UNDERSTANDING REFLECTION FROM THE PERSPECTIVE OF BACCALAUREATE NURSING STUDENTS

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DEDICATION

I dedicate this dissertation to the nurses in my family, each of whom has contributed far more to my understanding of the art and science of nursing than they will ever know. To the memory of my maternal grandmother, Anne R. Gehris, a diploma graduate who was surely a woman ahead of her time, and who would certainly have been empowered to pursue further education in nursing if she had lived in a different era. To my sister, Susan Greenawald Ammatelli, who is a much better clinician that I can ever aspire to be, and whose cross-country phone conversations with me as I drove home from Widener on the "blue route" always helped me re-frame my perspective on the process of doctoral education, made me smile, and gave me hope. And to my mother, Patricia A. (Gehris) Greenawald, a graduate of a prestigious university's three-year program in nursing only because there was no financial support for a 4-year degree, who has always supported my learning and who modeled for me the reality of reflective practice and "mindfulness in nursing" before it ever became the focus of my own research and practice. I am grateful to each of you, and to nurses and nursing students everywhere who aren't afraid to stop and ask "why" rather than thinking and acting in established patterns "because we've always done it that way".

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ABSTRACT

Across the nation, nurse educators are seeking to meet the needs of students with diverse learning characteristics within increasingly complex academic and clinical environments. One teaching-learning strategy that has been used is reflection; however, there is a notable lack of consensus among educators and researchers about the specific nature of reflection. The purpose of this study was to describe reflection from the perspective of baccalaureate nursing students. A review of the literature provided the context for the study, and was organized into four sections: Historical Perspectives, Models and Definitions of Reflection; Reflection in Nursing Practice; Reflection in Nursing Education; and Reflection in Other Disciplines.

Using a qualitative descriptive design within a naturalistic paradigm, undergraduate nursing students currently at the junior or senior level in three generic baccalaureate programs were individually interviewed to answer to the question: "What is the nature of reflection for undergraduate nursing students?". The use of such a design facilitated the careful examination of descriptions of reflection offered by participants, allowing the researcher to look for common properties in the data and discern emerging themes through constant content comparison. Convenience sampling from nursing programs within southeastern Pennsylvania was utilized.

Five main themes and 18 subthemes were identified in the analysis of data units from the interview transcripts. The main themes discovered included: Looking back

to deepen understanding, Being mindful of thoughts and feelings, Gaining perspective,
Giving words to experiences and emotions that have no right or wrong answer, and Using
reflection for learning. Student quotes supporting both the major themes and subthemes
gave evidence that reflection is generally a valued practice among undergraduate nursing
students and contributed positively to their nursing education.

Implications for nursing practice, nursing science, and nursing education are discussed. In particular, the findings from this study contributed to nursing research by providing information heretofore not addressed in the literature about the perceptions of undergraduate nursing students regarding reflection. Such information will allow nurse educators to better understand and contextualize its use for teaching and learning. Most students interviewed stated explicitly that they valued reflection and anticipated using it in their future professional practice. This finding points out the importance of including reflection/reflective activities in undergraduate nursing education and reinforces its importance for lifelong learning. Although the study was limited in its scope, utilizing a total of 16 students from three programs in a specific geographical area, it was significant to note that students' perceptions of the nature of reflection shared some common ideas depending on the program in which they were enrolled. It was apparent from the analysis that individual nursing education programs and faculty are influential over baccalaureate students' thoughts about and use of reflection. Future research building on this study may validate and refine the identified themes and explore the manner in which these may support existing models of reflection in nursing.

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CHAPTER I

INTRODUCTION

As nurse educators across the nation and around the world seek to meet the needs of students with diverse learning characteristics within increasingly complex academic and clinical learning environments, they are using many different teaching-learning strategies. One such strategy is the use of reflection, which is discussed in the literature as including a variety of activities such as storytelling, journaling, clinical logs, creative artwork, meditation, poetry, blogs, online discussion groups, debriefing sessions, dialogue pairs, and more (Bolton, 1999; Boyd & Fayles, 1983; Cole, 2005; Diekelmann, 1991; Duke & Appleton, 2000; Fiddler & Marienau, 2008; Freshwater, Horton-Deutsch, Sherwood, & Taylor, 2005; Gully, 2005; Johns, 2000, 2004; Laplante, 2007; Taylor, 2003; Thornton, 2005; VanHorn & Freed, 2008). There is a lack of consensus among researchers about the specific nature of reflection as it is used in teaching, learning, and professional practice. In addition, there is no universally accepted definition of reflection as it is understood and used in nursing (Greenawald, 2006; Honey, Waterworth, Baker, & Lenzie-Smith, 2006). In a critical analysis of data-based studies and implications for nursing education, Ruth-Sahd (2003) reported finding the terms "reflection", "reflective practice", "reflexivity", and "reflective learning" used interchangeably, thus demonstrating the lack of agreement regarding terminology. This researcher does not believe that there will be or needs to be a commonly held definition of reflection.

With the exception of one qualitative study (Hong & Chew, 2008) done in China using focus groups to explore nursing students' views of reflective practice, to date this

researcher has not found any published research in or out of the United Stated (U.S.) that specifically addresses nursing student perceptions about reflection. A deeper understanding of the perceptions of undergraduate nursing students about reflection allows nurse educators to better contextualize its use for teaching and learning. Understanding the perspective of undergraduate nursing students regarding reflection is important because such perspectives may affect the manner in which they engage in reflective learning activities and the outcomes realized from these activities. The ways in which students perceive reflection and actively engage in various reflective activities during the course of their undergraduate education may also influence their motivation to continue to use reflection as a life-long learning strategy once they are practicing professional nurses. As nursing education programs begin to increase the use of simulation technology and service-learning, both of which utilize reflection as an essential aspect of the teaching-learning process, it is important to explore the meaning of the phenomenon with the students who are engaging in it. Therefore, for both educational and clinical practice reasons, it was deemed important to pursue a study of the perspectives of nursing students regarding reflection.

Statement of the Problem

Although reflection is increasingly used as a teaching-learning strategy in nursing education (Ferguson & Day, 2005; Nielson, Stragnell, & Jester, 2007), no significant research to date in the U.S. has considered how students view and understand the use of reflection. Without an understanding of the perspectives of students regarding reflection, nurse educators are unable to fully utilize it for optimal learning outcomes.

Purpose of the Study

The purpose of this study was to describe reflection from the perspective of junior and senior level generic baccalaureate nursing students in order to provide nurse educators with information about reflection from the student perspective so that reflection may be more effectively used in academic courses and clinical education to promote and enhance learning.

Background of the Study

Seminal works regarding reflection (Boud, Keogh, & Walker, 1985; Boyd & Fales, 1983; Dewey, 1933; Schön, 1983, 1987) discussed the manner in which thinking, feeling, and doing are interconnected within reflective activities. Over a decade ago, Pierson (1998) studied the use of reflection as both a technique and a "purposeful intersubjective process" (p. 167), noting that reflection was increasingly included in nursing curricula as a pedagogical method. More recently, Fiddler and Marienau (2008) described "the importance of reflection as a requisite mediator between the experiences of students and the meaning they make of those experiences" (p. 75). They asserted that reflection is "an essential bridge between experience and learning" (p. 75) that must be learned and practiced. In their Events Model of Learning from Experience, Fiddler and Marienau depicted the pivotal role of reflection in converting an event to an experience out of which meaningful learning can occur. "Meaningful learning" is the "ultimate intention of reflective inquiry" (p. 79) used as a strategy within experiential learning. Both the object of reflection and the process of reflection are, they proposed, at the heart of learning from experience. The examination of both early works and more recent studies examining the

role of reflection in connecting experience and learning has significance for nursing, which prominently includes clinical experiences in all of its educational programs.

Reflection is a process that requires development. The history of its use as an educational method in the 20th century started with Dewey (1933), who understood reflection as an active and intentional cognitive process, involving sequences of interconnected ideas which take into account prior experiences, underlying beliefs and knowledge. Dewey defined reflective thought as "active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends" (p. 118). Ruth-Sahd (2003) noted that, for Dewey, "reflection is not only a rational, intellectual act but also an act that involves the whole person, including his or her emotions" (p. 489). In the latter part of the 20th century, educational theorists such as Mezirow (1991) and Brookfield (1995) continued to pursue the understanding and analysis of the concept of reflection, and "have proposed that reflection is indeed a learning tool with implications for the teaching-learning process" (Ruth-Sahd, p. 489).

Fink (2003), in his discussion of a Taxonomy of Significant Learning, pointed out the need for many students in higher education to "learn how to learn" (p. 14). By developing reflexive thinking, as opposed to increasing their capacity for "memorized knowledge" (p. 2), Fink proposed that students will be able to develop the problemsolving and reasoning skills they often sorely lack, thereby increasing their ability for complex thinking and application of learning to real-life situations. A significant learning experience, according to Fink, has both process and outcome dimensions. Similarly, the

phenomenon of reflection has both process and outcome dimensions, according to the conceptual definition used in this study (Greenawald, 2006). The major categories of Fink's Taxonomy of Significant Learning (p. 31) are foundational knowledge, application, integration, human dimension, caring, and learning how to learn. Each kind of learning has a synergistic relationship with the others, and, according to Fink, teaching and learning are synergistic activities as well. Reflection, alone or with others, on what one is learning, how one is learning, how this learning relates to one's own life experiences, and how it makes one feel, is one of three key components of active learning and is linked to the "human need to make meaning" (p. 105). As both teachers and learners, people are "meaning-making beings", according to Fink.

As humans, we have the capacity to change the meaning of our ideas and experiences --- but only when we pull our original meanings up to the conscious level and reflect on what new meaning we want those ideas or experiences to have. Only then do we become meaning-making beings, rather than simply meaning-receiving beings. (p. 106)

Fink's work, targeted toward teaching-learning in higher education, is noteworthy for nurse educators in that it presents a number of suggested strategies to promote reflective learning which have not heretofore been addressed specifically in the nursing literature reviewed. These strategies include one-minute papers, learning logs, and learning portfolios. Additionally, Fink very intentionally described teaching and learning as two points along the same continuum and informed this researcher's ideas of teaching and learning as reciprocal activities. The synergistic nature of teaching and learning in Fink's

work resonates with this researcher's fundamental understanding of nursing education, and supports the use of reflection by both teachers and learners as a "dynamic process of personal and professional growth which informs future behaviors" (Greenawald, 2006). The emphasis on "meaning-making" as differentiated from "meaning-receiving" are central themes in Fink's research which underline the importance of active learning environments in higher education, including pre-professional programs such as nursing.

Pierson (1998) described reflection as the integration of calculative thinking and contemplative thinking, wherein the former is a more deliberate problem solving activity and the latter is an exploration of deeper meaning. The process of reflection helps one connect a present situation, such as a clinical experience, with previous knowledge, resulting in a deeper understanding of the experience (Perry, 2000). In order for nursing students ("novices") to learn how to reflect in a meaningful manner, structure and guidance are required (Johns, 1995), generally coming from faculty engaged with the students in teaching and learning. Within a curriculum, reflection has been described as the intentional consideration of an experience that is tied into learning outcomes for a course (Hatcher & Bringle, 1997). Within designated service-learning courses, in particular, the use of reflective activities is an expected teaching-learning strategy. Laplante (2007) noted that students in a service-learning course are frequently exposed to situations and populations different from their own experience, and that reflection can be the means by which they identify their reactions to these experiences and gain insight into both themselves and the experiences.

In their frequently cited work, Boud et al. (1985) described reflection as "an important human activity in which people recapture their experience, think about it, mull it over, and evaluate it" (p. 19). This "working with the experience", Boud et al. maintained, has a significant effect on learning outcomes. Nielsen, Stragnell, and Jester (2007), along with Johns (1995), Kuiper and Pesut (2004), and Ruth-Sahd (2003) noted that, specifically for nursing education, reflection is thought to promote learning and increase retention of knowledge and skills experienced and practiced in clinical settings. The "Guide for Reflection Using Tanner's (2006) Clinical Judgment Model" developed by Nielsen, Stragnell, and Jester speaks to reflection as a process integral to active learning. Tanner's (2006) original model featured reflection as the last of four phases in developing clinical judgment or "thinking like a nurse" (p. 204). Clinical learning is the student outcome in Tanner's model, resulting from a series of non-linear activities which include reflection-in-action and reflection-on-action.

Consideration of the aforementioned studies and meta-reflection (reflection about reflection) leads to the awareness that there are many possible interrelated variables which may influence the understanding and use of reflection. The attitudes and understanding about reflection among nurse educators have been explored and reported in the nursing and allied health literature (Boyd & Fales, 1983; Burnard, 1995; Hannigan, 2001; Kuiper, 1999). Other researchers have described the varieties of learning styles of both nursing students and teachers and the prior experience with reflection/reflective practices of undergraduate nursing students as factors that may affect specific learning outcomes when reflection is used as a teaching-learning strategy (Duke & Appleton,

2000; Freshwater, 1999; Taylor, 2003). The fundamental question of the meaning of reflection for nursing students themselves, however, is absent from the body of research about these pedagogical considerations. As Pierson (1998) astutely observed: "The lives of student nurses have been significantly affected by these multiple and tacit understandings of the concept [reflection]...as activities have been consciously included in curriculum to foster reflective development" (p. 165). Therefore, it is important to examine student perceptions about reflection in order to uncover new understanding of the concept which may be used to inform nursing education.

Research Question

This study examined the question: What is the nature of reflection for undergraduate nursing students?

Definition of Terms

- 1. Reflection in its most common, everyday usage is defined in several ways, depending on its context, including: the act of bending back; a thought, idea, or opinion formed as a result of meditation; consideration of some subject, idea, or purpose; mental concentration; careful consideration (Merriam-Webster Online Dictionary, 2008). Related entries include such terms as self-reflection, angle of reflection, and self-examination (The American Heritage Dictionary, Online version, 2008).
- 2. Reflection in nursing is conceptually defined for this study as a holistic process of discernment, involving the body, mind, and spirit, through which the individual makes sense of an experience, idea, feeling, event, or question in/on/about nursing, and through such sense-making discovers greater understanding of various factors which affect the

nurse's role (Greenawald, 2006). Inherent in this conceptual definition is the understanding that reflection in nursing is a dynamic process of personal and professional growth which informs future behaviors.

3. Undergraduate nursing student is any male or female student enrolled at the junior or senior level in a generic baccalaureate nursing program in the United States. The definition included English-speaking students of any age who are enrolled in either part-time or full-time study in a traditional 4-year program and who have completed or are currently enrolled in a psychiatric/mental health nursing course. Students enrolled in second-degree or alternative (BSN/MSN) programs were not included within this definition.

Methodology

This study used a qualitative descriptive design. By using this design, this researcher was able to examine the descriptions of reflection offered by baccalaureate nursing students, look for common properties in the data, and discern emerging themes, as well as begin to interpret the meaning assigned to reflection by these same students. Within this methodological approach, the researcher continually compared new data to that which had already been examined, using the technique of constant comparative data analysis (Strauss & Corbin, 1990).

Based on the premise that there is more than one reality when exploring questions of meaning, a qualitative approach was most appropriate for the study of perceptions of undergraduate nursing students regarding reflection. The naturalistic paradigm articulated by Lincoln and Guba (1985) provided the backdrop against which the research design

was conceived. Its constructivist philosophy supports the exploration of the phenomenon of reflection as perceived by nursing students without assigning a priori assumptions to their responses, as would a hypothesis-based positivist methodology. This form of inquiry allowed all students' expressed ideas to be examined in order to discern their present thoughts about reflection without assigning "right" or "wrong" judgments to these ideas. Key elements of the naturalist paradigm were met in the study design, including the use of the researcher as the instrument of data collection in face-to-face individual interviews with students in their natural setting. In addition, the acknowledgment that the researcher has tacit knowledge about the phenomenon allowed her to be adaptable in responding to emerging themes and situations as the study was carried out. In Chapter III, additional reasons for using the naturalistic paradigm are presented, including discussion of the five basic axioms (p. 37) and specific characteristics (p. 39) as they relate to the present study.

The descriptive mode of inquiry (Artinian, 1988) was the initial approach to gathering and analyzing qualitative data which was utilized for this study. Sandelowski (1995b, 1997, 2000) has demonstrated the use of qualitative description as a legitimate form of research to advance nursing knowledge. Seeking to discover and describe the nature of reflection for undergraduate nursing students matches the goals of a qualitative descriptive design. The use of such a design permitted the researcher to maintain a focus on "understanding the essence of experiences about a phenomenon" (Cresswell, 1998, p. 65), specifically the experiences and understanding, the perceptions, of nursing students regarding reflection.

The phenomenon of reflection is subjective by nature. Therefore, qualitative methods can best uncover the subtleties of its meaning for nursing students and capture not just recurring themes, but also the potential diversity of meanings and experiences of reflection among individual students. Qualitative research has been described as an interactive approach that is systematic yet subjective and that is used to describe life experiences (Leininger, 1985; Munhall & Boyd, 1999). Through such rich description revealed within the framework of a naturalistic paradigm, researchers are able to more fully understand the meaning of these experiences for the participants. By first examining qualitative data about student perceptions regarding reflection in nursing, the findings from this study provide a foundation for future studies to build upon in examining the use and outcomes of specific reflective practices in nursing education.

Theoretical Framework

Several theoretical frameworks, from both within and outside the discipline of nursing, were used in analyzing the concept of reflection in nursing and arriving at the derived definition (Greenawald, 2006) used in this study. These included Paterson and Zderad's (1976) Theory of Humanistic Nursing, Parse's (1992) Theory of Human Becoming, Kolb's (1984) Theory of Experiential Learning, Mezirow's (1997) Transformative Learning Theory, and Kuiper's (1999) Self-Regulated Learning Theory. Utilizing criteria from Meleis (2007), each theory was reviewed and critiqued in order to examine if it might provide a lens through which the phenomenon of student nurses' perceptions of reflection could be better studied and understood.

After much thought about the use of a specific theory to underpin the development of this study, this researcher decided that the use of any theory or model would be a limitation rather than an asset, especially during the descriptive and initial analysis/interpretation phases. Within this study of the perspectives of baccalaureate nursing students regarding reflection, the descriptive mode of inquiry as described by Artinian (1988) and "emergent nature of qualitative research design" (Sandelowski, 2003, p. 781) are incompatible with the use of an a priori conceptual framework. Therefore, the study was structured without a guiding theoretical model so as to not limit the types of information that could be revealed and/or discerned through the interview process. This approach is consistent with the naturalistic paradigm (Lincoln & Guba, 1985) and constructivist educational philosophy and permitted the researcher, during both the data collection and analysis phases of the study, to be open to the true nature of reflection as perceived by the subjects. As the study progressed through theme identification and analysis, no one model or theory from nursing or another discipline was determined to be useful in explaining the comprehensive findings. Portions of the findings, however, were identified as relating to already existing theories and models, and these relationships are discussed in Chapter V.

Van Sant (2003) used an atheoretical qualitative approach within a naturalistic paradigm to explore the processes that nurses use to connect with psychiatric patients' emotional pain. While Van Sant's specific methodology was that of participant observation, her research demonstrated the liberating quality that such an approach renders when utilized to explore the meaning of phenomena within nursing practice.

Thorne, Kirkham, and MacDonald-Emes (1997) proposed that traditional methodology and the adherence to historically accepted research practices may not best serve the goals of nursing knowledge generation in the post-modern era. They advocated for the acceptance of interpretive descriptive methods as a valid alternative for developing nursing knowledge and advancing nursing science. The use of a theoretical framework for nursing research may, according to Thorne et al., limit the scope and depth of the study of phenomena that will be essential to consider within nursing science in the 21st century. This researcher found that an atheoretical approach is a credible and valid form of research which can advance the science of nursing and the practice of nursing education. Effectively utilizing this methodology and building a knowledge base through qualitative description is, in and of itself, a valid contribution to nursing's epistemology at this point in history.

Researcher's Worldview

The overarching purpose and design of this study emerged from the researcher's predominantly existential worldview. An assumption of the conceptual definition of reflection utilized within this research is that it is a deeply personal experience. The researcher's worldview supports the idea that each person has free will and self-determination. Perceptions are subjective rather than objective, and grow out of one's specific contextual experiences. The philosophical underpinnings of existentialism include personal responsibility for one's actions and for self-development. The development of self, not unlike the reflective process as defined by Greenawald (2006), is an on-going evolution of growth and understanding. Within the context of existential

understanding, individuals make choices which are neither inherently right nor wrong (Welch, 1999). Similarly, reflection, according to the conceptual definition utilized for this study, is a highly personal experience. Therefore, it was appropriate that a form of naturalistic inquiry be used to explore the questions of belief and meaning set forth in this study.

Within such an epistemological framework, reflection could be examined without seeking to exclusively define it or examine it empirically. Utilizing this philosophical view supported the discovery of subtle meanings and nuanced understandings as expressed by individual undergraduate nursing students in this study. The existential worldview supported the researcher's openness to the individual responses of each study participant as they discussed their perceptions of reflection. With such a state of open mindfulness, the researcher could be truly present to all students as they were interviewed, and be able to hear the words and meanings being shared with greater clarity and insight.

A day-long seminar the researcher attended in October 2007 with Christopher Johns, author of some of the most-cited works on reflection in nursing currently found in scholarly writing, provided not only new insights and information about the uses of reflection, particularly narratives, in nursing practice and education, but was also a source of inspiration which deserves to be noted. The opportunity to learn from such a renowned and respected nurse researcher, educator, and clinician aided the researcher in articulating the research question. A personal conversation with Johns at this seminar helped the

researcher clarify the conceptual definition of reflection and focus the direction of the overall study.

Assumptions of the Researcher

- 1. Reflection is a process of sense-making that is essential in a constantly changing world, and will be a vital part of a person's life-long education over the course of a career in nursing.
- 2. Most baccalaureate nursing students are currently using reflection in one form or another within the context of their learning, although they may not be fully conscious of its use or familiar enough with current pedagogy to call it by that term.

Biases of the Researcher

- 1. Reflection has the potential to be a positive and significant teaching-learning strategy for both formal educational programs and less-structured continuing education and lifelong learning experiences.
- 2. Reflection is a dynamic process of personal and professional growth which informs future behaviors.

Significance of Research

This study is significant because it adds a new dimension to the discussion of reflection and reflective activities for teaching-learning and gives researchers and educators a new lens through which to view and understand the concept. There are potential positive outcomes for all areas of nursing based on the findings of this study, which is presented at a time of remarkable change for systems of healthcare delivery and,

more to the point of this research, challenges and changes in the ways in which nurses are educated and practice.

Nursing Education

The purpose of this study was to describe reflection from the perspective of baccalaureate nursing students in order to provide nurse educators with information about reflection from the student perspective so that reflection may be more effectively used in academic courses and clinical education to promote and enhance learning. Such research is important at this time in history because a better understanding of what reflection means to students will assist nurse educators to effectively utilize it as a teaching-learning strategy. "Educators can promote personal transformation by enabling learners to enter into an inner dialogue" through reflection (Wade, 1998, p. 714). Such "personal transformation" is a worthy goal of education, but cannot be fully realized if the person/s involved has an inadequate understanding of the nature of such reflection. This study addressed the present understanding of student perceptions regarding reflection.

Nursing education is fundamentally experiential in nature, and educational programs are increasingly integrating service learning experiences into their undergraduate and graduate curricula. In their presentation of a case study in service learning, Baumberger-Henry, Krouse, and Borucki (2006) found that the use of reflection was a key component of the service-learning experience for nursing students in a freshman level course. Their observations of students over a 12-week period revealed that reflective activities such as journaling or group discussion aided students with thinking about their service learning experience and discerning whether or not their goals for the

experience were being met. In addition, reflection helped the students clarify their feelings about the experiences, enhancing both cognitive and emotional learning, and also clarified misconceptions, thereby benefiting both the giver (student) and receiver of service within the community setting. The increased understanding of reflection from the student perspective which the present study has described will enable nurse educators to more effectively use reflective practices within the context of service learning experiences.

Pesut (2005) asserted that "sense making is a universal activity...influenced by time, place, culture, and the unique worldview of the people engaged...in the process" (p. x). This study can be a vehicle for "sense making" for those nurse educators who, in whatever time, place, and culture they find themselves, are seeking to increase their understanding of reflective practices as teaching-learning strategies. The analysis and interpretation of questions and discussions regarding the meaning of reflection for nursing students provides additional evidence that nurse educators can use in making sound pedagogical decisions. By examining the perceptions of nursing students regarding the meaning of reflection, additional layers of understanding have been revealed, and, by considering this information, educators will be able to better utilize teaching-learning strategies using reflection in the educational setting.

Nursing Practice

Numerous researchers (Bolton, 1999; Buresh & Gordon, 2000; Burton, 2000; Cole, 2005; Hudacek, 2000; Kuiper, 2005; Taylor, 2004; Taylor, 2003) have found that professional nurses can engage in self-reflection in order to improve their practice, hone

their critical thinking ability, gain perspective, and discover meaning in the day-in, dayout professional and personal issues with which they are challenged. Given that many
nurses have realized the benefits of reflection in their clinical practice (Freshwater, 2004;
Gustafsson & Fagerberg, 2004; Johns, 1999, 2007a; Taylor, 2004), it would stand to
reason that student nurses may also be able to benefit by learning and practicing
reflective activities. By understanding the perceptions of student nurses regarding
reflection, clinical nursing leaders and administrators may encourage nurses in various
practice settings to build upon reflective activities they have been exposed to as
undergraduates and continue to develop their reflective practices as a means of sensemaking in their on-going nursing careers.

Nursing Science

Diekelmann (1991), whose work on interpretive phenomenology has contributed significantly to the present body of nursing knowledge, has suggested that innovation can result from reflection on lived experiences. Innovation, therefore, can result from the meta-reflection inherent in this study, as well as from the new ideas generated by the analysis and interpretation of the data. The consideration of students' perceptions about reflection may prompt nursing theorists to examine new ways in which qualitative inquiry can contribute to meaning-making in a manner that broadens the scope of nursing science rather than limiting it. Although the present study was descriptive in nature, future research based on its findings may delve into greater analysis of the perceptions of nursing students regarding reflection. Critical thinking and discussion about the findings

of this study may provide support for the development of models or theories to explain and support reflection in nursing.

Nursing Research

The findings generated by this qualitative research add to the growing body of knowledge related to reflection and reflective practices. As there are presently no published studies found by the researcher in the U.S. which specifically examined the meaning of reflection for undergraduate nursing students, the results from this research bring to the discussion of reflection a new dimension heretofore not revealed. Based on the findings from this study, future research may examine various aspects of the concept of reflection in greater detail, perhaps leading to empirical studies which can form the basis for evidence-based practice in nursing education related to its use. At a time in history when healthcare reform is focusing attention on the importance of nurses and nursing, researchers can benefit from both studying and using reflection. Reflection in nursing "helps us to explore what is just beyond the line of vision. It can be seen as a way of viewing the unfolding drama of the nurse becoming" (Freshwater, 2002, p. 8).

In addition to adding to the body of knowledge by contributing new understandings about reflection from the student perspective, this study contributes to nursing research by utilizing qualitative methods to discover nuanced aspects of the concept. The descriptive mode (Artinian, 1988), as an initial research method to explore student perceptions regarding reflection, provided a foundation for discovery in this study. The goal of the descriptive mode is to provide details that will allow the reader to understand a phenomenon of interest from another's perspective. The process of

discerning patterns among the responses of various subjects and of analyzing the manner in which such patterns relate to one another occurs in Artinian's discovery mode and equates to the interpretive phase of the descriptive-interpretive methodology used in this study. The rich descriptions of student perceptions regarding reflection which have been revealed in this study contribute to a deeper understanding of the concept and can serve as a guide for future research studies on the topic.

Chapter Summary

The purpose of this study was to describe reflection from the perspective of junior and senior level generic baccalaureate nursing students. Seeking to discover what undergraduate nursing students think and believe about reflection, this study posed the question: What is the nature of reflection for undergraduate nursing students?

Reflection in nursing was defined as a holistic process of discernment, involving the body, mind, and spirit, through which the individual makes sense of an experience, idea, feeling, event, or question in/on/about nursing, and through such sense-making discovers greater understanding of various factors which affect the nurse's role (Greenawald, 2006).

The researcher's predominantly existential worldview guided the examination of all students' ideas and opinions within a naturalistic paradigm (Lincoln & Guba, 1985) in order to discern their present perceptions about reflection. By providing a better understanding of what reflection means to undergraduate students, the results of this study are beneficial for nurse educators who seek to use reflection as a teaching-learning strategy. The results of this study also have significance for nursing practice, in which

clinical leaders may encourage nurses in various practice settings to build upon experiences they had as undergraduates and continue to develop their reflective practices as a means of sense-making in their on-going professional careers. As there is presently only one other published study (Hong & Chew, 2008) which has been found on the meaning of reflection for undergraduate nursing students, the results from this research will bring to the discussion a new dimension heretofore not revealed. There are potential positive outcomes for nursing education, practice, science, and research based on the better understanding of the nature of reflection for undergraduate nursing students which has been revealed by this research.

CHAPTER II

LITERATURE REVIEW

The Context for this Study

A review of the literature provided the context for a broad understanding of reflection, particularly reflection as it is used and practiced in nursing. While some qualitative researchers postpone a review of the literature until that time when they are actually gathering and/or analyzing data, in order for such literature to inform but not heavily bias their interpretation, significant study of the literature has been on-going for the researcher prior to the development of this study, and so pretending to ignore these findings would be not only illogical but also unethical. To facilitate a better understanding of what others have written about reflection and closely related concepts, Chapter II has been grouped categorically as: Historical Perspectives, Models and Definitions of Reflection; Reflection in Nursing Practice; Reflection in Nursing Education; and Reflection in Other Disciplines.

Although there is a growing body of literature on reflection, terms used in discussing reflection vary among academic disciplines and individual researchers. Therefore, several initial searches were conducted using what standard internet databases suggested are closely related terms, such as "reflection", "journaling", "reflective practice" and "critical thinking", in order to assess the body of research which was available for review. The results of these initial searches produced numerous resources from both within and outside the discipline of nursing. Much of the literature has come from outside the United States, specifically from Canada, Australia, Great Britain, and

Scandinavia. Over the past decade, nurse researchers in the U.S. have increasingly begun to devote attention to various dimensions of reflection, and there has been a noted increase in both publications and conference presentations focused on the topic.

Nevertheless, there are still few empirical studies regarding reflection and, therefore, much of the literature which was available for review was of a narrative nature, such as critical analyses and theoretical discourses synthesizing the work of others. Within this qualitative descriptive research study, Chapter II is presented in order to provide a background understanding of the phenomenon of reflection as well as to provide the context in which the research question ["What is the nature of reflection for undergraduate nursing students?"] may be thoroughly examined.

A search of the literature was conducted in June 2006 using the Academic Search Premier and CINAHL databases. "Reflection" and "reflective practice" were utilized as the main search parameters and paired with various stems (nursing, nursing education, journaling, critical thinking, medicine, occupational therapy, education, business, social work, psychology, counseling, health sciences). Initial searches using this method yielded over 700 articles, which were then limited to only those in English, bringing the total down to 432 articles. Of these, the abstracts of those published since 2001 were reviewed online to determine if they would be suitable to support the general research topic of reflection in nursing. Using an ancestry method, this initial computer search was supplemented with a manual search through the library holdings at two universities. Subsequent computer searches in September and October 2006, using key terms (reflection, reflective practice, undergraduate education, critical thinking) suggested by

the literature reviewed from July 2006, yielded 58 additional articles which were reviewed for their applicability to the research topic. Over the course of 2006 to 2008, the researcher began reviewing books related to reflection and reflective practice, utilizing the articles under consideration as a guide to the important historical literature related to the concept.

During the fall of 2007, an additional literature search was conducted, using the keywords "reflection", "meaning", and "nursing students". The initial search, using both Academic Search Premier and CINAHL, yielded 1,101 results. This list was then limited to include only those articles in English which had been published since 2003, in an effort to reveal the most current literature on the topic. The resulting list was pared to 468 titles. Most of these were duplications of articles which had already been obtained for review in 2006, but 27 new full text articles in English were obtained. Another search for relevant literature was conducted in September 2008, focusing on titles published since 2003 in English which had not been revealed in earlier searches. This search was helpful in identifying seven new articles and two books related to the research topic, as well as six articles via the ancestry method which provided evidence for the definitions of key terms and concepts used in this proposal. From January 2009 through March 2010, the article databases were monitored for new publications related to "reflection", "reflective practice", and "reflection in nursing", and in so doing, the most current research related to the research topic was able to be reviewed and considered during data collection and analysis.

Sigma Theta Tau International, The Honor Society of Nursing, published a comprehensive web-based reference during the 2003-2005 presidency of Daniel J. Pesut titled "Renewal Resource Guide". This guide includes an entire section on "Renewal Through Attention to the Scholarship of Reflective Practice" and promotes the use of reflective practice for nursing education, clinical practice, research, and the development of nursing science. The 14 resources listed provided an excellent point from which to discover some of the most recently published research related to reflection in nursing. During the process of proposal preparation, several articles and doctoral dissertations were serendipitously discovered through conversations with advisors and peers and from networking at a national nursing education conference.

The great majority of literature which was reviewed for this study discussed the benefits of reflection for professional education and practice, referencing not only nursing but other disciplines, as well. A few studies, however, did raise questions about the effectiveness of reflective activities vis-à-vis nursing education and practice, and these are noted in their respective sections. One might speculate that there have just not been as many studies conducted to examine the barriers to reflection as there have been to examine its positive aspects. The present study, in its examination of nursing students' perceptions of reflection, reveals not only positive aspects of the phenomenon but also some of its challenges.

Historical Perspectives, Models and Definitions of Reflection

The ancient Greek philosopher Socrates may be referred to as the originator of reflection used as a means of learning and knowledge acquisition. Historians point to

Socrates' use of questions rather than answers to encourage critical thinking and reflection among his young students. "An unexamined life is not worth living", attributed to Socrates, may be considered among the earliest maxims related to reflection as a conscious, intentional, and worthy act (Dell, 2007). In the 20th century, much of the foundational work for the study of reflection and reflective learning stems from the writing of John Dewey (1933, 1938). Dewey's teaching emphasized the experiential component of learning, and his research explored the role that reflection has as a powerful tool in the learning process, connecting experience with understanding. In his development of various theories related to education and learning, Dewey (1933) outlined specific characteristics of reflection in learning: 1) there must be a triggering event; 2) each experience in life influences the quality of future experiences; and 3) reflection is an active, deliberate, conscious process. Dewey claimed that reflective thinking requires ongoing self-evaluation of assumptions, beliefs, and hypotheses against known data as well as the consideration of any other possible interpretations of or explanations for the data. Having proposed that reflection involved "looking back over what has been done" so as to glean meanings that can inform one's dealing with future similar experiences, Dewey (1938) characterized reflection as "the heart of intellectual organization and of the disciplined mind" (p. 87).

A majority of researchers currently exploring the phenomenon of reflection either take their inspiration from or take exception to the work of Schön (1983, 1987). A social scientist by background, Schön's research and writing on reflection has had an impact on professional practice and education in a broad range of disciplines around the world. His

research asserted that various levels and kinds of reflections are important in solving the types of problems encountered in the "indeterminate zones of practice -- uncertainty, uniqueness, and value conflict" (1987, p. 6). In such situations, where theory and techniques derived from scientific knowledge are insufficient to address a given problem, reflection can lead one to a solution or resolution of the problem. Specifically, Schön delineated types of reflection according to the time-frame in which said reflection occurs. Thus, discussions of Schön's work today often center on the ideas of reflection-in-practice versus reflection-on-practice, also referred to as reflection-on-action, with the former happening concurrently with an action about which one is consciously reflecting, and the latter occurring with intention after an experience has occurred and is over. Schön argued that learning and growth in wisdom can occur through reflection on dilemmas that are encountered in one's professional practice, and that by using reflection-on-action, one continues to develop one's practice, elevating such practice to what he termed "professional artistry" (1987, p. 22).

Recently, The Honor Society of Nursing, Sigma Theta Tau International, utilized Schön's (1983, 1987) conceptual understandings in developing its own primary definition of reflection. In an extensive resource paper titled "The Scholarship of Reflective Practice" (Freshwater, Horton-Deutsch, Sherwood, & Taylor, 2005), reflection is defined as:

the way in which professionals bridge the theory-practice gap. Reflection enables one to uncover knowledge in and on action. Practitioners develop practical

knowledge and working knowledge as they make sense of their work in theoretical ways. Through reflection, tacit knowledge (knowing-in-action) can be made explicit. Reflection raises awareness that enlivens and changes practice. (p. 3)

Learning theorists have added to the discussion of reflection in nursing, particularly Mezirow (1991, 1998), who's adult learning theory centers around the idea of transformative learning. Mezirow made the distinction between reflection and critical reflection, stating that the former does not necessarily imply making a judgment about what is being reflected upon, whereas the latter "requires us to bring the process of choice into awareness to examine and assess the reasons for making a particular choice" (1998, p. 1). Mezirow's conceptual definition of reflection includes the stipulation that reflection occurs only when one experiences difficulty in understanding a situation or requires guidance for a problem or question. Other general parameters in his definition are that underlying beliefs may affect how one responds to a situation and that conscious awareness and deliberate choice are antecedents to reflection. In this regard, his understanding follows the basic tenets for reflection set by Dewey. For Mezirow, reflection is an active process by which individuals transform meaning, resulting in transformational learning. In a seminal work about the concept of reflection, Boud, Keogh, and Walker (1985) also viewed reflection from the learner's perspective, evidenced by their definition: (Reflection) "is a generic term for those intellectual and affective activities in which individuals engage to explore their experiences in order to

lead to a new understanding and appreciation" (p. 2). Like Dewey and Mezirow, they acknowledged that reflective thinking is a deliberative process which requires time.

In examining the concept of reflection, specifically in its relationship to nursing education, Pierson (1998) constructed a definition based on the work of German philosopher Heidegger, for whom reflection was the prominent component of thought (p. 166). The Heideggarian perspective considers reflection to be the integration of calculative and contemplative thinking, which Pierson believed to be the optimal way of defining the concept for use in nursing. Calculative thinking emphasizes practical processes of organizing and managing information, whereas contemplative thinking "does not require that we comprehend the essence of a concept....rather, we are released into our conceptual understanding" (Pierson, p. 166). If students are asked to reflect on an experience using only calculative thinking, Pierson contended, they focus solely on facts and tasks completed, reinforcing behaviorist educational traditions. If, however, as she proposed, reflection is the blending of calculative and contemplative thinking, such thinking will facilitate the "interpretation of experience into meaning" (Pierson, p. 166).

Taylor (2003), in her discussion of "more profound and less accessible forms of knowing", referenced the highly influential work of both Carper (1978) and Belenky, Clinchy, Goldberger, and Tarule (1986) on ways of knowing. Taylor presented an excellent synthesis and good understanding of reflection, as discussed in the literature, and supported the following definition of reflective learning from Boyd and Fayles (1983): "...the process of internally examining and exploring an issue of concern, triggered by an experience, which creates and clarifies meaning in terms of self, and

which results in a changed conceptual perspective" (p. 100). Taylor's definition most closely resembles the conceptual definition used in this study, although this researcher takes exception to her use of the "issue of concern", noting its negative connotations. The definition developed by Greenawald (2006) grew out of the understanding that the antecedent to reflection in nursing, the trigger which prompts one to reflect, might be any type of thought, event, feeling, experience, or question and not necessarily just an "issue of concern" (Taylor, p. 100).

Christopher Johns (2007a), one of the world's foremost researchers on reflection in nursing, gave his concise definition of reflection as "a developmental process of paying attention to and learning through everyday experiences, with the goal of realizing a vision of practice as a lived reality" (p. 1). Johns (2004) expanded on this definition considerably in other works (1995, 2000, 2004, 2006, 2007b), even while struggling with the challenge of defining a concept which is, essentially, continuously evolving. Johns, in fact, wrote that he prefers "description" to "definition" when considering the concept of reflection (p. 2). His definitions are similar to a melodic theme and variation, evolving with his on-going teaching and clinical practice. Johns' understanding of reflection is similar to the researcher's own essential understanding of the concept and underscores the importance of mindfulness in nursing practice. However, Johns' definition differs from this researcher's in that his focuses more on one's individual practice of nursing rather than on the broader scope of nursing, including education, advocacy, and research, as well as clinical practice. While Johns' work on reflective practice in nursing and nursing education has significantly influenced the knowledge development of this

researcher, his emphasis on the use of personal narratives as a way of entering into dialogue with what one is doing, thinking, or feeling is too narrowly defined for this study's conceptual definition. The Model for Structured Reflection (self-described as "edition 15/a, 2007b" at an October 2007 seminar the author attended) is the specific approach Johns utilizes within his understanding of reflection in nursing, and does not include the practices of dialogue with a trusted other or debriefing with a group as alternative methods for engaging in reflective understanding and practice.

Section Summary

In this discussion of historical perspectives, models and definitions of reflection it has been demonstrated that there are various accepted definitions of the phenomenon. Dating back as far as the ancient Greek philosopher Socrates, there is evidence that people have sought to solve problems and gain understanding of complex personal and professional issues through the use of reflection. In the 20th century, the work of Dewey (1933, 1938) emphasized the experiential component of learning, and his research explored the role that reflection has connecting experience with meaning and understanding. The work of Schön (1983, 1987) expanded on the use of reflection in situations where theory and techniques derived from scientific knowledge are insufficient to address a given problem. Common to the understanding of reflection of these and other writers is a triggering event, a process of contemplation and discernment, and the resolution of a problem or idea. For Mezirow (1997), reflection is an active process by which individuals transform meaning, resulting in transformational learning. Boud, Keogh, and Walker (1985) also viewed reflection from the learner's perspective, defining

it in terms of both intellectual and affective activities through which individuals can explore experiences, leading to growth in understanding and appreciation of those experiences.

Taylor (2003), expanding on the work done by Boyd and Fayles (1983), described reflective learning as an internal process, triggered by an experience, whose outcome is a changed conceptual perspective and the clarification of meaning for the one engaged in the reflection. Taylor proposed that, through reflection, meaning can be both created and clarified, thereby positively influencing both understanding and professional practice. A common theme among the definitions of reflection uncovered in the literature is the assertion that reflection connects one's knowledge with one's behaviors, promoting critical thinking and enhancing understanding. In 2005, The Honor Society of Nursing, Sigma Theta Tau International, presented an extensive resource paper on "The Scholarship of Reflective Practice" and defined reflection in a manner reminiscent of Schön and synthesizing the research of many others:

Reflection enables one to uncover knowledge in and on action. Practitioners develop practical knowledge and working knowledge as they make sense of their work in theoretical ways. Through reflection, tacit knowledge (knowing-in-action) can be made explicit. Reflection raises awareness that enlivens and changes practice. (p. 3)

Reflection in Nursing Practice

In a professional paper intended to begin to explore the principles underpinning reflection and reflective practice, Hannigan (2001) offered a critical discussion of both

the perceived strengths and weaknesses of reflection in nursing practice and education. He noted that reflective practices have influenced both the development of nursing curricula and the content of specific nursing courses at pre-licensure, baccalaureate, and graduate level. Hannigan asserted that reflection in and on practice can be a way of ongoing learning for practicing nurses and can promote a "more humanizing" approach to care (p. 280). In the United Kingdom (UK), reflective practice is endorsed by leading professional nursing organizations and practice councils as a standard of professional nursing care. However, Hannigan also reported that researchers such as Jarvis (1992) and Burnard (1995) have commented that there is very little evidence upon which to base this "reflective practice". The possibility exists, therefore, that reflection in nursing may be just "a passing fad" in nursing practice and education (Hannigan, p. 281). Freshwater (1999, 2002, 2004) and Johns (1999, 2000, 2004, 2006, 2007a), colleagues of Hannigan in the UK, would undoubtedly dispute this proposition. Numerous other researchers (Bolton, 1999; Buresh & Gordon, 2000; Burton, 2000; Cole, 2005; Hudacek, 2000; Taylor, 2004; Taylor, 2003) have found that professional nurses can engage in various methods of self-reflection in order to improve their practice, hone their critical thinking ability, gain perspective, and discover meaning in the day-in, day-out professional and personal issues with which they are challenged.

Using phenomenographic methodology, Gustafsson and Fagerberg (2003) studied the experiences of registered nurses in Sweden concerning reflection. The researchers conducted semi-structured interviews with four RNs of varying experience and, based on their analysis and interpretation of the data, developed four sub-categories to distinguish

what they determined to be various types of reflective practice. These included to think back or consider, mirroring, to reflect before and reflect after, and to use experiences (Gustafsson & Fagerberg p. 274). Their study was framed by the assumptions that "lifelong learning is a prerequisite in a profession that is in constant change" (Gustafsson & Fagerberg, p. 272) and that reflection is an appropriate tool to use for such learning, by promoting self-awareness and self-insight among professional nurses. They concluded that the use of reflection promoted a nurse's professional development and led to better nursing care. While their conclusions may be valid for the nurses who participated in their study, the generalization of their findings to the general population should be done cautiously based on the small sample size.

Citing ideas from the philosopher and sociologist Habermas (1972), Taylor (2004) suggested that "practical reflection" (p. 28) can improve a nurse's interpersonal communication. She had earlier defined reflection as "the throwing back of thoughts and memories, in cognitive acts such as thinking, contemplation, meditation and any other form of attentive consideration, in order to make sense of them, and to make contextually appropriate changes if they are required" (Taylor, 2003, p. 3). In her 2004 discussion of the phenomenon and its application to professional practice, she more specifically defines practical reflection as the application of reflection to specific interpersonal relationships, with the goal of enhancing communication. Taylor outlined three main phases for practical reflection and encouraged its use as a part of leadership development. The first phase, experiencing, involves retelling a story from one's nursing practice, similar to what Buresh and Gordon (2000) encouraged nurses to do in order to educate the public

about our profession. The second phase, interpreting, involves exploring the meaning inherent in the situation which has been described. In the final phase of practical reflection, Taylor asserted that learning occurs when new insights are discovered and integrated into the nurse's cognitive awareness and clinical practice. This phase is akin to Pesut's (2005) concept of "sense-making" (p. x). Conceptually, Taylor's ideas are consistent with Johns' (1999) description of the constructing of a "knowing voice" (p. 248) as a means to empowerment and transformation of practice for nurses. Effective leaders, Taylor asserted, use practical reflection in their everyday management of others in the clinical or educational setting.

Gully (2005) described reflective practice as a journey to the soul, and stated that through reflection, one is brought closer to oneself, "to the 'I' of who we are within our nursing practice" (p. 145). She shared three personal stories, based on her own experiences, as exemplars of how contemplative reflection is interwoven into her nursing practice in order to illuminate and inform that practice. Gully's work, including both poetry and narratives, underlined the importance of relationship, including both intrapersonal and interpersonal communication, as a part of the reflective process, which is similarly discussed by Bolton (1999), Burton (2000), Cole (2005), Kuiper (2005), and Taylor (2003). "Reflection", according to Gully's understanding, "enables a metamorphosis, an awakening of the self and a finding of the sacred path of personal knowing and being, within the art and science of nursing practice" (p. 144). Through reflective practices, specifically journaling and mindful meditation, Gully discovered that she was finally able to articulate her philosophy of nursing, and encouraged others to do

the same. Reflection, Gully proposed, can transport a nurse to the "beginning of knowing" (p. 144), and contributes to the nurse's ability to be in authentic relationship with another, either patient or colleague. Gully called reflection the "soulwork" (p. 150) of nursing, and considered it a vital link connecting the nurse's knowledge, practice, and spirit. The evolution of personal and professional understanding through reflection which was described by Gully is consistent with elements of the definitions of reflection referred to earlier in this Chapter.

Section Summary

Nursing researchers have found that professional nurses can engage in reflection in order to improve their practice, hone their critical thinking ability, gain perspective, and discover meaning in the day-in, day-out professional and personal issues with which they are challenged. Hannigan (2001) noted that reflective practices have influenced both the development of nursing curricula and the content of specific nursing courses at prelicensure, baccalaureate, and graduate level. With regards to clinical nursing, Hannigan reported that reflection in and on practice can be a way of on-going learning for practicing nurses and can promote a "more humanizing" (p. 280) approach to care. Recent studies have continued to describe and/or demonstrate that the use of reflection in nursing benefits both clinical practice and patient outcomes.

The ways in which nurses practice reflection vary from Johns' highly individualized journaling (2007a, 2007b) to Taylor's (2004) phases for practical reflection and Gully's (2005) poetry writing. Taylor explained that practical reflection is the application of reflection to specific interpersonal relationships, with the goal of

enhancing communication. Effective nurse leaders, Taylor asserted, use practical reflection in their everyday management of others in the clinical or educational setting. The three main phases for practical reflection outlined by Taylor include experiencing, interpreting, and discovery. New insights are discovered and integrated into the nurse's cognitive awareness and clinical practice in this final phase (discovery) of practical reflection. This phase is akin to Pesut's (2005) concept of "sense-making" (p. x) and is consistent with Johns' (1999) description of the constructing of a "knowing voice" (p. 248) as a means to empowerment and the transformation of one's nursing practice.

Reflection in Nursing Education

The perceptions of nurse educators regarding reflection and reflective practice were examined by Burnard (1995) in a qualitative descriptive study. Burnard noted in his report that using reflection in nursing was considered a relatively new educational approach at that point in history. A purposive sample of nurse educators (N = 12), representing a range of clinical practice and content areas, was interviewed for between 30 and 60 minutes using a semi-structured format. Content analysis of the transcripts of the taped interviews was conducted in order to identify common themes. Although respondents were strongly positive and enthusiastic in their comments about reflection in nursing, many also acknowledged that they were unaware of any evidence-based research supporting its value, and the understanding of what reflection in nursing was varied greatly among those who participated. Many of the participants defined reflection in terms of Schön's (1983, 1987) work, which was most commonly found in the educational literature at that time. They reported things like "looking back over my shoulder and

thinking about my performance and what I could have changed" and "becoming more self-aware of my own practice" (Burnard, p. 1169). The responses of the nurse educators indicated that they tended to distinguish between reflection and reflective practice when directly asked about each, but they went on to use the terms interchangeably throughout the interview. A few nurse educators linked reflection to Kolb's (1984) experiential learning cycle and one referred to it in relation to adult learning theory. In general, the perceptions of the nurse educators in this study were positive regarding the use of reflection in nursing education, although several expressed cautious optimism about the use of reflection in nursing, having concerns about students' privacy with respect to personal thoughts and feelings related to a clinical experience.

Taken in its historical context, Burnard's (1995) study is notable for its findings on the ambiguity a number of the respondents expressed during the interviews. Some responses about the phenomenon of reflection within nursing education and clinical practice were positive, with one participant reporting, "...we get a more thoughtful, purposeful...approach to nursing using reflection" (Burnard, p. 1171). However, negative responses to reflection in nursing contained sentiments that it was an elitist practice, and too much "mumbo-jumbo...about a simple human process" (Burnard, p. 1172). Another respondent expressed concern that reflective practice would be "time-consuming" and stated, "I think people have got enough to do without reflecting on every single thing that they do" (Burnard, p. 1172). In his discussion, Burnard pointed out a potential dilemma that continues to vex nurse educators who utilize reflective practice as a teaching-learning strategy --- When one reflects back "on practice", how likely are they to remember things

as they actually happened? Burnard concluded that what was needed next was for nurse researchers to explore the relationship between reflection in nursing and the quality of nursing practice and patient care, and called for "much more empirical evidence" to support reflection being "taken forward into new educational practices" (p. 1173). A shortcoming of the study was that Burnard did not offer his own (or any) definition of reflection in nursing or nursing education. The qualitative descriptions and discussion of the nurse educators' responses contained in the study, however, demonstrated the prevailing willingness of faculty to incorporate reflective activities into their teaching even in the absence of an evidence-base to support its use. Taken into consideration visà-vis the present study of student nurse perceptions of reflection, Burnard's study illuminates not just positive aspects of this teaching-learning strategy, but also highlights some potential drawbacks and negative aspects of reflection.

Kuiper (1999) noted that the use of reflective journaling as a teaching-learning strategy promoted higher levels of thinking in new graduate nurses. Using new graduate nurses (N = 15) who were participating in precepted clinical orientation experiences on acute-care units in the southeastern United States, Kuiper studied data from students' reflective journals over an 8-week period. Self regulated learning prompts were used as a stimulus for the students' reflective writing. The prompts were based upon behavioral, metacognitive, and environmental strategies adapted from Schunk and Zimmerman's (1994) Self-regulation Learning Model. The qualitative study used a comparative descriptive design and formed the basis for Kuiper's doctoral dissertation. All students showed an overall increase in thinking strategies, with self-observation being the most

common strategy for both BSN and ADN graduates. ADN graduates tended to use behavioral strategies more often in their thinking, as expressed in the reflective journals, whereas BSN graduates tended to use more metacognitive strategies. Kuiper's research demonstrated that:

when students are guided to reflect with all aspects of self-regulation, there is multidimensional consideration of every aspect of a situation that is similar to the clinical reasoning activities nurses practice on a daily basis --- the environment, monitoring, thinking, reactions; making judgments; and revising plans and approaches. (p. 355)

Her work demonstrated that through reflection undergraduate nursing students showed improvement in connecting theory with clinical practice, as well as getting in touch with their own deeper thoughts and feelings related to a particular clinical experience. Although reflective writing was used as the means of generating data, Kuiper did not attempt to address the new graduate nurse's perceptions or feelings about the reflection process itself.

Freshwater (1999) reported that student nurses experienced an increased sense of the importance of caring for self, as well as demonstrating an increased number of caring behaviors toward their clients, when engaged in reflective learning activities such as intentional journaling, role playing, and debriefing. Serving as the clinical supervisor for these students, Freshwater had the students carry out guided reflection, based on Johns' (1998) model of structured reflection in order to facilitate the connections between clinical experiences, prior knowledge, personal (tacit) knowledge, and caring beliefs

(Freshwater, 1999, p. 30), and met once every two weeks with the students on an individual basis for discussion about their narratives (journal entries). Johns (2007a, 2007b) endorsed the regular use of reflective journaling to engage professional nurses in the on-going discernment and creation of meaning in order to promote effective, caring nursing practice. Although Freshwater's qualitative study examined the lived experience of student nurses during a three-year diploma program in the United Kingdom (U.K), her findings highlighted only the specific experiences of one student nurse and she does not state the total number of students who were in the cohort. During her research, Freshwater maintained her own reflective journal throughout the time of clinical supervision of the students being studied. The outcomes of the study demonstrated that through experiential learning and reflective practice, combined with clinical supervision, the student nurse can develop self-awareness and an increased consciousness of his/her caring beliefs.

Burton (2000) wrote a critical analysis of reflection in nursing and raised points about its perceived benefits as well as some skepticism and concern about its widespread adoption as a panacea for nursing education and practice. In particular, Burton questioned the wide variety of supposed reflective methods being utilized in teaching-learning, and strongly cautioned about the use of reflective journals for tools for student assessment and evaluation. He did, however, assert what Schön (1983) first articulated, that reflection facilitates the integration of theory and practice and improves a nurse's ability to think critically and problem solve more effectively, and that reflection can be used to validate practice, answer questions about the nature of nursing, and generate new nursing

knowledge and theories. Burton's research frequently referenced the work of Schön, whose research on "reflection in practice" and "reflection on practice", as previously discussed, has provided a conceptual framework for much of the work done on this topic over the past 25 years.

The only quantitative study which was found during the present literature search that examined Schön's assertions that reflection facilitates the integration of theory and practice and improves a nurse's ability to think critically was done with undergraduate students in a palliative care program in the U.K. Over the course of one academic year, Duke and Appleton (2000) gathered data from the reflective writing assignments of students (N = 62), using a standardized marking grid to record evidence of the student's reflective and academic skill level as reported in their accounts. A chi-square test was computed on the total number of grades awarded to each reflective and academic skill over the year. The findings demonstrated a significant difference (p < .005) in the degree to which individual reflective skills were achieved, and showed that reflection in nursing was developmental. Further analysis suggested that the development of reflective skills was linked to changes in practice (clinical skills) and knowledge synthesis. Duke and Appleton noted that using a quantitative approach was "contrary to the philosophical underpinnings of reflection" (p. 6), but argued that such an approach allowed them to address the research questions. The researchers recommended that further qualitative research should be conducted to examine "how reflection is experienced by students, how to encourage them to become critical reflectors, and whether reflection influences patient care" (Duke & Appleton, p. 7).

One of the most discussed potential problems with reflection in nursing education is the use of reflective material (journals, critical incident reports, and so forth) for assessment purposes. Hannigan (2001) pointed out the increase in reflective activities being written into courses, curricula, and evaluation criteria in nursing programs in the U.K., but wondered how many faculty were adequately prepared to use these activities to fairly assess student learning. In addition, Hannigan (citing Newell, 1992), pointed out the argument that varying levels of student anxiety and clarity of memory both make reflection-on-practice a "fundamentally flawed activity" (p. 281). In his discussion of the pros and cons of reflection as an appropriate strategy for nursing education and practice, Hannigan also raised the question of the legal and ethical obligations of faculty when a student's reflection includes references to unsafe practice, an issue that was not addressed in any other source examined for this study. The lack of adequate preparation regarding what constitutes reflection in a given teaching-learning situation, as well as the lack of support for students and staff who are compelled to engage in reflective activities as a part of an overall curriculum were noted to be key issues for nurse educators to address.

Pierson (1998) and Ruth-Sahd (2003) addressed the power differential inherent in the teacher and student roles, and suggested that this may be a barrier to effective learning through reflective strategies. In particular, Pierson addressed the issue of trust in using reflective journals as a teaching-learning strategy in clinical education. Although reflective writing can be an excellent way for students to explore their deeper feelings and ideas about an experience, sharing their journal with a faculty member puts them in a somewhat vulnerable position. Pierson emphasized that the use of reflective journals

should be interactive and participatory, a "shared dialogue" between student and teacher (p. 168). Journals should be reviewed for the meaning of experience rather than for evidence of particular skills or content. Short debriefing periods between faculty and student during the clinical day were also presented as a reflective practice which can facilitate increased awareness and understanding of a clinical experience.

In an interpretive review of data-based studies done by Ruth-Sahd (2003), the author concluded that reflective practice, examined primarily by qualitative methods, was found to be beneficial, applicable in many settings (education, practice, leadership training), and defined in a variety of ways. Specifically, she noted studies that have identified participants' perceptions of positive outcomes of reflection, many of which have been presented in this Chapter. These outcomes included: integration of theoretical concepts to practice; increased learning from experience; enhanced self-esteem through learning; acceptance of professional responsibility and continued professional growth; empowerment of practitioners; increased social and political emancipation; improvement in practice by promoting greater self-awareness; and helping students expand and develop their clinical knowledge and skills (Ruth-Sahd, p. 490). One might question how, in her critical analysis and interpretation of primarily qualitative studies, Ruth-Sahd was able to report so many changes over time among her list of positive outcomes of reflection. Moving on and analyzing themes which emerged from the literature, she concluded that conditions necessary for reflection to be successful in the nursing classroom include flexibility on the part of teachers and students, mindfulness, being

aware of one's thoughts and feelings, creativity, and a safe learning environment characterized by openness, honesty, and trust (Ruth-Sahd, p. 491).

In response to her second research question, "What are the nurse educator's responsibilities and risks?", Ruth-Sahd (2003) concluded that communication should be open, involving genuine thoughts and feelings, whether positive or negative, and that all interactions be grounded in personal and professional integrity and honesty. A risk of using reflective teaching-learning strategies in nursing education, according to Ruth-Sahd's findings, is that some private issues may be inappropriate for the classroom forum, and that faculty must be vigilant about ethical issues. Because there may be great diversity among students in their reflective activities, faculty must be cautious not to "silence and devalue individuals and groups who are not a part of the dominant discourse" (Ruth-Sahd, p. 493). Educators, Ruth-Sahd reminds us, must remember that "their perspective is not the only perspective" (p. 493).

Scanlon, Care, and Udod (2002) sought to improve their understanding of the meaning and use of reflection by studying how three nurse educators, the researchers themselves, understood and used reflection in their teaching. This team of researchers utilized five different sources of data (classroom observations of the teacher, debriefing sessions following these observations, written autobiographies, critical incident journals, and research team meetings at which notes were kept) to describe and understand their personal and professional growth through the use of reflection and reflective practices. The authors acknowledged the obvious limitation of the study, which used only three participants who were themselves the research team. This researcher maintains, however,

that the four main themes which Scanlon et al. identified among their use of reflection in teaching warrant inclusion in a discussion of reflection in nursing, as they may provide a framework for future research. These themes included making connections, developmental aspects, influence of context on reflection, and influence of emotions on reflection, Their work was focused on the teaching role and did not specifically address learner responses, but, as teaching and learning are interwoven throughout the educational journey, the discussion they presented of their qualitative descriptive study may shed light on the phenomenon of reflection as it is perceived by undergraduate nursing students.

Taylor (2003) shared a perspective on reflection in nursing education from the U.K.: "Whilst there is debate about the merits of evidence-based practice, reflective practice is generally accepted with critical debate as an important educational tool" (p. 244). In her article on reflective accounts and the textual construction of reality, Taylor explored what she deems to be the two primary approaches in current thinking among scholars of health-related fields, evidence-based practice (EBP) and reflective practice (RP). The discussion of her study included four extracts (examples) from the written reflective accounts of nurses, as compared to a nurse giving an oral shift report and a medical student giving a clinical case presentation in similar "narrative" styles. The main point Taylor made is that reflection is a deeply personal ("I") practice, and is a necessary component of the shaping of judgment in nursing, medicine, law, and other case-based inquiry.

A qualitative study conducted by Honey et al. (2006) in New Zealand examined the usefulness of formal reflection in the context of undergraduate nursing education during a module on persons with disabilities. Implemented within a new 3-year curriculum, reflective practice was thought to be a key component in "developing safe and competent RNs who are committed to ongoing personal and professional development" (Honey et al., p. 450). Students were taught both interpretive and critical frameworks for reflection and were allowed to choose the framework to use, thereby "facilitating ownership of their learning" (Honey et al., p. 450), a philosophy akin to that of Fink's (2003) for promoting significant learning experiences. Following a senior-level mental health and disability clinical module, students wrote a 1,000-word essay reflecting on their learning and professional development, according to Tripp's (1993) framework.

Twelve reflective essays were evaluated for the study by Honey et al. (2006), using an inductive approach and line-by-line analysis, according to the methods of Strauss and Corbin (1998). Although students reported that reflection was beneficial to their learning and helped them link their clinical experiences with theory, the findings showed that, in actuality, the students' reflections focused primarily on the ways they were coping with clinical practice and their overall clinical experience rather than on their specific nursing experiences working with people with disabilities. In their discussion of the findings, the researchers pointed out that students can reflect in meaningful ways to increase both personal and professional knowledge, but not necessarily achieve the outcome intended by the faculty in designing such a learning experience. The outcomes demonstrated the need for very clear instructions and guidance

when reflective writing is used for clinical education and evaluation, as well as the need for students to "build a foundation of self-reflection prior to the [disability clinical] experience" (Honey et al., p. 453).

A mixed-methods descriptive study by VanHorn and Freed (2008) examined students' clinical processes as they worked individually and in dialogue pairs during clinical education. The students (N = 39) were all enrolled in the same course as part of an associate degree in nursing program. They were required to complete one 9-hour clinical day, plus a 45 minute postconference, per week for nine weeks. Twenty students were paired and 19 unpaired for the completion of journals, using specific guided questions, which chronicled their clinical experiences over the nine week period. The journals themselves were examined by the researcher as sources of data to describe the students' reflective processes. Using a rubric developed by the researcher, journals were evaluated for non-reflective and reflective actions. Non-reflective actions were defined as those that recalled facts alone, with little thought involved. Reflective actions were based on what the student "thought, felt, or acted upon in the process of problem solving" (VanHorn & Freed, p. 222). A simple linear regression analysis was computed on the mean journal scores for the 19 unpaired students and showed no significant change (p > .05) in problem solving skills across the nine weeks. When the same analysis was done on the mean scores of the 10 pairs of students who had completed their reflective journals together with their partner, a significant increase (p < .01) in the level of reflection and problem solving was noted. The findings supported the use of reflective journaling within dialogue pairs to promote the construction of knowledge based on clinical experience.

Since these two strategies had not been examined together prior to this study, an important finding was that the combination of the two methods led to noted increases in reflection and problem solving over the nine-week clinical experience.

Section Summary

Research, primarily using qualitative methods, on the use of reflection within nursing education has demonstrated many of the same outcomes as studies exploring the use of reflection in nursing practice. Kuiper (1999) demonstrated that through reflection new graduate nurses were better able to connect theory with clinical practice, as well as to get in touch with their own deeper thoughts and feelings related to a particular clinical experience. In her discussion comparing evidence based practice and reflective practice, Taylor (2003) emphasized her finding that reflection is a deeply personal ("I") practice, and she asserted that it is a necessary component of the shaping of judgment in nursing and other case-based inquiry.

Burton (2000) asserted what Schön (1983) had first articulated, that reflection facilitates the integration of theory and practice and improves a nurse's ability to think critically and problem solve more effectively, and that reflection can be used to validate practice, answer questions about the nature of nursing, and generate new nursing knowledge and theories. While endorsing the concepts of reflection-in-practice and reflection-on-practice discussed by Schön, he nevertheless cautioned about the widespread use of reflection and reflective practices being used as a panacea for nursing education and practice, and strongly cautioned others about the use of reflective journals as tools for student assessment and evaluation. Most recently, however, VanHorn and

Freed's (2008) study demonstrated that the use of reflective journals in combination with dialogue pairs promoted and increase in reflective abilities and problem solving among a group of nursing students in a clinical situation. The review of the literature related to reflection in nursing education indicates that it is a beneficial teaching-learning strategy which cries out for greater empirical evidence to explain and defend its use.

Reflection in Other Disciplines

The work of Cole (2005) came from the discipline of physiotherapy. He outlined five benefits of reflection that were identified by participants (N not specified) in a professional workshop related to continuing professional development that he was conducting on behalf of the Chartered Society of Physiotherapy. These included: "Engendering thought; facilitating problem solving; enhancing practice; coping with feelings and emotions, and celebrating what is done" (Cole, p. 14). Cole's evidence for the usefulness of reflection as a continuing education strategy was extensive but anecdotal. He never identified the number of physiotherapists in the group he was facilitating, and outlined no formal research design. Nevertheless, his findings supported the use of reflective practices within one's professional life and suggest that such reflection should be a purposive and structured approach to learning. What Schön (1983) referred to as "reflection in action", and what others have similarly referred to as clinical reasoning and clinical intuition, Cole called "everyday informal reflection" (p. 14). "Reflection on practice", he proposed, is by comparison a much more formal and systematic type of reflection. True reflective practice, according to Cole's understanding, was to be "reflection on practice", and he endorsed it as a learning activity for

physiotherapy and other healthcare professions students, along with other traditional and alternative learning strategies. Cole suggested that there are many clinical questions which can be addressed through a process of careful, deliberate reflection on practice. In his work, he specified that reflective practice must be purposive, defined, finite, and structured (p. 15). Cole also developed a model depicting the process of reflective practice which is reminiscent of "The Experiential Learning Cycle" developed by Kolb (1984). Kolb's concept of experiential learning, which many writers on reflection in nursing relate to, included four phases: 1) concrete experience; 2) reflective observation; 3) abstract conceptualization; and 4) active experimentation.

The use of critical incident analysis with students during early field experiences in education was examined by Hamlin (2004) at a small, liberal arts college in the northwestern United States. This study compared the quality of reflective writing in the journals of students in a course which emphasized a critical analysis approach to the field reports of students in two other sections of early field experience who were not given specific prompts regarding the content of their daily journals or learning logs. The number of students whose work was examined was not reported, but Hamlin's findings pointed out several important observations: Students in the course which emphasized a critical incident approach to journaling demonstrated reflection at multiple and complex levels when compared to those who were keeping learning logs without additional direction for processing their field experiences; The ability of undergraduate students in an early field experience to reflect at higher levels about their experiences can be

enhanced through a program of structured writing using critical incident analysis (Hamlin, p. 177).

The use of a reflective log by physicians was advocated by Middleton (2005) as a technique for continuing education that connects real-life experiences with knowledge and training. Notable in his essay was the suggestion that a reflective log linked to a personal development plan and/or a practice professional development plan can be not only informative but also motivating for physicians. Middleton suggested that a reflective log can be hand-written or maintained electronically on a personal computer. His personal experience had been that maintaining such a log "enables the recording of 'reflection in action' and facilitates the possibility of 'reflection on action' [referencing Schön], at some time after the event" (Middleton, p. 593). Nowhere in the study was a working definition of reflection given and, although the anecdotal information is interesting to consider for practical application of reflection within a professional life, the study did not address what exactly constitutes reflective practice within medicine.

Bolton (1999) exposed the written reflections and exemplars of physicians as tools for personal and professional growth, but his commentary has applications for other healthcare professionals and healthcare students, too. He observed that reflective writing allows practitioners to "study their own decision making processes, relationships with colleagues, and responses to patients; analyze their hesitations, and gaps in skill and knowledge; and face difficult and painful episodes" (Bolton, p. 243). He described reflective writing courses that have been offered to healthcare practitioners in the U.K. since 1989, including accredited postgraduate medical education and in-service training

for professional nurses. Bolton reported that an online model had been successfully piloted, in which members of a cohort (maximum size of 8 people) share their work-related stories and comment on the writings of others electronically in a confidential forum. The advantages of such a format, he stated, are its convenience for busy clinicians and the opportunity to connect with professional peers one may not otherwise meet. However, a noted disadvantage of an online reflective writing group was that it required careful facilitation in order to "assure that the discussion focus on the content of the writing and not on the writers: these are not meant to be personal therapeutic groups" (p. 243). Writing or orally sharing stories based on their experiences is a valuable practice for clinicians, Bolton concluded, as it afforded them the opportunity to gain new perspectives into their practice, "to increase their understanding and empathy by exploring a range of experiences, knowledge, and emotions" (p. 245) both of themselves and others.

Researchers outside of the traditional science-based professions have also addressed the use of reflective practice to enhance professional performance. In a study examining artists who are both educators about art and creators of art, Thornton (2005) proposed that reflective practice was a strategy that could assist artists to improve navigating through the various roles associated with artistic creation and art education. Referencing the work of Schön (1983, 1987), Thornton developed a list of 18 characteristics of "artist teachers" in present-day England, where he works as an art educator. His research was based on a review of the literature and the examination of the practices and beliefs of four artist teachers, as recorded in the literature, "in order to gain

an understanding of the factors that enabled them to function effectively in this dual role" (Thornton, p. 168). Especially notable among his findings was the description of one characteristic of artist teachers which has potential application for nurse educators: "(Artist teachers) have a self-identity that could help them to alleviate any sense of identity crisis by asserting the positive relationship between personal art-making and teaching" (Thornton, p. 168). Whereas nurse educators sometimes feel a similar conflict between themselves as clinicians and themselves as educators, Thornton's findings could have potential transferability and benefit nursing practice and education.

Section Summary

It is beneficial to look beyond the walls of nursing literature to discover meanings and understandings of reflection and reflective practices. Not only have researchers in allied health professions, such as Cole (2005) from the discipline of physiotherapy and Middleton (2005) and Bolton (1999) from medicine, examined the meaning and use of reflection within their respective frames of reference, but Thornton (2005) also studied reflective practices and their influence on artist teachers. It is important to consider these and other perspectives from outside nursing science in order to more fully appreciate the many and nuanced ways in which reflection is being used and understood in nursing education and professional practice.

Chapter Synthesis

In this chapter an overview of the literature related to reflection has been presented, grouped categorically as: Historical Perspectives and Models/Definitions of Reflection; Reflection in Nursing Education; Reflection in Nursing Practice; and

Reflection in Other Disciplines. There is no consensus among nurse researchers, educators, or clinicians about what reflection in nursing is nor is a common definition presently used among the nursing community. There does appear to be general agreement, however, that reflection has positive effects on nursing education and practice, and literature from other disciplines supports the use of reflection in various forms as a legitimate teaching-learning strategy or, using Carper's (1978) terminology, a legitimate way of knowing. Some common features regarding reflection as identified in the literature include an element of time (before, during, after), often triggered by an unusual or problematic event; an active process, involving deliberate, conscious thought; a process that is influenced by the context; a process which results in integrating new understanding into one's experience and subsequent practice and knowledge. The outcomes of reflection most frequently described in the literature are learning, personal growth, enhanced professional effectiveness, discovery of meaning (either by uncovering meaning or creating meaning), and changes in behavior and/or attitude.

Although the focus of this study is on the perceptions of nursing students regarding reflection, the foundational research on reflection and reflective practice largely comes from outside the science and practice of nursing. It is noteworthy that nursing education and practice have been positively influenced by this research from a variety of other professional and academic disciplines, most significantly social science and education. For the purposes of qualitative study and consistent with qualitative approaches, a review of the literature was on-going during the data collection phase of this study and continued concurrently with the analysis of the data. Therefore, in addition

to the findings presented in this literature review, the most current and relevant literature informs the interpretation and discussion of the findings in Chapter V.

CHAPTER III

METHODOLOGY

The purpose of this study was to describe reflection from the perspective of baccalaureate nursing students in order to provide nurse educators with information about reflection from the student perspective so that reflection may be more effectively used in academic courses and clinical education to promote and enhance learning. Qualitative research is a distinctive and credible research methodology which uses a systematic, interactive, subjective approach to describe life experiences and give them meaning (Leininger, 1985; Munhall & Boyd, 1999). Whereas quantitative research traditionally uses deduction rather than induction and seeks to confirm or deny specific hypotheses about the variables of interest, qualitative research is conducted to generate new knowledge through discovery and the uncovering of meaning (Sandelowski, 2000). Therefore, a qualitative approach was the most appropriate methodology to utilize in order to address the purpose of this study and to answer the research question, "What is the nature of reflection for undergraduate nursing students?". Specifically, this study utilized a qualitative descriptive research design, differentiated by Sandelowski from other types of qualitative designs, such as ethnography, phenomenology, and grounded theory, as a singularly valuable method.

Overview of the Approach

Use of a qualitative descriptive design facilitated the careful examination of descriptions of reflection offered by baccalaureate nursing students, allowing the researcher to look for common properties in the data and discern emerging themes, as

well as begin to examine the meaning assigned to reflection by students. Within this methodological approach, the researcher continually compared new data to that which had already been examined, using the technique of constant comparative data analysis (Strauss & Corbin, 1990). The predominantly existential philosophy of the researcher allowed all students' expressed ideas to be examined in order to discern their present thoughts about reflection without assigning "right" or "wrong" judgments to these ideas.

The naturalistic paradigm articulated by Lincoln and Guba (1985) provided the backdrop against which the research design was conceived. Its constructivist philosophy supports this exploration of reflection as perceived by nursing students without assigning a priori assumptions to responses, as would a hypothesis-based positivist methodology. Key elements of the naturalist paradigm were met as the study was conducted, including the use of the researcher as the instrument of data collection in face-to-face individual interviews with students in their natural setting. The five basic axioms which form the methodological framework developed and described by Lincoln and Guba concern the nature of reality, the inquirer-respondent relationship, the nature of generalization and truth, the nature of explanation and causality, and the role of values in naturalistic inquiry (p. 37). The researcher in this study examined the individual perspectives of nursing students regarding reflection through a holistic lens, uncovering multiple realities, both similar and dissimilar, which students hold concerning this concept (Axiom 1). The relationship between the interviewer and the participants (Axiom 2) will be addressed in a subsequent section discussing the use of human as instrument, and is consistent with the naturalistic paradigm. Axiom 3, focused on the ability to generalize findings from

individual cases, is addressed, although the findings may only be generalized to a limited population which meets the same criteria as the participants in this study. Although the present study did not seek to establish any causal linkages, the naturalist version of causal linkages (Axiom 4), which purports that it is impossible to separate cause from effect, is met inasmuch as relationships among specifically identified variables may be shared by participants during their discussions of the nature of reflection. Axiom 5 (the role of values in inquiry) resonates with the over-arching design of the study, within which it is acknowledged that inquiry is influenced by the inquirer (Corollary 1) as well as the paradigm guiding the researcher (Corollary 2) in his/her inquiry. Specifically, the inquiry in this study was value-resonant (Corollary 6) with the concept, purpose, and context of the research and with such congruence was able to produce meaningful results through rich, qualitative description. Considering these parameters and the goals of this study, the naturalistic paradigm was the optimal framework for research.

Thorne, Kirkham, and MacDonald-Emes (1997) pointed out that "nursing's unique knowledge mandate may not always be well served by strict adherence to traditional qualitative methods" (p. 169), referring to phenomenology, grounded theory, and ethnography. None of these three traditions have roots in nursing research, having grown out of the disciplines of philosophy, sociology, and cultural anthropology respectively, but each has significantly influenced the development of qualitative methodology within nursing. Thorne et al. proposed that a descriptive interpretive approach to knowledge development can contribute to nursing science in meaningful and significant ways without compromising the integrity of qualitative approaches and

Sandelowski (2000) affirmed descriptive research as a valid method of qualitative inquiry. In fact, these researchers encouraged other nurse researchers to take the risk of breaking with tradition and begin to legitimize new methodological approaches to qualitative inquiry. Almost a decade earlier, Artinian (1988) reported that the "descriptive mode of inquiry must precede all others, allowing the point of view of the subjects to be understood" (p. 138). Sandelowski (2000) astutely pointed out, however, that "all inquiry entails description, and all description entails interpretation" (p. 335), opening the door for qualitative descriptive research to stand alone as a valuable method which does not require the researcher to move as far into or from the data as would other, more "interpretive", qualitative approaches. As recently as 2006, Morse emphasized the importance of qualitative descriptive methods in opening the doors to the insight which allows new perspectives to be revealed and advances nursing science.

The movement from objective to perspectival views, first noted by Schwartz and Ogilvy (1979), is one of seven major characteristics of the "new paradigm" they described which formed the underpinning for Lincoln and Guba's (1985) assertion of the legitimacy of using naturalistic inquiry (p. 51). "A whole picture is an image created morphogenetically from multiple perspectives" (Schwartz & Ogilvy, p. 15). The characteristics which Lincoln and Guba described as operationalizing naturalistic inquiry (pp. 39-43) and which stem from the Axioms discussed earlier are consistent with the methodology utilized in this research study. These include use of a natural setting, human as instrument, utilization of tacit knowledge, qualitative methods, inductive data analysis, emergent design, negotiated outcomes, case study reporting, idiographic interpretation,

trustworthiness. An additional characteristic, grounded theory, is indirectly in agreement with the study, as no a priori theory is being applied to the data which was encountered. However, the generation of theory as a response to the data revealed through the examination of the multiple realities of the subjects regarding reflection was not a specific goal of the study, in which the purpose was description of the phenomenon. The constructivist methods of naturalistic inquiry match the researcher's existential worldview and are in sync with the purpose of the study. The inductive approach to analysis which characterizes this methodology is also consistent with a study design that was open-ended in seeking to describe what is revealed through the perceptions of nursing students regarding reflection.

Data Collection within the Naturalistic Paradigm

The individual face-to-face interviews which were used for data collection in this study generated participant responses leading to a descriptive narrative of perceptions of those students regarding reflection. "To know something is to become sufficiently engaged with it so that we can see it in the context of our own concerns" (Lincoln & Guba, 1985, p. 55). Although the goal of the study was not to generate theory, the researcher did engage with the data by using the technique of constant comparative content analysis (Glaser & Strauss, 1967), noting common themes as well as dissimilarities among the students' perceptions of reflection in nursing through the course of interviewing and data analysis. Qualitative content analysis is a dynamic process wherein data collection and data analysis occur simultaneously and mutually shape each

other (Sandelowski, 2000, p. 338). In keeping with the tenets of naturalistic inquiry, it is noted that the design and focus of a study may change in response to new ideas which emerge as it is carried out. The researcher acknowledges that in the present study only small changes in design occurred in response to new ideas that were emerging.

Specifically, after hearing ideas about the nature of reflection from the first few participants and reviewing the transcript data, several additional questions were added to the repertoire used as a basis for conducting the individual student interviews. After careful evaluation and re-evaluation of the nearly 400 pages of transcript data, the outcome of the study consists of a rich descriptive report of nursing student perceptions of the definition and meaning of reflection.

Researcher as Instrument

The researcher was the sole interviewer for data collection. This enabled each student to establish a relationship with the same person during the process of sharing information and permitted the interviewer to determine when saturation of the data had occurred. The researcher who conducted this study is a Master's prepared professional nurse who is currently enrolled in the Doctor of Philosophy program at the Widener University School of Nursing (Chester, PA) and an Assistant Professor of Nursing in a baccalaureate program at a comprehensive professional university with a liberal arts core. During the first four years of teaching nursing at the undergraduate level, this researcher realized that reflective activities had intentionally or unintentionally played a significant role in meeting learning outcomes for students in every course with which she had been involved. This epiphany prompted the researcher to explore the phenomenon of reflection

by becoming familiar with the literature, which in turn led to the discovery that no research specifically addressed student perceptions about the concept. The knowledge and general understanding of the phenomenon allowed the researcher flexibility when responding to emerging themes and situations as the study was conducted. This is consistent with the interaction between inquirer and respondent (Axiom 2) within the naturalistic paradigm (Lincoln & Guba, 1985).

Since the primary goal of the study was to seek individual student's perceptions about reflection, the use of individual interviews rather than focus groups was deemed to be the optimal method for data collection. Using the human (interviewer) as instrument in this study matched the characteristics noted by Lincoln and Guba (1985) for choosing the naturalistic paradigm as one's research framework. These characteristics include: 1) responsiveness, the ability of humans to interact with a situation and make meanings explicit; 2) adaptability, allowing the "human instrument" to simultaneously gather various types of verbal and non-verbal information during a human to human interaction; 3) emphasis on the holistic nature of human experience; 4) the ability to continuously expand one's tacit and propositional base of knowledge during data collection as well as post hoc; 5) processual immediacy, or the ability to respond in the moment to new information as it is received; 6) the use of clarification, summarization, and amplification to confirm what is observed and heard as data is being gathered; and 7) the opportunity to explore atypical responses in order to achieve a greater understanding than would be possible within another research paradigm (Lincoln & Guba, p. 194). This researcher had examined and acknowledged her own assumptions, biases, and personal and professional

values (Axiom 5) regarding reflection prior to commencing the research and agrees with Lincoln and Guba that no research is entirely value free. In order to be open to the perceptions of nursing students regarding reflection, therefore, this researcher utilized the phenomenological technique of bracketing (Creswell, 1998, p. 52) during the interviews of subjects, setting aside any prejudgments about reflection, holding in abeyance her own prior experiences, and relying on established and credible qualitative interview techniques to obtain the best picture of the subject's experience during the process of data collection. The researcher also consulted with academic advisors, who are experts in the field of qualitative research, during the course of the project in order to maintain her own objectivity and perspective on the discovery of new knowledge as the study unfolded.

Sample

A voluntary sample of convenience of undergraduate nursing students enrolled in generic baccalaureate nursing programs was recruited from colleges and universities within a 100-mile radius of Philadelphia, PA, with an initial goal of 4 to 6 students from at least three different institutions for a total sample size of 12 to 18. Lincoln and Guba (1985) encouraged variation among a sample when desiring to generate rich description of a phenomenon. Using participants from more than one college or university facilitated the gathering of a broader range of perceptions regarding reflection than if students from only one institution had been interviewed, while still maintaining the homogeneity desired within the sampling strategy. The university at which the researcher is employed was not utilized as a source of participants in order to minimize interviewer bias during the process of data collection and analysis. Criteria for inclusion in the study required that

the student be enrolled at the junior or senior level in a traditional (non-accelerated or second-degree) generic BSN program in a part- or full-time capacity, have completed or be presently enrolled in the psychiatric/mental health nursing course, and speak English. Both male and female students were eligible for participation in the study, although no male students expressed interest in participating when recruitment was done. The proposed methodology had stipulated that the first six students from each program who responded to the invitation to participate and who met the inclusion criteria would be contacted about scheduling an interview, thereby allowing for a small measure of attrition or no-shows at each site but still achieving the desired minimum sample size of 12 to 15 participants. The response to recruitment was particularly enthusiastic at the first college, however, and so interviews were scheduled with eight students, assuming the possibility that some would be no-shows for their appointments. In the end, all of the students who were registered at this site met the eligibility criteria and followed through as participants. At the two subsequent nursing programs from which participants were recruited, four students per site were enrolled and all followed through with interviews, allowing for a total of 16 participants. No students who expressed interest in participating and who met the eligibility requirements were turned away. In consideration of their time, participants were given a blank journal for reflective writing and a \$10.00 Borders TM book store gift certificate at the conclusion of the interview.

The ages of participants ranged from 21 to 41 with a mean age of 26. All participants were female, and included 15 senior level students and 1 junior. The average cumulative GPA of participants was 3.1 (range 2.7 to 3.5). Three of the students who

were interviewed had earned previous degrees, including education, computer science, and emergency medicine (associate degree). Selecting from among categories used on the U.S. Census, students described themselves as America Indian or Alaska Native (1), Black of African descent (3), White Caucasian/European descent (11) and African American (1). The students' self-reporting of their previous experiences with a variety of reflective activities listed on the questionnaire is summarized in Table 1.

Table 1 Present or Previous Experience with Reflective Activities

T '4 D C 4' A 4' '4'	1 11 11 11 11
Experience with Reflective Activities	
Clinical Journals	15
Clinical post-conference	16
Debriefing following simulation	11
Exemplar writing	0
Relationship with a mentor or coach	5
Small group work requiring	8
consensus	
Participation in ChatRoom or	6
Discussion Board	
Participation in a ListServ or Blog	0
Being videotaped and reviewing	8
performance	
Faculty evaluation of clinical	14
performance	
Critical incident reports	2
Role playing and discussion	7
Personal diary or journal	8
Poetry writing	3
Peer evaluation	9
Autobiography	1
Creative Art	4
Mediation	5
Self-evaluation	12
	12
Other: "Sitting and thinking"	l 1
Other: "Care Plans"	1

"Saturation of the data occurs when no new themes or essences have emerged from the participants and the data are repeating" (Speziale & Carpenter, 2007, p. 95). Therefore, in planning this qualitative study of undergraduate nursing students, it was impossible to know prior to beginning interviews exactly how many participants would be needed in order to adequately respond to the research question. According to LoBiondo-Wood and Haber (1994), the sample sizes in qualitative studies are generally small, and interviews should be continued until data becomes repetitive, that is, when no significant new ideas are being shared by the participants. Creswell (1998) proposed that when using in-depth interviews (up to 2 hours in length) for a phenomenological study, 10 subjects represents a reasonable size, whereas, a grounded theory study would be best served by interviewing 20 to 30 subjects (p. 122).

The present study on the perceptions of nursing students regarding reflection did not distinctly fall under either qualitative methodological approach, but nonetheless the researcher sought to determine the appropriate end-point for data collection when the data had been saturated. By the completion of the 12th interview, it was apparent to the researcher that the general idea of "looking back" was repeating itself among all participants and a consultation with the dissertation committee chairperson was held. The decision was made to continue collecting data for the next four interviews, which had already been scheduled, to confirm that the data had been saturated and to discern if any new essences were emerging. Hearing no significant new ideas regarding the nature of reflection after the 16th interview, data collection was stopped. It should be noted, however, that the last four interviews did reinforce for the researcher the influence that a

particular nursing program and/or faculty member has on students' understanding of the nature of reflection, which is included in the presentation of findings and discussion in the following chapters.

Sandelowski (2000) acknowledged that the determination of adequate sample size in qualitative research is ultimately a matter of judgment, based on the particular method being used, the sampling strategy employed, and the overall purpose of the study. The convenience sampling being used in this study aimed to explore similarities and variations of understanding among a specific demographic group (junior and senior level undergraduate nursing students within a defined geographical area). Accordingly, Sandelowski stated that the minimum number of sampling units (subjects) could be reduced but still produce credible findings. A principle to follow is that the total number of subjects should not be so large as to inhibit the rich analysis that is a hallmark of qualitative inquiry, and not so small as to prohibit the "new and richly textured understandings" of the experience or phenomenon being studied (Sandelowski, p. 183). The original study proposal anticipated a minimum sample size of at least 12 to 15 students. After discerning that an initial main theme of "Looking back to deepen understanding" had emerged and was repeating by the 12th interview, it became apparent that no additional subjects would be needed in order to achieve saturation if the theme was also heard among the final four interviews which had already been scheduled. Quotations from these final interviews provided further support for this initial theme and other themes which had been emerging and the researcher did not feel the need to pursue

additional participants in order to provide a "richly textured understanding" (Sandelowski, p. 123).

Setting

Participants in this study were recruited from generic baccalaureate nursing programs in southeastern Pennsylvania. Because face-to-face interviews were utilized for data collection in this research design, it was necessary that the nursing programs accessed be within a reasonable geographical proximity of the researcher's locale. The interviews were conducted in a private space, such as an empty conference room or classroom, determined by the researcher based on convenience and availability in conversation with staff at the college or university where the interviews were being conducted. In an effort to "facilitate sharing by the research participants" (Speziale & Carpenter, 2007, p. 37), every attempt was made to conduct the interviews in a place and at a time that was convenient and comfortable for the participants. Interviews were conducted between July and November 2009. Follow-up to the initial interviews was done by email, with the participants able to respond from a familiar setting at a time which was convenient for them.

Procedures

Access to Sample

The researcher sent a letter of introduction and a brief overview of the intent and design of the research study (Appendix A) to the Dean, Director, or Chairperson of the nursing departments at targeted colleges and universities. The initial contact was designed to facilitate a determination of support from those institutions for the

implementation of the research project at their institutions, as it would voluntarily involve their students. Colleges and universities at which the researcher had already established faculty contacts through professional associations and/or collaborations were contacted first, as familiarity with one or more faculty members facilitated recruitment of subjects as well as scheduling of the student interviews for data collection. The university at which the researcher is employed was not utilized as a source of participants in order to minimize interviewer bias during the process of data collection and analysis.

Within one week of mailing the initial letters of introduction, follow-up phone calls were made to the Dean, Director, or Chairperson in order to provide further information and address any questions or concerns. At two of the programs contacted, the researcher was given access to undergraduate nursing students after this initial contact, and was referred to specific faculty members whose courses at that time would provide an optimal pool of students from which to recruit eligible participants. At a third targeted program, the researcher encountered significant time delays related to communication problems and procedures related to that institution's IRB and therefore decided to pursue an alternate site for further subject recruitment. Another institution expressed full cooperation with the researcher but required the approval of their own institutional IRB, which was obtained in an expedited review.

Access to participants occurred through the faculty who teach junior and senior level classes. At the recommendation of the program directors, individual faculty were contacted by the researcher (Appendix B) to discuss whether they currently had groups of students in a class which utilizes reflective learning activities. Students who were

currently enrolled in or who had completed their psychiatric/mental health nursing course were targeted for recruitment, as they most likely would have experienced some form of reflective learning activities. Faculty were asked by the researcher for permission to distribute an informational letter about the project (Appendix C) and give a brief oral presentation to their class in order to solicit participants. Students interested in participating were asked to sign up on the day of the presentation at the conclusion of the class or to contact the researcher by email. Field notes kept during this phase of the study include a list of students who responded, including first name, email address, and primary phone number, as well as the date of the recruitment presentation and any other anecdotal information about the research activity. Students were advised in advance that the interviews would be tape recorded, and none indicated an unwillingness to cooperate with this procedure, so all were enrolled in the study. After being informally screened to determine that they met the criteria for participation by being asked if they had completed their psychiatric/mental health nursing course or were currently enrolled in such a course, students were scheduled for individual interviews within the next one to two weeks. Participants were sent a confirmation email 24 to 48 hours prior to the scheduled interview with the date, time, and location listed and asked to reply to the email to confirm their appointment. All students confirmed their appointments in this fashion, and there were no no-shows for scheduled interviews.

Data Collection

The interviews conducted for this study were semi-structured in their format, utilizing prepared open-ended questions as a starting point for conversation (Appendix

D). As the study unfolded, the questions used were altered slightly in order to uncover even deeper meanings among the perceptions of students, and several questions were added to the repertoire (Appendix E). The naturalistic paradigm guiding the study design permitted flexibility in the format and direction of each interview. Therefore, participants' spontaneous comments on aspects of their undergraduate education experience other than thoughts about reflection were permitted to be shared and explored by the investigator within the conversation.

When conducting qualitative interviews within a naturalistic design, it is understood that the interviewer (researcher) and the interviewee (student participant) are in a relationship of mutual influence to some extent, and yet, the individuality of each needs to be recognized (Rubin & Rubin, 2005, p. 33). In the course of any interview, an individual researcher may learn information from a participant that reveals a history of unsafe practices or unethical behavior on the part of the student themself or another with whom the student was interacting. Whereas the researcher has an ethical obligation to report the interviews accurately, as their content may pertain to emerging themes which address the research question, every effort has been made to fairly represent any information shared as part of a balanced presentation when reporting and analyzing the data. Although the researcher had made provisions to deal with comments about ongoing unsafe behavior or practices, no such comments were made during the interviews conducted for this study. Therefore, there was no need to counsel any student to discuss the matter with their faculty or nursing program director. If, in the researcher's opinion as a professional nurse, anything shared within the context of an interview for this study had demonstrated a clear and present danger to either the participant or others, appropriate entities at the facility where the interview was being conducted would have been notified following the interview, based on the researcher's ethical determination as to whether the harm of breaking participant confidentiality justified the good of reporting a potentially unsafe situation. Based on information shared during the course of interviews and data collection, there was no need to take this action.

Prior to initiating the recorded interview on the date that it was scheduled with each student, written informed consent was obtained (Appendix F). The time required for this procedure was included in the scheduled appointment. All students were given copies of the signed consent form. During the interview, students were referred to by first name only. Any personally identifying information revealed in the interview was deleted from the printed transcripts. The date of the interview and a research identification number were recorded directly on the audiotape label. This number, student's name, college or university, date of interview, and preferred email address were separately recorded on a list of participants in order to prevent a potential violation of privacy while providing for the contact information which was necessary to have for follow-up verification by the students of the printed transcripts of their interviews and later member checking regarding identified themes.

Students were scheduled for interviews at two hour intervals, allowing approximately 90 minutes per interview with flexible time in between interviews to accommodate longer interviews. Few interviews exceeded 60 minutes, and the additional time in between scheduled appointments was used by the researcher to make field notes.

Up to three interviews were scheduled at the same site for one day, taking into consideration the distance which the researcher had to travel to a site and the possibility that a scheduled subject might fail to keep the appointment ("no show"). At the first site where interviews were conducted, four students were scheduled for the same day in order to accommodate their tight schedules during the summer session. The interviews were tape recorded using micro-cassettes, one per interview, for compatibility with transcriptionist's equipment. Audio recording was done with the full knowledge and consent of the participants. A back-up tape recorder was used in order to prevent any interview data from being lost due to possible technical difficulties. All data collected for the study, including audio tapes, was stored in a locked file cabinet in the researcher's locked office, except for the time the tapes were in the possession of the professional transcriptionist.

At the conclusion of the interview, participants were given a brief demographic questionnaire (Appendix G) to complete. This was done intentionally at the conclusion of the interview so as not to suggest specific reflective practices to the student prior to engaging them in conversation about their perceptions of the nature of reflection. No student names were included on this questionnaire in order to maintain anonymity when compiling the data.

As an expression of appreciation for their voluntary participation in the study, students were given a \$10.00 Borders TM book store gift certificate and a blank journal to use for reflective writing at the conclusion of the interview. At the first program from which students were recruited for participation, the faculty of the nursing research class

in which six of them were enrolled did count the hours of their involvement in this study for a field work requirement associated with the course, but this was the sole determination of the faculty member after the students volunteered and not part of the research design. When data collection and analysis were completed, each participant was emailed a personal thank-you letter acknowledging their willingness to support nursing scholarship by participating in a nursing research study, as well as a summary of the research and a certificate of participation for portfolio inclusion.

Ethical Considerations/Protection of Participants

Prior to the initiation of this study, approval was obtained from the Institutional Review Board (IRB) of Widener University to conduct this study, following standard procedures. In addition, IRB approval was obtained from one of the institutions at which nursing students were accessed for interviews, as required by that university. Access to students at the other two institutions was granted based on the Widener University IRB approval.

There was no physical risk involved in participation in this study. There was minimal risk for psychological discomfort which may have resulted from a participant's reflecting on the questions asked by the researcher.

There were no known benefits for participation, although it was acknowledged that students might benefit from the opportunity to contemplate their own understandings of reflection both during and after the interview if, through the process, they experienced positive thoughts and feelings about reflection that they were not conscious of before.

There were no contraindications to participate in this study.

There were no alternative procedures to the face-to-face interview with each participant other than choosing not to participate in the study.

Following a written and oral explanation of the study on the day of the interview, participants were asked to sign an informed consent form (Appendix F) before being interviewed and audiotaped. Assurance of confidentiality was given to each participant. Participants were informed that they could withdraw from this study at any time and for any reason without penalty or consequence. No student chose to withdraw from the study at any time during the course of the research. If this had been the case, any records related to that student would have been destroyed. The decision on the part of a student to terminate participation in this study would not have impacted their grades or academic status.

All information, including audiotapes, written transcripts, demographic questionnaires, and participants' contact information was kept in a locked file cabinet in the researcher's locked office, the exception being that time at which the audiotapes were being transcribed by a contracted professional transcriptionist or when selected data were being reviewed or audited by members of the researcher's dissertation committee. The audiotapes made during data collection will be destroyed one year after the conclusion of the study by removing the tapes from the microcassettes and incinerating them. Any personally identifying student information will be shredded one year after the conclusion of the study. Student participants have only been contacted by the researcher for purposes of the research study, and their contact information will not be shared with any other individuals prior to its incineration one year after the conclusion of the study. Any

publications resulting from the research study will contain pseudonyms for any participants to whom specific references are made.

The only compensation for the students who were interviewed for the study was a token thank you gift (\$10.00 Border's[™] gift certificate) for their voluntary involvement, a blank journal, a letter acknowledging their service, and a certificate of participation.

Data Analysis Procedures

Verbatim transcripts of the interviews were made by a contracted professional transcriptionist and stored as a text document within a word processing format in addition to a hard-copy. Audiotapes were delivered to the transcriptionist as they were obtained. The researcher initially reviewed the transcripts as they were returned from the transcriptionist while listening to the taped interviews. Review of the tapes and transcripts was ongoing throughout continuing data collection. This not only facilitated checking the accuracy of the transcripts, but also allowed the researcher to further immerse herself in the data and determine that point at which saturation of the data was occurring.

Whereas the data in a qualitative study may be thought of as "constructions offered by or in the sources" (Lincoln & Guba, 1985, p. 332), during analysis the researcher is challenged to reconstruct the various ideas from the transcripts of individual participant's interviews into a meaningful whole. Through inductive, rather than deductive, processes, qualitative analysis in this study examined not only individual participant responses but also attempted to discern common themes among all the responses. Using Glaser and Strauss' (1967) method of constant comparison throughout

the implementation of the interviews and the examination of the transcripts, commonalities as well as notable differences in the participant's responses were studied. Unlike Glaser and Strauss' method in its purest form, however, the analysis of participant responses in the present study was not targeted at generating a theory, but only used as meaningful way to organize and process the qualitative data. Reviewing each transcript in a line-by-line manner, this researcher began to uncover recurrent ideas and commonalities. During this phase of data processing and analysis, representative selections of the interview transcripts were discussed with the researcher's dissertation committee chairperson, who discussed the noted commonalities with the researcher and assisted in clarify initial memos made about emerging themes.

After a series of data examinations, during which individual responses were compared within a grouping to ascertain their "look/feel-alike" properties (Lincoln & Guba, 1985, p. 348), the data were then organized according to themes and sub-themes and these were defined. Once data collection began, it proceeded simultaneously with data processing and analysis until it became apparent to the researcher that the data had been saturated, that is, when "continuing data collection produces tiny increments of new information in comparison to the effort expended to get them" (Lincoln & Guba, p. 350). During the interview process (data collection) and review of transcripts, an initial main idea of "looking back to deepen understanding" began to emerge. When this theme was repeated through interviews 14, 15, and 16, the researcher, in consultation with her Committee Chairperson, determined that the data had been saturated and therefore did not recruit any further participants with whom to conduct interviews.

Six general codes were initially used to organize data from the verbatim transcripts into common categories: 1) Definition [of reflection]; 2) Reason ["Why" I reflect]; 3) "What" I reflect about; 4) "When" I reflect; 5) "How" I reflect; 6) Sharing my reflections. Although not part of the research design, to some extent these codes followed the general questions that were asked of participants in most of the interviews and provided an initial organizing framework for clustering common ideas expressed across the interviews. As the 393 pages of transcripts were being reviewed and coded in a line-by-line fashion, two additional categories were added to help organize emergent ideas related to teaching/learning and comments specific to nursing practice. The basic units of data which began to emerge in this initial processing and analysis were further categorized into groupings of more specific common content (themes and sub-themes). Divergent as well as convergent responses were tracked during this process. Streubert (1991) calls this procedural step "apprehending essential relationships" (p. 121). Such an approach allows for the subsequent discussion of the essence/s of reflection as perceived by individual students and among the total group of students who were interviewed.

Consistent with qualitative methods within a naturalistic paradigm, member checks were conducted at several points following the initial interviews. Participants were initially emailed verbatim transcripts of their interview with the researcher to review and comment on. Twelve of the 16 students replied to this email, indicating that they had reviewed the transcripts and agreed that they were a fair representation of the interview. Four students never responded to the email asking them to verify the written transcripts, even after one email reminder with delivery confirmation was sent. Based on the

researcher's verification of the written transcripts against the audiotapes, all 16 transcripts were included in the findings and analysis. Following the initial coding and theme development, all participants were emailed summaries of the main ideas identified by the researcher and given the opportunity to respond with their reactions. Responses were received from seven participants, all indicating agreement with the emerging ideas. As data analysis continued and themes and sub-themes began to clearly emerge and were defined, summaries of the data were again emailed to all participants, giving them the opportunity to express agreement or disagreement with the analysis. Only 4 of the 16 participants responded to this final member check-in, all indicating agreement with the analysis.

Trustworthiness

The importance of demonstrating to those who read and use qualitative research that such research is a respectable and reliable approach to science is essential in having results accepted and integrated into nursing education and practice (Speziale & Carpenter, 2007). While it is important in any study to establish the trustworthiness of the data, Emden and Sandelowski (1999) have suggested that within qualitative research, it is equally important to acknowledge a "criterion of uncertainty" (p. 5), which affirms that any results are at best tentative and may be subject to change. They suggest that statements regarding scientific rigor within a qualitative study are at best a judgment call on the part of the researcher. In consideration of the ongoing debate over scientific rigor in qualitative research, Speziale and Carpenter assert that "rigor in qualitative research is demonstrated researchers' attention to and confirmation of information discovery" (p.

49). Using terms identified by Lincoln and Guba (1985), which they referred to as "the naturalist's alternative trustworthiness criteria" (p. 301) within the paradigm of naturalistic inquiry, the trustworthiness of this study was addressed in the following manner, taking into consideration the credibility, dependability, confirmability, and transferability of the research.

Credibility

The "truth value" (Lincoln & Guba, 1985. p. 295) of the data in this study was addressed first through informal member checking which took place during the course of the interviews, as the researcher used techniques consistent with qualitative interviewing, such as summarization, to verify that she had correctly understood what a participant expressed. A second measure of assuring credibility was achieved by the researcher simultaneously listening to the audio tape of an interview while reading the transcript to check for accuracy, thereby having the opportunity to correct any errors of fact. In addition, members of the dissertation committee reviewed random samples of the interview transcripts. In this manner, a record of the "correctness" of the record was established prior to coding and qualitative analysis of the data.

Lincoln and Guba (1985) stated that it is essential that participants be given the opportunity to react to representations of their own realities if a qualitative investigator hopes to establish credibility with his/her data analysis (p. 314). Within the study design and consistent with the naturalistic paradigm, participants were emailed summaries of the main ideas identified in their transcripts during initial coding and given the opportunity to respond to the researcher with their reactions. As data analysis continued and themes and

sub-themes were identified, summaries were again emailed to participants who were invited to express agreement or disagreement with the analysis and encouraged to respond. Although responses on the part of the study participants to these member checks could not be forced or guaranteed, soliciting member feedback established the opportunity for participants to affirm the validity of the findings. In addition, the researcher communicated with her dissertation committee, comprised of three doctorally prepared nurse educators, who assisted in reviewing the on-going study for credibility and appropriate implementation.

Dependability

The consistency of the process utilized to obtain the data for the study was assured by utilizing the same basic questions (Appendices D & E) for each of the individual semi-structured interviews. In addition, the researcher herself conducted all of the interviews and the same transcriptionist was used to create the verbatim written transcripts throughout the study.

Confirmability

Throughout the study, field notes and a reflective journal were kept by the researcher, and all documentation related to the study is available for review upon request. In addition, the original audio tapes and verbatim transcripts of the interviews will be maintained in a secure location for one year following the conclusion of the study and will provide an audit trail for the research. The implementation of the study and the data from the study were reviewed by the researcher's dissertation committee on an ongoing basis. Specifically, committee members reviewed the open coding of the data in

order to ascertain that there was agreement by outside readers on those themes and ideas the researcher discerned to be emerging from the data. The final report of the study, therefore, includes a rich, thick description of the findings, consistent with the purpose and methods qualitative analysis.

Transferability

Convenience sampling provided the best possible range of information within the overall study design of the perceptions of generic junior and senior level nursing students regarding reflection. The detailed data analysis of the one-on-one interviews conducted with study participants has provided the thickest description of the phenomenon being examined in this study and thereby meets goals for transferability described by Lincoln and Guba (1985) within the naturalistic paradigm. Ultimately, the judgment about the applicability of findings from a qualitative study is the responsibility of the potential applier rather than the researcher (Lincoln & Guba, p. 316).

Chapter Summary

This chapter has described the use of the descriptive research design used for this study. Sandelowski (1995b, 2000) and others (Artinian, 1988; Burns & Grove, 2005; Leininger, 1985; Morse, 2006; Munhall & Boyd, 1999; Thorne, Kirkham, & MacDonald-Emes, 1997) have demonstrated that qualitative research is a distinctive and credible methodology within the discipline of nursing which can generate new knowledge through discovery and the uncovering of meaning. A qualitative approach, specifically a descriptive design within a naturalistic paradigm (Lincoln & Guba, 1985), was the most

appropriate methodology to use in order to answer the research question posed in this study.

Elements of the methodology which have been presented and explained in this chapter include access to participants, convenience sampling, the recruiting of 16 subjects, and the setting. The procedures for completion of individual interviews with undergraduate nursing students using a semi-structured format have been described and are consistent with the goals of qualitative research and the purpose of the study. The demographic characteristics of the participants have been described, as well as their self-reported previous experience with reflective activities. Ethical considerations and the treatment of human subjects have been addressed. Procedures for analysis of the data have been described and include constant content comparison and open coding to identify themes and sub-themes within the data.

The data analysis procedures which were used in this study permitted the researcher to discover the understanding of reflection as perceived by individual nursing students as well as among the total group of students who were interviewed. An audit trail was maintained during the study and consultation with dissertation committee members was done to confirm and validate findings. Methods for establishing trustworthiness, the qualitative researcher's standard for scientific rigor, have been outlined and were carried out during the data collection and analysis phases of the research. The methodology used for this study, as presented in this chapter, was the best approach consistent with the research question and facilitated the uncovering of students' descriptions of reflection and their understanding of the nature of reflection.

CHAPTER IV

FINDINGS

Using a qualitative descriptive design within a naturalistic paradigm (Lincoln & Guba, 1985), undergraduate nursing students currently at the junior or senior level in three generic baccalaureate programs were individually interviewed in order to answer the question: "What is the nature of reflection for undergraduate nursing students?" The use of such a design facilitated the careful examination of descriptions of reflection offered by participants, allowing the researcher to look for common properties in the data and discern emerging themes through constant content comparison.

As stated in the rationale leading to the design and implementation of this research study, although reflection is increasingly used as a teaching-learning strategy in nursing education (Ferguson & Day, 2005; Nielson, Stragnell, & Jester, 2007), no significant research to date has considered how students view and understand the use of reflection. Therefore, the purpose of this study was to describe reflection from the perspective of baccalaureate nursing students in order to provide nurse educators with information about reflection from the student perspective so that reflection may be more effectively used in academic courses and clinical education to promote and enhance learning.

All definitions and understandings of reflection and related concepts were bracketed by the researcher during the process of data collection and theme development in order to be wholly receptive to the thoughts expressed by participants. Every attempt has been made throughout this study to be true to the ideas of the undergraduate nursing

students who completed individual interviews with the researcher regarding the nature of reflection between July and November of 2009.

Thematic Findings

In this chapter, the findings from a careful examination of the transcripts of 16 individual student interviews are presented and organized by themes. Five main themes and 18 subthemes (Table 2) were specifically identified during the analysis of data units from the transcripts and will be defined and supported by student quotes which provide evidence for the theme development. The main themes that emerged include: Looking back to deepen understanding; Being mindful of thoughts and feelings; Gaining perspective; Giving words to experiences and emotions that have no right or wrong answer; and Using reflection for learning. The themes are presented in the order in which they emerged during a process of constant comparison which was on-going during data collection and analysis. Although "Looking back to deepen understanding" was the first main theme which emerged during the study, there is no priority or hierarchy of importance among the main themes and sub-themes.

Looking back to deepen understanding

As students discussed the nature of reflection, it became apparent that it was for them a cognitive process of thinking about something, generally which had already occurred, and their effort to try to discern deeper meaning about that experience or occurrence. Therefore, the original thematic idea of "looking back" was expanded to "Looking back to deepen understanding". One student attempted to describe her experience of looking back by explaining:

Table 2

Themes and Sub-Themes

Themes	Sub-Themes
Looking back to deepen understanding	Digging deeper into my thoughts
Being mindful of thoughts and feelings	Seeing how far I've come
	Putting the pieces together and making connections
	Seeking resolution
	Finding contentment
	Informing practice
	Promoting change
Gaining perspective	Reviewing practice which guides learning
Giving words to experiences and emotions that have no right or wrong answer	Re-framing situations which promotes understanding
	Recognizing the feelings of another which increases caring
	Putting words on paper
	Sharing words out loud
	Listening and speaking with an open heart and mind
Using Reflection for Learning	Journaling as dialogue
	Trusting others with private thoughts and feelings
	Influence of time, preparation, environment
	Reflection for lifelong learning
	Perception of reflection framed by context

I would define reflection as a process of, I keep wanting to say a process of reflecting, Um, not necessarily a process of analyzing but a process of kind of thinking about or looking back on an event or a situation or anything really, and kind of, you know, thinking about what happened...

Another participant's definition of reflection was more straightforward, as she stated that it meant "Looking back on the day...trying to make sense of things." The temporal nature of students' understanding of reflection was reiterated throughout the interviews, with common thoughts such as "I would define reflection basically as looking back either into yourself or into your mind, just thinking of what you have accomplished, what has gone on that day, just basically thinking back, look back." In explaining her perception of reflection, one student stated, "...I mean, I can think about things that didn't happen [yet] but I think of reflection more as looking back...". Another was more detailed in her explanation, stating "I just don't see how you could reflect upon the future because reflect is like, you know, if you look at the word "re-", like re-doing it, right?...a prefix for going back." These two examples support the definition of the first theme, "Looking back (emphasis added) to deepen understanding".

This main theme was expressed more specifically by students in several ways that indicated some common understandings about the nature of reflection, which are articulated in sub-themes directly related to "looking back to deepen understanding". If one thinks of the main theme "Looking back…" in terms of action, the sub-themes may be thought of in terms of outcomes for this action. The three sub-themes related to this

theme are: Digging deeper into my thoughts; Seeing how far I've come; and Putting the pieces together and making connections. They are discussed as follows.

Digging deeper into my thoughts

The sub-theme Digging deeper into my thoughts reflects the students' perceptions that the nature of reflection offered them the opportunity to contemplate their thoughts and ideas, as well as those of others, more extensively than when they were considering how to answer questions or solve problems in other settings. Students spoke of sharing information in teaching/learning situations in their various nursing programs, but distinguished between such academic exchanges and reflection, with the latter involving more personal thought and the former more often involving the recollection of factual information. As one participant stated, "...[Reflection is] going a little deeper with things and writing about feelings rather than about my day...". Another student commented that reflection was "...thinking...or looking back...and kind of evaluating what happened....It's not just what happened, it is the thoughts along with what happened." A particularly philosophical response which illustrates this sub-theme incorporated the metaphor of a mirror:

Whenever I think of reflection, like, visually I see a mirror...but I don't think that gives an accurate description...because that [mirror]shifts your outer appearance and you are not really getting in deep and seeing what you are thinking or what is happening in the past, or what could happen in the future. So I think whenever you see more of like a mirror you are only seeing the present and you are not getting the big picture...and I think it [reflection] is way more than that.

Reflection is so complex... I think it is much too deep than just your outer view and how you are right now.

Reflection was variously expressed by participants as both the 'invitation' to think more deeply and the 'response' to thinking more deeply about thoughts and feelings, specifically those related to their nursing experiences. "I think reflection helps nursing [education] especially because nursing is so fast paced and it is so intense that reflecting ... is a chance to really, really understand what happened [and]...it keeps getting deeper and deeper with each class that you go through", explained one student. "Digging deeper..." meant for these students uncovering not just factual answers to questions, but coming to new self-understandings about previously unknown or unexpressed emotions and opinions. Several students shared deeply personal experiences about instances when reflective activities, journaling in particular, had profound effects on their lives. One example of this is, "...[reflective journaling] has also helped me to overcome the depression I was in...and I would just write and write you know whatever was coming out of me. I'd almost just write and not even know what I was writing. Because then I would look back and [understand]."

Seeing how far I've come

"Looking back" either physically with one's eyes, as when hiking on a trail, or metaphorically, as when considering one's progress in an academic program or professional role, frequently results in the heightened awareness that one is not in the same place, either physically, mentally, or emotionally, as one was at a previous point in time. The understanding of reflection as a way of seeing how far one had progressed in

their personal or academic life was a common idea expressed by students, illustrated by such comments as "I think of reflection as thinking about where I was in the beginning of all this and where I am now, and all of the things that it took to get me here." Data units which converged to form this sub-theme conveyed a sense of affirmation and increased self-esteem on the part of students, who, through reflective activities, were able to see how far they had come. This awareness resulted in deepened understanding of the importance of their cumulative knowledge base and increased clinical skills repertoire. For many students, the deepened understanding which emerged from "seeing how far they had come" was a motivating force as they faced new challenges in their personal and/or academic lives. In the words of one student,

I would define it [reflection] as looking back over an experience and analyzing feelings and data from that experience...For me it is helpful because I can see, like I said, where I came from and where I am now, and it is encouraging to know how much I have made it through.

Another student who also conveyed positive feelings of satisfaction about this revelation of "how far (I've) come" explained "...I think you have to do it now [in the nursing program] to see where you are and where you have been because that's what keeps you going. ...It definitely helps build my self-confidence in all of this...". In particular, students explained how reflective journals afforded them the opportunity to look back after extended periods of time and, in being able to read their actual thoughts and ideas from earlier stages in their scholastic life, deepened their understanding and appreciation of their growth and development in the student nurse role:

I have found writing it [my reflections] down to be helpful, especially when I look back after a large amount of time has passed...because I'm like, 'Oh wow, I came so far from where I was at that point in time', and I feel like I've learned so much.

One student expressed more ambivalence about the positive effects of "looking back to see how far I've come", however, as she stated

I don't know if it [reflective journal] really was helpful. It was nice to like see, like when I was done with the semester, to look back and see where I was at and things like that, and see if I accomplished the goals that I wrote, but I don't know if it was really helpful.

Putting the pieces together and making connections

Sometimes using these exact words, "You are able to make connections ... Able to put all the pieces together to answer a question", students spoke freely about consciously bringing together previously un-connected knowledge, skills, and experiences and, through such reflection, having an "ah-ha!" moment in which they were able to relate these "pieces" to each other in a manner which gave the student understanding about a previously unknown or misunderstood concept or experience. As one student explained,

So it [reflection] is kind of a way of connecting things that have happened in the past with what you are doing now...and you will retain it. It is that mental note up in your head that, 'OK, this is what I saw, this is what we talked about, and now I know'.

Another student commented on using reflection in the clinical setting as she shared,
...There is a connection...Once you are actually physically doing what you are

reading [about], you understand it more...As I am doing it, it is playing back also in my head, like, I remember this and how this goes this way and this is how I do it.

Giving a very specific example from a recent experience, a junior level student said,
...we were learning about Parkinson's [disease]...and I had this patient... and
then, when [I] saw them in person, [I'm] like, yeah, this is exactly right. Then,
when you go back and take the test you can reflect on the patient that you had in
clinical and you're like, oh yeah, this is what it was.

Yet another participant expressed the essence of this sub-theme as she spoke about using reflection for problem-solving:

I think if I break a problem down to just, you know, what's really bugging me or what really is wrong, then I think I can figure out a way to make it better. So I guess that would be like putting the pieces back together. The right way.

Thematic Summary

The first theme which emerged from the constant comparison of interview transcripts generated in this study was Looking back to deepen understanding. Its three associated sub-themes were: Digging deeper into my thoughts; Seeing how far I've come; and Putting the pieces together and making connections. Each of these thematic ideas captures a particular facet of the essence of students' perceptions that reflection involves a cognitive process thinking about something, generally which has already occurred, and discerning deeper meaning about that experience or occurrence.

Being mindful of thoughts and feelings

This theme represents the heightened state of awareness of thoughts and feelings, but generally not facts, that students consistently spoke about when discussing the nature of reflection in their personal and academic experiences. Student quotes supporting the development of this theme and its associated sub-themes referenced such things as "taking time to yourself", "take a moment to take everything in", "prayer", "meditation", "just my thoughts and feelings", and "mindfulness". One student described her reflections as "... More of how I felt about a patient or the way they were feeling and how I have reacted to that and how I felt at the end of the day." Students expressed being keenly aware of the particulars of a situation when they were engaged in reflective activities. "Taking everything in" was a phrase used by one participant when she spoke about reflection. Another participant stated, "...when I reflect...I appreciate little things that I don't think a lot of people usually think about in a day". One particular student brought her personal journal to the interview, in which she recorded not only her own thoughts and feelings, but quotes from others, such as the Buddhist monk and Nobel Peace Prize winner Thich Nhat Hanh. As she shared, "...through journaling and writing and becoming more just kind of in tune with myself, I am becoming more mindful in the now."

Comments made during the interviews indicated that, for some students, being mindful of thoughts and feelings occurred when they were asked to reflect about a specific experience, such as a clinical rotation or following a service learning project.

Many students also discussed the apparent randomness with which they found themselves

reflecting on thoughts and feelings, as in this quote:

It's random. You know, one sentence...that strikes a nerve,...Situations, conversations, meetings with people, even just driving in the car, seeing the scenery, it triggers certain feelings, it reminds you of something you've been through.Music, certain songs...reflect exactly how you felt in the past or how you are feeling.

The very personal nature of reflection was expressed by one student, who stated, "It's [reflection] your thoughts and opinions....just how you feel...Sometimes it can be how you felt, sometimes it can be about how the patient felt, all different kinds of things." Another student explained reflection saying, "I would define it as taking time to yourself, thinking about feelings". One student actually made the connection between reflection and mindfulness as she shared, "I would say that mindfulness and reflection go in the same boat."

The perception of many students that reflection has significant spiritual dimensions was apparent in the quotations which support this theme, including ...prayer is my form of reflection. ...I place my burdens elsewhere to kind of get relief when I think about things, and I try to see hope. ...Sometimes if I think about it long enough, I kind of, you know [come to a resolution]...the answer comes to you through reflection.

Across the spectrum of participants, being mindful of thoughts and feelings was a common understanding of the nature of reflection. As the data units were more closely examined for deeper meanings, several distinct sub-themes emerged, which were

identified as: Seeking resolution; Finding contentment; Informing practice; and Promoting change. Each of these sub-themes is discussed as follows.

Seeking resolution

As students described their experiences of reflection as being mindful of thoughts and feelings, several outcomes of reflection/reflective activities were articulated. One student described, "...when I get conflicted I can...reflect on what I'm thinking... and then sometimes I can find the answer...I can come to a resolution." Sometimes these ideas were offered in response to the interviewer's questions about "why" or "how" someone reflects, and, on other occasions were comments in response to a question such as "How do you know when you're done [reflecting]?" The examination of these quotes individually and as a cluster of common ideas led to the sub-theme Seeking resolution. The working out of some problem or dilemma, some level of psychological, emotional, or spiritual discomfort felt by the student, is evidenced in quotes supporting this subtheme as a motivating factor for reflection at certain times in one's professional or personal life. "If I had a bad day or something happened I will constantly reflect upon that until I can find some kind of inner peace to just say, OK, tomorrow will be a better day, let's move on, here's what I can do differently tomorrow." One student shared a situation she had with a faculty member in which reflection played a significant role leading to the resolution of a conflicted relationship:

This semester I had a little incident with one of my professors, and when I reflected back on it I [thought that] maybe I did come off a little too strong...and the more I thought about it, I felt as though I did [act inappropriately]...and so I

went to her and apologized. ...So it [reflection] did help me fix a relationship that could have been broken with my professor.

Reflection which seeks and leads to resolution allows students to, as one expressed it, "put that behind me and move on to something else". A dissimilar observation about using reflection to seek resolution, however, was proffered by one participant, who observed that "I guess reflection is bad...that it hasn't helped me when I think about a situation that I absolutely cannot change, so no change equals getting nowhere, kind of."

Finding contentment

Student quotes describing "getting it off my chest", "feeling more calm, more at ease", "...and then I could relax" all illustrate the nature of reflection as experienced by the subjects as a stress reducer. Even in instances when students had experienced a distressing incident, they voiced feeling satisfied after reflecting on the experience and knowing that they had done the best that they could have in a given set of circumstances. As one participant said: "Well, as long as you feel you did the best thing that you could, you know, because nursing is going to be stressful, but as long as you feel like you did the best that you could...then you can rest."

Whereas the sub-theme "Seeking resolution" emerged from quotes largely describing interpersonal occurrences, "Finding contentment" was derived more from intrapersonal situations. Contentment was variously expressed by students as peacefulness, self-satisfaction and pride, and a relaxed state of body and mind. One student described feeling less stress after reflecting about an intrapersonal dilemma she was experiencing: "...it [reflection] can also be a stress reliever...Because it allows you

to think back about...a stressful situation... see it a little different and just cleanse your mind of it." Another participant found a sense of contentment after reflecting on a situation and shared, "...after you reflect on where you were, you think ahead about... where [you are] going....and that makes me feel good about myself". Yet another student quote which supported this sub-theme puts the feeling of contentment this way: "It makes me feel good, so that is part of my reflective process, as well. It is a very therapeutic thing." One quote, in particular, provided an exemplar of mindfulness leading to the contentment which comes from a sense of gratitude: "I have recently been reflecting on how thankful I am...for a lot of things that I do have and that I take for granted a lot and I want to try and be mindful of that."

Informing practice

Another result of being mindful of thoughts and feelings as described by the participants in this study was informing practice. For many of the students, this was articulated as connecting classroom learning with clinical practice, prompted by the personal knowledge of a unique patient care situation, juxtaposed with a mindfulness of their thoughts and feelings about a particular situation with which they were confronted. Quotations supporting this sub-theme clustered around common sentiments such as "mentally preparing myself", "how I could handle that differently in the future", and "figuring out what happened, why it happened, and what the next step should be". The following quote is an example of the essence of this sub-theme:

...if I were reflecting in clinical, it would be about my past clinical experiences and, you know, how I reacted in a certain situation and if it was right or

wrong...And then I could go forward with what I thought was right, you know, in the now [present]...

Clinical experiences in maternal-child and psychiatric/mental health nursing were frequently referenced as students spoke about the manner in which reflection informed their clinical practice. One quote in particular summed up the essence of this sub-theme as it was clearly demonstrated across numerous interviews:

...if you don't reflect on what you have done [in the past] or what you are about to do [present/future], then I don't think you can be as good a nurse as you could be. I think it [reflection] adds compassion, caring, responsibility.

Promoting change

The fourth sub-theme relating to the theme of "Being mindful of thoughts and feelings" emerged from repetitive student ideas about how reflection prompted them to specifically change or improve something they had done, felt or said. An illustration of this was, "...But I know that things that I have done in the past and that I have reflected on have helped [me] and changed the way I react about things now." The previous sub-theme, Informing practice, included the possibility that one might be "informed" to change nothing, but rather, upon reflection, continue to practice or behave in a manner which had been determined to be appropriate and good. The distinction between the sub-themes "Promoting change" and "Informing practice" is that the latter is more focused on concrete actions or behaviors, while the former concerns students' emotional or affective responses. As one student explained,

...I analyze everything I do. Did I do that right? Maybe I should have said this instead [of that] or, you know, acted this way instead. ...At the end of the day I go back and think, well, all right, well, I said that to her - was that the right thing to say, or maybe I should have approached it a little differently...

"Promoting change" as an outcome of reflection led to a student feeling better (affective domain), whereas "informing practice" resulted in a student doing something better (psychomotor domain). As one student put it, "...I know that things that I have done in the past and that I have reflected on have helped [me] and changed the way I react about things now." This sub-theme reflects action which results from heightened mindfulness about one's thoughts and feelings. One student commented that intentional reflection would be a positive activity to engage in on a regular basis in order to inform (her) future behaviors:

I think it would be good to reflect every day...Just look back and see, just assess the situation and see if you felt like everything ran how you wanted it...or if you had to do that again, how could you make it go the way you wanted it to go...

Thematic Summary

The second theme identified in this study, Being mindful of thoughts and feelings, expresses the common idea articulated by participants that reflection involves a state of keen awareness. Its associated sub-themes include: Seeking resolution; Finding contentment; Informing practice; and Promoting change. Each of these sub-themes illustrates an end-point students described arriving at as a result of the increased mindfulness they had through reflective activities.

Gaining perspective

While few students actually used the word "perspective" in describing the nature of reflection, most verbalized an understanding of reflection as the act of viewing things in their true relations or relative importance. In doing reflective activities, students consistently described the ability to see things more clearly, to bring to their consciousness new understandings about the relationship between discrete ideas and experiences, as expressed by one student who stated,

I can replay a situation that I may have had with one of my consumers to think of a better approach to have dealt with them or something I may have said or they may have said to understand what they were talking about....If I can sit back and reflect on it, it could give me a better insight into where they're coming from.

As quotations from the transcripts were further reviewed and more deeply reflected upon by the researcher, three sub-themes related to "gaining perspective" emerged, each representing one aspect of what students experienced when they were engaging in reflection at various times. The sub-themes included: Reviewing practice which guides learning; Re-framing situations which promotes understanding; and Recognizing the feelings of another which increases caring. These will be described in more detail in the following section.

Reviewing practice which guides learning

This sub-theme represents the manner in which students described reviewing a situation or interaction they experienced in order to learn from their mistakes and thereby increase learning. In their discussion of the nature of reflection, students clearly

distinguished between looking back on thoughts and feelings for better understanding and looking back on behaviors and actions, which this sub-theme more specifically represents. One quote illustrated the essence of this sub-theme, as a student discussed reviewing a situation in order to learn from her mistake and improve her practice:

I think if you sit back and...reflect about different things that go on, you can always see where you could have improved...you could have done something differently. But when you are in a situation, a lot of times you don't see it...once you step out of the situation and have a chance to reflect back on it, you can then see it because you are replaying the event in your head.

Another participant explained, "I make sense of things and try to figure out what I did during the day, like if I made mistakes or if I think something should have been done better, [and] then I reflect back on that to help me improve the next day."

Several students also made comments with a future orientation when discussing how reviewing practice gave them perspectives which guided their learning and future behaviors, as exampled in this quote:

[after clinical simulation or case study] ...that would be reflecting...I think it is a backwards way of doing it because you are reflecting on what you would do and then you are kind of giving feedback on...what could have worked better,...And then, if that situation would happen in the future, you can reflect back on that simulation.

Another student, in referring to the reflective journal that she was required to do as a part of her maternal child health clinical, expressed what emerged to be this sub-theme in this

manner:

...for Mother and Baby 1 clinical... it was kind of guided. They gave you certain questions or ideas to kind of follow...You know, like this is what I did today, this is what I've accomplished and this is what I wish I could have accomplished today....and the next time [I encounter a similar situation] I would like to try to do this.

In this example, it is obvious that students were given some prompts by the faculty to promote the reflection, which subsequently afforded the student an opportunity to gain perspective on her clinical practice and consider what she would do the same or differently in the future.

Re-framing situations which promotes understanding

As students described specific experiences of reflection in their personal and/or academic lives, they discussed finding greater understanding by looking back at a situation with a different perspective than that which they had previously used to examine it. By "re-framing" the situation using a new perspective, participants shared how their understanding of that situation had changed or increased. Repeated occurrences of this idea in the interview transcripts led to the description of this sub-theme, Reframing situations which promotes understanding. The following quote illustrates how one student experienced this when participating in a regular study group:

Especially with [the study group], having the reflections of different people helped a lot. It was easier for me to be able to hear somebody else say it and absorb it again. It was rewarding because you were able to feel like you

understood something when they were talking about it,...or when you didn't feel like you understood anything [before the group met], you'd be like 'OK, um, I see how you are saying it now. Maybe I didn't see how the teacher was saying it, but when you explain it I understand that.'

Another student from the same nursing program revealed an understanding of the nature of reflection as experienced in a study group, as well, and shared her "ah-ha moment" which promoted understanding: "...yes, it does help me a lot...when I study or when I reflect with other people, because everyone's teaching is different...but someone else can present it in a way where you're like, Oh, there's the clicker, I get it now."

In sharing about an emotionally challenging situation she had experienced in the clinical setting, one student described her experience of reflection this way: "...You know, I mean, with the instance of the Mother Baby clinical it kind of forced me to go back and think about how I felt in that situation...and maybe think about it in a different way." When examining a problem by looking back, students placed it within a specific context, but when they were willing and able to re-adjust their perspective and examine a situation from a different angle, they described arriving at new and better understandings.

Recognizing the feelings of another which increases caring

Students who were interviewed for this study shared the ways in which reflection helped them gain perspective on various situations, and their experiences often pointed to a growth in empathy. "Recognizing the feelings of another which increases caring" emerged after closely examining the data within this major theme, Gaining perspective. It was discovered that numerous instances of positive changes in caring attitude were

revealed by students as they discussed what happened as a result of their new perspectives on a situation because of reflection, such as:

..our Mental Health rotation was a lot of talking [with the patients]. Like it is so interesting, especially with people who don't see things the same way that you do, it is really interesting to hear their, you know, perspectives...[it let me] really empathize, put myself in that position and realize what it would be like...

Another student, also discussing an experience from a mental health clinical rotation, shared that "...when I'm in a situation with one of my consumers, reflecting, like if I was in their shoes how would I feel, how would I handle this, and trying to understand what they are actually going through."

One quote provided evidence that through increased self-awareness and gaining perspective on her own thoughts and feelings through reflection, this student was more open to recognizing the different feelings and experiences of her patients. She discovered an increased sense of personal gratitude for her own experience as well as a heightened sense of caring for others, even if their experience was much different:

[reflecting about a situation with pediatric clinical] ...I learned that there is different --- people come from different backgrounds and situations and everybody's family situation is different...It just made me think about how grateful to be that you have somebody that loves you and some of these kids don't have anybody and they just need that attention and strive for it and tend to act out because they want the attention and can't get it.

The following passage from an interview transcript depicts the participant's awareness that the spiritual and emotional states of a client must be considered within a holistic nursing plan of care:

[I feel like reflection] ...has helped me a lot with this whole nursing situation and I think that reflecting and journaling, being in the now and mindfulness, all that stuff, has helped me understand myself more, which in turn has helped me understand other people, so I feel like, you know, how can I put this? Like...I understand my needs and things...

Over time, this student gained perspective on many dimensions of the nursing role, and was able to transfer her own growing understanding to an increased awareness for connecting with her patient, thereby increasing her caring for and about that patient.

When asked if reflection increased her empathy for other people, the student replied, "...Yeah, I would say so. I just feel like I can make a better connection with them on a spiritual level..." She explained that by studying the patient's healthcare record, she could learn about their physical needs and determine what nursing actions she should take, but she also stated that "...spiritually and emotionally, there is still that person who can get better or can get worse based upon how they are being treated."

Caring among undergraduate students is difficult to evaluate, and yet quotes from this study unmistakably point to self-described positive changes in student demeanor and caring behaviors as a result of reflection on their own feelings and the feelings of others.

Thematic summary

"Gaining perspective" is the third major theme which was revealed in the examination of interview transcripts generated by this study. It is characterized by the perceptions of students which revealed that, through reflection, they were able to view previous situations more clearly, thereby bringing to their consciousness new understandings about what they had experienced or observed. Three sub-themes emerged which depict different aspects of "gaining perspective", as described by the participants in the study. These include: Reviewing practice which guides learning; Re-framing situations which promotes understanding; and Recognizing the feelings of another which increases caring.

Giving words to emotions and experiences that have no right or wrong answer

Assigning words to thoughts and feelings was a common understanding revealed in the transcripts of student interviews discussing the nature of reflection. The undergraduate nursing students in this study collectively expressed that their reflections were neither right or wrong, true or false, good or bad, but were nonetheless valid expressions of their true feelings at a given point in time. As one student put it, "I don't think there are any right or wrongs you could do to reflection." Another participant distinguished reflection from her perception of critical thinking, stating "Reflection is your whole opinion. You don't have to find anything...that backs up your opinion and you don't have to go and do all the research to support it."

Reflective activities afforded students the opportunity (and, in some instances, "pushed them") to articulate emotions and share experiences, verbally or on paper, that

they otherwise might have missed. When asked by the researcher how she might tell someone how to do reflection, one student responded, "...Speak from their heart and just write down whatever they think, whatever comes to mind. There are no guidelines per say." Another participant equated reflection to prayer, and described her increasing awareness of thoughts and feelings through reflection in this way: "...another time that I reflect is when I pray...it just becomes like a conversation in my head. Prayer becomes reflection." Several other participants discussed prayer as they mused about their understanding and use of reflection.

Many student quotes give evidence of the appreciation that students had for being able to "get in touch" with deeper thoughts and feelings through reflective activities. The varieties of reflective activities utilized by students as they "gave words" to their experiences and emotions led to the identification of five sub-themes, which will be discussed in the following sections. These include: Putting words on paper; Sharing words out loud; Listening and speaking with an open heart and mind; Journaling as dialogue; and Trusting others with private thoughts and feelings.

Putting words on paper

The act of writing, while resisted by some students according to their interviews, was an experience common to many of the participants in this study. Journaling, in particular, was referenced by all of the students at one data collection site when they were asked to talk about their understanding of reflection. An illustration of this sub-theme is

I feel like a reflective journal is completely different [from a clinical log] because you get to...give your emotions. You can give your feelings...When I am

reflecting I don't make it a list. It just has to flow.

Another student put her experience of putting words on paper this way: "[my journal] was more like a [chance to] freely express yourself, express your feelings, what you learned, you know, what bothered you, that kind of thing." In thinking back to a particularly challenging time in her personal life, one participant shared that "...journaling really became an impact on my life at a time when I was really very depressed, and that became my outlet to, you know, figure things out."

Putting their thoughts down on paper was one way in which students were able to give words to their experiences and emotions, often after their clinical education day. For some students this meant writing in a journal or notebook, while others spoke of typing at their computers, "virtually" putting the words down on paper, as they reflected on an experience and tried to articulate their thoughts and feelings. The manner in which this sub-theme relates to its primary theme, Giving words to experiences and emotions that have no right or wrong answer, can be seen in the following example from one student's experience:

And then [in] Psych you would [write about] thoughts and feelings, but they don't typically have you do journals of thoughts and feelings for every clinical rotation, just certain ones. Like they want to know what the beginner nurse is thinking after their first clinical day or after their second clinical day...And they want to know what the Mental Health nursing student is thinking after each day of clinical because it is a heavy subject and you hear some stuff that you would never think you would ever hear...so you can process it better.

With respect to reflective journals in particular, as compared to other types of clinical logs and paperwork or assignments, one student described how putting the words on paper helped her get in touch with more nuanced feelings about her experience:

It is more abstract...[about] what I am thinking inside of me. It is not so black and white, not so clinical. I mean, there is no right or wrong [answer], but it's just how I'm feeling...how you experienced what you did, how the patient made me feel...How I made the patient feel.

It must be noted that not all students shared an enthusiasm for "putting words on paper". Some, in fact, expressed that being required to write a journal after a clinical experience felt like a barrier to their getting in touch with thoughts and feelings. One participant explained: "You know that it probably is very therapeutic for them [other students] to write things down....But for me I just find...it is in my head,....I am always thinking, so I don't find it that helpful to write it down." Other students, however, shared that not only did writing their thoughts and feelings help them get in touch with what they were experiencing, but also prompted them to discuss these feelings with others, such as the example in the following quote from a student discussing her recent service learning trip to Belize: "...and my roommate, a lot of times we would journal before we went to bed, and as we were journaling we would start talking about what we experienced that day."

Sharing words out loud

It became apparent in examining the interview transcripts that journaling was hardly the exclusive understanding of the nature of reflection for the students in this

study. Many participants described reflective activities which involved speaking with others, including formal and informal conversation with peers, friends, and/or nursing faculty. In contrast to some of the quotes exampled in the previous section discussing "putting words on paper", one student stated

It [reflection] is more verbal for me. When I talk, I can understand it more than just writing it down...Some people decide, 'I'll reflect and I'll just jot it down', but I don't jot it down. I always keep it up in my mind but I normally don't write it down on paper.

In discussing reflection and reflective activities, students recounted clinical postconferences, debriefings, and study groups as places where they reflected with others by talking about their experiences, thoughts, and feelings. For example, one student described the following:

...and then in post-conference we...kind of let stuff off of our chest or share something different [than the specifics of the treatment plan]. I consider post-conference way more reflective than writing down 'this person is 46 years old and I wrapped their left ankle...'. It puts everything out there in an organized way...gets everything out of my brain.

In another comment which supported and illustrated this sub-theme, a student shared how much she valued the opportunity to "share the words out loud" with her clinical group:

Sometimes we reflect...like a post conference with the clinical group...It is reflecting on the day... we sit around a table somewhere...and talk about our day and everybody adds something into it – good, bad, indifferent...you hear

interesting things that you learn...that is probably one of my favorite parts of the day.

Verbally discussing experiences and emotions with others allowed students to articulate thoughts and feelings about previous situations and helped them explore their own developing ideas while getting feedback from others about those ideas:

...and we talk it out after every session, like in clinical, a post-conference kind of thing. We...talk about the things that we have already been through, the patients we have had, anything that has gone right, anything that has gone wrong. There is a lot of praise in that. There is...constructive criticism, too, so you know what to do better with the next patient.

As these quotes demonstrate, not only did students value the opportunity for reflecting together by sharing experiences in a group setting, they also valued the opportunity for immediate feedback on what they were thinking or feeling. This happened more expediently when sharing words out loud as opposed to sharing written reflections with an instructor or other students.

Listening and speaking with an open heart and mind

The dual nature of this sub-theme, listening and speaking, represents the importance students gave to both the opportunity to hear and to speak when reflecting with others. Doing so was valued by the students, as illustrated by this statement: "I think it [post-conference] is really good because if you had a rough day you are able to reflect and hear what everyone else is experiencing and sometimes it is not just you who has had a rough day..." Another student, in describing one of her experiences with reflection in a

classroom setting, said "I think I get more from hearing other people". The following quote captured the essence of this sub-theme and, in particular, demonstrated the importance of listening with an open heart and mind which emerged as students discussed their perceptions of reflection:

I think it was helpful because you just got a chance to kind of wind down at the end of the day and you got to hear how everybody else's day went and you got to hear what other people did...what worked well for them, and I think that helps learning...Because if you are just always reflecting on yourself, you might not always get to learn more. But if you are kind of reflecting on other people and figure out what worked well for them, you can try that in your way and see what works for you. [You get] a bigger picture. If you hear everybody else then it kind of gives you a whole understanding of what happened throughout the day.

Journaling as dialogue

Participants in this study discussed the use, albeit the inconsistent use among the faculty and programs where students were studying nursing, of writing in a reflective journal and having the faculty respond in writing, either electronically (online format) or on paper. This sub-theme emerged from various comments made by participants who described using their journals as a format to have a conversation with themselves, to write and later come back and reflect on their own words, and in doing so, consider their initial ideas from a different perspective. The following is an illustration of this sub-theme:

...with my journaling. I think as I talk, and I write it down more so than actually

just sitting there and trying to talk it out...Because then I can look back on it and not have ten billion other thoughts in my head. I can write it down and "talk it out" that way.

In discussing a recent experience she had with online reflective journaling, another student shared the following quote which highlights the dialogue feature of this subtheme:

It is the first time I have submitted a journal online [this semester], and our teacher responds to each one of us, even if it's quick,...but she acknowledges how you are feeling about that subject.... I like hearing her opinions or what she has to say about the same thing. I like to hear that she might agree, I mean, who doesn't? But it helps to know that I am on the right track.

It is this feature of a number of passages in the interview transcripts, describing a "back and forth" communication in some reflective activities, which distinguished this subtheme from the earlier sub-theme "Putting words on paper".

In a few instances, students intentionally shared their journals with others in order to promote a conversation about the contents and solicit support or understanding. In one particular instance, a student discussed the manner in which sharing reflections among peers in response to a prompt was a required part of one course she had taken:

[about online journal for Pediatrics clinical] We had to log in and do it...and then...once everybody responded to the question we would have to go back and respond to everybody else's responses and see how they responded, if they gave

any new questions or if we can give them any questions, or see if we can give them any advice...

'Journaling as dialogue' is the sub-theme which supported all of these instances of the nature of reflection as understood by undergraduate nursing students.

Trusting others with private thoughts and feelings

To trust another is to do something without fear or misgiving. The essence of this sub-theme emerged from the understanding described by students that their reflections are unique, intended for their own use. As one student put it, "I go deep...when I'm writing...on my own that nobody else is going to see." This understanding, that students expressed their thoughts in reflective activities as belonging to them, was described by the word private. The following passage from the interview transcripts illustrated the concern many students had trusting others with their private thoughts:

...I don't really like turning in my journals for classes. Like, I like making them but I don't really like turning them in. ...I think, because you are more hesitant to write certain things down...that might be a reason why people don't fully write [about] their entire experience when they are at clinical that day because they don't want to be stepping on anyone's toes or...have the feeling that the instructor is going to be judging you based on what you've written.

Another student commented on the value she places in being able to trust someone else, in this situation a close friend and not a faculty member, with her private thoughts:

I have a really close friend and her and I kind of connect on the same level...we have a lot of the same opinions and beliefs and whatnot, and...she is really the

only person I can really talk to and reflect [with].

This sub-theme represents the persistent idea, supported by student quotes, that reflections in all forms are deep, personal thoughts and ideas which are not readily shared with others until a trusting relationship has been formed.

Thematic Summary

"Giving words to experiences and emotions that have no right or wrong answer" emerged as a main theme when transcripts of students' interviews were carefully reviewed in this study in order to discover the perceptions of undergraduate nursing students regarding reflection. A general idea expressed by students was that there are "no rights or wrongs" when doing reflective activities. The five sub-themes which related to this main theme described various ways and conditions under which students discussed "giving words" to their experiences and emotions. These included: Putting words on paper; Sharing words out loud; Listening and speaking with an open heart and mind; Journaling as dialogue; and Trusting others with private thoughts and feelings.

Using Reflection for Learning

The interviews with the 16 participants in this study revealed some important ideas and opinions regarding the use of reflection in teaching/learning, leading to the broad descriptor of the final theme which emerged from an evaluation of the data. This theme represents comments that were heard and understood to be students' informal evaluation of the various ways in which they have experienced reflective activities as a pedagogical method and what approaches were more or less helpful to them in their nursing education. Additional information which was freely shared by most participants

in this study gave some insight into their observations of the manner in which they have seen nurses using reflection in actual practice, and how the students foresee themselves using similar reflective practices for lifelong learning in their future careers as registered nurses. An unanticipated finding was the discovery that student perceptions of reflection in teaching and learning were notably influenced by the specific institution and/or nursing education program where they were enrolled. The sub-themes include: Influence of time, preparation, and environment; Reflection for lifelong learning; and Perception of reflection framed by context. These further describe specific aspects of the main theme, Using reflection for learning, and are described as follows.

Influence of time, preparation, and environment

As students discussed how they experienced reflection in teaching and learning, repetitive comments indicated that their perceptions were influenced by considerations of the time needed for reflection, how much preparation or explanation they had received for the reflective activity, and the environment in which they did their reflecting. Most students who were interviewed for this study expressed that reflection takes time, but is generally a worthwhile use of their time. As one student put it, "it is time consuming because it is hard to think about how you feel." When faced with numerous assignments and deadlines, however, some students shared that reflection was not a top priority for them, as in this statement:

...I understand the purpose of it ...but, you know, when you are in midterm week and you have a hundred other things to do, the last thing I wanted to be doing was sitting and writing about what I thought about my clinical day, you know

what I mean?... And especially because I am not somebody that journals or likes to write things down like that...So for me it was like just another thing on the list that I had to get done.

Some students acknowledged that while they themselves appreciated reflection as a teaching/learning strategy, not all of their peers necessarily agreed. "It [clinical journal] is kind of a joke to everyone else....They're [other students] just like, oh I'll just write this and get it over with. Like they are not really reflecting. I feel like they are just kind of getting it done."

In listening to the interviews and repeatedly reading over the transcript data, it became apparent that students experienced various levels of preparation and explanation for reflection within their nursing education programs. One student alluded to being "told to do a reflective journal" but not really receiving any explanation about what elements such a journal could or should include. The evaluation of reflective activities seemed to have some bearing on the seriousness with which students took such assignments, as well as the freedom they felt they had in expressing any type of thoughts or ideas. While comments from the participants indicated that they did not feel that reflections can or should be graded, they also acknowledged that without any type of evaluation by the faculty of their work, many might not take the opportunity to engage in reflective activities seriously. One student, in discussing her clinical journal, shared this thought: "When it is worth points it is better because then you are actually getting points for it... but when it is not worth points, you are just like, 'I feel like I can't do this'." Conversely, another student pointed out that when reflective assignments were graded, some students

failed to invest the time and thought necessary to benefit from the reflection:

I think like, if it's a journal for class or something, I think people might just feel like it's a homework assignment rather than like a personal experience and something that could really benefit them, and so they are just trying to get it done...just trying to get the good grade.

Interestingly, one participant shared an observation from her own experience which demonstrated the complexities of language, and how previous experiences could color one's perception of a word such as reflection and, perhaps, influence a student's attitude toward reflective activities used in teaching and learning in an undergraduate program:

I work in a Behavioral Health Unit. When I [think about] reflection there at work, I think more of our yearly review from our manager, but I don't really like that. That is always so intimidating. I think that might also be a reason why some people don't really like reflection...Because you are worried that all the negative things are going to come up like when you are in your review.

The importance of the environment emerged as a common idea in student comments as they discussed the optimal time and place for their own reflective activities. "I think sometimes I have to be comfortable, like in my own environment, in my car or in my bed is my personal space where I can either say it out loud or talk to myself...I think a lot, I reflect a lot..." Several students shared that music helped them reflect, such as this participant who stated, "Music is a very good reflector for me....something about instruments like just kind of puts me in a zone and I start thinking about things..." For another, however, the environment needed to be quiet in order for them to reflect,

although "quiet" could be tied to a feeling of relaxation which the student may need in order to reflect: "Especially before I go to bed [I reflect on things] because it is quiet and you can think everything...you're relaxed."

In asking students "how" and "when" they used reflection in their learning, a number of students said that they frequently reflected on things while driving:

...it may not be, you know, journaling, like I said, but I think I will always be sort of reflecting at least on the day and things like that. I think I constantly am, on my drive home from work....I reflect on what happened that day and things like that.

Some students shared that their time in the car was one of the rare times when they were alone and could "really think". Commenting on her optimal environment for reflecting, one student explained, "I like to go by myself and just reflect. ...I am rarely ever by myself except in my car and when I go walking, so that is my reflection time." Others shared that regular reflection time and "alone time" occurred most often right before they went to bed: "Normally it [reflection] occurs when I am not busy, like at night when I'm just thinking about anything, my mind wandering off before I finally fall asleep." One student actually reported that she reflects on things while sleeping:

...and sometimes I do it [reflection] in my sleep. Sometimes I'm asleep and all of the sudden stuff comes to my head in my sleep and I'll jump up and be like, oh, now I know...and I'll start writing it down real fast.

In discussing the use of reflection in teaching and learning, the researcher asked students if reflection itself could be learned, as other learning strategies and study skills may be. One student responded:

I think so. I mean, everything takes practice ...so maybe if I had more assignments about reflection I could better understand how the concept works... honestly, before this I never really thought about this [reflection] unless I had to. I really think I need to understand what it [reflection] is more, as a nursing student, so I can get better at it...like my other skills that I do.

A senior-level student stated, "I think reflection had a big part in my learning process."

Another offered her unsolicited recommendation about the use of reflection in teaching and learning: "I think there are some nursing schools out there who do not make reflection a big part, and I don't think it has to be a huge part, [but] I think it has to have a role in your nursing curriculum."

Reflection for lifelong learning

This sub-theme represents the idea which emerged from evaluation of the interview transcripts that students envisioned themselves using reflective activities in the future, and that they foresaw using reflection as one means of lifelong learning throughout their nursing careers. The participants in this study had completed a wide variety of clinical education experiences prior to being interviewed, and in addition, a number of participants had worked or were presently working in healthcare positions exclusive of their educational programs. All of these situations afforded students the opportunity to observe professional nurses in real-life settings, and some students were able to share instances when they felt they had observed RNs using reflection. Such observations led the students to discuss ways in which they envisioned themselves using

or not using reflection in their future professional careers. In sharing a memory of her participation in a code at an acute care facility, one student said:

I think that it [debriefing after a crisis] is good, and whether or not I'll share, I don't know, but just like even to sit there and hear everybody else discuss what they just went through, what I went through...makes me feel better, whether I say something or not.

Comments from the participants indicated that they had seen nurses use reflection for reviewing practice, coping and managing stress, and as a way of lifelong learning.

The following quote illustrates how a student perceived nurses use reflection when sharing relevant patient information:

...like when they are doing shift change, they will talk with each other about how the day went, ...they'll talk together about how things should change in order to make this person better. I mean they still advocate for the patients and discuss with each other what went on that day and what they hope to see for the next day. In the next example, a student's comment demonstrated how she envisioned using reflection in nursing practice to manage stressful situations:

...I can see how it would be helpful because everyone could kind of get it out or at least have someone maybe mediate something so that everyone could get it out and feel better....and move on.

Another participant's comment acknowledged her opinion that nurses must engage in lifelong learning, and that using reflection was one way to engage in thinking and continuously expand her knowledge base:

This is a knowledge based practice, a vocation. If you don't want to learn, and now I'm going to start saying "If I don't want to reflect", then this isn't the right thing for you, because you have to engage in thought and always be learning.

Complementing the sub-theme of Reflection for lifelong learning, when prospectively considering their future professional roles, the student participants in this study were able to imagine themselves using reflection in practice for their benefit, as in the following quote:

I think when I am actually in the field, like, maybe during lunch break, [I'll] just sit back and take a minute to say 'okay, I did their meds, I did this, I did what had to do, I did my assessment'...and, like, take a breather, I guess.

Another student, recognizing the importance of establishing appropriate boundaries around work related issues, speculated,

I think it could also be beneficial to have a time like that [to reflect with peers] at work, so you are talking with your colleagues who have more of an understanding of what you are going through, rather than bringing it home and venting to your family members and taking work home with you.

Yet another student explained the use of reflection to manage a difficult work situation this way: "...so as nurses, you are going to need an outlet...so you can know that you did what you could or it wasn't your fault, you did the best that you could, so you could be able to sleep at night." One particular student foresaw the use of reflection informing a nurse's practice in a holistic manner, helping the nurse to be "as good a nurse as [she] could be":

It's all about decision making, and if you don't reflect on what you have done or what you are about to do, then I don't think you can be as good a nurse as you could be. It [reflection] adds compassion, caring, responsibility. I think that a careless nurse won't take time to reflect on the situation or won't look forward, 'should I do this, should I not do this?', ...so I wouldn't want any nurse to make hasty decisions.

Finally, a student who reported not having directly observed any nurses doing reflection, nevertheless offered her assessment that

I think it would just be weird if they [professional nurses] didn't reflect on anything because, it's just, you have to get it out. They have to be able to process it and say it and explain it, and it just makes sense [to reflect].

Whether the learning is related to self, to others, to nursing knowledge or clinical skills, quotations supporting this sub-theme demonstrated that undergraduate nursing students envisioned using reflection as a means of lifelong learning.

Perception of reflection framed by context

During the course of data collection and examination, evidence also emerged which suggested that a student's understanding of reflection was largely contextual. That is, the ideas participants shared during the interviews revealed some common understandings about reflection or references to reflective activities specific to each of the three nursing programs where data were collected. At the first site (interviews 01 to 08), students all referenced "journals" when discussing their understanding and use of reflection. At the second nursing program from which participants were recruited (09 to

12), all four students who were interviewed mentioned both post-conference and study groups where reflection was carried out, while no students from the other two nursing programs mentioned study groups when discussing reflection. At the third data collection site (13 to 16), all students referenced journaling as a part of Service Learning when sharing their ideas about reflection. These observations pointed to the influence that nursing education and/or a nurse educator may have on undergraduate nursing students' perception of reflection, and led to the articulation of this sub-theme related to the main theme Using reflection for learning.

One student, in talking about the different types of journals she had to write over the course of her educational program, shared that

The journal depends on the class. It just depends on how the professor comes to us about it....Because they [faculty] have different perspectives about it. Some of them, you know, it's about the task and for other ones [it's] about the feelings. It just depends.

The students' quotations which clustered in a site-specific manner demonstrate the potential power that an academic program or curriculum or even individual faculty may have over the student's understanding and use of reflection in baccalaureate nursing programs. "It just depends", in the most recent quote, depicts in the simplest terms the essence of this sub-theme, Perception of reflection framed by context.

Thematic Summary

The final theme which emerged from the ideas expressed by students in this study is Using reflection for learning. Thematically, it represents students' experiences of

reflective activities within their individual nursing programs and their perceptions about these activities as pedagogical methods. The three sub-themes represent those dimensions which, according to student quotes, have influenced their perceptions about reflection in teaching and learning, including: Influence of time, preparation, and environment; Reflection for lifelong learning; and Perception of reflection framed by context.

Chapter Summary

This chapter described five main themes and 18 subthemes which were identified in the analysis of data units from the interview transcripts of 16 students who participated in this study. The main themes discovered included: Looking back to deepen understanding; Being mindful of thoughts and feelings; Gaining perspective; Giving words to experiences and emotions that have no right or wrong answer; and Using reflection for learning. Each of these themes, as well as their related sub-themes, was defined and discussed, utilizing student quotes to illustrate their meaning. Student quotes, supporting both the major themes and sub-themes, gave a rich description of the nature of reflection for undergraduate nursing students. Although the ideas expressed in the interviews conducted for this study were not unanimous in their understanding of reflection, the quotes and corresponding theme definitions offer preliminary evidence that reflection is generally a valued practice among undergraduate nursing students.

CHAPTER V

DISCUSSION

Nursing education programs have been increasingly incorporating reflective activities into their teaching and learning activities for both pre- and post-licensure students (Decker, 2009; Honey, Waterworth, Baker, & Lenzie-Smith, 2006; Langley & Brown, 2010; Ruth-Sahd, 2003), albeit without a commonly accepted definition for the concept "reflection". The meaning and use of reflection has been examined through a variety of lenses by researchers in nursing and other disciplines over the past several decades. The fundamental understanding of reflection by nursing students, however, had not been examined prior to this study. The purpose of this study was to describe reflection from the perspective of baccalaureate nursing students in order to provide nurse educators with information about reflection from the student perspective so that reflection may be more effectively used in academic courses and clinical education to promote and enhance learning. Utilizing a qualitative descriptive approach, this study examined the question: What is the nature of reflection for undergraduate nursing students?

During the on-going review and content analysis of this study's data, there were numerous "ah-ha moments" and awakenings of understanding which pointed to emerging themes describing undergraduate nursing students' perceptions regarding reflection.

These epiphanies were, for this researcher, similar to what Pesut (2005) described as "sense-making" (p. x). Utilizing individual interviews as a way to capture student perceptions was the optimal method to allow the students' voices to be heard. Concurrent with the interviews, constant comparative analysis of the transcripts and attentive

listening in each subsequent interview allowed the researcher to stay tuned to recurring ideas and emerging themes, as well as divergent ideas, expressed by the participants. Such examination of the data facilitated deeper understanding of the students' ideas and opinions, which are supported by the quotations included in Chapter IV that illustrate each theme and sub-theme. Chapter V presents a synthesis of the study findings with notable historic and current research, and expands the discussion through "reflection on reflection" in light of the findings. The implications of this study for nursing education, nursing practice, nursing science, and nursing research are presented. The limitations of the study are acknowledged, and indications for future research are offered.

Thematic Discussion

This study explored largely unchartered waters in its examination of nursing students' perceptions regarding reflection. In the final analysis of this study, five main themes were identified and described, including: Looking back to deepen understanding; Being mindful of thoughts and feelings; Gaining perspective; Giving words to experiences and emotions that have no right or wrong answer; and Using reflection for learning. These themes are discussed in the following sections, noting both similarities to and differences with other research regarding reflection in nursing.

Hong and Chew (2008) used focused interviews to ask eight pre-licensure nursing students at the International Medical University (Singapore) prepared questions regarding their perspectives of reflective practice. The research team concluded that the interviews demonstrated that students felt a lack of clarity about reflection and reflective practices, although comments in the transcripts indicated that students did feel that some

reflective activities had helped them improve in their clinical performance. In particular, students in their study indicated that they valued the feedback and guidance they received from clinical instructors when engaging in reflection. Although Hong and Chew did not present a thematic analysis of their findings, the present study, conducted with prelicensure nursing students on the other side of the world, revealed some similar ideas to their findings.

Looking back to deepen understanding

One of the first and most common understandings of reflection which came to light during the student interviews was the idea of "looking back" to better understand something which happened. Participants' comments indicated that this "looking back" was a very personal, singular activity, which students felt was "unique to each person". While such reflection involves cognition, students spoke of reflection as a more contemplative activity, "not just what happened", and explained to the researcher that looking back to deepen understanding was more extensive that recalling factual information in order to answer a question or solve a problem. Sub-themes which describe more specific dimensions of "Looking back to deepen understanding" include: Digging deeper into my thoughts; Seeing how far I've come; and Putting the pieces together and making connections.

In examining the transcripts from participant interviews, it became apparent to the researcher that students used "reflection" as both a noun and a verb in discussing its nature for them. As an action word, reflection was the first step, the "invitation", to think more deeply about an event, idea, or feeling. When student comments were examined in

the context of what emerged to be the theme "Looking back to deepen understanding", it was also evident that many used reflection as a noun when discussing a result of their thinking more deeply. This dual understanding of reflection is similar to Moon's (2004) discussion of reflection in experiential learning as both a process and an outcome. Moon proposes that there may not necessarily be different types of reflection and reflective thinking, but that the differences discussed in the literature relate more to the manner in which reflection is operationalized. The student perceptions revealed in the present research, particularly those quotes from which this first theme emerged, underline a conundrum which is a common thread in research on reflection: There is an inability to definitively describe reflection as either a specific activity related to learning or as an outcome of a learning activity. The results of this study point to an understanding of the nature of reflection by baccalaureate students that is not "either/or" but, rather, "both/and".

The student perceptions of reflection which clustered to become identified as this theme indicated that students understood reflection to be a deliberate act, described by one participant as "my own time-out". For many students, the act of reflection, understood as "looking back", brought to consciousness previously unknown emotions or new ideas and realizations, and the outcome of reflective activities was what many referred to as increased self-understanding. This is a similar perspective to that expressed by Ruth-Sahd (2003) when she discussed reflection as looking back over something that has happened in practice and examining oneself vis-à-vis that situation with the goal of increased self-understanding and subsequent professional growth. Taylor (2003) defined

reflection as "the throwing back of thoughts...in cognitive acts such as thinking, contemplation, meditation...in order to make sense of them..." (p. 3). The first theme which emerged in the present study supports Taylor's definition, although the perspectives of students revealed a more multi-dimensional understanding of reflection than her definition would encompass. In her development and use of the reflective selfregulated learning (SRL) in nursing model, Kuiper (1999, 2005, 2009) noted different aspects of self-understanding, which include self-observation, self-judgment, selfevaluation, self-correction, and self-efficacy. Each of these aspects of self-understanding was reflected in the various comments of students who shared their understanding of reflection as "Looking back to deepen understanding". "Understanding" is the most inclusive and comprehensive term to describe students' perceptions of realizations they had and/or changes in thinking they experienced in looking back or reflecting. The participants' quotes expressed the perspective that reflective activities were a significant way for them to "make meaning" and come to a greater understanding about things in their personal and professional/academic lives.

The idea of "digging *deeper* (emphasis added) into my thoughts" indicates the perspective by students that reflections are not simple, two-dimensional ideas, but are multi-dimensional, deep, detailed, and often complex. This perception is consistent with the assertion by others (Brookfield, 1995; Duke & Appleton, 2000; Gillespie & Paterson, 2009; Johns, 1998, 1999, 2006; Schön, 1987) that reflection is a higher order of thinking than the simple recollection of facts or application of objective knowledge sets in standard situations. The findings support the definition of reflection in education by Jeffs

and Smith (2005): "...the process of working with other (or ourselves) to deepen learning" (p. 1). Recurring student ideas which led to the identification of the first theme in the current study provide valuable evidence from the student perspective to illustrate reflection as an activity by which one can "recapture experience and mull it over, resulting in building new understanding" (Jeffs & Smith, p. 1).

The quotations which provided support for the development of this first theme frequently included a temporal aspect, showing an awareness by the student of some sort of change over time which was revealed through reflection. This awareness, expressed as the sub-theme "Seeing how far I've come", was often discussed when students referenced reflective journals they had kept, often for a nursing course earlier in their programs.

These written records, when re-read by the students after a period of time, provided concrete evidence for them of progress they had made over time, and of "how much I've grown". Participants expressed amazement in looking back on written accounts of their reflections from an earlier time, and in so doing, affirmed for themselves the progress they were making in their nursing programs. Such epiphanies often resulted in increased self-confidence for students, and provided motivation for them to continue to press forward in pursuit of personal or career goals.

Forneris and Peden-McAlpine (2007) conducted a study examining the development of novice nurses' critical thinking skills during the first six months of their practice, utilizing as a teaching-learning strategy a reflective contextual learning intervention (CLI). The CLI incorporated four attributes of critical thinking: reflection, context, dialogue, and time (Forneris & Peden-McAlpine, p. 412). In their study,

narrative reflective journaling was the strategy used to engage the six novice nurses' reflective thinking in order to recall and document their experiences over their initial 6-month period of professional practice. Using qualitative case study analysis methods to examine the participants' narratives, Forneris and Peden-McAlpine discerned themes for each of three 2-month time periods. For time period one (months 1 to 2), "putting pieces together" was a common experience influencing critical thinking ability which the nurses' reflective journaling revealed. This is consistent with the third sub-theme, "Looking back to deepen understanding", in the present study. In addition, the aspect of change over time emerged as a theme in both the second (months 3 to 4) and third (months 5 to 6) time periods, articulated as "the use of past experience to discern change over time". Novice nurses in their study displayed movement from a more concrete, rules-oriented thinking style to one in which they were able to consider the broader context of a clinical situation, incorporating past experiences and knowledge as they reflected on a present scenario.

The narratives from Forneris and Peden-McAlpine's (2007) study demonstrated not only the temporal aspect of reflection which also emerged as the theme "Looking back to deepen understanding" in the present study, but also showed the awareness of the novice nurses that they had matured as critical thinkers over their initial 6-month period. In writing their narratives and, subsequently, sharing them with preceptors, the novice nurses were able to reflect on their own thinking and experiences, and recognized growth in their role as a nurse over time, as expressed in sentiments such as feeling good when a nursing practice (applying oxygen to a patient when needed, for example) "really felt

automatic". The study by Forneris and Peden-McAlpine demonstrated ways in which a novice nurse's critical thinking ability may be developed through reflective activities, and also provided research evidence which corresponds to the understanding expressed by students in the current study that reflection is a vehicle by which they are able to "see how far I've come".

In addition to the pervasive idea of "looking back to deepen understanding", it was interesting to study the interview transcripts for other references to the temporal aspects of reflection. While students in the present study consistently shared that reflection on things in the past often influenced future behaviors, few of them could conceive of thinking about "what if's" and hypothetical situations as reflection when directly asked by the researcher. This is not to say that students are unable to think prospectively about hypothetical situations, an approach upon which case study method is developed, but rather that students in this study did not explicitly consider such thinking to be reflection.

The temporal nature of reflective activities has historically been a point of discussion among numerous scholars. In their seminal work on reflection, Boyd and Fales (1983) presented an understanding of a process used to examine and explore an issue of concern to clarify understanding or create meaning, but did not restrict their understanding exclusively to a backward looking activity. Schön's (1983, 1987) work distinguished between "reflection in action" (present orientation) and "reflection on action" (past orientation), while more recently McKenzie and Bowen (2009) introduced the idea of "pro-active reflection" (future orientation) as an initial activity for students in

the development of reflective clinical judgment. Using this approach, students reflected on a written scenario prior to interacting with the manikin in a simulated nursing care situation. McKenzie and Bowen discovered that when reflecting pro-actively, students described their role in the scenario unfolding in a more textbook fashion, and did not anticipate various issues which might occur in a real-life situation. Such "pre-simulation reflection" did not contribute to the development of clinical judgment in the same way that the researchers found "post-occurrence" reflection (akin to Schön's "reflecting on action") to do.

The perceived inability by students in the present study to conceive of "prospective reflection" provides some evidence as to why pre-simulation reflection may not have contributed to the development of clinical judgment as effectively as post-simulation reflection in the McKenzie and Bowen (2009) study. Reflection-on-action or "looking back" is based on a greater degree of concrete thinking ("this is what I directly observed...") than pre-simulation reflection, which requires abstract thought. Post-simulation reflecting after a clinical day or another educational experience, particularly if facilitated by a engaged teacher, may therefore be a more accessible type of reflection for undergraduate nursing students, who tend to be more concrete in their learning, whereas prospective reflection ("What if...?") may be a more challenging cognitive activity for these students. The temporal aspects of reflection represent an area for further nursing research, particularly related to teaching and learning.

During the course of interviewing participants for this study, there were numerous references made to reflection as "putting the pieces together" and/or "making

connections". Some students specifically discussed connecting the past with the present, or making the link between classroom learning and clinical experiences. Schön (1983) and Burton (2000) both demonstrated that reflection facilitated the integration of theory and practice, and these earlier findings are consistent with what students in the present study described about their understanding of the nature of reflection. Connecting what had been read in a textbook, heard in the classroom and/or practiced in a nursing skills lab with a real life situation was described by several students as one purpose or outcome of reflection for them. Comments such as "...and I thought, so this is what it is really like" and "...and then it all came together and I understood" are illustrative of the perceptions of students that reflection was one way to bring knowledge and skills learned in the classroom or lab setting together with a lived experience of patient care for new understanding of a concept or practice. The quotations from this study richly illustrate the perceptions among students that reflection is a way to pull together classroom/textbook knowledge with their clinical experiences, and support the use of reflective activities as meaningful and helpful in undergraduate nursing education.

In their research on service learning with undergraduate nursing students, Hunt and Swiggum's (2007) analysis of students' written reflections revealed the new understanding students realize as reflective activities help them to bridge the gap between theory and practice. Their findings included evidence that, through both reflective writing and discussions with peers and instructors, students were forced to think more deeply about what they were experiencing. In so doing, Hunt and Swiggum contended that the students gained a much better understanding of the many dimensions of community

based nursing, and, specifically, of working with families who are homeless. Reflective activities were the conduit for "putting together the pieces and making the connections" for the students in their study, which is a perspective on reflection shared by the students in the present study. In her research on the critical attributes of reciprocity in service learning, Laplante (2007) described reflection as a means for students to make meaning of their experiences working with older adults and inner-city children. The idea of "making meaning through reflection" resonates with the perceptions of students in this study as expressed in this first main theme of "Looking back to deepen understanding". Like Laplante, Lashley (2007) found that reflection was the key to undergraduate nursing students making meaning of their service learning experiences while working with an inner-city homeless population. In discussing their perceptions of reflection, many students in the present study spoke about searching for a more complete understanding as they looked back, "reflected", in an effort to, for example, make sense out of a perplexing situation or understand a series of events in the context of a broader patient care scenario. This understanding of the nature of reflection relates to its use by many nurse educators to promote the development of clinical judgment, to "get the big picture", and is consistent with the assertion that reflective activities promote the connections between theoretical knowledge and practice applications, ideas which will be further discussed in the implications section of this chapter.

Thinking critically about something which had happened, "picking it apart and then looking at it as a whole again", was also a recurring understanding about reflection that emerged in this study. This perspective by baccalaureate nursing students is

expressed as the sub-theme "putting the pieces together and making connections", ideas of which have previously been discussed in this section. Critical thinking, not unlike reflection, lacks conceptual clarity, and is an often debated topic in nursing education and education in general about which numerous books and articles have been and continue to be written. Therefore, there is the potential that introducing the concept into this discussion may be a distraction to the purpose of this study. However, in order to stay true to the voices of the participants, it must be included, as students brought up critical thinking on numerous occasions when discussing their perceptions of reflection. From the students' perspectives, reflection and critical thinking are often overlapping ideas. In the context of the theme "Looking back to deepen understanding", students sometimes distinguished between critical thinking, which they viewed as a more objective problemsolving process, and reflection, which they perceived to be more subjectively oriented. In the context of this first theme, one student explained to the researcher that "putting the pieces together to solve a problem" was critical thinking, but that such thinking first required reflection in order to see and understand the connections between the pieces. It is difficult to discern how students in this study operationalized their understanding of critical thinking, so all comments in which students relate it to reflection must be cautiously considered. Within the context of this discussion of findings, however, there are several points about reflection and critical thinking which should be made.

When searching the literature on reflection as a preliminary step to this study, "reflection", "self-reflection", "critical reflection", and "critical thinking" were common key terms in the research which was discovered, and demonstrate again the lack of

consensus among scholars about terminology and definitions related to reflection. For example, Mezirow (1997) differentiated types of critical reflection, ranging from simple awareness to taking something into consideration or imagining alternatives. Goulet and Owen-Smith (2005), in presenting their research on cognitive-affective learning in physical therapy education, state that "critical self-reflection is an important skill to teach future healthcare professionals" (p. 69). In her work on self-regulated learning during a senior-level clinical preceptorship, Kuiper (2005) adopted McDonald's (2000) definition of critical thinking, a "non-linear process that requires complex methodologies for instruction and evaluation" (p. 352). Kuiper distinguished this "critical thinking", a cognitive strategy, from the metacognitive "self-regulation" which includes selfreflection before, during, and after a task. Similarly, the participants in this study used a variety of terms in discussing both reflection and critical thinking. Students expressed the perspective that these concepts were connected, but were not as forthcoming in their ability to explain how they were related. However, it is notable that many of the quotes which clustered within the thematic idea "Looking back to deepen understanding", and more specifically in the sub-theme "putting the pieces together and making connections", included the words 'critical thinking' in relation to the student's understanding of reflection.

Forneris and Peden-McAlpine (2007) stated that reflection is a "key mechanism" in critical thinking, and define critical thinking as a process of reflective thinking that "goes beyond logical reasoning to evaluate the rationality and justification for actions within context. It is a thinking process focused not on achievement of the answers, but on

achievement of a coherence of understanding within the context of a situation" (p. 411). Their work on the development of critical thinking skills in new graduate nurses is based on the assumption that novice nurses do not yet have the context which is necessary to think critically about clinical issues and solve practice-related problems, and therefore, resort to more concrete, rule-determined thinking in their first months of professional practice. These researchers cite the early work of Schön with Argyris in 1974 in which they discussed "the notion that reflective thinking within the context of real life enhances the ability to be critical in our thinking (to uncover hidden realities)" (Forneris & Peden-McAlpine, p. 411). In the present study, participants repeatedly spoke about reflection as a way of understanding rather than as an activity directed toward the achievement of a particular goal or solution. "Looking back to deepen understanding" and its associated sub-themes, particularly "putting the pieces together and making connections", has similar aspects to Forneris and Peden-McAlpine's definition of critical thinking, and so it should not be a surprising discovery that study participants frequently discussed the nature of reflection as overlapping with what some scholars call critical thinking or critical reflective thinking. The wide variety of conceptual understandings of other researchers (Argyris & Schön, 1974; Goulet & Owen-Smith, 2005; Kuiper, 2005; McDonald, 2000; Mezirow, 1997) demonstrates the lack of clarity regarding the understanding of both critical thinking and reflection, and is reflected in the perceptions of undergraduate nursing students interviewed in this study.

Recently, Benner, Sutphen, Leonard-Kahn, and Day (2010), in calling for a "radical transformation" in the way in which nurses are educated, pointed out that nurses

use multiple forms of thinking, including critical, creative, imaginative, and reflective. In their research, they observed nurse educators often "lumping together" these various forms of thinking and related teaching-learning strategies under a "loosely constructed and extraordinarily broad notion of 'critical thinking' (p. 95). If, as Benner et al. assert, nurse educators are so vague about what critical thinking is, how it is operationalized, and how it might be evaluated, is it then any wonder that the students in the present study would be unclear, at best, about the relationship between reflection and critical thinking? Perhaps the idea of Benner et al. that "integrative thinking" would be a better approach to teaching and learning in nursing mirrors the perspective of the baccalaureate nursing students in this study regarding reflection. Theme one, "looking back to deepen understanding", is one perspective of a multi-faceted concept. Students discussed numerous ways of reflecting and understanding reflection, and attempts to "lump them all together" into one definition or model could result in a construct too loose or broad to be helpful in teaching-learning.

Being mindful of thoughts and feelings

In an attempt to put the pieces together and make connections, this chapter continues with a discussion of the second major theme, Being mindful of thoughts and feelings, which emerged from the data. This theme distinguished how students in the study consistently spoke about a heightened state of awareness of thoughts and feelings, but not necessarily facts, when they discussed the nature of reflection in both their personal and academic experiences. Mindfulness of their own values, beliefs, and feelings was perceived by participants to be an important personal attribute which

contributed to their ability to render care to others as a student nurse, and they described various reflective activities as promoting and enhancing this self-awareness. The subthemes Seeking resolution, Finding contentment, Informing practice, and Promoting change describe the perceived outcomes of reflective activities which emerged from constant comparative analysis of the interview transcripts.

The ability to reflect on one's own values and beliefs as they relate to professional nursing practice is among the outcomes described by the AACN (2008) for generalist nursing practice at the baccalaureate level. Developing the capacity for meaningful self-reflection leads to the personal knowing which promotes professionalism and safety in the provision of nursing care. Participants in this study shared specific examples of how mindfulness of their thoughts and feelings informed their practice and, in some instances, promoted change in how they thought about or carried out an activity. Reflection, which was reiterated to be a "very personal experience" by the students, was the door to mindfulness and increased self-awareness, with several students equating reflection with mindfulness when asked how they would explain reflection to another person.

In his 2004 book on reflective practice, Johns described reflection as "being mindful of self, either within or after experience, as if a window through which the practitioner can view and focus self within the context of a particular experience" (p. 3). Comments by students expressing the ability "to take everything in" and "appreciate all the little things", which help contextualize a particular experience for them, demonstrate that they have a perception similar to Johns', which is expressed by this theme. Students referred to both intentional and random instances of self-reflection, and expressed the

sentiment that such mindfulness was often a welcome interlude from the consideration of facts and figures, a relief from the study of concrete information and knowledge application which characterizes much of nursing education at the pre-licensure level. This understanding supports the assertion that reflection involves more than empirical knowing (Carper, 1978; Decker, 2009; Johns, 1995, 2004, 2007b), and that reflective activities can contribute to a fuller understanding about oneself or a situation one is considering. The findings from this study indicate that baccalaureate nursing students use reflection as a way of being more mindful and that they appreciate opportunities for mindfulness. As such, self-awareness contributes to their overall better understanding of a problem or situation. Nurse educators, however, should not assume that such reflection will occur automatically with every student, and might consider the use of strategies to promote such a way of knowing across teaching-learning settings. Such activities as guided reflection and journaling to open-ended prompts, facilitated debriefing following simulation, and online discussions of case studies or ethical dilemmas relative to a particular area of study in nursing, may give students the practice they need to hone their mindfulness. Tailoring specific reflective activities to the learning styles and needs of individual students is a topic that warrants further examination by nurse researchers.

A number of participants in the present study made references to prayer or meditation when discussing their perceptions of reflection, indicating that there is a spiritual dimension to reflective activities for these students. Like prayer for some, reflection was a way for students to "work things out" or "find the answer" they had been seeking. This heightened awareness or mindfulness is called the "journey to the soul" by

Gully (2005), who stated that "reflective practice brings us closer to the self...enables an awakening of the self and a finding of the sacred path of personal knowing and being, within the art and science of nursing practice" (p. 144). Students who spoke about having experienced reflection as mindfulness described feelings of peace and contentment after wrestling with an interpersonal or intrapersonal conflict through reflective activities. This understanding of the nature of reflection by baccalaureate nursing students is expressed in the sub-themes "seeking resolution" and "finding contentment".

It was apparent by the comments participants made that they had used reflection for problem solving in the past and that reflective activities, particularly journaling, afforded them a way in which they could come to the resolution of a dilemma with another person or within themselves. This understanding of reflection leading to resolution hearkens back to the cathartic properties of reflection discussed by Boud et al. in 1985, who stated that since feelings affect what we do, think and say, it is vital to be in touch with one's emotions, both positive and negative, through self-awareness and to have an outlet for expressing and understanding those emotions. Students in this study found that reflection was an effective way to be aware of thoughts and feelings and to express and understanding those feelings.

Although few students offered specific religious comparisons to their understanding of the nature of reflection, many alluded to the experience of "being mindful of thoughts and feelings" as having spiritual characteristics. Through reflection, some students described a transformation of their understanding or being that aligns with Mezirow's (1997) work on transformative learning, which included reflection as a key

component. Williamson (2003), writing about mindfulness in medicine, encouraged physicians to become aware of the "hidden knowledge" they have which impacts the cognitive, emotional, and technical aspects of medical practice. "When we are mindful," Williamson wrote, "we keep in touch with our essence... When we are reflective we bring more of ourselves, hidden, into the world" (p. 18). Johns (2007b) equated mindfulness with "taking control of oneself", and called it "a lifting energy...that, like the ocean, only finds itself its wholeness" (researcher's notes from live workshop, October 2007). Johns' understanding of mindfulness has many spiritual dimensions, and has been strongly influenced by Eastern religious thought, notably Thich Nhat Hanh. Therefore, it was a serendipitous discovery for the researcher when one of the participants in the current study brought to the interview her own journal, and revealed that she frequently meditated on and journaled about the writings of this same Buddhist monk. The understanding of the nature of reflection expressed by participants in this study supports the use of reflective activities to engage mindfulness, to uncover one's "hidden knowledge", thereby heightening self-awareness and enhancing the learning and practice of the "art" of nursing.

The sub-themes "informing practice" and "promoting change" reflect outcomes which students described as resulting from their increased mindfulness or self-awareness. When mindfulness of thoughts and feelings resulted in a student doing something better (psychomotor domain), they usually acknowledged reflection as a helpful activity which could inform their student nurse practice. One of the participants, however, recalled a time when her mindfulness about a situation only made her feel worse about it as she

experienced her feelings even more intensely but felt anxious over her perceived powerlessness to change what was bothering her. Nurse educators should take note that not all mindfulness yields positive feelings, and should be open to dialoguing with students for whom reflective activities result in discomfort rather than resolution or contentment. "Promoting change" expresses the finding that many students felt better (affective domain), had a change of mind or spirit as a result of mindfulness of thoughts and feeling, often having recognized emotional triggers which they recognized they could learn to manage more appropriately. Comments which lead to the development of this theme often referenced the idea that students would approach a situation differently in the future as a result of their increased self-awareness or mindfulness.

It is significant that "Being mindful of thoughts and feelings" emerged as one perspective of students regarding reflection in this study, because other researchers (Horton-Deutsch & Sherwood, 2008; Hunt, 2006; Idczak, 2007; Johns, 2006) have also reported that the use of reflection can increase self-awareness, which in turn can inform students' understanding of "who nurses are" and "what nursing is". Idczak (2007) found that increased self-awareness, "being mindful of thoughts and feelings", helped students in early clinical nursing experiences begin to discover what it meant to "be a nurse". In her study of how nursing students make meaning of experiences, the recording of thoughts, feelings, and emotions about patient interactions via electronic journals was a reflective activity that promoted self-awareness and enhanced learning among the 28 sophomore level students who participated. Such self-awareness through reflection helped novice nursing students "find meaning in who they were as nurses" (Idczak, p.

69). From her hermeneutical analysis of the students' online journals, Idczack identified five themes, including becoming self-aware and connecting with knowledge (p. 68), ideas which also emerged in the present study. The thematic findings from this study complement Idczak's research inasmuch as they reveal students' perceptions about reflection which support its use for making meaning from experiences.

"Being mindful of thoughts and feelings" is an initial and essential step in developing emotional intelligence, defined by Goleman (1998) as "the capacity for recognizing our own feelings and those of others...and for managing emotions well in ourselves and our relationships" (p. 317). Horton-Deutsch and Sherwood (2008) stated that "reflection includes the emotions and feelings that are an integral part of practice but are often ignored" (p. 949). Comments from study participants indicated that, in some instances, a strong feeling or emotion was the trigger for their reflection about a situation, whereas in other instances, they described a reflective activity as the way in which they became aware of a strong emotion or feeling. In either case, students consistently described the ways in which engaging in reflection, whether by personal choice or because of an academic assignment, made them more aware of their own thoughts and feelings. For some, this increased self-awareness was disconcerting, as they were confronted with emotions or situations which made them uneasy. Comments such as "feeling uncomfortable" were made on more than one occasion when students were describing their responses to emotions that their reflections had revealed, and some participants expressed that becoming more self-aware through reflection reminded them of things they should have done, wished they had done, or "just couldn't change",

resulting in a sense of defeat or guilt. For the majority of participants in this study, however, the perception that reflection led to being mindful of thoughts and feelings was a positive outcome which, in turn, promoted resolution, contentment, informed practice, and/or the impetus for change. This study, therefore, and specifically the quotations which lead to the development of this second theme, provides evidence that the use of reflective activities can contribute to the development of emotional intelligence in undergraduate nursing students.

Gaining perspective

The word perspective represents a way of looking at or thinking about something or to see or understand it more clearly. In their seminal work on reflection, Boyd and Fales (1983) presented reflection as the key to learning from experience, and Heath (1998) described reflection as "a means of surfacing experiential knowledge" (p. 1054). Each of these understandings is an apt description of the perception that many students in the present study had when they spoke about gaining perspective through reflective activities. Specifically, student perceptions about reflection which emerged from the data indicated that reflective activities were a way of putting either personal or academic/clinical experiences in perspective so that they had a better understanding of what they had experienced. Repetitive ideas expressed by the participants were that reflection was their way of "processing things" which had occurred during a given day, "looking at things in a different light" if they were still trying to uncover or create meaning from a situation, and "putting it all in perspective" in order to have a sense of closure at the conclusion of their day. These understandings are illustrated by quotations

in Chapter IV which support the three sub-themes: Reviewing practice which guides learning; Re-framing situations which promotes understanding; and Recognizing the feelings of another which increases caring.

Bolton (1999) found that reflection through either writing or orally sharing stories based on their experiences was a valuable practice for clinicians, because it afforded them the opportunity to gain new perspective into their practice, "to increase their understanding and empathy by exploring a range of experience, knowledge, and emotions" of both themselves and others (p. 245). In this study, many quotations supporting the theme "Gaining perspective" revealed an eagerness on the part of the students to make sense of things they experienced, observed, thought, or were feeling. They were self-motivated to "understand things better" by considering alternative points of view or new information and considered this 'reflection'. New perspectives may result in changed attitudes and behaviors, both of which students described in their conversations with the researcher about reflection.

As previously discussed in this chapter, reflection has been found by many educators and researchers to be the key to discovering or creating meaning from experience. Although there was no singular definition for reflection which was expressed by the participants in this study, most of them discussed an understanding of reflection similar to that of Boud, Keogh, and Walker (1985), who defined it in terms of both intellectual and affective activities [mindfulness of thoughts and feelings] through which individuals can explore experiences, leading to growth in understanding as well as appreciation of those experiences. The theme "Gaining perspective" and its associated

sub-themes present evidence that baccalaureate nursing students share the understanding of a relationship between reflection and learning from experience, and the findings support the ways in which some educators utilize prompts or "guided reflection" in order to promote the consideration of different perspectives and, hopefully, greater understanding of more complex patient care situations by their students.

Many aspects of Schön's (1983, 1987) "reflection on practice" align with the theme "Gaining perspective" and, in particular, the associated sub-theme "Reviewing practice which guides learning". Findings from the present study revealed that students use reflection to "replay a situation" in order to gain perspective on what was happening from the patient's point of view, and in so doing, are able to learn what they (the nursing student) might have done differently for a better outcome. Participants gave examples from clinical education experiences of events, both positive and negative, which triggered them to look back and review their practice in order to learn and apply that learning to future situations. Students in this study also discussed reviewing their decision making about a situation, which emerged as the sub-theme "Re-framing situations which promotes understanding" and indicated a more cognitive process of gaining perspective. Gaining perspective pertaining to the affective domain, or what some scholars have referred to as growth in emotional competence, was represented by the sub-theme "Recognizing the feelings of another which increases caring".

In the final phase of Taylor's (2004) discussion of practical reflection, learning occurs when new insights are discovered and integrated into the nurse's cognitive awareness and clinical practice. "Discovering new insights" is a similar idea to "Gaining

perspective", and Taylor's understanding of reflection is similar to the nature of reflection understood by participants in this study. As pre-licensure nurses, students may not have the self-awareness combined with knowledge and experience which contribute to the ability to "reflect in the moment", or as Schön (1983) describes it, "reflection-in-action". Until they develop the repertoire of knowledge and self-awareness necessary to critically reflect "on the spot", nursing students need to practice "reflection-on-action", or contemplation of a situation after it has happened in order to gain the perspective needed to positively impact their nursing practice. Few students understood reflection to occur simultaneously with experience, and in fact, several spoke about "needing to take time to reflect, because you just get so caught up in the work itself". Their comments about "seeing things in a different way, and thinking about how I would do it differently the next time" after thinking back about an experience illustrate the manner in which they gain perspective from "reflecting back" to inform their practice at this point in their nursing education.

A surprising discovery in the present study which emerged with the theme "Gaining perspective" was that two participants specifically described the development of nursing care plans as one way that they do reflection. No prior research which was reviewed for this study specifically mentioned care planning as a reflective activity, although Lauterbach and Hentz (2005) pointed out that reflection is integral to every phase of the nursing process, and that "reflection on care is crucial to the development of expert practice skills" (p. 30). Comments from students in this study indicated that through reflection they were able to understand a patient's situation more clearly, "get the

big picture", and consequently felt able to develop a more appropriate care plan for that person. As expressed by statements made during the interviews, reflecting upon or "reframing" subjective and objective assessment data moving toward a holistic perception of a patient's needs gave the students the perspective they felt they needed to complete a plan of care for that patient.

Humanistic Nursing Theory (Paterson & Zderad, 1976) offers a frame of orientation which is centered on the nurse-patient intersubjective transaction (Decker-Brown, 2003). Paterson and Zderad referred to Humanistic Nursing as both a theory and a practice which exists within the art-science of nursing. Central to their theory is that the nurse-patient relationship occurs within its human context, requiring a response from the nurse, a description of knowledge and subsequent action discovered through the nurse's response to human situations. The theory relies on the ability of both the nurse and the patient to make meaning out of the human-human interaction, and therefore demands reflective thought. By gaining perspective through reflection, students began to be open to the unique possibilities in a given situation, as described by Paterson and Zderad in the Humanistic Nursing Theory, and thereby optimize their care for another or others. Reflection allowed the students to "connect better" with their patients. The ability to discover meaning and gain perspective influenced students' learning about nursing practice, their understanding of specific situations, and their caring attitudes and behaviors, evidenced by comments with sentiments like, "I thought about what it would be like to be in their shoes and how I would want to be treated". Gaining perspective

through reflection assisted students to "be the nurse" they would "like to have care for me" if they were the patient.

To frame something means to give expression to it, to fit or adjust it or to construct by fitting together and uniting various parts (Merriam-Webster, 2010). Hunt (2007) studied the lived experience of nursing students working with a homeless population through a service learning activity and found that reflection was a key to the students' development of empathy for rather than judgment about families living in poverty. Re-framing a situation, adjusting it, or fitting it together in a new way in order to see it from another's perspective, promotes understanding and contributes to improved nursing care and, ultimately, better outcomes. Freshwater (1999) found that student nurses demonstrated an increased number of caring behaviors toward their clients, as well as experienced an increased sense of the importance of caring for themselves, when they were engaged in reflective activities. In the present study, participants shared their perceptions about various ways in which reflective activities had contributed to their learning, understanding, and growth in caring attitudes and behaviors in both personal and nursing-related relationships, supporting the earlier findings by Hunt and Freshwater in their separate studies with student nurses.

The AACN (2008) stated as an assumption in its introduction to <u>The Essentials of</u>

<u>Baccalaureate Education for Professional Nursing Practice</u> that the generalist RN

graduate will be prepared to practice from a holistic, caring framework (p. 8).

Participants in this study indicated that reflection contributes to their understanding of specific patient issues as they consider a patient's health status in the context of that

person's values and other life experiences, thereby increasing the student's ability to plan and provide appropriate nursing care for the individual. Specifically, by recognizing not only their own feelings about a situation, but the feeling of another or others, the students expressed increased empathy for those in their care. Laplante (2007) asserted that nursing faculty must especially allow for reflection when students have been exposed to highly emotional situations, so that their strong feelings may evolve into a more empathetic, therapeutic response. The perceptions revealed in the current study indicate that undergraduate nursing students do use reflection to gain a better, more holistic perspective on their patients, including recognizing not just their own feelings but also those of the patient. They spoke of reflection as helpful to increase their awareness and understanding of a patient's situation, thereby increasing their own capacity to both "care about" and "care for" the patient.

Giving words to emotions and experiences that have no right or wrong answer

The analysis of interview transcripts from this study clearly demonstrated that nursing students struggle with questions or situations that they feel "have no right or wrong answer", that they value the opportunity to deal with the feelings associated with these occasions, and that giving words to these emotions and experiences through reflection is understood by them to be both a way of making meaning and relieving stress. Some students described the "action" of reflecting ("just getting it out", "just writing it down") to be helpful, while others emphasized the "content" of their reflection as valuable to their understanding and learning. Participants consistently made comments

indicating that they understood reflective thinking as a very personal activity, consistent with Taylor's (2003) description of reflection as a deeply personal ("I") practice.

Because students have different learning styles and ways of knowing, it is not surprising that they operationalized "giving words to experiences and emotions that have no right or wrong answer" in various ways, including writing, speaking, listening and responding, and engaging in dialogue via written journals with faculty or other students. The subthemes Putting words on paper, Sharing words out loud, Listening and speaking with an open heart and mind, Journaling as dialogue, and Trusting others with private thoughts and feelings emerged from these specific student understandings of the nature of reflection as they discussed "Giving words to experiences and emotions that have no right or wrong answer".

Recently, Duffin (2009) wrote about other creative ways that help nursing students reflect on patient experiences and discover meaning from situations that have no right or wrong answer. These reflective activities included: poetry writing; singing, listening, writing, or making music; reading literature related to a clinical situation; viewing films which depict controversial or emotional healthcare situations nurses can relate to; creating fine art, such as painting or sculpture. Although the use of the fine and performing arts as reflective activities did not emerge as a theme, students in this study did share instances when listening to or making music either prompted or facilitated their reflection, and one student eloquently described how dancing (classical ballet and jazz) was a way in which she understood and carried out reflection. Reflective activities such as these and others gave students the opportunity to express emotions and share

experiences that they otherwise might have missed, and quotes from the transcripts demonstrate the appreciation students had for being able to "get in touch" with deeper thoughts and feelings through such practices.

In what emerged to be the sub-theme "putting words on paper", students in the current study discussed the use of reflective journaling as one way of using reflection to increase self-awareness and promote understanding. These findings support what Hunt (2007) discovered about the essential role of reflection in her study exploring the lived experience of nursing students working at an inner-city homeless shelter. One student in Hunt's study explained, "Reflection forced me to have to put words to what I was feeling, which was difficult for me" (p. 279), an idea similar to those expressed by students in the present study. For some students in the present study, the act of writing was the "reflection", and for others, the journal entry itself, the written word re-read and contemplated, was the "reflection". It was common for students to respond "journaling" when asked by the researcher, "What comes to mind when I say 'reflection'?". Many reported that they first experienced reflection in higher education by being required to keep a journal related to a clinical nursing course or a service learning experience. They differentiated reflective journals from clinical logs, which they understood to be a record of skills performed and facts about their assigned patient/s rather than a chronicle of thoughts and feeling about their clinical experience. While most students stated they found writing to be a helpful process for their understanding, several indicated that "being made to journal" or the physical act of writing itself was a barrier to their reflective thinking. With greater experiences in nursing, the ability to use journaling as an effective tool for self-awareness and growth in understanding may be increased in some participants, although due to differences in personalities and learning styles, some may never find the act of writing to be a preferred way for "making meaning" and increasing understanding. As one student put it, "I'm reflecting on things all the time, but I hate to write it down". Nurse educators, aware of these differences in learning styles, might consider giving students the option of several different reflective activities when using reflection to enhance learning.

For the same reasons (personality differences, learning style variations) that some students either embraced or avoided written reflections, some others either preferred or expressed reluctance to reflect by sharing their experiences, emotions, thoughts and feelings out loud. "Sharing words out loud" was discussed in various ways by participants in the study, including conversations with a friend, a "trusted other" (peer or faculty member), or within a group setting, such as at a clinical post-conference or a study group. One benefit of sharing reflections out loud was the opportunity to receive immediate feedback. Most students who discussed sharing their reflections out loud recalled occasions when they received affirmation from the group or another person, stating things like "and it was just so great to know that other people were feeling the same way I was". However, some students also told the researcher that they would be hesitant to share some questions or problems they had during their clinical day with the whole group, and held back when others were reflecting out loud. Nevertheless, one of these students did state that she learned a great deal by listening to the others reflect on

their clinical experiences during the post-conference. The sub-theme "sharing words out loud" encompasses these divergent perspectives expressed by the participants.

A perception about reflection that this study revealed was the understanding by students that any sharing of reflections with others had to be done with an open heart and mind. The dual nature of the sub-theme "listening and speaking with an open heart and mind" represents the importance students gave to opportunities to both hear and speak when reflecting with others. Goulet and Owen-Smith (2005) remind educators to support students in "emotional risk taking" by giving them a safe forum in which to speak up, but also to give students the permission to be quiet, to listen and contemplate. Because, as the students reiterated, reflection is "so personal", they acknowledged that no two people would reflect in the same way or have the exact same understanding of a situation after reflecting upon it. In reflection experienced as "giving words to experiences and emotions that have no right or wrong answer", students spoke about the need to listen to others with an open heart and mind, bringing no pre-conceived notions or assumptions to their experience of the moment, and of being honest with themselves about what they were feeling. There is a risk for student and teacher that negative emotions may be exposed or unsafe practices revealed when reflection is used to discover or create meaning from a situation. Students may want to listen and speak with an open heart and mind, but the discussion of some issues which are uncovered through reflective activities may be so private as to be inappropriate for the classroom. Ruth-Sahd (2003) asked the question "What are the nurse educator's responsibilities and risks?" related to the use of reflection in teaching-learning, and concluded from her survey of the literature that

communication should be open, involving genuine thoughts and feelings, whether positive or negative, and that all interactions should be grounded in personal and professional integrity and honesty. When "giving words to experiences and emotions that have no right or wrong answer", students and faculty alike should be respectful of diverse perspectives and be reminded of the boundaries of appropriate discourse per the setting and circumstances, and rules for group work should be clearly established and enforced.

Much of the literature on reflection has focused on reflective journals, or as in Johns' (2006, 2007a, 2007b) research, reflective narratives. In encouraging reflection in practice, Johns teaches practitioners approaches to writing narratives that will help them engage in dialogue with themselves, the story, the text and other sources of knowledge, and the emerging text (2006, p. 36). Through such engaged reflection with narrative dialogue, practitioners can promote their healing energies through increased self-awareness. Lauterbach and Hentz (2005) proposed that "journaling as the application of reflection is a dynamic process, a bending back of attention to self, experience, education, and care" (p. 31). This understanding is consistent with student comments in the present study, which indicated that by writing and reading their reflective journals, they are able to engage in self-dialogue about things they have felt, seen, experienced, or learned.

In a qualitative descriptive study, VanHorn and Freed (2008) examined students' clinical processes as they worked individually and in dialogue pairs during clinical education. Those students in dialogue pairs shared their journals with each other over the nine week clinical experience. The researchers found that students who shared their reflective journals in pairs reflected at a higher level and were better able to construct

knowledge based on clinical experience than students who had not worked in a dialogue pair. In the present study, the experience of working in dialogue pairs was not discussed by any participants, but the use of "journaling as dialogue" did emerge as a common understanding in discussing the nature of reflection.

The development of self-awareness involves examination of oneself, which students in this study understood to be a type of reflection. This self-examination may be done through journaling and subsequent reading and contemplation of those reflective writings, discussed by students as one way in which reflection was understood and operationalized, represented in the findings by the sub-theme "journaling as dialogue". Such reflection in an intrapersonal dialogue, a self conversation, but this sub-theme also represents those instances when journaling affords the students the opportunity for interpersonal dialogue, either orally, after reading another's journal entry, or in writing, with a handwritten or online response to another's ideas. The nature of reflection for students in this study included both types of dialogue. Laplante's (2007) research on the meaning of reciprocity for undergraduate nursing students in a service learning course discussed the manner in which students engaged in reflection and dialogue in online discussion groups. "Reflecting on the writing of others," she stated, "has the potential for students to clarify their understanding of an issue with which they are unfamiliar" (Laplante, p. 178). Students in this study shared perceptions about reflection which indicate that through reading, writing, and dialogue with others, they are able to clarify understanding and gain insight on experiences and emotions which may have no right or wrong answer. "Giving

words" to their experiences and emotions is the first step in understanding and clarifying their own values, beliefs, and opinions.

Pierson (1998) and Ruth-Sahd (2003) both addressed the power differential inherent in the teacher and student roles, and suggested that this may be a barrier to effective learning through reflective strategies. In particular, Pierson addressed the issue of trust in using reflective journals as a teaching-learning strategy in clinical education. Although reflection can be an excellent way for students to explore their deeper feelings and ideas about an experience, being compelled to share their reflection with a faculty member or classmate puts them in a somewhat vulnerable position, a point which was supported by the perspectives of students in this study. Pierson emphasized that the use of reflective journals should be interactive and participatory, a "shared dialogue" between student and teacher (p. 168). In the current study, some students welcomed the written or oral feedback they received from faculty and/or peers when engaged in reflective activities, but others stated that they "held back" from sharing their reflections with others who they did not know well or share a trusting relationship.

The sub-theme "Trusting others with private thoughts and feelings" expresses a general idea which emerged from the data in the transcripts, but does not make a judgment about students' perceptions of the value of trusting others with private thoughts and feelings. In fact, in conducting the interviews and subsequently reviewing the transcripts to discern students' understanding about the nature of reflection, it was discovered that students at various times expressed both concern about trusting others with their reflections and relief about sharing their reflections with others. This

ambivalence about sharing "private thoughts and feelings" applied to both written reflections and conversations, such as clinical post-conference or debriefing in a group after a simulation activity. Some students felt vulnerable, at risk for embarrassment or failure, when pressured to reflect in a group setting, or even one-on-one with an instructor through a journal, while others embraced the opportunity to talk or write about their ideas and feelings, and found reflection to be a constructive outlet for processing emotions and experiences.

Horton-Deutsch and Sherwood (2008) stated that the development of self-awareness, a critical component of reflection, requires one to be totally honest with oneself. Such honesty requires courage, confidence, and support from others that are trusted (p. 949). Because the nature of reflection understood by students in this study and expressed by this theme is felt to be such a personal experience, trusting others with their private thoughts and feelings emerged as a common concern. This concern was not found among the participants in the study by Hong and Chew (2008), although one participant did say that she only wrote about her work, not her feelings, implying that she was not willing to risk sharing these with her nursing instructors. Caution should be taken by nurse educators when considering how such reflections will be shared, used and evaluated, as the knowledge that their thoughts and feelings will be read or heard by others may inhibit students from the deeper thinking which contributes to their increased self-awareness, discovery of meaning and learning.

Using Reflection for Learning

Findings from this research revealed opinions students have regarding the use of reflection in teaching and learning, which are represented by this final theme, "Using reflection for learning". The participants shared a common understanding that reflection could be useful for their learning, even though the ways in which they had experienced reflection were varied. Some students had used reflective activities from their first college course, some were introduced to reflection in their first clinical course, and others had only experienced reflection as a teaching-learning strategy in specific courses (most commonly maternal-child and psychiatric/mental health clinical nursing) or when they had courses with specific faculty who embraced the pedagogy. Students discussed how their perceptions of reflection were influenced by time, the preparation they had been given, and environmental factors, which is described by a sub-theme within this main theme. Another sub-theme, Reflection for lifelong learning, represents the assumption expressed by participants that they will be using reflection in their future nursing careers for on-going learning and to increase their self-awareness. The final sub-theme, Perception of reflection framed by context, depicts the manner in which participants expressed how they have been influenced in their understanding of reflection by the nursing programs they are attending and/or specific faculty they have had during their educational experiences.

In research on reflection and patterns of knowing in nursing, Heath (1998) noted a movement away from a dependence on theory applied to practice and toward a recognition that experience, together with theory and critical reflection, combines to yield

knowledge that can guide both cognitive and behavioral growth among student and practitioners over time. "Reflection", Heath stated, "is a means of surfacing experiential knowledge, and students may use more reflection as their experience of nursing accumulates" (p. 1054). The current study utilized upper-level students as participants and did not discern any trends indicating that senior level students utilized reflection more than junior-level students, but comments did indicate that some of the participants felt "more comfortable" doing reflective activities when they had accumulated some experience using them, and also that, over the course of their nursing programs, they came to better appreciate the value of such activities. The indication, therefore, based on the findings from this study, is that reflection in nursing is a developmental skill which can be learned and improved. Nurses can continue to use reflection for learning over the course of their careers, and become better at using reflective practices with increased life/nursing experience and self-awareness.

Participants in this study sometimes expressed strong opinions about the ways in which time, type of preparation, and the environment affected their ability to do reflection. Students perceived that reflection was time consuming. They stated that completing reflection assignments did not necessarily require a great amount of time, but the mindfulness and thinking involved in reflection took time, because "it is hard to think about how you feel". This perception prevailed whether students were discussing online journaling, hand-written clinical journals, or other forms of reflection they had done.

Once they invested the time in reflection, however, the students interviewed for this study freely and genuinely discussed its benefits, and some criticized peers for "just getting it

done but not really reflecting much". It should be noted, based on personal experience and anecdotal information from colleagues, that reading reflections and providing feedback is also a time consuming enterprise.

The students who participated in this study all discussed their busy academic and clinical schedules, in addition to which many worked part-time and had family responsibilities. In the midst of so many interests competing for their time, many participants admitted that, when faced with writing papers, preparing for clinical assignments, practicing nursing skills, and/or studying for tests, their assignments involving reflection were not their highest priority. Those who had experience with journaling prior to starting their nursing education, or who used reflection (primarily journaling) on a regular basis in their personal lives, were less stressed by the time pressure, but nevertheless expressed that reflective assignments are not their main focus. This may be also due to the fact that many of the assignments related to reflection were either pass/fail ("you either do them or you don't...") or ungraded, and so students did not feel the same pressure to produce a specific quantity or quality of work by a deadline in order to pass a course. Perspectives on the relationship between quality of reflection and grading were mixed however. Some students expressed that they invest more time and energy in reflective assignments which will be graded, while others confessed that if a reflective journal is regularly collected and graded, they treat it more like homework, getting it done but not investing the thought in it that they acknowledge could benefit their learning. Fink (2003) and Pierson (1998) both cautioned that grading students' reflective writing may inhibit productive dialogue between student and teacher.

The dilemma of whether to grade reflections and how to grade reflections is juxtaposed against the desire of nursing students, expressed in the interviews for this study, for meaningful feedback and "dialogue" on their reflections. Participants stated that they seek and welcome comments and constructive criticism on their reflections, but seldom get meaningful or timely feedback from their faculty. Short comments from their instructors such as, "that was a good decision!", or "go a little deeper with that thought", made about their reflections in a timely fashion were much appreciated by the students who had received them. In this manner, faculty serve a "coaching role" for the students, providing feedback and encouragement but allowing the student to create meaning and understanding through their reflection.

Grading reflections used in teaching and learning remains a controversial topic in the literature, but with an increased demand for outcomes assessment and evidence to support educational practices, educators have been exploring frameworks which might be helpful for teaching, facilitating and evaluating reflection. Several recent examples are Tanner's Clinical Judgment Model (2006), the Guide for Clinical Reflection (Nielsen, Stragnell, & Jester, 2007), and the Situated Clinical Decision-Making Framework (Gillespie & Paterson, 2009). None of the students interviewed for this study discussed ever having used a model for doing reflection or having it evaluated, and this researcher has not utilized any of these in her own practice to date. The use of a rubric or framework of some type has potential benefits for both the student and the faculty, as it may help define expectations, delineate levels of performance, and provide benchmarks against which to measure progress. Providing a framework for reflection to students also allows

them to self-monitor their learning and develop confidence (Lasater & Nielsen, 2006).

Participants in this study had not experienced using any such frameworks, but expressed the perspective that there should be more structure for reflective assignments that are graded.

Students discussed inconsistent preparation by their faculty for reflective activities, and many expressed anxiety over having to write reflections when expectations for those reflections had not been made explicit. Interestingly, the Hong and Chew (2008) study conducted with pre-licensure nurses in Singapore had a similar finding, with students reporting "there was no consistency in instructions and guidance given them by the academic staff" (p. 45). The role of the teacher is essential in preparing students to effectively utilize reflection in learning and to develop into reflective practitioners. Students in this study reported being minimally prepared by their faculty for reflective assignments, and many made comments like "it just really depends on the teacher...some are into it and some aren't". If, as has been shown in the research and supported by the perceptions of students in this study, reflection is the key to learning from experience, then nursing faculty must better prepare students to engage in reflective activities so that they can develop the skills and experience necessary for reflective nursing practice. "Developing the habit and art of reflection will ultimately develop the art of nursing" (Lauterbach & Hentz, 2005, p. 32).

In addition to preparation by the faculty being significant for their ability to learn using reflective activities, students talked about the influence of the environment on their reflecting. Many had a favorite time and place for reflecting, and a number of students

stated that they ended their day with some sort of reflective activity, often of a spiritual nature. Several students reported that they regularly walked for exercise, and this was their "alone time" and reflection time. It was not uncommon for students to describe reflecting while driving and/or while listening to favorite music. However, several students also shared that they needed a quiet, undistracted place in which to do reflective activities. Faculty should consider the environment when planning reflective activities, conscious of these perspectives of students revealed in this study.

Johns' (2007a) description of reflection as a developmental process of paying attention to and learning through everyday experiences relates to ideas about "Using reflection for learning". Significant aspects of his continuously evolving definition of reflection are the ideas of "developmental process" and "learning through". These ideas are reinforced by Johns' entire body of research which demonstrates the ways in which reflection contributes to the continuous unfolding of a practitioner's understanding of both him/herself and the person/s in their care. Johns prefers the use of a written, narrative approach to engage oneself in reflective dialogue in order to "realize desired practice as the lived reality" (2006, p. 36).

In the current study, students spoke about various reflective activities which helped them become more self-aware, as well as helped them gain perspective on the feelings of patients in their care, and they said that they planned to continue using reflection after graduation as a way of lifelong learning. In relationship to Johns' (2006, 2007a) understanding, students expressed a perspective of reflection as an activity which helped them "learn from" their experiences and promoted understanding and the

discovery of meaning, but no participants spoke directly about "learning through" and experience. Perhaps "learning through" experience is a higher order of reflection which students will arrive at with more time in nursing practice and greater self-awareness. Learning "through" rather than "from" represents the on-going and forward thinking which occurs through reflection as students and practitioners are continuously learning throughout their lives. Although such forward thinking anticipates "how I will deal with that in the future", a frequent comment by participants when offering reasons for reflecting on practice, students did not understanding such thinking to be "reflecting about the future".

"Reflection for lifelong learning" is a sub-theme which emerged as students spoke prospectively and enthusiastically about continuing to use reflection after completing their baccalaureate nursing programs. Numerous researchers (Bolton, 1999; Buresh & Gordon, 2000; Burton, 2000; Cole, 2005; Freshwater, 1999, 2002, 2004; Hudacek, 2000; Johns, 1999, 2000, 2004, 2006, 2007a, 2007b; Langley & Brown, 2010; Perry, 2000; Taylor, 2004; Taylor, 2003, and others) have found that professional nurses can engage in various methods of self-reflection in order to improve their practice, hone their critical thinking ability, gain perspective, and discover meaning in the day-in, day-out professional and personal issues with which they are challenged. Hannigan (2001) asserted that reflection in and on practice can be a way of on-going learning for practicing nurses and can promote a "more humanizing" (p. 280) approach to care. The perspectives of students in this study regarding using reflection for lifelong learning support these previous findings. For the most part, students in this study felt that

reflective activities had contributed to their learning during their undergraduate programs, and envisioned themselves doing reflection in the future when they were working as professional nurses. Several shared observations of instances when they had seen RNs doing what they (the students) described as reflective activities, and saw these activities to be valuable. Such activities included critical incident debriefing after a code, colleagues talking and crying about an unexpected patient death, and incidental conversations between RNs sharing "nurse's intuition" about a patient after change-of-shift report had taken place. As one student stated, "there are just so many things that happen in a day...it would just be weird if they [RNs] didn't reflect on things".

The work of Jack and Smith (2007) exploring self-awareness and professional self-development among professional nurses discussed reflection as one tool which might be used by nurses to examine their thoughts and feelings and increase their self-awareness throughout their careers. They made the interesting observation that "in nursing, reflection is a commonly used term but is not necessarily an activity performed effectively" (Jack & Smith, p. 50). Jack and Smith suggested that compiling a professional portfolio can stimulate reflection and promote self-awareness. Only one student in the current study mentioned keeping a portfolio of items representative of her undergraduate nursing work, but she did not identify this as a reflective activity and the use of portfolios did not emerge as a common idea among participants discussing the nature of reflection. Anecdotally, this researcher is aware that more and more healthcare employers are requiring their nurses to maintain portfolios which are used for review and promotion purposes. The introduction of portfolios into baccalaureate education might

provide a meaningful reflective activity for students and also prepare them for what they will be experiencing in the workplace in coming years.

In addition to portfolio use, "the compiling of which can in itself stimulate reflection" (Jack & Smith, 2007, p. 51), Jack and Smith recommend keeping regular reflective journals about one's nursing experiences. They were careful to point out, however, that such journals may be highly personal, and that nurses may only want to share their written reflections with a few trusted colleagues, ideas which were articulated by students in the present study and expressed by a previous theme, "trusting others with private thoughts and feelings". Translating this idea from clinical practice to nursing education, it may be suggested to students that they keep two reflective journals during clinical education experiences, one which will be shared and one which will be for their personal use only. Such a discussion among undergraduate students may complement instruction on what type of sharing is appropriate for professionals using online social networks such as FacebookTM and what type of sharing should be kept more private for personal, professional and ethical reasons. By suggesting to students that some ideas, opinions, and feelings are best shared only among trusted others, faculty acknowledge and show respect for the privacy issues some students in this study expressed concern about when they discussed their perceptions of reflection, and is an important topic to address when using reflection for learning.

A final finding warrants discussion within the theme of "Using reflection for learning". During the course of interviewing students and concurrently analyzing transcripts that had already been completed, it became apparent to this researcher that

student perceptions were noticeably influenced by their nursing education program. That is, the individual student's understanding of the nature of reflection was largely contextual. Common understandings were expressed by students at each data collection site which were specific to their particular experiences at that institution. This was an unanticipated finding, an "ah-ha! moment" for the researcher as she carried out her own reflection on the data, indicated by comments in the field notes. At one site, every student interviewed discussed "journaling" in relation to reflection. It was revealed by the participants that all students had to keep a journal in their very first clinical course, and although their experiences with reflection had been varied since that time, they all quickly recalled this activity as reflection during the interview. At another nursing program, all of the students who participated in the study mentioned study groups as a way in which they practice reflection for learning, and at the third site from which participants were recruited and interviewed, every student mentioned service learning in relation to reflection.

The students' quotations which clustered in a site-specific manner demonstrate the potential power that an academic program, nursing curriculum or even an individual faculty member may have over the students' understanding and use of reflection in nursing education. Nurse educators need to be keenly aware of how influential they and their related curricular requirements and activities are over undergraduate students' understanding and use of reflection, as evidenced by the finding that student perceptions are framed by the context in which they are learning. "Using reflection for learning" was a main theme which emerged from the interview transcripts in this study, and warrants

careful examination by educators for its implications in teaching and learning.

<u>Summary of Thematic Discussion</u>

The themes and sub-themes which have been discussed in this Chapter offer support for and are supported by previous research, both historic and current, related to the understanding and use of reflection, and provide evidence that reflective activities are perceived by nursing students to be useful for their learning and understanding. The rich descriptions of the nature of reflection as understood by baccalaureate nursing students which formed the basis for this qualitative descriptive study provided multiple layers of information and nuanced understandings to inform the discussion of findings presented in this section. The nature of reflection from the perspectives of the participants in this study has revealed a number of common understandings, which students generally discussed as positive ways in which they are able to discover new things about themselves as people and future nurses and about their clients and the complex healthcare world they are entering. Students tended to think of reflection as "looking back" rather than "looking forward", and spoke of various other temporal aspects of reflective activities as they have participated in and understood them. Journaling was one of the most common reflective activities referenced by study participants, but was not the exclusive understanding of reflection revealed in the study.

Student participants described reflection as both a process and an outcome, and frequently cited examples in which reflective activities had helped them connect didactic (classroom/textbook) learning with clinical/experiential learning. Although many of the participants referenced some type of "trigger" or stimulus for their reflective thinking, as

well as an eventual end-point to their reflection about a particular scenario or problem, no common understanding for "doing reflection" emerged from the interviews other than the general idea of "just let your mind go, let your thoughts and feelings flow". Most participants voiced a desire to have some sort of feedback from faculty about reflections done in reference to a clinical experience, but they also commonly resisted the idea of reflections being graded like other assignments. All of the participants had used reflection in some form during their nursing education, and all anticipated utilizing reflective activities in their future careers as RNs. Individual student understandings of the nature of reflection appeared to be influenced by nursing faculty they had been taught by and/or the curricular focus or specific teaching-learning strategies (service-learning, for example) used within their own nursing education programs.

Implications of the Findings

Nursing Education

The findings of this study broaden the conversation among nurse educators regarding the ways in which reflection can most effectively be included in educational programs to increase student learning and retention of knowledge and skills essential to entry level nursing practice. The undergraduate students who participated in this study shared a desire to find meaning in their studies and their work, and the rich data from their interviews has revealed that they perceive reflective activities to be one method of achieving this deeper understanding. Nurse educators, therefore, should learn how to incorporate reflection into their teaching across the curriculum to facilitate students' opportunities for meaning-making and increased self-awareness. The idea expressed by

some students that care planning was a reflective activity was a surprising finding, but can be understood within the context of the theme "Gaining perspective" as a way of assessment, planning, implementation and evaluation of nursing care from a holistic perspective. Hearing such a novel perspective from nursing students might encourage faculty to think in non-traditional ways about traditional frameworks, and to utilize the perceptions about reflection articulated by this study's participants to engage their own students in activities that promote mindfulness and sense-making.

As nursing education programs begin to increase the use of simulation technology and service-learning, both of which utilize reflection as an essential aspect of the teaching-learning process, it is important to understand the meaning of the activity by the students who are engaging in it. Few students in this study discussed their experience of reflection directly in relationship to clinical simulations. However, student perceptions did support the use of reflective activities to identify thoughts and feelings related to service-learning experiences, similar to the findings of Laplante (2007). In addition to both traditional (hard-copy) and online journals, faculty might have students from different service-learning appointments share in pairs or small groups through a discussion board or blog in order to compare their experiences and discover the similarities and differences which will help give deeper meaning to each one's individual experience. For beginning students, the use of open-ended questions and prompts will facilitate the broader and deeper thinking by which students are able to gain insight into both their experiences and themselves. One-minute papers, in which students are pushed to brainstorm words and phrases to express their thoughts and feelings, rather than write

grammatically correct complete sentences, can be the seeds for more detailed reflections at a later point in time. The use of drawing, origami, and other art expressions are some other ways in which nursing faculty might engage the reflective thinking of students as they contemplate clinical situations and personal challenges which require new perspectives and creative solutions.

Davies and Sharp (2000) described reflective learning as a developmental process, and asserted that the capacity for reflection increases with maturity. As participants in the present study discussed their perceptions of reflection, including past, present, and future use when they are registered nurses, it was apparent that they felt that reflection can be learned and that individuals can improve their capacity to engage in reflective activities. For undergraduate students in entry-level courses, the use of carefully selected videos, works of fiction or short case studies may be a less intimidating way to stimulate and practice reflective thinking than the use of real clinical situations, which are less predictable and may be perceived by students to be more risky to discuss with others. In addition, lower level students may not yet have the opportunity to participate in the real clinical experiences which often provide the perplexing situations that trigger reflection, or the desire to "put the pieces together and make connections", and so the use of these alternative resources may be more accessible and easier for faculty to incorporate into their teaching/learning activities. Horton-Deutsch and Sherwood (2008) noted that the capability for reflection develops over time, and also caution that some students have more natural aptitude for reflection than others, both points which were addressed by the participants in this study. Therefore, nursing faculty

should consider how and when reflective activities will be taught and utilized within their programs so that students may be continuously developing their capacity for reflection as they grow in knowledge and skill acquisition.

One of the goals of baccalaureate nursing education is to prepare nurses who will not only be skillful clinicians, but also future nurse leaders and managers. In their analysis of applying reflective theories and methods in nursing education, Horton-Deutsch and Sherwood (2008) concluded that reflective activities promote the development of emotionally competent nurse leaders. The specific strategies they discussed include being mindful, identifying patterns of behavior, active listening, dialogue, shared thinking, and questioning/reframing situations, among others (Horton-Deutsch & Sherwood, p. 949). These strategies focus on the improvement of relationship and communication skills, the development of self-awareness, and the capacity for emotional intelligence which permits nurse leaders to be both assertive and compassionate during times of change. The importance of such skill development for student nurses is undeniable. The current study has identified themes describing the nature of reflection as perceived by baccalaureate nursing students which point to some of the same strategies discussed by Horton-Deutsch and Sherwood, such as Being mindful of thoughts and feelings, Looking back to deepen understanding, Listening and speaking with an open heart and mind, and Gaining perspective. The implication herein is that there is a growing base of evidence supporting and encouraging the use of these and similar activities in undergraduate nursing education.

Particularly for clinical nursing education and for helping students bridge the classroom-clinical gap, such reflective activities as role-playing, critical incident analysis, and regular debriefing meetings (either in a small group or individually) can be important teaching-learning tools. In addition, the expectations for "clinical journals" should be clearly communicated to students, and distinctions made between such reflective journals and the more task-oriented clinical logs or "skills sheets" which are sometimes utilized in clinical education. Based on the perceptions of students in this study, faculty should place importance on engaging students in their reflective activities by providing feedback on a regular basis. Prompt responses to students' journal entries, even if brief, can facilitate dialogue about questions and problems and also push the student to "go deeper" with their reflective thinking about complex situations.

Based on students' perceptions expressed in this study by the sub-theme "trusting others with private thoughts and feelings", faculty should be clear and intentional in communicating to students exactly who will have access to their written reflections and how they will be evaluated, if at all. If reflecting as a group, the "rules for engagement" for discussion and sharing should be mutually understood and agreed upon: Students should not be forced to share their reflections with other students if they do not feel comfortable, and all should know that what is said within the group stays within the group. The use of online discussion groups for reflective activities should be carefully considered in light of the concerns over privacy and trust revealed by the perceptions of participants in this study. Faculty should be explicit about the goals for any reflective assignments without imposing too many constraints on individual student's reflective

expressions, and offer exemplars (with permission) from previous students or examples of their own reflections in order for students to have an idea of what is expected, permissible, and encouraged. Trust is built over time, and some students may be reluctant to write their true feelings about a situation for fear of being judged by their teacher. For beginning students in particular, it is helpful to guide reflective activities by providing some open-ended questions or prompts. It may also be helpful to suggest to students that they can keep separate reflective journals if they choose to do so, with one to be shared with the faculty and the other to contemplate privately as they "look back to deepen understanding" or "give words to emotions and experiences that have no right or wrong answer".

Faculty who are not aware of pedagogies utilizing reflection should educate themselves and begin to incorporate reflective activities into their teaching, as undergraduate students have perceived such activities to be beneficial for their learning, as evidenced by the findings of this study. In addition, this researcher issues a call to all educators and clinicians to practice reflection themselves in order to inform their teaching and practice, thereby discovering greater meaning in their work and lives and modeling the holistic approach to nursing which is inherent in reflective practice.

Nursing Practice

The perceptions of students regarding reflection which were discovered in this study support the belief of Taylor (2003) that both understanding (knowledge) and professional practice (skill) are positively influenced by reflection, through which meaning from experiences and feelings can be created and clarified. Themes that

emerged from careful analysis of the interview transcripts support the assertion made in The Scholarship of Reflective Practice (Sigma Theta Tau International, 2005) that "Reflection raises awareness that enlivens and changes practice" (p. 3). Most students in this study indicated that they anticipated using reflection in some form after they graduated, and voiced perceived benefits for its use in their future nursing practice. Based on previous research and the findings of this study, nurses should be encouraged to use reflective activities as a part of professional practice in all settings, and leader-managers should attempt to model, encourage and facilitate such activities. Students who observe nurses using reflection in practice will be encouraged to use it during their education, and those who have progressively developed the ability for reflective thinking as undergraduates will be more likely to continue to utilize reflection in their future careers to change and improve their practice, gain perspective on the daily challenges with which they will be faced, and discover meaning in the everyday professional and personal issues which punctuate our lives.

Reflection in nursing practice (which may be "practiced" by students in the context of their nursing programs, as well!) may be done privately by various means (journaling, art, music, meditation, etc.) or in relationship with others, as in critical incident debriefing, both of which were perceptions of reflection described by students in this study. For those professional nurses who are unfamiliar with reflection, continuing education offerings would be good opportunities to introduce and practice reflective activities. Book clubs are emerging as an opportunity for healthcare professionals to reflect together on issues of common interest across disciplines, and can be implemented

in many different ways in order to meet the needs of interested participants. As more graduate nurses enter the workplace with prior positive experiences using reflection for learning, healthcare facilities should incorporate reflective activities into all areas of their delivery systems, including nursing services, education, and administration.

Nursing Science

While major themes and sub-themes demonstrating some common understandings of students' perceptions of reflection were identified during the course of this research, the overall findings of this study are unable to be generalized in any aspect that would support their application to a currently existing model of reflection. Neither do the findings support the development of any new comprehensive model or theory to explain reflection. However, the perception of many students that reflection is a meaningful activity to increase self-awareness and inform clinical practice supports the use of the Situated Clinical Decision-Making Framework recently proposed by Gillespie and Paterson (2009) as one way for novice nurses to engage in retrospective reflection ("looking back to deepen understanding") in the context of a clinical experience and thereby increase their learning. Additionally, aspects of the themes of this study, particularly "Gaining perspective", support many elements of Paterson and Zderad's (1976) Humanistic Nursing Theory. Further examination of the nature of reflection for nursing students, nurses, and even patients may contribute to nursing science by building upon Paterson and Zderad's work, perhaps bringing to light the continuing importance of discovering meaning in human to human interactions, even as the healthcare delivery system itself becomes more technological and less personal in so many ways.

The understanding of the nature of reflection as "gaining perspective" is consistent with the stages of reflective observation and abstract conceptualization in Kolb's (1984) Experiential Learning Cycle. In the current study, quotations supporting this theme often implied some sort of "cycle" of reflective thinking, with students using the word "process" in their discussions of reflection leading to new perspectives, which in turn, guided their practice, promoted understanding, or increased their feelings of caring toward another. As previously stated, however, a specific model or description of a consistent process for reflection did not emerge during the constant comparative analysis of the interview transcripts. In fact, this researcher contends that the findings reinforced the idea that reflection may be unable to be conceptually "reduced" to any one model or theory for broad application, as student perspectives demonstrated that they feel it is a "unique experience" for each person.

While there were many intersections in the thematic analysis which pointed to a possible "process of reflection", no one process or understanding emerged as predominant from the students' perspectives as discussed in the interviews. Since this study was first proposed, an on-going review of the literature led to the discovery of a possible framework for examining the temporal and developmental aspects of reflection which has implications for the research findings and discussion herein. The work by King and Kitchener (1994) on a reflective judgment model has been primarily used with teachers and education students but provided the framework for McKenzie and Bowen's (2009) research on developing reflective clinical judgment with nursing students, discussed in this chapter in reference to the first main theme. The Reflective Judgment

Model (King & Kitchener, 1994) lists seven stages of cognitive development organized in three phases which relate to increasing capacities for reflective judgment. Based on the results of this qualitative study which point to an understanding by nursing students that reflective thinking can be learned, practiced, and improved, researchers should now more closely examine King and Kitchener's model for its potential applications to the study and evaluation of reflection in nursing.

In her critical analysis of data-based studies on reflection, Ruth-Sahd (2003) noted that previous studies have identified positive outcomes of reflection in nursing. The thematic findings from this study on the perspectives of undergraduate nursing students regarding reflection reinforce many of the outcomes listed by Ruth-Sahd. Specifically, the first theme which emerged, "Looking back to deepen understanding/seeing how far I've come", relates to her identified outcome, synthesized from the examination of numerous studies, of enhanced self-esteem. The sub-theme in the present study identified as "Putting the pieces together and making connections" directly relates to the integration of theory with practice identified as another outcome of reflection by Ruth-Sahd. Other notable intersections between outcomes of reflection identified in her study with themes identified in the present study include the relationships between "Reflection for lifelong learning" and continued professional growth, "Promoting change" and empowerment of practitioners, and "Being mindful of thoughts and feelings" and improvement in practice through greater self-awareness. The findings of this study support the assertions made by Ruth-Sahd and expand upon them by adding nursing students' perspectives on reflection. The similarities regarding understandings about reflection between nurse researchers, as

synthesized by Ruth-Sahd, and undergraduate nursing students, as revealed in the present study, are a notable discovery related to the art and science of nursing.

In defining terms utilized within this study, this researcher offered her own synthesized definition of reflection in nursing which, while held in abeyance during the participant interviews and development of thematic ideas, cannot be dismissed when considering the implications of this study's findings for nursing science. Whereas the focus of this study was on undergraduate baccalaureate nursing students and the conceptual definition by this researcher was developed to apply more globally to "reflection in nursing", it is difficult to make direct comparisons, but the intersection of ideas between the participants and this researcher were apparent in several aspects. Many of the perceptions of undergraduate nursing students which emerged from the data in this study support the conceptual definition of reflection as "a holistic process of discernment, involving body, mind, and spirit, through which the individual makes sense of an experience, idea, feeling, event, or question in/on/about nursing, and through such sensemaking discovers greater understanding of various factors which affect the nurse's role" (Greenawald, 2006, unpublished). Consistent with this definition, student participants did not perceive reflection to necessarily be triggered by a problem or question, but acknowledged that "really, anything!" might prompt them to reflect, and that their reflections might be intentional or totally random.

The perceptions of undergraduate nursing students in this study support an understanding of the nature of reflection which goes well beyond that of Dewey (1933, 1938) or Mezirow (1991) as a purely cognitive act to include a variety of activities which

may embrace mind, body, and spirit, consistent with this researcher's understanding. Students' perceptions, however, were incongruent with the researcher's conceptualization of reflection having a past/present/and future orientation, as most of them voiced an understanding of the nature of reflection as "looking back" rather than reflecting in the moment or reflecting about the future. Nevertheless, the understanding of the nature of reflection which emerged in the analysis of interview transcripts clearly points to an understanding by the students that "reflection in nursing is a dynamic process of personal and professional growth which informs future behaviors" (Greenawald, 2006, unpublished), and supports the idea of reflection as a means for lifelong learning.

Finally, the diverse experiences and understanding of reflection and reflective activities revealed by the student perspectives presented in this study should inform scholars of the need to be open-minded in their consideration of the concept. Perhaps the time has come when less energy needs to be spent on debating definitions and trying to develop a one-size-fits-all understanding of reflection, and more energy needs to be expended operationalizing reflection in a variety of ways and assessing outcomes in order to meet the needs of increasingly diverse learners across all nursing education settings.

Nursing Research

At the conclusion of their quantitative study on the acquisition of reflective skills by nursing students over an academic year, Duke and Appleton (2000) recommended that further qualitative research should be conducted to examine "how reflection is experienced by students". This study on the nature of reflection from the perspective of baccalaureate nursing students has answered that call. Prior to this research, only one

other study (Hong & Chew, 2008) was found which specifically explored the views of students regarding reflection and reflective practice. By achieving the purpose of describing the nature of reflection from the perspective of baccalaureate nursing students, the present study adds a new dimension to the discussion of reflection in nursing by bringing to the body of research the voices of undergraduate students as they perceive reflection and reflective activities. The use of qualitative interviews to reveal rich descriptions of students' perceptions of reflection, including nuanced and unique understandings which could not have been obtained through other data collection methods, contributes new information to the evolving body of research regarding the understanding and use of reflection in nursing.

The identification of themes describing undergraduate nursing students' perceptions of reflection is a valuable first step in describing this activity from the student, rather than researcher or educator, perspective. Future research to validate these themes, either by qualitative or quantitative methods, may contribute further information to the understanding by nurse educators, in particular, of how reflective activities may be best utilized in pre- and post-licensure programs to support learning. A larger and more diverse group of participants may reveal new themes and expand on the results presented herein. Methods utilizing technology (online discussions, for example) or focus groups at a wider representation of nursing programs would enhance the scope and depth of student perceptions which have been revealed.

Based on the understanding of the nature of reflection expressed by students in this study, one might wonder if reflection/self-reflection increases a person's self-

awareness, or if those nurses (and nursing students) who are inherently more self-aware to begin with are better at using reflective activities to their advantage for learning. The former relationship (reflection increasing self-awareness) has been examined and supported in the literature (Freshwater, 1999; Gustafsson & Fagerberg, 2004; Horton-Deutsch & Sherwood, 2008; Idczak, 2007; Johns, 2000, 2006; Schön, 1987; and others), but no studies were discovered while completing this research which examined the latter relationship (one's degree of self-awareness affecting the ability to reflect or use reflection for learning). Determining how to assess "self-awareness" and then exploring these relationships and how they impact the use of reflection in nursing is a topic for future researchers to consider. It is hoped that the reflection by others on the findings of this study and its implications for all facets of nursing will result in innovative thinking, practice, teaching and research.

Limitations

There is elusiveness to capturing the essence of reflection, and although this study has made progress in identifying the perceptions of undergraduate nursing students regarding this activity, there are several limitations which must be acknowledged. First, the volunteer participants in the study were self-selected, which may have skewed their feelings about reflection in a number of ways. For example, some students may have been motivated to volunteer for participation because of the strongly positive experiences they previously had using reflective activities. Those with negative experiences using reflection may not have wanted to spend any more time thinking about or discussing it with the researcher, and therefore not volunteered for participation. It is also possible that

those students who felt insecure about their own understanding of reflection did not volunteer for fear of seeming incompetent when being interviewed by the researcher, even though it was made clear during recruiting activities that the goal of the qualitative descriptive study was not to identify "right or wrong answers".

Although saturation of the data was determined to have occurred by the sixteenth interview, all of the participants were from nursing programs in the same geographical area in southeastern Pennsylvania, and all were female. A greater diversity of students by gender or geographical area may have influenced thematic development or the number of interviews at which saturation was achieved. A final limitation was the inability of the researcher to follow-up with all participants for member-checking after the initial interviews were conducted. The diminishing number of participants who responded to the three member-check communications during the course of the study may have been the result of several factors, including lack of time, lack of interest, change of status (several students graduated from their BSN programs prior to the conclusion of the study), or natural attrition during a research study. In any event, the researcher did not have the power to force their continued participation, and therefore the validity of the identified themes and sub-themes may be questioned.

Recommendations for Future Research

As stated previously, the results of this study have implied that there may be some general processes by which students engage in reflection, and future research may examine these ideas in greater detail. The development of a model for reflection in nursing that is both consistent with student perspectives, as having been described in this

study, and supportive of learning outcomes may optimize the teaching, learning and evaluation of reflection within undergraduate nursing education programs. In particular, research examining the use of reflection by students and its influence on specific measurable learning outcomes would be beneficial in advancing the body of knowledge about this activity as a teaching/learning strategy in baccalaureate nursing education. Such research would build upon this study to create a bigger evidence-base, thereby continuing to advance the understanding of reflection as a valid pedagogical method within nursing education and providing greater support for its use throughout all types of educational settings. In addition, as educators and practitioners continue to examine the development and evaluation of critical thinking abilities in nursing, there are opportunities to build upon existing research regarding reflection and contemplate how these two concepts may be synergistically related.

Summary

The purpose of this study was to describe reflection from the perspective of baccalaureate nursing students. Using a qualitative descriptive approach yielded new information and nuanced understandings by the students which have heretofore not been described in the literature. In this chapter, the five major themes and 18 sub-themes which emerged through constant comparative analysis of the interview transcripts were discussed in light of historic and current literature, including literature discovered since the time the study began, an approach consistent with qualitative methodology.

Implications of the findings for nursing education, practice, science, and research were

presented. The limitations of the study were candidly discussed, as well the researcher's recommendations for future research prompted by the findings.

Nursing education is fundamentally experiential in nature, and reflection has been shown to be a key activity in connecting knowledge with practice for greater understanding. This study describing and analyzing the nature of reflection as perceived by baccalaureate nursing students has revealed common understandings by the students, which are largely consistent with the major tenets of reflection as previously discussed by scholars, educators, and clinicians. These perceptions have been identified as: 1) Looking back to deepen understanding (digging deeper into my thoughts; seeing how far I've come; putting the pieces together and making connections); 2) Being mindful of thoughts and feelings (seeking resolution; finding contentment; informing practice; promoting change); 3) Gaining perspective (reviewing practice which guides learning; re-framing situations which promotes understanding; recognizing the feelings of another which increases caring); 4) Giving words to experiences and emotions that have no right or wrong answer (putting words on paper; sharing words out loud; listening and speaking with an open heart and mind; journaling as dialogue; trusting others with private thoughts and feelings); and, 5) Using reflection for learning (influence of time, preparation, environment; reflection for lifelong learning; perception of reflection framed by context). By "listening to the voices" of students offered by this research and considering their perspectives on this teaching-learning strategy, nurse educators will be better prepared to facilitate the capacity of their students to utilize reflection as a way of understanding the art and science of nursing.

A closing thought upon which to reflect: "Because practice will only become more complex over time, nurses must leave their formal programs prepared to be lifelong learners, with the disposition and skills to be reflective practitioners and expert learners" (Benner, Sutphen, Leonard, & Day, 2010, p. 4).

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APPENDIX A

Introductory Letter to Directors of Targeted Nursing Programs

Deborah A. Greenawald, RN, MSN, PhD (candidate)

(Date)

(Name, Director/Dean/Chairperson)
School of Nursing
College or University
Address
City, State Zip

Dear Dr. :

I am currently completing research in fulfillment of requirements for a PhD in nursing at Widener University. The purpose of my study is to describe the phenomenon of reflection in nursing from the perspective of baccalaureate nursing students. Within the qualitative design of my study, I will need to complete individual interviews with 12 to 18 junior or senior nursing students from baccalaureate programs within a 100-mile radius of the Philadelphia area, and so I am writing to request your permission to contact students at your program in order to solicit their participation.

Working with faculty who teach courses at the junior and/or senior level, it is my hope to recruit 4 to 6 students from your program who have experienced reflective learning activities for participation in this study. Each student will be asked to meet with me individually for approximately one and one-half hours in order to conduct a semi-focused interview which will be audio-taped and subsequently transcribed for analysis. The date, time, and location of these interviews will be arranged individually and will not conflict with the student's academic classes or clinical education. There are no known risks involved with participation in the study. The involvement of the students will be entirely voluntary, although I do intend to give them a token gift (\$10.00 BordersTM gift certificate) at the conclusion of the study in appreciation for their participation.

I have submitted my application to the Institutional Review Board (IRB) of Widener University. Pending this approval, I am asking your permission to contact faculty in order to access student participants for this study. I plan to follow-up this letter with a phone call to you within the coming week, and hope that we can further discuss my need for study participants at that time. Thank you in advance for your time and consideration of this request.

Sincerely,

Deborah A. Greenaw	ald	
Ph.		
Email:		.edu

APPENDIX B

Introductory Letter to Faculty of Potential Student Participants

Deborah A. Greenawald, RN, MSN, PhD(candidate) (Date) (Name, title) School of Nursing College or University Address City, State Zip Dear Dr. : I am currently completing research in fulfillment of requirements for a doctorate in nursing at Widener University. The purpose of my study is to describe the phenomenon of reflection in nursing from the perspective of baccalaureate nursing students. Within the qualitative design of my study, I will need to complete individual interviews with 12 to 18 junior or senior nursing students from baccalaureate programs within a 100-mile radius of the Philadelphia area who have experienced reflective learning activities. I will specifically be recruiting students who are currently enrolled in or have already completed their psych/mental health course. The (Dean, Chairperson, Director) of the (College/University) Nursing Program has given me permission to contact you and inquire about how I can access either junior or senior level students to participate in this study. It is my hope to recruit 4 to 6 junior or senior level students from your program for participation in this study. I would appreciate the opportunity to speak to your junior or senior level class/es briefly about the project at a time that is convenient for you within the next month. Attached you will find a copy of the letter that I would like to distribute to your students when I come to speak to them and recruit participants. With your help in accessing appropriate students, I hope to complete data collection before the end of the current semester. Your only involvement with the study would be to permit me to speak to your class at a time/day that we mutually agree upon. The Institutional Review Board of Widener University has granted me approval to conduct this study. I would appreciate the opportunity to discuss my study further with you, and would ask that you please contact me at your convenience as soon as you are able via email at edu or by telephone at). Thank you in advance for your time and consideration of this request. Sincerely,

Deborah A. Greenawald

APPENDIX C

Recruiting Letter for Student Participants

A research study is being conducted to gather the perspectives of undergraduate nursing students regarding reflection. The purpose of this qualitative study is to describe reflection from the perspective of baccalaureate nursing students in order to provide nurse educators with information about reflection from the student perspective so that reflection may be more effectively used in academic courses and clinical education to promote and enhance learning.

You are being asked to participate in this study because you are currently either a junior or senior level student in a generic baccalaureate nursing program who has completed or is presently enrolled in the psych/mental health nursing course and who has experienced reflective learning activities. Each student who agrees to participate will be asked to meet with the researcher individually for approximately one and one-half hours in order to conduct an interview which will be audio-taped and subsequently transcribed for analysis. The date, time, and location of these interviews, which will take place on your campus, will be arranged individually and will not conflict with your academic classes or clinical education. The information you share will be reported anonymously.

Participation in this study is entirely voluntary and will have no affect on your course grade or academic standing. The Institution Review Board (IRB) at Widener University has approved the solicitation of subjects for this study, and your program director and faculty have given me permission to recruit participants at this program. Students who agree to participate will be given an Informed Consent form to review and sign prior to beginning the interview. There are no known risks or benefits involved with participation in the study. In appreciation of your time, you will be given a \$10.00 BordersTM gift certificate at the conclusion of the study, along with a certificate of participation for your professional files.

If you are interested in participating in this study, please speak to me immediately after your class today or contact me via email at <u>ledu</u> or by

telephone at the common teleph

APPENDIX D

Focused Participant Interview Questions

[Researcher] *I'd like to spend this time with you discussing reflection.* [Note: Questions will be drawn from the following, but will not necessarily follow in a prescribed order nor be inclusive of all the prompts given on this list.]

- 1. When I say "what do you think about reflection", what is the first thing that comes to mind?
- 2. Do you reflect? When do you reflect? What sorts of things do you think about?
- 3. What sorts of reflective activities have you used within your nursing program?
- 4. Do any of your non-nursing courses require or encourage you to engage in any types of reflection?
- 5. How would you define reflection?
- 6. How do you feel about reflection? Do you enjoy it? Why or why not?
- 7. Do you feel that reflection is beneficial to your learning? If so, how?
- 8. Can you think of any times when reflection hasn't been beneficial to you?
- 9. Did you engage in any sort of reflective activities before coming to college?
- 10. Do you think reflective activities help you learn about nursing and being a nurse? If so, how?
- 11. Do you think you will continue to practice reflection of some sort once you graduate and are working as a professional nurse?
- 12. Is there anything else that you would like to share with me about your perceptions of reflection or any other aspects of your undergraduate learning experience?

APPENDIX E

Additional Focused Participant Interview Questions

The following questions were added to the repertoire as the study unfolded, in response to ideas generated in conversations with the first several participants:

- a. How would you explain reflection to someone?
- b. Do you think you can get better at reflection?
- c. Does reflection have a purpose? If so, what?
- d. Did you ever keep a diary?
- e. How honest can you be when you are reflecting with others?
- f. Do you feel that there is a risk sharing something you have done wrong when reflecting?
- g. Have you ever observed nurses in your clinical setting doing some sort of reflection?
- h. If you were the teacher, how would you explain to someone how to write a reflection?

APPENDIX F

	Participant Demographic Questionnaire	Site:	*************************************	-
1.	Age (in years)			
2.	Gender:	Female	Male	
3.	Year in educational program:	Junior	Senior	
4.	Current overall GPA:			
5.	Do you have any other earned degrees? _	Yes	No	
	If "yes", please list the discipline of ye	our previous degre	ee:	
6.	How do you describe yourself?			
	American Indian or Alaska Nati	ve	Asian	
	Black (African descent)		Africa	n American
	White (Caucasian/European desc	ent)	Arab	
	Native Hawaiian or other Pacific	e Islander	Hispan	ic or Latino
	Other (please identify)			
7.	Have you ever done any assignments that	use reflection?	Yes	No
8.	From the list below, please check all activity	ities you have don	e or presently	do within
	your nursing program:			
	Clinical Journals reports			
	Critical incident reports			
	Clinical post-conference discuss	sion		
	Role playing & discussion			
	Debriefing following simulation	1		
	Personal diary or journal			
	Exemplar writing			

	_ Poetry writing
	Relationship with a mentor or coach
	Peer evaluation
	_ Small group work requiring consensus
	_ Autobiography
	_ Participation in ChatRoom or Discussion Board
	Participation in a ListServ or Blog
	Being videotaped & reviewing performance
	_ Creative art
	_ Meditation
	Self-evaluation
	_ Faculty evaluation about clinical performance
	Other (describe):
9. What nu	rsing courses are you currently enrolled in?
10. What n	ursing courses have you already completed?

APPENDIX G

CONSENT FORM

Widener University IRB Protocol Number 116-09

INVESTIGATOR NAME: Deborah A. Greenawald, RN, MSN, PhD (candidate) Widener University School of Nursing

STUDY TITLE: Understanding Reflection from the Perspective of Baccalaureate Nursing Students

PURPOSE OF THE STUDY: The purpose of this research study is to gain a better understanding of the phenomenon of reflection in nursing as perceived by undergraduate nursing students in a traditional baccalaureate program. I am being asked to be a participant in the study because I am a junior or senior in a baccalaureate nursing program who has participated in reflective learning activities.

DESCRIPTION OF THE STUDY: My participation in this study will involve an interview with the researcher at or near my college at a time, date, and location that we mutually agree upon. I understand that each interview will take approximately one and one-half hours to complete, and will be audio-taped and transcribed for analysis purposes. I will be asked to avoid using my full name or any other specific identifying information during the interview in an effort to preserve confidentiality: However, if such information is included, I understand that the researcher will black it out from the transcripts. I will also be asked to complete a brief demographic questionnaire. I understand that the researcher may contact me as she is organizing the data to check my agreement with any theme/s she identifies within the transcripts of various interviews, and that I will be expected to reply within a reasonable amount of time indicating my agreement or disagreement with her analysis.

RISKS AND DISCOMFORTS: I understand that there are no known or anticipated risks for physical harm involved in participating in this study. There is minimal risk for psychological discomfort which may result in my reflecting on the questions asked by the researcher;

however, this is no more than may occur in everyday interactions. I understand that I have the right to refuse to answer any questions posed by the researcher during the interview. BENEFITS: I understand that there may be no direct benefits of participating in this study; however, the opportunity to reflect on my own thoughts and feelings during the interview may be beneficial to my professional growth and understanding of nursing practice. In addition, I understand that data that are revealed through this study may benefit nursing students and faculty by adding to the body of knowledge regarding best practices in nursing education.

ALTERNATIVE PROCEDURES: I understand that the only alternative is to choose not to participate in this study.

CONFIDENTIALITY: All documents and information pertaining to this research study will be kept confidential in accordance with all applicable federal, state, and local laws and regulations. I understand that data generated by the study may be reviewed by Widener University's Institutional Review Board, which is the committee responsible for ensuring my welfare and rights as a research participant, to assure proper conduct of the study and compliance with university regulations. If any presentations or publication result from this research, I will not be identified by name.

The information collected during my participation in this study will be kept in a locked cabinet in the researcher's locked office. Transcriptions and audio-tapes will be maintained for one year following the completion of the study, at which time they will be destroyed by shredding and/or incineration.

TERMINATION OF PARTICIPATION: I may choose to withdraw from this study at any time and for any reason without penalty or consequence. If I choose to withdraw from the study, I will contact the investigator and my records will be destroyed. My decision to terminate participation in this study will have no impact on my grades or academic status. COMPENSATION: I understand that my participation in this study is strictly voluntary. However, I will receive a token of appreciation (\$10.00 Border'sTM gift certificate) from the investigator at the completion of the interview for my participation as well as an official letter of participation. There will be no cost to me for participating in this research.

INJURY COMPENSATION: Since the	re are no anticipated risks to participants, injury
compensation does not apply.	
QUESTIONS: All of my questions have	e been answered to my satisfaction and if I have
further questions about this study, I may	contact Deborah A. Greenawald, Principal
Investigator, at phone number	or email du . If
I have any questions about the rights of	research participants, I may call the Chairperson of
the Widener University's Institutional R	eview Board at . If I want a summary
of the final study report, I understand that	at I may request one at no cost by contacting the
researcher at the aforementioned phone	number or email.
VOLUNTARY PARTICIPATION: I u	nderstand that my participation in this study is
entirely voluntary, and that refusal to pa	rticipate will involve no penalty or loss of benefits to
me. I am free to withdraw or refuse con	sent, or to discontinue my participation in this study
at anytime without penalty or consequer	nce. I understand that I will receive a complete copy
of this consent form for my personal rec	cords after the signatures have been affixed.
Signatures:	
Participant's Name (Print)	
Participant's Signature	Date
I, the undersigned, certify that to the bes	st of my knowledge, the subject signing this consent
form has had the study fully and careful	ly explained by me and has been given an
opportunity to ask any questions regardi	ing the nature, risks, and benefits of participation in
this research study.	
Deborah A. Greenawald Investigator's Name (Print)	
Investigator's Signature	Date
Widener University's IRB ha	as approved the solicitation of participants

for the study until _____ June 4, 2010 ___.

APPENDIX H

Audit Trail (excerpt)

Data Units	Initial	Sub-Theme	Theme 1
Quotes from transcripts of individual	Coding		
student interviews. Number code refers to	Category		
student.			
"Thinking back to things that have been either said or done in the past." 02	Definition	(looking back)	Looking back to deepen
"I would define reflection as a process of, I keep wanting to say a process of reflecting, Um, not necessarily a process of analyzing but a process of kind of thinking about or looking back on an event or a situation or anything really, and kind of, you know, thinking about what happened" 03			understanding
"I mean, I can think about things that didn't happen [yet] but I think of reflection more as looking back" 04			
"I just don't see how you could reflect upon the future because reflect is like, you know, if you look at the word "re-", like re-doing it, right?a prefix for going back." 05			
"Thinking back on what I have done during the day or in the previous activity." 09			
"Looking back on the daytrying to make sense of things." 11			
"put your own self in time out, taking a minute to think. Because even when you put your children in time out you say, you go over there and sit down and think about what you just did." 11			
"I always thought of reflection as looking back, I never thought about it as looking forward." 15			
"I would define reflection basically as looking back either into yourself or into your mind, just thinking of what you have accomplished, what has gone on that day, just basically thinking back, look back." 16	Reason		
"a lot of looking back on that class [geriatric clinical] and looking back on other experiencesdrives what I am going to do [after graduation]." 06			
[after a simulation] "We all met afterwards and then we could go back and see what we do, what we could have done better and what we messed up on and things like that." 08	When		

"Usually it is after anything has happenedto really sit there and think about what I was feeling or what happened." 06	How	(looking back)	Looking back to deepen understanding
"We did [a journal] for our first nursing class after every clinical. I think the purpose was to start a journal so you know what you are doing that is new each time, so you could go back and look on it" 04			and to the same of
"how the day went, what was good about it, if anything could have been done differentlyit's kind of when you look back and then you know what to look for [next time]." 06			
"I look back on maybe something that has previously happened and maybe, I guess, rethink I should have done something differently or, you know, if everything I did was OK, to look toward the future" 16			
"Like I said like I think reflection is kind of unique to each individual. You know everybody, I think, I don't know, I think everybody reflects at some pointYou know what I mean. It may not be a conscious thing. They might not be doing it on purpose but I think it just kind of happens. You know everybody kind of looks back and thinks about past experiences or how they handle the situation, you know, not necessarily on purpose but it just happens." 03	Definition	Digging deeper into my thoughts	
[Reflection] "It is really justI feel, like a way of life. I feel like it is a spiritual thingReflection is perception and is mindfulness. It is just a deeper way of thinking." 05			
"Whenever I think of reflection, like, visually I see a mirrorbut I don't think that gives an accurate description if you are trying to get more philosophical with it because that [mirror]shifts your outer appearance and you are not really getting in deep and seeing what you are thinking or what is happening in the past, or what could happen in the future. So I think whenever you see more of like a mirror you are only seeing the present and you are not getting the big pictureand I think it [reflection] is way more than that. Reflection is so complex I think it is much too deep than just your outer view and how you are right now." 07			
"thinkingor looking backand kind of evaluating what happenedGoing deeperIt's not just what happened, it is the thoughts along with what happened."			
"when I hear reflection, I think of me just reflecting onto my day or what I have done in the pastLooking backbasically reflecting on anything that has happened that is making me feel the way I am." 16			

"has also helped me to overcome the depression I was in was going back, and I would just write and write you know whatever was coming out of me. I'd almost just write and not even know what I was writing. Because then I would look back and [understand]." 05 "going a little deeper with things and writing about feelings rather than about my day" 05 "I go back and look at the journal and it doesn't even look like my handwriting and it is just full of	Reason	(Digging deeper into my thoughts)	Looking back to deepen understanding
emotions." 05 "I go in some more depth about things and how I felt and how I saw things and whatnot and perceptions I may have gained or something" 05	Why		
"Things just mull around there and mull around there and I reflect all the time. I mean I reflect on things that have happened, you know fights that I have had, disagreements that I have had, situations that I have been in. You know, I just constantly mull it around in my head and try to think of ways to do better in the future and not have the situation occur, talking to the person about what happened, you know that kind of thing. I just kind of constantly have things mulling around in my brain about that." 02	When		
"Sometimes things trigger a memory and then you reflect on that." 15			
[about journals] "I mean for some people I think that is the most effective way for them to figure out their thoughts or think back on what happened throughout the day or whatever" 03	How		
"I think reflection helps nursing [education] especially because nursing is so fast paced and it is so intense that reflecting I think is a chance to really, really understand what happened {and}it keeps getting deeper and deeper with each class that you go through." 07	Teaching/ Learning		
"You would define reflection as looking back to what happened in the past and trying to apply any mistakes and anything that you did, you know, any mistakes or any good things that happened - apply them to now and you just kind of look back and see where you were and where you have come and where you are going." 02	Definition	Seeing how far I've come	
"I think of reflection as thinking about where I was in the beginning of all this and where I am now, and all of the things that it took to get me here." 06			
"I would define it [reflection] as looking back over an experience and analyzing feelings and data from that experienceFor me it is helpful because I can see where I came from and where I am now, and it is encouraging to know how I have made it through." 06			