIAST attended international workshops such as the Creative Teaching for Nursing Conference at the University of Memphis where they would have the opportunity to meet with nurse educators from several different universities and learn more about a variety of instructional strategies.

Professional workshops for their chosen area of nursing provided an opportunity to discuss clinical and professional issues with peers. Current research on the topic was then incorporated into the courses. Examples included attending community events such as those offered by professional associations such as the Schizophrenia Society of Saskatchewan or the Alzheimer’s Society of Saskatchewan where current information on the topic could be obtained, or education days for the unit in which they are employed where they would receive current information on a variety of topics related to their area of nursing. Nurse educators would also use this experience as an opportunity to see how other people taught. Ideas may be generated from the presentations. For example, one nurse educator began to incorporate more pictures into her power point slides rather than writing out the points as the pictures explained more to the student. This approach was used at the community event in which the presentation consisted only of pictures.
3.3.5.3 I teach the way I like to be taught.

Previous educational experiences as a student were also drawn upon in preparation for teaching, as each nurse educator reflected on instructional strategies they found effective as a student. Nurse educators reflected on their experiences as a student either in a Masters or Doctoral program as noted by this nurse educator:

My first degree was in education and by that time when I was taking education classes, I could feel the difference already in how our professors taught us about education. It was how they had us be involved doing activities, doing projects, doing role-plays, using media. It wasn’t just straight lecture any more by that time. So that probably helped me then and there to appreciate the process of what that all means and to just getting out of the just straight textbook lecture style learning.

The activities that they found to be effective were then tried in the classroom to see if it would work in their class and with their students. Nurse educators stated that these experiences exposed them to a variety of instructional strategies, as classes would be taught from a variety of colleges separate from nursing as in this example:

Being a student…and taking classes from several different institutions right now allowed me to analyze it both from a teacher’s point of view and a student’s point of view…so being exposed as a student to a variety of different teaching methods and thinking, relating that to how I teach and what I like and don’t like as a student versus what I don’t like as a teacher.

It was also effective in decreasing the amount of lecture used by three nurse educators. One nurse educator stated that she could understand “why students find lectures to be
boring” as she sat in a class where lecture was a predominant strategy and discovered that it is difficult to keep students’ attention with this instructional strategy. This factor emerged in all years of the nursing program.

3.4 Support Systems

3.4.1 Peer Support.

Support of peers played a role in the decision of instructional strategies. The nurse educator may seek a mentor to help with the transition into the program. The two nurse educators then may meet regularly to cover a variety of issues such as using equipment in the classroom to a discussion of concerns that arise about the use of certain instructional strategies or student participation. This strategy was done on a more formal basis with SIAST and on an informal basis with the First Nations University of Canada and the College of Nursing. Nurse educators in all years of the program stated that a more formalized system of support for those teaching in the classroom is needed so that nurse educators can learn from an in-service, share their experiences, continue to learn from the experience of others, receive peer feedback on teaching, and develop a bank of material to use across sites so that there is not such an extensive amount of time spent on class preparation as noted by this nurse educator:

In terms of resources I really would appreciate if someone could somehow develop a bank of some sort for teaching resources…. Especially for someone who has come in in a situation with no prior experience and have just been doing it by trial and error, I think mentoring with senior faculty would be so beneficial…. 
New nurse educators as well as by more experienced nurse educators recognized the lack of support for those new to the classroom setting. The recognition of lack of support has led to nursing faculty supporting each other on a more formal basis as noted by this educator:

One thing that we’re starting here, or we’re trying to start here is actually peer evaluations, where we actually have to have our peers come in and evaluate our teaching and then we, together, go through what was done well and what needs to be worked on. Again, a little bit more effective-type of evaluation and ownership to that evaluation rather than just looking at students’ evaluation.

One nurse educator at SIAST felt that peer support should extend outside of the specific institution. She felt she received more peer support when the courses merged with the First Nations University of Canada and from sharing her office with College of Nursing faculty. One nurse educator felt that peer support lessened, as her colleagues were spread out at six different sites as stated “my colleagues have been a really important part of my professional development. And…we’ve got six different sites now you know you just don’t get that.”

Students have offered support to the nurse educators in terms of providing feedback when new strategies were implemented either informally after the class or formally through course evaluations. For the purposes of this research, students will be included as a peer as they were seen as an equal partner in the learning experience. As stated by this nurse educator:
I think the best support we get is the peer eval. I just find that I take that both from the students and from the faculty. I think that’s my touchstone and then I know where I can go and if I need to seek help I can target that help.

One nurse educator at SIAST stated that the first nursing class of the program was most supportive as they were interested in trying out new instructional strategies and would provide suggestions for improvement following the class session. The nurse educator credited this support to having smaller class sizes and being involved in the early years of NEPS. Nurse educators in all years of the program stated that they valued the student feedback as it identified where the nurse educator could improve and then the nurse educator would seek assistance of colleagues for suggestions to target those identified areas.

3.4.2 Administrative Support

Workshops on process curricula during the development of the NEPS program helped the nurse educators to understand the principles of the curriculum. New nurse educators are introduced to the NEPS program during orientation as discussed in the workshop section. Despite the fact that there is an orientation to the NEPS program, statements made by the nurse educators suggest that the orientation may not be adequate or sufficient. New nurse educators at SIAST, College of Nursing and the First Nations University of Canada would like further support and training in their roles within a process curriculum. The nurse educators specifically requested additional information on the curriculum, along with information on instructional strategies to use in given situations.
Even though new and experienced nurse educators conceptually knew what a process-oriented curriculum meant, six nurse educators felt uncertain of their definition. Several nurse educators requested learning more about the curriculum as stated, “I think to get people on board with process, that we all could use the fundamental education.” One nurse educator at SIAST was unsure of how process-oriented principles would translate to her courses and how the course content could be incorporated into principles of the curriculum. She wanted the administration to help her to understand the theoretical underpinnings of the curriculum specifically relating to critical social theory, phenomenology, and humanism as she stated here:

Like help me to understand the theoretical underfittings, if you will, and I know it’s social critical theory and phenomenology and humanism because I just read that in the book….if we could spend some time talking about what does that mean and maybe suggestions as far as how do we make ourselves process-oriented teachers if that’s what the curriculum is supposed to be.

Two nurse educators with the College of Nursing did not feel supported in their roles by administration, as they felt that there was too much emphasis placed on research and not enough emphasis on the support for the nurse educator in the classroom. These nurse educators would like administration to recognize teaching in the classroom as an important role in the undergraduate program, and decrease the focus on research. The two nurse educators discussed the need to support new educators in the classroom and develop support systems to effectively incorporate the skills and knowledge base of the faculty. One nurse educator at SIAST felt that she was not supported by administration while taking courses toward her Master’s degree. She felt that since College of Nursing
faculty have their workload decreased or have the option to take a sabbatical, that SIAST should recognize and support educational opportunities of its staff due to the need to complete a Master’s degree.

3.4.3 Technical Support

Technological support has improved, as all nurse educators have their own computer and each classroom is equipped with a computer and access to the Internet. This change in technological support has modified the way that information is presented to the students as now a variety of methods can be employed such as the blackboard, overhead projector, Power Point, and links to sites on the Internet. Technology is driving the types of instructional strategies employed. Students can access course information online. Nurse educators feel that support services such as with PowerPoint use or duplicating services has consistently been available to meet their classroom needs. Nurse educators orientate themselves to the equipment or seek the assistance of a colleague.

3.5 Understanding of Self

It is from their own understanding of self that instructional strategies emerge. Instructional strategies were chosen based on how nurse educators perceived themselves and their strengths. Their clinical background was drawn upon heavily as that was commonly how the nurse educator viewed herself, first as a nurse, then as a teacher. As stated by this nurse educator, “so I’d just came off of Psych and I was doing group therapy and education and stuff so that’s the way I approached it. I still use that- a lot of those techniques from group therapy.” This approach was echoed in the statement of another nurse educator who stated, “I was a community health nurse before. I guess I could say that would be somewhat professional development because I was always
seemed to be educating the public at that point in time” and those experiences influenced
the types of chosen instructional strategies she used in the classroom.

Nurse educators see themselves as registered nurses whose goal is to get the
information to the students as explained in this example:

Story-telling I think works very well, using clinical examples of real patients,
anonymously of course. But using those examples seems to captivate their
attention…so pictures of wounds or anatomy or actual patients with their
permission works extremely well because then they seem to be connected into
that story more.

Nurse educators chose instructional strategies based on previous clinical
experience and classroom experience. Personal clinical experience was cited as these
situations not only provided credibility to the learning experience for the student, but also
allowed the student to see the significance of the topic to nursing by relating the theory to
practice as identified by this nurse educator, “I think the fact that I’m able to bring some
eamples from my clinical, my ongoing, my current clinical practice, works well.” This
discussion of clinical practice gave credibility to the nurse educator teaching the content.

The understanding of self became an integrating factor in the research.
Instructional strategies chosen by the nurse educators are based on a variety of factors.
Instructional strategies, as previously discussed, were chosen based on how the nurse
educators felt they learned best in previous classroom experiences as a student and
reflected what they felt “comfortable” doing in the classroom setting. This understanding
of who they are and what they feel most comfortable doing was supported in SIAST
course manuals that allowed the nurse educators to choose instructional strategies based
on their judgement and preference as a variety of options are available for each classroom session as stated in this manual “each facilitator should use his/her judgment as to which if any of the suggested lab exercises they wish to use. Feel free to be creative and innovative.” Types of strategies available ranged from reflective writing, modeling, role playing, self study, story telling, and videos as stated by this nurse educator “we talk about ideas and we share them…we get together to plan what the course manual will be and we have a course manual for the teacher as well so there’s suggestions in there.”

It is from their view of their roles and responsibilities that define their approach to teaching in the classroom setting and her again the understanding of self emerged. Nurse educators, who viewed their role as needing to deliver content to the student, chose lecture as their primary instructional strategy. While other nurse educators focused on the student and how they would learn best. Instructional strategies can be based on the nurse educator’s personal experiences in the classroom as a student and teacher.

3.6 The Theory

The theory that emerged from the data suggests that the nurse educators come into teaching in a nursing program with an understanding of self, which is influenced by their clinical role as a registered nurse. The nurse educator brings these experiences from working in the clinical setting with her, as she enters into her new role. Her understanding of teaching is also influenced from past experiences as a student in the classroom setting. Together the understanding of self and previous experiences as a student, influence how the nurse educator defines her roles and responsibilities as a nurse educator.
For those nurse educators with a teacher-centred style, the student becomes a passive recipient of information, as the most common instructional strategy used was lecture. This teaching style was seen primarily in new educators with little experience teaching in the classroom, as they wanted to ensure that the student received the content. Other influences included classroom factors and number of students as the nurse educator commonly took this approach in classes with a large student enrolment and in auditorium or theatre-style classrooms. This approach seemed to change to a student-centred approach as the nurse educator gained more experience teaching in the classroom.

For those educators with a student-centred approach to teaching, the student was seen as an equal partner in the learning process as the students participate in their own learning by reflecting on the learning activity to develop their critical thinking. A variety of instructional strategies were implemented to help the student develop critical thinking skills and expose them to various clinical situations. Types of instructional strategies included journaling about clinical experiences, sharing their personal life experiences with the class, guest speakers, discussion questions, and debates. The nurse educator
would try to add a variety of instructional strategies to meet the various learning needs of the students and adjust strategies if they felt that the students still had questions about the content.

![Diagram](image)

Figure 2. Pictorial representation of teacher and student-centred influences.

Other influences on the type of instructional strategy chosen by the nurse educator included classroom factors, peer support and educational professional development activities. Large number of students in a classroom led to many nurse educators to chose to use lecture in order to ensure that the student received the required content. Another consideration was high enrolment. If student numbers were high, fewer instructional strategies were chosen due to time constraints as process techniques would require additional time to complete. Educators also took into consideration the layout of the classroom to ensure that the student would be able to see and hear the class information.
Peers, such as nursing faculty, provided support to the educators. Students also provided a form of support. Nurse educators would seek the effectiveness of strategies by asking for either student or faculty feedback. Workshops also influenced chosen instructional strategies as ideas were generated from watching other people teach. Instructional strategies were also influenced by technology as computers, data projectors, and Internet access was available in the classroom. Administrative support played a factor as well in that nurse educators would like more support in learning how to teach in a process curriculum.
CHAPTER FOUR

Discussion

The purpose of this study was to seek a Grounded Theory that explained the process of selecting instructional strategies used within the classroom setting in a process-oriented curriculum. This grounded theory research was guided by two major questions: What factors have played a role into the individual nurse educator’s decision of choosing an instructional strategy? What support systems have been or need to be in place for faculty development with respect to instructional strategies chosen for the classroom? The factors that emerged from the data provided insight into how instructional strategies are chosen for the classroom setting and resulted in theory development. The discussion that follows will be organized according to the identified factors and examine how the findings fit into current literature.

4.1 Defining the Curriculum

According to the NEPS Curriculum Manual (2004), the curriculum is process oriented, rather than content driven which was further explained by the definition of a “shift from a focus on training to education, from technique to understanding, from strict content to critical decision making from product line thinking to value-based human caring education…” (Curriculum Manual, 2004, p. 2). Reflecting on the provided definition in the curriculum manual, the nurse educators appeared to have a fair understanding of how the NEPS program defined its curriculum. Nurse educators used terms such as “understanding principles” and “learning… the process of how to learn and how to figure stuff out and how to apply things.” This wording would reflect the principles of the “shift from technique to understanding” and “from strict content to
critical decision making” as instructional strategies were utilized to help develop critical
thinking skills and understanding of the roles of the registered nurse.

The process of caring was also evident in the nurse educators understanding of the
process curriculum. Caring as defined in the NEPS curriculum manual is “a manner of
relating to another person that facilitates development of that person…” (Curriculum
Manual, 2004, p. 4) the nurse educator needs to understand the student’s world from
his/her perspective and then reflect on what is learned. This process was evident in how
the nurse educator defined their roles as noted in this statement:

I like to get to hear what the students are telling me, to get a bunch of different
perspectives about what’s going on. And how they view things. The experience
that they bring in, because all of them bring in experience.

Other caring behaviours such as helping people grow, sharing self, and respecting
were evident in the interviews. Two or more of the nurse educators commented that their
role was to “provide guidance, but allow the students yet to have the creativity to go
where they need to…” Several nurse educators reflected on sharing self by sharing their
personal experiences of being a registered nurse and encouraging the students to share
their experiences within the health care system. Process-oriented strategies were reflected
in their choices of instructional strategies. When students were working on group projects
or discussion questions, the nurse educators would share their experience or guide the
students towards the answer when help was sought.

Not all nurse educators incorporated the use of process-oriented instructional
strategies in the classroom. This study found that eight nurse educators created a teacher–
centred environment and that two nurse educators were moving towards a student-centred
environment which they attributed to increase in experience of teaching in a classroom setting. These eight nurse educators were able to define a process-oriented curriculum using similar terms as other nurse educators, however, two nurse educators were more uncertain of their definition and roles. Lecture was used most frequently with information focusing on what is on the Power Point slide as stated by this nurse educator “pretty stuck to the podium and my notes and pretty worried about what happens if I get off track…” Schaefer and Zygmont (2003) analyzed the teaching styles of a nurse educator and concluded that the nurse educator’s written teaching philosophies recognized the importance of a student-centred environment, but that the nurse educator predominantly created a teacher-centred environment. This research study differs from Schaefer and Zygmont, as eight of the participants created a teacher-centred environment, which would equate to 47% of the respondents and as the nurse educators gained experience teaching there was a shift towards more of student-centred approach.

Nurse educators appeared to have doubts about their interpretation of the curriculum as evidenced by laughter when the question was asked, by requesting the question later in the interview, or by stating that they felt that did not have a good understanding of the topic. This finding varies from the research conducted by Lunyk-Child, Crooks, Ellis, Ofosu, O’Mara, and Rideout (2001) who found that nurse educators displayed doubts in their abilities to teach in a self-directed learning program rather than doubts in their ability to be able to define it.

4.2 Teacher-centred Instructional Strategies

Philosophical beliefs affect how nurse educators view teaching and learning. Teacher-centred instructional strategies emerged with nurse educators who viewed their
role as delivering content to the students. Nurse educators who were newer to teaching
the in classroom conveyed this teacher-centred style primarily through the means of
lectures and providing notes for the students. Lectures were most commonly chosen to
cover the content considered to be the most important by the nurse educator. Time also
played a factor. Nurse educators, who felt compelled to cover all class material as
outlined in the course manual, used lecture. Schaefer and Zygmont (2003) stated “this
teaching style is commonly demonstrated by nurse educators who try to teach too much
content in too short a period of time” (p. 238).

Historically speaking, many educators are accustomed to students playing a
dependent role with the educator providing various levels of direction (Lunyk-Child et
al., 2001). This data suggests that how the nurse educator views her role affects how an
instructional strategies is chosen, despite her ability to describe the curriculum as student-
centred. Schaefer and Zygmont (2003) supported this concept and stated that
“philosophies are not universal; each faculty member has a personal belief system that
provides the basis for a professional belief system” (Schaefer & Zygmont, 2003, p.243).
This nurse educator’s personal belief system favoured a traditional curricular approach as
noted in this statement:

The one thing that we don’t do with skills that we used to do a long time ago, but
that even changed before process-oriented curriculum, was actually doing return
demonstration of skills and sometimes I wonder in the back of my mind if we
should be going there again.

This nurse educator preferred more focus on training and technique to prepare the student
for clinical practice.
4.3 Student-centred Instructional Strategies

Nurse educators who viewed their role as a facilitator in the learning process used a student-centred approach. This approach was seen with nurse educators who had more experience teaching in the classroom or were mentored by others who favoured this approach. Instructional strategies varied and included the use of group discussion, debate, guest lectures, case studies, and journaling. Bevis and Murray (1990) discussed the need to have instructional strategies that provide the student with choice and flexibility, direct experiences, discussion, and evaluation to help the student develop a sense of competence. Thus, this research shows that the nurse educators understand their role in a process curriculum and have developed instructional strategies that focus on the learning needs of the students while meeting the program intents as a variety of instructional strategies were implemented that encouraged participation and development of critical thinking.

Nurse educators’ philosophical beliefs can evolve from teacher centred to student centred as one nurse educator stated “…and in a process-oriented program, you want to have interaction in mind you know. It’s not just ‘stand and deliver’, which is what I kind of thought it was going to be when I came here until the first day that I walked in.” Two nurse educators were beginning to change to a more student-centred approach. Reasons cited for this change included more experience in the classroom, receiving feedback from students, and becoming more true to their beliefs of what is required. This change is supported by Creedy and Hand (1994) who found nurse educators modify existing instructional practices when implementing new approaches on a trial basis and receiving peer feedback on the strategies. Although Creedy and Hand cited peer support to be on a
professional peer level, the results of this study suggest that feedback and support can be received from students.

Nine nurse educators used the word ‘facilitator’ to describe their role in the curriculum, while three other nurse educators described their role as more of a ‘consultant’ who guided students in the right direction and helped them learn how to learn. Nurse educators who teach for SIAST and the College of Nursing used the word ‘facilitator’ in their description of their roles. The same word appears in faculty lab course manuals for years one and two. These nurse educators also used the term an “equal” in the learning process to define the way of learning that occurs as they believe that the nurse educator and student learn from each other. Nurse educators have the theory and clinical knowledge, while the student brings their life experiences, and the two merge to share these points of view. Despite the fact that the nurse educators described their role as a facilitator and equal partner in learning, these nurse educators varied in their use of instructional strategies and either fit in the teacher-centred or student-centred approach. The term ‘facilitator’ is not used in the nursing literature but can be supported by the definition of learning by Bevis and Watson (1990), which describes learning as a process the includes acquiring insights, seeing patterns, and finding meanings and significance. These nurse educators have interpreted this process as a facilitation role in which they help the student to see the clinical picture as it develops and relates experiences of those involved in the situation to develop a deeper understanding.
4.4 Barriers to the Student-centred Approach

4.4.1 Market factor demands

Market factor demands arose when nurse educators were required to teach specific content to the students to prepare them for their roles as registered nurses. This content varied depending on the course and reflected needs that were occurring within the health region. The factor emerged in courses in which there was a recent change in the standard of care and any change or addition in the course was discussed with nursing faculty. The nurse educator felt the need to incorporate changes that were occurring in clinical courses into the theory course. For example one nurse educator stated, “what I’m teaching has to apply to any nurse in the community….” Another nurse educator stated:

I have looked at concept mapping and having students use concept mapping instead of care planning as a way of addressing the needs, but where I have a problem with that, is that that requires a lot of education of the nurses on the ward that you’re working with in clinical.

This last statement is supported by Sutcliffe (1992), who discussed the need for clinical staff to have education on the beliefs and practices of the curriculum so that students are able to implement the theory in the clinical area without being told that things are done differently in the work world. No empirical studies were located to support this factor. It appears that this research expands upon the non-empirical literature.

4.4.2 Not All Courses Can Be Taught in a Process Manner

Nurse educators in four foundational classes identified the belief that certain classes could not be taught in a process manner. This factor emerged in courses such as anatomy and physiology or pharmacology where the theory was specific and concrete in
nature. New nurse educators would seek help from more experienced nursing faculty on how to teach the course in a more process-based manner and were told that due to the nature of the course, that it was the exception. One new nurse educator stated that she wanted to challenge the belief that her course was the exception to the rule. This form of transmission of beliefs suggests a transmission of workplace culture as the senior nurse educators have influenced how newer educators construct their instructional strategies.

One article by Alexander, McDaniel, Baldwin and Money (2002) challenged this assumption that not all courses can be taught in a process manner, as the authors described in detail how they implemented a problem-based learning approach in their pathophysiology course. The authors stated that they incorporated a variety of lectures and audiovisual material into the course along with real-life situations, historical documents, and projected clinical experiences (Alexander et al., 2002, p. 252). When comparing the two pathophysiology courses, it would appear that the NEPS curriculum incorporates many of the same instructional strategies as the Alexander et al. such as lecture and interactive strategies. Alexander et al. incorporated the instructional strategies in the theory portion of the class, while the NEPS course splits the course into a lab and theory component. As the NEPS course is providing an opportunity for the students to understand and critically think through pathophysiology in the laboratory setting, it would appear that this belief would be a perceived barrier rather than a real barrier.

4.4.2 A Focus on Content

When nurse educators in years one and two perceived that there was a time constraint, lectures were used to present students with the course material as this approach was viewed to be the most practical way to deliver the required content as
outlined in the course manual. As noted by this one educator, “unfortunately it is a content driven course. There are ‘x’ number of things that have to be taught, so sometimes the most efficient way is to get it across in a lecture.” This statement would suggest that nurse educators felt compelled to cover all information as outlined in the course manual during scheduled class time, which would limit possible instructional strategies. This finding would suggest that course outlines in the student and faculty manual play a significant factor in choosing instructional strategies. Schaefer and Zygmont (2003) support this factor and discussed how teacher-centred teaching styles are commonly demonstrated by nurse educators who try to teach too much content in a very short period of time (p. 238), and further lists curriculum mandates as a barrier.

4.5 Classroom Factors

Classroom size and layout are identified in the literature as barriers to using a student-centred instruction strategy approach (Schaefer & Zygmont, 2003). Nurse educators would prefer to have classroom space that is free of obstruction with an open layout that would allow the chairs to be moved freely. A space such as a gymnasium would provide the nurse educator with additional options for instructional strategies such as noted by one nurse educator who stated, “all I really wanted was something like a gym, that’s it, where I could put my students in small group with tables and chairs.” In classrooms in which the chair layout was predetermined, the nurse educators found that it was hard to interact with the students. This limited interaction was found in auditorium-style lecture theatres in which the students are spread out in the room, which made it difficult for all students to hear questions or discussions. Nurse educators continue to use their chosen instructional strategy but would make the best out of situation by making
adjustments. For example, if the nurse educator was using PowerPoint slides, the light bulbs above the screen would be removed to make the projected slide easier to read or PowerPoint slides would be formatted so that everyone could see to the bottom of the slide.

There is very little information available in the literature about the size of classrooms, a few of the nurse educators commented that forty to fifty students in a classroom was ideal, as the class was smaller and students participated in the instructional strategies. As noted by this one nurse educator, “I think that the size of a class is a real impediment.” She found that teaching to a group of 50 students was effective as the smaller class size allowed students, who would be uncomfortable speaking in front of a larger group, the opportunity to participate. Another nurse educator at SIAST had similar comments about the class size with 40 students, as in her opinion the students felt more comfortable participating in activities. Alexander et al. (2002) identified that in their study the traditional classroom space for teaching was adapted to six round tables and 24 to 30 chairs for two small rooms in their school of nursing, which was found to be effective. Schaefer and Zygmont (2003) listed classroom size as a barrier without going into further information. It would appear that this study expands upon current information available.

4.6 Student Factors

Student participation affected the types of instructional strategies chosen. On days in which student participation was minimal, instructional strategies changed to increase the amount of student participation such as asking questions or initiating large group discussion. Nurse educators commented that student attendance was lower on days
in which assignments were due or there was a midterm in another class. Other factors that influenced student participation included the day of the week the class was scheduled, as nurse educators found that Monday mornings and Friday afternoon classes had lower attendance.

Instructional strategies used were based on student feedback and participation. Student feedback was sometimes obtained during the class when a student would suggest another approach with the same instructional strategy in order to make the content easier to understand. Student feedback would also be obtained after class in which students would suggest ways to improve upon the chosen instructional strategy either informally as a comment to the nurse educator or more formally through course evaluations.

Students became an equal partner in their learning, as experiences in their own personal life or experiences in the clinical setting were reflected upon by the nurse educator to help build upon the student’s professional knowledge. This strategy was used in all years of the nursing program. This finding indicated that nurse educators are constructing their instructional strategies using student-centred principles that engage the student in active participation and engagement of the topic.

Nine nurse educators stated that they based their instructional strategies on student understanding of the topic. Some of the nurse educators are assessing the learning needs of their students throughout the course. Another nurse educator stated that final marks for the course are used to determine student understanding of the content, while other nurse educators did not list this as a factor. This would indicate that not all nurse educators are assessing student understanding of the content or adjusting instructional
strategies to meet their learning needs while the class is in session as it is difficult to change instructional strategies or further explain the topic after the class has ended.

Characteristics of the student group also factored in as the age of the student was taken into consideration when choosing instructional strategies to ensure that it would not offend the class. As noted by one nurse educator, “I’ve tried games and they haven’t worked very well and it’s because I’m finding that more and more of our students are mature and they see games as something other than acknowledging that maturity.” Maturity was also a factor in assigned group projects, as one nurse educator discussed that in one of the course assignments, students were not allowed to choose their groups as in “real life they don’t get to [choose] their colleagues and they need to learn to work with people who are their colleagues.” She explained that feedback she received from the students were positive as the students gained experience with colleagues who had different views and expectations about the assignment. The nurse educator did not stop using this instructional strategy due to feedback from the students about how valuable the experience was. The nurse educator also found this experience valuable as she was providing students with life experiences.

Age and generation of students also factored in when the nurse educator felt that the mature student might not be as technologically as advanced as younger students. The impact of age and generation also played in a role in the nurse educator’s decision to increase the use of technology in the classroom as in this statement, “there are students a generation above us on the computer and I think as soon as you start putting things on the blackboard or overhead, they kind of look to you like don’t you know how to use a computer?” There is very little information found in the literature on this factor. It
appears that this study expands upon the concept of classroom factors as a noted barrier in the study by Schaefer and Zygmont (2003).

4.7 Educational Professional Development

4.7.1 Journal Articles

The nurse educators who were new to teaching in the classroom read current journal articles to generate ideas that they could use in the classroom setting. The nurse educator would then discuss what she had read with colleagues to see if they have tried the activity and how successful it was for them in the classroom. This activity indicated that the nurse educators were using the current research to gain new or innovative ideas. The data supports that the nurse educators are keeping current in their instructional strategies by reading journals. Reading journal articles was also a form of professional development as indicated by one nurse educator, “looking for journal articles from applicable journals for nurse educators of strategies that people have written up about that they’ve tried, that would be the primary way I would say that I have done development for myself.” This factor is not mentioned in the literature, however the use of journals by the nurse educators supports the need to remain current and up-to-date with nursing practice.

4.7.2 Workshops

Nurse educators commonly cited professional development workshops as an activity that was beneficial. These workshops varied in form and content, and topics included an orientation to teaching in the classroom setting to a peer review of a chosen instructional strategy. Eight of the participants have taught in the NEPS program since it commenced in 1996. Workshops held at this time of curricular change focused on
introducing the nurse educators to the new type of curriculum. Guest speakers were invited to share their experiences of teaching in a process-based curriculum and a collaborative curriculum.

Currently new educators are required to attend site-specific orientation to the NEPS program. Nurse educators hired with SIAST are required to complete a Faculty Certificate Program within three years of hire. Courses relate to issues the nurse educators will experience in a post-secondary technical school. Nurse educators hired with the College of Nursing attend an orientation session in Saskatoon, and workshop sessions with the Gwenna Moss Centre for Teaching Effectiveness. While the nurse educators with the First Nations University of Canada attend a teaching session at the University of Regina. As well the nurse educators attend faculty meetings that include educators at all three sites where other topics and issues are discussed.

Other workshops focused on current trends in their chosen nursing fields such as latest information related to nursing care for specific client populations, working with clients with a specific diagnosis such as Alzheimer’s or schizophrenia, or current information on immunization or crystal methamphetamine. These workshops provided an additional form of support to the nurse educators as one commented that she was able to see the effectiveness of certain approaches used by other presenters. Nurse educators also attended conferences on teaching nursing where they were exposed to a variety of effective and ineffective strategies. The nurse educators learned how effective certain instructional strategies were based on personal experience, which was then reflected in her choice of instructional strategies in the classroom.
The literature supports the need for professional development workshops that may take a variety of formats. Nurse educators require on-going support, resources and staff development specifically focusing on regular workshops, evaluations and personal development programs (Berkson, 1993; Lunyk-Child et al., 2001; Williams, 1999). Creedy and Hand (1994) concluded that professional development activities should include the opportunity for nurse educators to reflect on their practice, have opportunities to trial new instructional strategies with feedback and support of their peers. Hitchcock and Mylona (2001) found a major advantage of having an “in-house” faculty development program where support is ongoing and immediately available. While participants stated that the workshops were beneficial, location became an issue due to limited ability to access programs. This factor emerged with nurse educators at the University of Saskatchewan at the Regina site as many programs and functions with the Gwenna Moss Centre required the nurse educators to be in Saskatoon for the session.

4.7.3 I Teach the Way I Like to Be Taught

Nurse educators identified that instructional strategies chosen for the classroom were also based on their own previous experience as students. Nurse educators reflected on instructional strategies they have experienced and use what they preferred as learners in their own classrooms as stated in this example:

Probably a lot of just to do with my past experience, being in class, taking different classes from people who have actually utilized other instructional strategies. That’s probably influenced me the most, in the sense that if I remember an instructional strategy that somebody’s used that really kept my attention I have
attempted to try to develop it in order to see if it works for the other students as well, too.

One nurse educator who identified that she preferred to teach the way that she likes to be taught primarily used lecture as her chosen instructional strategy, while four other nurse educators discussed using a variety of techniques such as role playing, case studies, discussion questions, and creative activities in which the student must pictorially represent different concepts to name a few. Schaefer and Zygmont (2003) supported the concept that nurse educators teach the way they were taught and cited the high use of lecture as the result of exposure to teacher-centred instructional strategies. This study however expands on this principle by identifying that learning is life-long and teaching approaches can change and evolve with exposure to new instructional strategies as the nurse educators who reflected on previous experience as a student utilized either a student-centred or teacher-centred approach to teaching when reviewing their chosen instructional strategies.

4.8 Support Systems

4.8.1 Peer Support

Peer support by faculty was identified as a factor that affected how instructional strategies were chosen. Nurse educators would seek others who have previously taught the course or had experience teaching in the classroom setting. Nurse educators would then discuss a variety of topics such as “what they’re doing, what they like” to use in the classroom, or more experienced educators would “share their notes or give…ideas of how to do things” for the course. Each nurse educator discussed sharing their classroom issues with other nurse educators as in this statement, “talking to other instructors and finding
out, so what do you do about you know this?” Peer support extended into the classroom in the form of peer evaluation as stated by this nurse educator, “this colleague of mine is going to come in and watch me teach. And so in that way, the person is not only watching me teach, they are watching the responses of what’s happening with individuals in the classroom.” The majority of nurse educators requested a more formalized system of peer support.

Students also provided a form of support to nurse educators by letting them know what worked well in the classroom and did not work well. This feedback could be done at the end of the class through formal written class evaluations or during the classroom session with suggestions of various instructional strategies to try. Little information is found in the literature on students as a form of support; however, student feedback has been used to enhance courses and student success rates are used to measure the effectiveness of the nursing programs (Alexander, McDaniel, Baldwin & Money, 2002; Richardson & Trudeau, 2003). The literature identifies fellow nurse educators as a form of encouragement that leads to enhanced sense of sharing and support, with a decreased sense of feeling isolated (Creedy & Hand, 1994). Robinson Wolf, Bender, Beitz, Wieland and Vito (2004) discuss the evaluation of teaching performance is commonly done with peer, self, administrative, and student evaluations. Student evaluations of faculty focus on the educator’s ability to provide clear expectations, courses that are well organized, informative and interesting with use of a variety of instructional strategies. Robinson Wolf et al. encourage faculty to appreciate students’ views and use it to acknowledge areas of success as well as areas for further improvement.
4.8.2 Administrative Support

Nurse educators felt supported at the beginning of program development. During the time of curricular change the nurse educators received support and training by administration as workshops were held to introduce the faculty to the new curriculum. Nurse educators at SIAST, Regina site, were informed that with the change in location, each person would receive their own computer and phone, which supported the nurse educators in their roles. Nurse educators however, also stated that they felt like their input into how to design classes was not supported. At the Regina site, SIAST moved to a new building which was formerly a hospital. The nurse educators felt that their input into classroom design was not accepted as administration kept informing them that the square footage of the classroom would remain the same. One nurse educator stated that she questioned how the square footage would be allotted, and if student number increases were taken into consideration. When changing location she then stated that the layout of the classrooms became an issue. College of Nursing faculty also addressed similar issues of concern about classroom space.

Nurse educators identified a need for on-going education for teaching in the classroom specifically focusing on the curriculum and how the process-oriented approach can be incorporated into their courses. Six nurse educators felt uncertain about their definition of the curriculum. One nurse educator at SIAST was unsure of how the principles of the curriculum translated into her course and wanted further information on the underlying approaches of humanism, critical social theory and phenomenology. One experienced nurse educator stated,
You have a right to expect some kind of assistance or introduction to the program you are going to teach. Even new people coming into this program are not given any information as far as I can see about the fact this is a process-oriented curriculum.

Nurse educators identified that resources such as the Gwenna Moss Centre for Teaching Effectiveness or workshops through the faculty certificate program are available and know how to access them. Nurse educators would like the support of the administration to value their roles as educators by encouraging and rewarding teaching and continual learning. Two College of Nursing educators would like less of an emphasis on research and publishing with more emphasis on teaching.

Nurse educators at the University of Saskatchewan felt that they were not supported by administration in that they did not receive the classroom space that they requested, not having money allocated for proper supplies for the students to practice with, or the need to use personal professional allowances to buy what they felt was needed in their role. The need to recognize and value teaching is mentioned in the literature (Johnston & Tinning, 2001; Williams, 1999). Hitchcock and Mylona (2001) suggested sending faculty to learn from other schools. One advantage of doing this is that the participants receive a wider perspective on the process curriculum than if one educator comes to the university, as at the host school, several faculty members would be involved with the education. The faculty member then returns to their institution to share what they have learned with their peers. Schaefer and Zygmont (2003) recommended that administration balance the complement of faculty members to include clinicians,
educators, and researchers to facilitate mentoring and an exchange expertise as well as to maximize the students learning (p. 244).

In reviewing literature for administrative support, the most congruent article located was that by Glanville and Houde (2004). Glanville and Houde discuss the scholarship of teaching and believe that teaching of nursing should not be penalized for spending time on issues of teaching and learning. The authors encourage nurse educators to recognize the innovations in the classroom and clinical settings and to document them in journals to help advance educational practices. The authors acknowledge that the greatest barrier to advancing educational practices is the existing hierarchical system in which research is rewarded with tenure (Glanville & Houde).

4.8.3 Technical Support

The use of technology in the classroom has played a role in the types of instructional strategies chosen by the nurse educators. The classrooms are equipped with equipment support the use of the Internet, PowerPoint, and other software programs. Various professional sites can then be used to supplement course content such as website for the Centres for Disease Control and Prevention when learning about various disease outbreaks or the Canadian Mental Health Association, Saskatchewan Division, when assessing the prevalence of mental health disorders. The Internet is also used to deliver course information to the student as the student accesses learning intents, course outlines, required readings, and course specific resources online through the use of a course management system such as Personalized Access to Web Services (PAWS) or WebCT. These course management systems help to distribute course materials, deliver online quizzes, and manage student marks.
Nurse educators at all sites felt that they had adequate support from administration and technical support services to deliver course content via paper or the Internet and to incorporate additional instructional strategies into the classroom setting such as the use of PowerPoint or websites. One nurse educator with the College of Nursing addressed concerns that she did not receive adequate support for implementing new projects, as there was no money or support person assigned to new projects developed for the Internet. As well, one nurse educator felt that students were not receiving the technical support they required when changes in supplies occurred due to the number of limited supplies, as in the example in which the student only practices with one safety syringe.

The use of instructional strategies based on Internet sites would suggest that the nurse educators are choosing a variety of instructional strategies that reflect the changes in access to resources that the students will face during their professional careers. The use of technology in the classroom is minimally described in the literature; however, process-oriented principles support the need to use a variety of instructional strategies that will allow the students to grow on a professional level.

4.9 Understanding of Self

How the nurse educator viewed herself played a factor in her decision of which instructional strategy to employ. The data collected from the participants suggests that the nurse educators view themselves as first as nurses, and base instructional strategies on personal clinical experience. This finding is evident in the statement by this nurse educator who stated, “I think the fact that I’m able to bring some examples from my clinical, my ongoing, my current clinical practice, works well, like, as far as being a nurse and having nursing stories to tell about.” Another nurse educator stated that she chose
instructional strategies based on “what fits with who I am, which is a lot about or what I see my strengths, which is my clinical background.” When deciding on case studies to use or in discussion of personal clinical experiences, nurse educators use clinical examples from their nursing career. This finding is supported in the literature as Schaefer and Zygmont (2003) found participants in their study viewed themselves as nurses rather than first as teachers and the use of sharing clinical experience is described as a means of transitioning the student to the professional realm.

The understanding of self was an integrating factor to emerge in the results. It is from the nurse educators understanding of who they are, their strengths, and their roles in the curriculum that influence how instructional strategies were chosen. Their clinical background was drawn upon heavily as that was commonly how the nurse educator viewed herself, first as a nurse then as a teacher. The nurse educators were able to describe the curriculum with a good understanding of the principles of the curriculum as stated in the curriculum manual. Chosen instructional strategies varied with each nurse educator. The instructional strategies were influenced by how they defined their roles either with a teacher-centred focus or a student-centred focus.

Instructional strategies were influenced from past experiences as a student in the classroom setting. The nurse educator reflected on what she found to be effective in the classroom as a student and then would examine the instructional strategy closely to see if it would work in their classroom. Other educational professional development activities that influenced the choice of instructional strategies included reading current journal articles or attending workshops. The understanding of self emerged, as the nurse educator
would further examine those instructional strategies discussed in the literature that were of interest to them.

The understanding of self emerged in classroom and student factors. Large number of students in a classroom led to many nurse educators to chose to use lecture in order to ensure that the student received the required content. This choice was due to the nurse educator’s belief that it was their responsibility to ensure that students leave the classroom with the needed information. Students played a role in the understanding of self as nurse educators presented clinical examples to students in order to be seen as credible. As noted by this nurse educator, “as far as being a nurse and having nursing stories to tell about or you know, ‘I once looked after a man with this condition’ and I think that works well. Like I think I have some credibility in the classroom.”

The understanding of self emerged in the factor of peer support. Nursing faculty provided support to the new educators either informally or formally. It would appear that nurse educators could choose to participate in a mentorship program or not as stated “you can meet with your faculty mentor as often or as in often as you want.” Nurse educators varied in how they would seek support and the type of support requested varied based on their individual needs. As noted by this nurse educator:

if I knew somebody was going to take over my class, they would come into every one of my lectures this term and they would teach my class next year. And would that be helpful? Possibly. Is it to say that micro is easier than anatomy or anatomy is easier than 115? No, I don’t think any of them are easier. So would that be helpful? Possibly. I think that until you get it under your belt and make it your own, I think that everything is difficult. Would it help? Maybe. Would I
have wanted to do that? I don’t know. Would it have helped? I think that it would have been a lot of sitting there and listening. You’d be like a student again.

I’m very conservative with the budget.

Several nurse educators found that the students provided a foundation of support when reflecting on the use of instructional strategies in the classroom. The type of support varied depending upon the nurse educator and what they saw as their needs.

4.10 The Theory

The research has attempted to capture how the nurse educators define their reality and how their beliefs are related to their actions. During interviews with nurse educators working in the NEPS program, the understanding of self emerged most frequently from the data. From the understanding of self, a theory emerged detailing how instructional strategies are chosen for the classroom setting, along with factors that influence what instructional strategies are chosen. The theory appears to be unique. In grounded theory, a description of a contradictory or alternative case is provided in order to substantiate the theory. In this research, no contradictory cases emerged. The findings of the current research expand upon factors previously discussed in research. It appears that there is very little empirical information available on the understanding of self and this research expands on available information.

4.11 Study Limitations

Factors influencing the study include sample characteristics along with the context of the study. The study focused on nurse educators who taught full-time in the classroom setting and did not include nurse educators who worked part-time or in the laboratory settings. Full-time nurse educators were chosen due to their commitment to
working full-time in an educational program and to explore how they define reality, and how their beliefs are related to their actions. Thus, the question would arise if nurse educators who teach on a part-time basis would identify similar factors. As well all participants who volunteered to be part of the study were female. So the question arises if male nurse educators have similar experiences teaching in the classroom setting?

Another factor that influenced the study was that all data was collected from face-to-face interviews and course manuals. This study did not observe the nurse educator teaching students in a classroom setting. Information was gathered from the participants about their philosophy of teaching and instructional strategies used, along with the influences during the face-to-face interview.

The results of this Grounded Theory study expand upon current research on process-oriented curriculum. This study provides information on the factors that have influenced the choice of instructional strategies used in the classroom setting and the support systems these nurse educators feel need to be in place. The research study findings expand upon the current research and provide more information on the factors. The research findings represent the factors identified by nurse educators teaching in a generic process-oriented curriculum in Saskatchewan. The NEPS program is taught on three separate locations across the province of Saskatchewan. The identified factors were common to all sites. This curriculum does not prescribe to self-directed learning or problem-based learning techniques and thus the findings cannot be generalized to these types of process-oriented curricula.
CHAPTER FIVE

Recommendations

The findings and resulting theory of this Grounded Theory study have relevance for those individuals involved in nursing educational programs. This chapter presents recommendations for nurse educators, program administrators, program planners and students who are currently engaged in a process-oriented curriculum. The chapter concludes with recommendations for further research.

5.1 Recommendations

The results have implications for all involved in nursing programs. The Grounded Theory developed provides an opportunity for nurse educators to reflect upon their current teaching styles to examine if their philosophical beliefs and teaching style are the same as those identified in the curriculum. The self-reflection can begin at orientation to the nursing program as the nurse educators learn about the intents of the curriculum.

Nurse educators employed with the University of Saskatchewan can access the Gwenna Moss Centre for Teaching Excellence, which has an online program titled, “Transforming teaching” in which participants reflect upon the program’s curriculum design and instructional strategies to determine if these match the intended teaching goals. For nurse educators employed with SIAST, the Faculty Certificate Program has an ongoing personal professional development course that would provide the nurse educator with the opportunity to reflect on their philosophical beliefs. Nurse educators can identify their philosophical beliefs and their preferred instructional strategies early in their teaching career by accessing these programs. By acknowledging the factors that will play a role into their decision as to what instructional strategy to choose, nurse educators can
seek assistance from their peers or formal workshops so that they may focus on the learning outcomes for students rather than on their teaching style.

Nurse educators can use the findings to reflect on how their experience as a registered nurse is communicated to the students through their use of instructional strategies such as case studies or through sharing experiences with their students. Nurse educators can relate to experiences that the student may be encountering in the clinical area at that moment and ultimately make the learning experience more meaningful for the students, as the students can appreciate the complexity of nursing care. To this end, the findings have significance for experienced nurse educators currently mentoring new educators. Sharing experiences and stories with new educators will reinforce that instructional strategies will vary from nurse educator to nurse educator. The new educators will find a source of support in knowing that they do not have to replicate another’s technique but can effectively find their own instructional strategies by being true to their self-identity and use instructional strategies with which they feel most comfortable. The findings reinforce that it is not only important for nurse educators to know ‘their value systems’ but also that it is equally important to get to know who the students are that are sitting in the classroom by sharing information about the learning intents for the course and ‘checking in’ to ensure that the students are acquiring and understanding the course content.

The findings have implications for administrators of nursing programs as it provides an insight into the support systems that the nurse educators feel are valuable to their professional development as an educator and need to be in place throughout their careers. The findings suggest that the nurse educators would like more support from their
peers on a formal and informal basis. Informal support may be obtained through regular contact with the other nurse educators during coffee and lunch breaks. It is important for administrators to acknowledge this need and encourage the faculty to meet on a regular basis to share how things are going in the classroom setting. To facilitate this exchange of expertise, it is important for administrators to value teaching and find a balance so that there is an equal complement of faculty with a research focus and a teaching focus. Formal support may include a mentorship program that pairs new nurse educators with those with more experience. This support should extend into the classroom so that the nurse educator may receive peer feedback from a nurse educator perspective rather than only that of the students. Nurse educators would like more formalized training regarding the curriculum model and underlying approaches of humanism, critical theory, and phenomenology so that they may understand how the intents of the program may be translated into the content of their courses. It is also important for the administrators to be aware of the role that organizational culture plays within their institution and how this may be relayed through peer support.

The findings have implications for those involved with program planning. When revising a course, it is important to focus on the intents of the program. Thus, it is important to examine how educators can make each class more process-oriented by broadening the use of the instructional strategies and reducing the focus on content. It is also important to consider class size and location requirements for a process-oriented program. Increasing class sizes resulting in larger classroom spaces with shorter class times limits the selection of instructional strategies. Program planners are encouraged to
limit class size and find classrooms with a large open space that would facilitate small group discussions and increase student participation.

Finally, the results have implications for students in a process-oriented curriculum. In the kindergarten to grade twelve system, the student is exposed to a variety of instructional strategies such as debate, group work, simulation, case studies, and simulation. Thus, students have some experience in using these instructional strategies in classroom settings. With increasing class sizes and use of auditorium seating, the variety of instructional strategies becomes more challenging. Thus, it is important for the students to be prepared to participate in the chosen instructional strategy. It is important for the students to understand the curriculum and value the differences in experiences of both the student and nurse educator. As the student is viewed as a source of support, it is also important for students to share with the nurse educator what instructional strategies they found to be effective along with any suggestions for improvement as their opinions are valued and respected.

In summary, the findings of the study have significance for nurse educators, administrators, program planners, and nursing students. Nurse educators are encouraged to do a self-reflection of their preferred teaching styles and philosophical beliefs to determine if they match the NEPS curriculum intents by accessing professional development workshops. Administrators are encouraged to continue to support nurse educators in the classroom through formalized mentoring by pairing experienced faculty with newer faculty and to encourage informal faculty support by bringing faculty together during coffee and lunch breaks. Program planners are encouraged to limit the number of students in the classroom and find open classroom spaces that would allow for movement
of tables and chairs to facilitate small group discussions. Nursing students are encouraged to participate in the instructional strategies by providing feedback to the nurse educator on the effectiveness in meeting learning intents.

On-going research is needed to further understand the research problem. For example by addressing the limitations of the study the following questions emerge: do nurse educators who teach on a part-time basis identify similar factors? Do male nurse educators have similar experiences teaching in the classroom setting? As this study did not observe nurse educators teaching in the classroom another area to examine would include examining the curriculum as lived by the nurse educator versus how it is conceptualized. In addition to these questions other potential areas for research become highlighted. As seen in this research, newer nurse educators adopted more experienced nurse educator’s ways or beliefs in how certain classes are taught. Thus ongoing research is needed to further examine the importance of culture in the workplace. Research also is needed to explore the role that the student plays in the classroom as a source of support for the nurse educator.


Canadian Association of Schools of Nursing. (2004, March). Final report of the review team of the Canadian Association of Schools of Nursing for the Nursing Education Program of Saskatchewan at the College of Nursing, University of Saskatchewan and Nursing Division, Saskatchewan Institute of Applied Science and Technology in collaboration with the First Nations University of Canada for accreditation. Saskatoon: Author.


Appendices

*Appendix A. Literature review*
<table>
<thead>
<tr>
<th>Source</th>
<th>Purpose/Problem</th>
<th>Design/Sample/Setting/Consent</th>
<th>Findings</th>
<th>Implications</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bevis, E. &amp; Murray, J. 1990.</td>
<td>-Discusses emancipatory teaching</td>
<td>-Discusses narrative teaching, lectures’ dialectical tensions, lecture as oppression, emancipatory teaching, distinctions regarding what teachers do, teaching and curricular models, looking behind models to purposes, and a different approach to curriculum development -Based on Friere</td>
<td>-Narrative teaching is lecture -All lecture is oppressive -Tensions exist because information is often the precursor to knowledge and is the content upon which scholarly skills and educations rest. It is also easily obtained via lecture. -Lecture makes students consumers of information made private -Lecturing does not teach how to learn, how to critique, nor how to come to our own meanings -Lecturer provides information that has already been digested: information that has been gathered, analyzed, sorted, washed, tested, put in some desired order and made to some position (this makes it oppressive) -Problem posing education is antidote to oppression -Emancipatory curriculum- content and teaching strategies must be selected that conform to criteria that support critical consciousness, liberation, responsibility to and for community, counter hegemony and critical thinking scholarship (many teaching strategies may be used but lecture is seldom one of them) -We lecture because we are taught to</td>
<td>-Must care for the teacher which means providing support in faculty development and developing curricula agenda in which they are the planners and power persons with the opportunity to plan, practice and perfect new teaching roles -The success of the paradigm shift in nursing education is dependent upon faculty development for new teaching roles and new alliances with students and with practice persons. -Need a problem-posing education</td>
<td>(s) Bevis is seen as a leader in curriculum development and is credible - (s) based on critical social theory</td>
</tr>
<tr>
<td>Source</td>
<td>Purpose/Problem</td>
<td>Design/Sample/Setting/Consent</td>
<td>Findings</td>
<td>Implications</td>
<td>Comments</td>
</tr>
<tr>
<td>--------</td>
<td>----------------</td>
<td>------------------------------</td>
<td>----------</td>
<td>--------------</td>
<td>----------</td>
</tr>
<tr>
<td><strong>Opinion</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Darbyshire, P., 1993.</td>
<td>-critique of andragogy -claims that true pedagogy has far more radical, powerful and transformative possibilities for nursing education.</td>
<td>-critiques Malcolm Knowles theory of andragogy which is considered a progressive educational theory with a variety of teaching techniques and strategies such as problem-based learning and self-directed learning</td>
<td>-states andragogy seems to have been wholly and uncritically adopted -states the foundational assumptions for andragogy are inappropriate for nursing education -believes a caring pedagogy offers a more radical alternative for nurse education. -defines andragogy -provides reasons he believes andragogy is flawed (a) children are seen as dependent while adult learners are self directed (b) adult is always seen to be eager to learn (c) children’s life experiences are of lesser value than adults (d) excludes children from learning by problems -why is it accepted? -the majority of nurse teacher preparation courses are still based upon an essentially behaviourist, instrumental and content-driven conception of education -need faculty development</td>
<td>-Van Manen explains that pedagogy involves all of our encounters and dealings where we dwell learning with our students for the sake of their development, growth and well-being -pedagogy calls forth new ways of being, thinking, conversing and becoming lifelong learners ourselves -the Curriculum Revolution movement has given nurse educators a renewed sense of the power of true pedagogy -this pedagogy embraces critical, feminist, political, hermeneutic and phenomenological insights</td>
<td>-(w) bias stated as author does not support andragogy -(s) based on critical social theory -(s) authors views supported by critical social theory</td>
</tr>
<tr>
<td>Source</td>
<td>Purpose/Problem</td>
<td>Design/Sample/Setting/Consent</td>
<td>Findings</td>
<td>Implications</td>
<td>Comments</td>
</tr>
<tr>
<td>--------</td>
<td>----------------</td>
<td>------------------------------</td>
<td>----------</td>
<td>--------------</td>
<td>----------</td>
</tr>
<tr>
<td><strong>Opinion</strong></td>
<td></td>
<td></td>
<td></td>
<td>(s)trength (w)eakness</td>
<td></td>
</tr>
<tr>
<td>Harden, J., 1996.</td>
<td>Explores the notion that nurse education is a political activity that is value laden and has multiple social learning.</td>
<td>-uses Habermas’ definition of critique as a framework -uses Paulo Freire’s concept of conscientisation as an educational model</td>
<td>-as long as teachers continue to pursue liberal and andragogical theories of learning, students will fail to develop a critical consciousness -major assumption: adult learners through their own backgrounds and rich life experience are driven by a desire to become self-directed, independent and autonomous in their learning careers -Freire—unless we teach for emancipation, the concepts of the knowledgeable doer and the reflective practitioner will never be realized -nurses are an oppressed group as evidenced by lack of autonomy, accountability and control over their own profession (linked to the domination and oppression of women) -much complaining within the oppressed group, self-hatred and low self-esteem that creates submissiveness when confronted with the powerful figure. -horizontal violence results -education suffers from narration sickness: -narration turns students into containers to be filled by the teacher -the more completely the receptacle is filled the better the teacher -andragogy=oppressor +oppressed -medicine is a dominant profession</td>
<td>-social critique is most useful in liberating people from domination -critique and analyses of how domination affects health and health care are still in their infancy -teaching is apolitical activity and everything we teach is value-laden -lecturing does not teach how to critique -teachers must resist the temptation to control, validate or interpret the perceived meaning -to be a reflective practitioner requires critical thinking skills -problem posing education -update teaching methods (caring, interactive, commitment)</td>
<td>-(w) no empirical evidence to support claims -based on critical social theory -discusses emancipatory teaching -(s) consistent with critical social theory -(s) uses theory purported by leaders in critical social theory to support stance</td>
</tr>
<tr>
<td>Source</td>
<td>Purpose/Problem</td>
<td>Design/Sample/Setting/Consent</td>
<td>Findings</td>
<td>Implications</td>
<td>Comments</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Tanner, C. A., 1990. | -reflections on 4 years that marked the beginning of a contemporary movement that was proclaimed as the Curriculum Revolution. | - cites work of Bevis, Benner, Kuhn, Schon as influential in this process | -began in 1986.  
-related to issues in health care and dilemmas with educational system  
-used revolution in the sense that it would occur when the community of nurse educators agreed to a new world view on educational practices  
-central concerns:  
(a) social responsibility  
(b) centrality of caring (teacher, student, client)  
(c) understand and criticize beliefs and assumptions that guided educational practice (open up to new possibilities)  
(d) dilemma of the behavioural model  
(e) teacher student relationship  
-controversy about how much change should occur | -new way to educate students  
-nursing response to health care needs of the nation  
-to educate caring, critically thinking nurses who can safely practice in today’s world.  
-encourage the diversity needed to achieve goals—therefore no right or wrong curriculum | -(s) Tanner is seen as a leader and credible within the field  
-based upon critical social theory |
<table>
<thead>
<tr>
<th>Source</th>
<th>Purpose/Problem</th>
<th>Design/Sample/Setting/Consent</th>
<th>Findings</th>
<th>Implications</th>
<th>Comments</th>
</tr>
</thead>
</table>
| Sutcliffe, L., 1992. | -examines how curriculum influences and is influenced by its micro and macro environments | -discusses implications for curriculum planning, linking theory with practice, obtaining approval for a process-oriented approach  
-discusses implications for implementation, discovery learning, problems, attitudes of students  
-discusses implications for evaluation looking at outcome and examinations | -the starting point in planning a curriculum is the nature of the student, rather than the consideration of knowledge  
-the student’s intrinsic motivation expressed through curiosity, competence and reciprocity is channelled  
-mastery of skills is best achieved by use of behavioural objectives  
-may reduce the drop out rate as students feel less threatened in the face of rapid change  
-clinical staff require updates and education on the beliefs and practices within the curriculum for the student may be caught between the work ethos of the ward with a training approach to the mastery of skills and the educational beliefs of the college  
-problem solving is central within a process approach to education  
-learning methods such as group projects, discussions, seminars and problem solving exercises  
-learning calls for considerable resources such as videos, computers and learning packs which call for an increased financial allocation | -on going education of clinical staff is required  
-increased communication between educational and clinical staff  
-calls for an examination of beliefs about nursing and education  
-a process approach encourages innovative thinking, problem solving and flexibility essential in all aspects of life  
-high staff/student ratio  
-teacher needs to develop pastoral role  
-based on student self assessment  
-teacher in role of critic | -based upon pedagogy  
-(w) calls for combined process/traditional curriculum  
-discusses teaching methods |
<table>
<thead>
<tr>
<th>Source</th>
<th>Purpose /Problem</th>
<th>Design/Sample/Setting /Consent</th>
<th>Data Collection</th>
<th>Findings</th>
<th>Implications</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Qualitative</strong></td>
<td>-reports on a study of a group of nurse educators who were involved in a professional development programme and to examine changes in participants thinking in relation to teaching and learning.</td>
<td>-interpretative case study approach -longitudinal Sample -14 educators who participated in the program, along with 3 who volunteered to provide more detailed information.</td>
<td>-participants were required to keep a journal -worked in teaching teams and group sessions -used probing questions to have participants focus on choices they were making -classroom observation -triangulation of data through use of researcher as observer in conjunction with participant’s interpretations</td>
<td>-at beginning of study: predominant understanding of student learning by teachers is that students are passive absorbers of information which they store easily in retrievable fragments and integrate by virtue of repeated practice -factors such as the developmental nature of conceptual change, stress, reflective processes and professional developmental programs exert some influence on how nurse educators modify their teaching-learning beliefs -2 of 3 participants adopted the student centered pedagogy</td>
<td>-provide opportunities to reflect and develop new learning and teaching beliefs -professional development programs can foster reflection and provide a forum to exchange information, ideas and share resources and develop peer support networks</td>
<td>-(w)no information on how the 3 were chosen to participate -(w) not mentioned if the researchers had vested interests in the outcomes of the programme or just strictly observers -(s) design of study -(s) data collection with daily journal and group and individual discussions -(s) triangulation of data and method -(s) prolonged engagement and persistent observation therefore could develop trust -(w) not mentioned how observational notes kept -(w) time constraints with journals</td>
</tr>
<tr>
<td>Source</td>
<td>Purpose/Problem</td>
<td>Design/Sample/Setting/Consent</td>
<td>Data Collection</td>
<td>Findings</td>
<td>Implications</td>
<td>Comments</td>
</tr>
<tr>
<td>--------</td>
<td>----------------</td>
<td>-------------------------------</td>
<td>----------------</td>
<td>----------</td>
<td>--------------</td>
<td>----------</td>
</tr>
<tr>
<td>Lunyk-Child, O. I., Crooks, D., Ellis, P. J., Ofosu, C., O’Mara, L., &amp; Rideout, E., 2001.</td>
<td>To explore faculty and student perceptions of self-directed learning (SDL) and investigate factors that facilitate or impede it.</td>
<td>-interpretive approach -cross sectional Sample - 47 faculty member - 17 students (from year 2, 3, 4) Setting - McMaster University - 4 year undergraduate program - faculty attended retreat - students attended focus groups on campus Consent - obtained verbally from faculty and written by students - research approval by IRB not mentioned</td>
<td>-1 hour long focus groups sessions held for both faculty and students -asked what SDL means to you? What factors influence SDL? What are some of things that professors do to facilitate SDL? -investigators read transcripts while listening to tapes to ensure completeness -specific aspects of SDL were coded -codes were agreed by consensus -student transcripts were assigned for analysis to 2 investigators who did not teach the students</td>
<td>-faculty used similar words to define SDL -faculty had doubts in their abilities to implement SDL -faculty had questions about how SDL was being implemented and if it was consistent -faculty stated that there is need for ongoing faculty development -students were able to define SDL -students were frustrated by the inconsistent implementation of SDL -students found it confusing that SDL was not a requirement in all courses -students repeatedly expressed the need to be reassured that they will pass the course requirements -faculty seen as a resource -faculty need to increase the level of student awareness regarding the organization infrastructure -faculty have different degrees of willingness to relinquish the power and authority vested in the teacher-centered approach. -implemented faculty development workshops, brown bag lunches, and course and curriculum reviews (s) data saturation achieved with the number of students interviewed -(s) interrater reliability achieved -stated future research needs to identify and test the effectiveness of strategies that foster the development of SDL -(w) focus group as some people may not be comfortable expressing their views in front of a group -(s) anonymity and privacy maintained for students -(s) significant to nursing education</td>
<td>-s) strength (w) weakness</td>
<td></td>
</tr>
<tr>
<td>Source</td>
<td>Purpose/Problem</td>
<td>Design/Sample/Setting/Consent</td>
<td>Data Collection</td>
<td>Findings</td>
<td>Implications</td>
<td>Comments</td>
</tr>
<tr>
<td>--------</td>
<td>----------------</td>
<td>-----------------------------</td>
<td>----------------</td>
<td>----------</td>
<td>--------------</td>
<td>----------</td>
</tr>
<tr>
<td><strong>Qualitative</strong></td>
<td>-purpose of the study was to compare graduating baccalaureate students in a problem-based curriculum with those in a conventional nursing program focusing on perceived preparation for clinical practice, clinical functioning, knowledge and satisfaction with their education.</td>
<td>-cross-sectional analytic design using a self-report questionnaire -all student graduating in April 1999 invited at McMaster University School of Nursing and University of Ottawa School of Nursing -60% of graduates completed the questionnaires</td>
<td>-collected information on age, gender, marital status and average on admission to program -focused questions on student perception of clinical functioning, preparation for clinical practice, nursing knowledge base. -used a six-point Likert scale -results were statistically significant if p-values were less than 0.01 -Two members of the team analyzed the open-ended questions for themes</td>
<td>-no significant differences in their perceived preparation for nursing practice or perceived clinical functioning -no statistically significant differences in RN scores -students in the PBL program were more satisfied with their educational experience -PBL students have a sense of confidence that they will be able to function in situations new to them.</td>
<td>-contributes to understanding of the relationship between different educational approaches and student outcomes -suggests the PBL is an effective approach for educating nurses.</td>
<td>-(w) study was short in duration and reflected the student’s opinion of their program at the end of graduation -requires more of a longitudinal design that could account for any differences following graduation with further work experience -(s) compared results to RN exams -(w) with their choice of p-value, they have increased the probability of making a Type II error (missing out on a new finding)</td>
</tr>
<tr>
<td>Source</td>
<td>Purpose/Problem</td>
<td>Design/Sample/Setting/Consent</td>
<td>Data Collection</td>
<td>Findings</td>
<td>Implications</td>
<td>Comments</td>
</tr>
<tr>
<td>--------</td>
<td>----------------</td>
<td>-----------------------------</td>
<td>----------------</td>
<td>----------</td>
<td>--------------</td>
<td>----------</td>
</tr>
<tr>
<td><strong>Qualitative</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schaefer, K. M., &amp; Zygmont, D., 2003.</td>
<td>-to describe the predominant teaching style of nursing faculty as either teacher-centred or student centred. -to compare teaching style to instructional methods faculty members used in courses they taught and to their stated philosophies of teaching and learning</td>
<td>-descriptive correlation design -used questionnaire and readings -100 randomly selected BN programs accredited by NLNAC -5 packets sent to each -10% of packets invited respondents to send a copy of course outlines -response rate 37% (187 returned) -voluntary consent; could chose not to return</td>
<td>-the principles of adult learning scale was used to measure the teaching style of participating faculty -40 item measurement -each item is measured using a six-point Likert-type scale ranging from always to never -scores range from 0 to 220 -scores greater than 146 indicate a tendency towards student-centred approaches and lower scores indicated a tendency toward teacher centred approaches -questionnaire sent in which respondents were asked to describe their philosophy of teaching</td>
<td>-their philosophy of teaching, and teaching style approximated their actual teaching style -all courses used a variety of teaching methods -focus on the process of teaching rather than on the process of learning -barriers to student centred learning was large class size, type of course, expected outcomes and curriculum mandates</td>
<td>-faculty are ready to move to a more student centred environment -faculty could benefit from formal and informal interventions to improve the climate of learning with the development of formal supports for junior and senior nurse educators</td>
<td>(s) identified supporting framework -(s) large sample -(w) only small amount replied to survey -no description of nursing program in which faculty taught -no mention of courses taught or acceptance of the curriculum -question arises if there would be differences between participants and those who declined to participate</td>
</tr>
<tr>
<td>Source</td>
<td>Purpose/Problem</td>
<td>Design/Sample/Setting/Consent</td>
<td>Data Collection</td>
<td>Findings</td>
<td>Implications</td>
<td>Comments</td>
</tr>
<tr>
<td>--------</td>
<td>----------------</td>
<td>------------------------------</td>
<td>-----------------</td>
<td>----------</td>
<td>--------------</td>
<td>----------</td>
</tr>
<tr>
<td><strong>Qualitative</strong></td>
<td>- To examine the clinical educator’s perspective of a 3-year undergraduate nursing programme utilizing problem-based learning to determine whether student learning has a positive impact on bridging the reported theory-practice gap.</td>
<td>- purposive sample - longitudinal Sample - clinical educators who were involved in the year 1, semester 2 clinical supervision in 1995. (N=8) - clinical educators employed for all 3 years at the end of 36 months in the new program (N=14). Approximately half of the participants from the original group. <strong>Setting</strong> various acute care clinical settings in Australia <strong>Consent</strong> - obtained in writing for: being taped, transcribed and analyzed with potential exposure through publication - not mentioned if consent received from IRB</td>
<td>- specific open-ended questions at the end of the first 12 months of the new program. - reliability was enhanced as each participant received a copy of the content of the focus group with a request for additional comments and clarification. However none offered any additional comments. - no discussion on the validity of questions or if pre test done.</td>
<td>- ability of each student varied between each student group, clinical educator and placement - the motivated or mature student tended to do well - the younger student more overwhelmed and less confident - students demonstrated a high level of team spirit, insight and achievement (worked well in teams) - students did not ask for answers as they were aware that had to find the answers for themselves within an adult learning framework - used their time to seek out learning opportunities, and asked for help appropriately - clinical educators found their feedback was more appreciated - students confused at beginning of programme with respect to expectations - few students failed clinical</td>
<td>- strategies started to ensure all required content was covered - set up workshops for faculty - reviewed curriculum to ensure no overlap of content - covered a broader range of topics, focusing on common and useful disease processes - included ethics into curriculum - student request more formal teaching at beginning of program but opinions change by year 3</td>
<td>(w) sample size small. Only included one department out of 14 in the area. -(w) stated that they knew little of PBL when initiating the study therefore it could have affected the type of questions asked and the response to answers given. -(s) triangulation of data -(s) research design -(s) significant for nursing education</td>
</tr>
<tr>
<td>Source</td>
<td>Purpose/Problem</td>
<td>Design/Sample /Setting/Consent</td>
<td>Data Collection</td>
<td>Findings</td>
<td>Implications</td>
<td>Comments</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>--------------------------------</td>
<td>----------------</td>
<td>--------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Berkson, L., 1993.</td>
<td>-To examine if PBL curricula teach problem solving, impart knowledge, enhance motivation, or promote self directed learning skills better than traditional schools.</td>
<td>-literature review -reviews literature published before September 1992 seeking evidence for this innovative curriculum -focused on medical literature</td>
<td>-focused on questions: (1) Do PBL curricula teach problem solving better than traditional schools do? (2) Do PBL curricula impart knowledge better than traditional schools do? (3) Do PBL enhance motivation to learn medical science better than traditional schools do? (4) Promote self-directed learning skills better? (5) Why does the product of PBL seem indistinguishable from traditional school?</td>
<td>-graduate of a PBL curriculum is, to date, difficult to distinguish from his or her traditional counterpart -the curriculum can be stressful for both students and faculty -the curriculum may be unreasonably costly -twenty five years of experimentation has not produced a distinctive, more competent physician -expertise, experience and efficiency are the traditional curriculum’s potential strengths</td>
<td>-medical schools are reviewing and questioning elements of their curricula -(w) focused on 12 studies between 1983-1992 [curriculum has been in use since the 1960s] –were all available resources used? - (s) uses chart to compare literature in easy to understand format - (s) used primary studies -focused on literature reviewing effectiveness of program -support the need for changes (currently in progress in 1992)</td>
<td></td>
</tr>
<tr>
<td>Source</td>
<td>Purpose/Problem</td>
<td>Design/Sample/Setting/Consent</td>
<td>Data Collection</td>
<td>Findings</td>
<td>Implications</td>
<td>Comments</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>-------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Literature Review</strong></td>
<td>-aimed at those who undertake a transition to problem based learning</td>
<td>-literature review</td>
<td>-focused on questions:</td>
<td>-few studies have documented the impact of problem based learning faculty development strategies</td>
<td>-faculty need training to effectively teach in problem based learning</td>
<td>-focused on literature reviewing effectiveness of program with no empirical research included in the literature review and focused on the opinions of those currently training for problem based learning in 1999.</td>
</tr>
<tr>
<td>Hitchcock, M. A., &amp;</td>
<td>-review of ERIC and Medline databases using “teaching/training” and “problem-based learning” as search terms</td>
<td></td>
<td>(1) what is known from past research about training faculty in the skills of</td>
<td>-the path from lecturer to facilitator is often difficult</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mylona, Z., 2001.</td>
<td></td>
<td></td>
<td>problem based learning?</td>
<td>-there are many other skills that faculty must acquire to contribute fully to a problem based learning initiative and that faculty development programs should follow a specific order</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2) what skills are important to teach faculty and how does one teach them?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(3) what options are available for training faculty in problem based learning?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- A few studies have documented the impact of problem-based learning faculty development strategies.
- The path from lecturer to facilitator is often difficult.
- There are many other skills that faculty must acquire to contribute fully to a problem-based learning initiative and that faculty development programs should follow a specific order.
- Faculty need training to effectively teach in problem-based learning.
- The most effective launching of the program is to hire a trainer or send faculty away for training.
<table>
<thead>
<tr>
<th>Source</th>
<th>Purpose/Problem</th>
<th>Design/Sample/Setting/Consent</th>
<th>Findings</th>
<th>Implications</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opinion</td>
<td>- describes the implementation of problem based learning in the School of Nursing curriculum at Samford University in January 1998.</td>
<td>- courses redesigned with the goal of improving learning outcomes in the following areas: critical thinking, self-directed learning, communication, interdisciplinary collaboration, the ability to work and contribute within a team and the development of lifelong learning skills</td>
<td>- adapted traditional classroom space by providing six round tables and 24 to 30 chairs for each room</td>
<td>- implementation of problem based learning was considered to be highly successful with 100 percent of the graduates passing the NCLEX exam</td>
<td>- provides examples of how they implemented problem based learning in a variety of courses such as community health, management, pathophysiology, statistics, and research</td>
</tr>
<tr>
<td>Source</td>
<td>Purpose/Problem</td>
<td>Design/Sample/Setting/Consent</td>
<td>Findings</td>
<td>Implications</td>
<td>Comments</td>
</tr>
<tr>
<td>--------</td>
<td>----------------</td>
<td>------------------------------</td>
<td>----------</td>
<td>--------------</td>
<td>----------</td>
</tr>
<tr>
<td>Johnston, A. K., &amp; Tinning, R. S., 2001.</td>
<td>-describes their experience in developing a group to advance teacher facilitation skills.</td>
<td>-eight to ten teacher volunteers working within problem based learning will form a reflective practice group</td>
<td>-group reflective practice strategy for facilitator development is more likely to prepare teachers to meet the demands of problem based learning than traditional forms of staff development. -two phase approach for faculty development: (a) phase one brings the group together for a discussion on problem based learning facilitation (b) phase two involves critical analysis of personal practice of facilitation in the context of problem based learning</td>
<td>-teachers will benefit from the opportunity to improve personal professional performance and gain confidence in facilitating problem based learning. -working together as a group may lead to more positive relationships between teachers -failure of disclosure by participants concerning personal practice and failure to accept constructive critique will impede changes in practice. -institution needs to support this change.</td>
<td>(s)trength (w)eakness -comments presented supported in literature</td>
</tr>
<tr>
<td>Source</td>
<td>Purpose/Problem</td>
<td>Design/Sample Setting/Consent</td>
<td>Data Collection</td>
<td>Findings</td>
<td>Implications</td>
</tr>
<tr>
<td>--------</td>
<td>----------------</td>
<td>-----------------------------</td>
<td>----------------</td>
<td>---------</td>
<td>--------------</td>
</tr>
<tr>
<td>Rentschler, D. D., &amp; Spegman, A. M., 1996.</td>
<td>-To describe the experience of a generic nursing baccalaureate program’s shift from a Tylerian model to a humanistic-educative model, six years later.</td>
<td>-Kuhn’s model for paradigm shift is used as a framework for presenting the stages of change that occurred. Sample -personal reflections on change Setting -baccalaureate program in the United States of America Consent -not applicable</td>
<td>-reflections on the change in curriculum over a 6-year period. -describes the authors’ perceptions of a curriculum revolution and paradigm shift experience</td>
<td>-restraining forces to change identified: (a) -balancing content and process -faculty had difficulty relinquishing the content they valued. -remains an issue as many faculty continue to focus on content. -faculty have only experienced education in a traditional paradigm and thus cannot draw from personal knowledge as a guide for other ways to teach (b) -fear of failure by faculty -personal and emotional reasons (c) -maintaining standards to meet consumer standards -need to examine outcome competencies (d) -accepting responsibilities for active participation -faculty do not trust that students can or will take on the responsibility for understanding, applying, and contextualizing without the pressure of specific assignments.</td>
<td>-individuals’ attitudes, beliefs and behaviors need to change in order to let go of the old paradigm and accept the new. -teaching styles must be diverse to meet the varied learning styles of students.</td>
</tr>
</tbody>
</table>

102
<table>
<thead>
<tr>
<th>Source</th>
<th>Purpose/Problem/Setting/Consent</th>
<th>Design/Sample/Setting/Consent</th>
<th>Data Collection</th>
<th>Findings</th>
<th>Implications</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richardson, K., &amp; Trudeau, K. J., 2003.</td>
<td>- discusses how they used problem based learning and collaborative learning in their nursing program.</td>
<td>-authors involved in the program Writing across the Curriculum -developed focused writing assignments to assist student to become independent thinkers and learn the importance of evidence-based practice -received feedback from 59 students registered in the course</td>
<td>-students were given a case study and had to answer questions on the case study -students then wrote a report to justify their answers using literature -students filled out a survey about what they liked the most or least about class -53 students filled out the surveys</td>
<td>-students felt the case study approach helped them to improve critical thinking and increase their knowledge of the material -students liked working in groups and learning from each other -students felt this approach was time consuming -some students indicated that group members cam unprepared or were uncooperative</td>
<td>-need to orientate the student to this type of approach -students learn valuable skills such as working in groups, communication, team work and conflict management -need to do training with the tutors -should be implemented in all years of the nursing program</td>
<td>-(w)not a formal research study -(w)represents the opinions of the class at that point of time in the curriculum without information on what orientation the students had on this type of teaching approach</td>
</tr>
</tbody>
</table>
Appendix B. Ethics approval.
Certificate of Approval

PRINCIPAL INVESTIGATOR
S. Bassendowski

DEPARTMENT
Nursing

BEH# 06-146

STUDENT RESEARCHERS
Shauna Davies

INSTITUTION(S) WHERE RESEARCH WILL BE CONDUCTED (STUDY SITE)
University of Saskatchewan

Saskatoon  SK

SPONSOR
UNFUNDED

TITLE
Instructional Strategies chosen for the Classroom in a Process-Oriented Curriculum: A Grounded Theory

CURRENT APPROVAL DATE
02-Oct-2006

CURRENT RENEWAL DATE
01-Oct-2007

The University of Saskatchewan Behavioural Research Ethics Board has reviewed the above-named research project. The proposal was found to be acceptable on ethical grounds. The principal investigator has the responsibility for any other administrative or regulatory approvals that may pertain to this research project, and for ensuring that the authorized research is carried out according to the conditions outlined in the original protocol submitted for ethics review. This Certificate of Approval is valid for the above time period provided there is no change in experimental protocol or consent process or documents.

Any significant changes to your proposed method, or your consent and recruitment procedures should be reported to the Chair for Research Ethics Board consideration in advance of its implementation.

ONGOING REVIEW REQUIREMENTS
In order to receive annual renewal, a status report must be submitted to the REB Chair for Board consideration within one month of the current expiry date each year the study remains open, and upon study completion. Please refer to the following website for further instructions:  http://www.usask.ca/research/ethical.shtml

APPROVED

Dr. John Rigby, Chair
Behavioural Research Ethics Board
University of Saskatchewan

Please send all correspondence to: Ethics Office
University of Saskatchewan
Room 305 Kirk Hall, 117 Science Place
Saskatoon, SK S7N 0W0
Appendix C. Letter to participants.
July 27, 2006

Dear Name:

My name is Shauna Davies. I am a Master of Nursing student at the University of Saskatchewan. I am currently working on my thesis titled, Instructional Strategies Chosen for the Classroom in a Process-oriented Curriculum: A Grounded Theory. This grounded theory research will be based upon research guided by two major research questions: What factors have played a role into the individual faculty decision of choosing an instructional strategy? What support systems have been or need to be in place for faculty development with respect to instructional strategies chosen for the classroom?

I am seeking volunteers to participate in this study who currently work full-time and teach in the classroom setting. Your participation in this study is completely voluntary. The in-person interview will take approximately one hour to complete. The interview will take place during a mutually agreed upon time during your workday and in a location separate from your office such as in the library. You may refuse to answer individual questions. This interview will be audio taped to ensure that all of the information is collected accurately and thoroughly. You may also be asked to participate in a follow-up interview.

The Behavioural Research Ethics Board at the University of Saskatchewan has approved this study on June 7, 2006. Any questions regarding your rights as a participant may be addressed to the Office of Research Services at (306) 966-2084. Out of town participants may call collect.

If you wish to participate in this study, please call Shauna Davies at (306) 798-0740 or e-mail shauna.davies@siast.sk.ca

Sincerely,

Shauna Davies
Master of Nursing Student
College of Nursing
University of Saskatchewan
Appendix D. Interview guide.
Interview Guide

WHAT FACTORS HAVE PLAYED A ROLE INTO THE INDIVIDUAL NURSE EDUCATOR'S DECISION OF CHOOSING AN INSTRUCTIONAL STRATEGY?

Demographics

1. How long have you been teaching in the Nursing Education Program of Saskatchewan?

2. What courses do you currently teach? What courses have you previously taught?

3. For each course, please estimate the size of each class.

Philosophy of Teaching

4. What is your understanding of a process-oriented curriculum?

5. How do you perceive the role of the teacher and the learner within a process-oriented curriculum?

Implementation

6. What instructional strategies have you tried within the classroom? What worked well? What did not work well? Please provide examples of various experiences.

7. How did you prepare yourself to teach in a process-oriented curriculum?

Future Growth and Development

8. What factors have played a role in your decision of which instructional strategies to utilize within the classroom setting?
WHAT SUPPORT SYSTEMS HAVE BEEN OR NEED TO BE IN PLACE FOR
FACULTY DEVELOPMENT WITH RESPECT TO INSTRUCTIONAL
STRATEGIES CHOOSEN FOR THE CLASSROOM?

9. What professional development activities have you utilized to develop
   instructional strategies?

10. What support systems do you feel have been or need to be in place for faculty
    teaching within the classroom setting?
Appendix E: Consent form for participation.
Consent form

You are invited to participate in a study entitled Instructional Strategies Chosen for the Classroom in a Process-oriented Curriculum: A Grounded Theory. Please read this form carefully, and feel free to ask any questions you might have.

Researchers: Shauna Davies, Master of Nursing student, College of Nursing, University of Saskatchewan, phone number (306) 798-0740.
Dr. Sandra Bassendowski, research supervisor, College of Nursing, University of Saskatchewan, phone number (306) 798-0735.

Purpose and procedure: The purpose of this study is to present a grounded theory for instructional strategies used within the classroom setting in a process-oriented curriculum. This grounded theory will be based upon research guided by two major research questions: What factors have played a role into the individual faculty decision of choosing an instructional strategy? What support systems have been or need to be in place for faculty development with respect to instructional strategies chosen for the classroom? Your participation in this study is completely voluntary. The in-person interview will take approximately one hour to complete. The interview will take place during a mutually agreed upon time and in a location away from your workplace. You will be asked to share your knowledge about the questions. You may refuse to answer individual questions. This interview will be audio taped to ensure that all of the information is collected accurately and thoroughly. You may be asked to participate in follow-up interviews to confirm findings. Dr. Sandra Bassendowski at the College of Nursing, University of Saskatchewan in Regina, Saskatchewan will keep the tapes and
transcribed files locked for a period of 5 years and may then destroy all tapes and transcribed files. You will receive a final copy of the thesis by mail.

**Potential risks:** There is a risk that you may be identified through the use of direct quotations, however no identifying data will be reported within the study. There may be no direct benefits to you personally with your participation; however the information gathered will provide a theory of how instructional strategies are chosen for the classroom setting in a process-oriented curriculum.

**Confidentiality:** Because the participants for this study have been selected from a small group of people, all of whom are known to each other, it is possible that you may be identifiable to other people on the basis of what you have said. Confidentiality will be maintained at all times with identifying personal information stored in a separate location from the transcripts, so that it will not be possible to associate a name with any given set of responses. Data will be reviewed and interpreted by the researchers only. Pseudonyms will be used to present information in the form of quotations.

**Right to withdraw:** You may withdraw from the study for any reason, at any time, without penalty of any sort. If you withdraw from the study at any time, any data that you have contributed will be destroyed.

**Questions:** If you have any questions concerning the study, please feel free to ask at any point. You are also free to contact the researchers at the numbers printed above if you have any questions at a later time. This research study was reviewed and approved on ethical grounds by the University of Saskatchewan Behavioural Research Ethics Board on June 7, 2006. Any questions regarding your rights as a participant may be addressed to
the Office of Research Services at (306) 966-2084. Out of town participants may call collect.

**Consent to participate:** I have read and understood the description provided above. I have been provided with an opportunity to ask questions and my questions have been answered satisfactorily. I consent to participate in the study described above, understanding that I may withdraw this consent at any time. A copy of this consent form has been given to me for my records.

________________________________________________________________________

(Signature of participant)                                (Date)

________________________________________________________________________

(Signature of researcher)                               (Date)
Appendix F. Pictorial representation of initial coding for data analysis.
This figure is a pictorial representation of the initial coding for instructional strategies influences. The numbers in the bracket represent the number of times the factor was mentioned in the interviews followed by the number of times the factor was associated with another category.
Appendix G. Pictorial representation of initial coding for data analysis of student-centred activities.
This figure is the pictorial representation for student-centred activities. These are the categories that emerged from the data that focused on instructional strategies taken by nurse educators who identified with a student-centred approach.
Appendix H. Pictorial representation of initial coding for data analysis of teacher-centred activities.
This is a pictorial representation of the categories that emerged from interviews with nurse educators who had a teacher-centred philosophy of teaching.
Appendix I. Pictorial representation of initial coding for support systems.
This is a pictorial representation of the categories that emerged dealing with the topic of support systems that are or need to be in place.