THE WAYS OF LEARNING
EXPERIENCED AND DESCRIBED BY POST-REGISTERED NURSE LEARNERS

By

SEETHA L. H. VITHANARACHCHI

BSc.N.(Hons)., The Open University of Sri Lanka, 1997

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENT FOR THE DEGREE OF
MASTER OF SCIENCE IN NURSING

in

THE FACULTY OF GRADUATE STUDIES
(School of Nursing)

We accept this thesis as conforming
to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA

July, 2000

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Department of Graduate Studies

The University of British Columbia
Vancouver, Canada

Date July 31, 2000

DE-6 (2/88)
Contemporary nursing education may lead to changes in the learning processes used by learners, from traditional ways of transmission of knowledge to transformation of knowledge. Present trends encourage critical thinking skills in nursing practice and in nursing education, thus, facilitating nursing learners’ transformation of nursing information into nursing knowledge. Identifying ways of enhancing critical thinking skills is pivotal to professional development. In this sense, identifying how these mature post registered nurse (post-RN) learners learn, and how they use critically reflective actions in learning, is important in helping learners to face the challenges of education in order to learn successfully.

The way we learn to acquire a practical skill is different from the way we learn to understand information given in a lecture. Especially in higher education, learners need to think reflectively and critically. Although there are studies describe different learning styles and models of learning and the learner, reflective learning or transformative learning is not described adequately in the literature of nursing education. Mezirow’s (1991) transformation theory describes the process of transformation that takes place in adult learning, where prior knowledge is transformed into new knowledge through critical reflection. This study attempted to identify the ways of learning experienced by post registered nurse (post-RN) learners, using a theoretical framework based on Mezirow’s transformation theory.

A qualitative, naturalistic approach was used to explore and identify post-RN learners’ ways of learning. A purposive sample of 11 post registered nurse learners was
used in this study. A total of three focus group interviews were audio-taped and transcribed verbatim. Data analysis followed strategies of qualitative content analysis and the constant comparison method. It was also guided by Mezirow's theoretical framework.

Four major themes emerged from the data: approaches to understanding, knowledge constructing, preserving knowledge, and conceptions of learning. The first three themes describe the ways of learning and the fourth one describes factors influencing learning. Participants apply this new or revised knowledge immediately or may preserve it for future use. Later, this preserved knowledge become existing knowledge and used in participants' next learning situation. Therefore, this study identifies learning as a continuous process.
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ACKNOWLEDGEMENTS

First of all, I would like to appreciate all of the participants who contributed in this study for the generous offer of their valuable time, energy, and support. Without you I will not be able to accomplish this task.

Next, I would like to express my gratitude to my thesis committee for their supportive and caring manner and encouragement that gave me more confidence and strength to achieve this academic goal successfully. Your kind consideration really meant a lot to me. Thank you very much Prof. Carol Jillings, Prof. Anne Dewar, Prof. Sonia Acorn, and Prof. Linda Leonard.

Then, I am grateful to the Open University of Sri Lanka, the University of Athabasca, and the Canadian International Development Agency for providing me this opportunity to study for the Master of Science in Nursing at University of British Columbia. Without your support, it would just be a dream.

I would like to express my sincere appreciation to the faculty members, my colleagues, and non-academic staff at the school of nursing for their kind support.

Finally, my thanks to my loving family for always being there, waiting for me patiently. It was your love, support, patience, and encouragement that empowered me to face the challenges confronted in the task of achieving this academic goal.

My sincere thanks to all of you.
CHAPTER ONE
Introduction to the Study

Introduction

"The human capacity for learning is an important characteristic with far reaching implications for both the individual and the society"

(Gredler, 1997, p. 1).

Learning is one of the most important universal processes. Knowledge is a result of the learning process in which "teachers, learners, bodies of knowledge, and experiential meanings interact" (Usher, 1992, p. 211). The way we learn a practical skill is different from the way we learn the information from a lecture. We need to reflect to understand. Individuals perceive and understand information, transform that information to construct new knowledge or add to previous knowledge, occur through different ways of learning that are unique to the individual (Sims & Sims, 1995).

During the learning process, all involved parties are affected and different degrees of transformation of knowledge takes place (Usher).

Increasing numbers of post-registered nurse (post-RN) students who enter the baccalaureate program in nursing are independent, mature, self-directed adult learners with rich life experiences. These students vary in their previous academic experiences. Most are part-time students who have to maintain a balance among their family life, student life, and work life. Maintaining this balance is time consuming and stressful. With the time pressures, these life long learners need to develop sensible and effective way of learning that are appropriate for them as individuals (Sherbinski, 1994). In helping these mature learners adapt to the diverse learning opportunities encountered in
nursing education, and maintain balance to learn effectively, teachers need to be sensitive to their learners' learning styles (Cleverly, 1994).

Our heredity, past life experiences, and the needs of the present environment, interact with our learning abilities. As a result, we develop our own learning styles. Our learning styles have strengths such as transforming knowledge through analytical behaviors, and weaknesses such as transmitting knowledge through dependent behaviors. Despite the environment in which learning takes place, students need to learn and apply their learning. During their life-long learning, individuals possess unique preferences for the ways in which they learn (Cranston & McCort, 1985; Garity, 1985; Sims & Sims, 1995). Highfield (1988) states that students are more successful if they are aware of their own ways of learning.

There is a belief that teachers are responsible for students' learning (Frymer, 1996; Symanski, 1991). In other words, although teachers are responsible for teaching and learners are responsible for their learning, teachers cannot leave the learning responsibility solely to the learners because teachers are obliged to help learners to learn (Frymer). Therefore, it is a responsibility of nursing educators to identify the learning potential of their students and challenge them to develop their potential in promoting personal growth (Cleverly, 1994).

**Background and Significance of the Problem**

The nurses of today must be more knowledgeable than the nurses in the past (McDonald, 1995). In addition, as work becomes more abstract in the future, adult learners need to learn more through understanding and manipulating information rather than through acquiring information (Mezirow, 1997). Hendricks-Thomas and Patterson
(1995) identified the false consciousness, which requires nurses to accept the views and values of the discipline without question. This blind acceptance in turn, exploits nursing, as the values and beliefs of nurses are subordinated and devalued. Therefore, nursing educators should relinquish control over the learning activities, and should allow learners to examine their values and beliefs of their teaching-learning process. One way in which educators and learners share power is to engage in learning activities through dialogue and by encouraging active participation in the learning process.

Educators must have knowledge and understanding of the learning process (Sims & Sims, 1995). To be effective, instructors should understand the importance of students' involvement in learning how to learn (Highfield, 1988; Sims & Sims). In particular, the instructor should understand how the adult learner internalizes knowledge during his or her learning process. In this way, the instructor can provide adequate learning experiences for the development of that learner (Cleverly, 1994). Tanner (1998) also states that to develop and promote meaningful learning experiences, teachers need to have an understanding of students' perspectives and backgrounds along with a willingness to collaborate with them. Baker (1996) claims that in order to maintain successful, autonomous community based practice, nursing educators have to face the challenges of developing greater critical thinking skills of nursing learners.

Van Halen-Faber (1997) states that critical reflection occurs when we question our own knowledge. Reflection is a very important process in professional education (Atkins & Murphy, 1993) and a most important educational goal (Tanner, 1993). As such, fostering critical reflection through transformation may result in emancipatory education (Hendricks-Thomas & Patterson, 1995). Therefore, understanding the
reflective process and the required skills to develop reflection is of paramount importance for the professional growth in nursing (Atkins & Murphy, 1993; Girot, 1995; Hartley & Aukamp, 1994; Tanner, 1993).

Although some learning style theories discuss the ways individuals process information and prefer to learn, most nursing educators are not familiar with the concept (Garity, 1985). Merriam (1993) cites the complex nature of adult learning as a cause of frustration. Moreover, the focus of most learning theories is either on life situations or characteristics of the learner rather than on the actual process of learning (Clark, 1993). Despite the diverse group of adult learners who enter nursing with self-directed and unique learning styles, nursing education tends to continue using the traditional approach of teaching and learning (Cleverly, 1994). Jones and Brown (1991) argue that "the rational, technical, narrowly focused methodologies" (p. 533) used in traditional nursing educational processes are inadequate. Thus, nursing education needs to incorporate or develop processes that challenge perspectives and share different kinds of truth. Only through these changes can nursing education prepare for the challenges of the current health care delivery system.

Although the nursing curriculum is based on various learning theories, the literature of nursing education does not adequately reflect the complexity and breadth, of theory on learning (Cowmen, 1998). A wide range of disciplines and institutions continuously study how adults learn, and nursing learners are the group of health care professionals most frequently used in studies on learning styles, very little is known about the ways of learning applied by adult nursing learners in constructing nursing knowledge. The issue of nursing students' ways of learning is not clearly identified or
stated. In fact, most research on nursing education has been limited to seeking factors related to academic achievement (Chacko & Huba, 1994; Haffer & Raingruber, 1998; McDonald, 1995) with little attention given to advancing knowledge on ways of learning or any other aspect of learning.

Although teaching methods greatly influence learning, the learners' ways of learning have greater effect on the ways they understand and interpret the newly acquired knowledge. A clear view of the learning process of nursing learners is imperative for the betterment of nursing education. Powell (1989) emphasizes the necessity of understanding and the application of knowledge derived from nursing and its contributing disciplines, in nursing education. However, very few nursing researchers (Landeen, Byrne, & Brown, 1995; Powell; Wong, Kember, Chung, & Yan, 1995) have attempted to identify transformative learning in nursing. None have explained adequately the way that the learner transforms new knowledge or links with the prior knowledge.

Problem statement

As more emphasis is placed on critical thinking skills that are needed in nursing education and nursing practice today, identifying the ways of learning that enhance critical thinking skills is crucial for professional development. The ways of learning are unique to each individual. Furthermore, learning has been said to occur only when learners are able to demonstrate understanding (Arseneau & Rodenburg, 1998). This raises the question why some learners are unable to demonstrate understanding? Perhaps, an explanation lies in the way learners interact with knowledge.

Nursing knowledge is constructed upon nursing experience combined with
different values and beliefs. When we learn a new idea, we try to fit that idea with our preconceived knowledge. In the attempt to make a fit, we need to use reflection. As a result of reflecting, we either reject the new idea or accept and integrate it. Learners especially those in higher education, need to think reflectively and critically. Despite the remarkable emphasis on critical thinking and reflection in nursing education and nursing practice, the extent to which nursing learners actually use critical reflection to question their knowledge is unknown.

**Purpose of the study**

The purpose of the study was to explore, identify, and describe the ways of learning as discussed by post registered nurse (post-RN) learners about their classroom and clinical contexts. This study also aimed at examining the application of reflection and critical reflection in developing nursing knowledge from the perspectives of these learners.

The research question posed was: What are the ways of learning experienced and described by post-RN learners. An answer to this question has provided insight into how these learners construct their nursing knowledge; the way they describe differences of past learning experiences in relation to the present; and the use of reflection as a learning skill in their learning.

In achieving these purposes, attempts were made to recognize how the adult learner was described in the literature; how theorists described learning; what was expected from learning in nursing; and which learning theories and models were discussed in the nursing literature. Through these attempts, the most recent learning theory was identified. This theory provided the direction for the study. In this study, my
goals were: to encourage adult nursing learners in identifying strengths and weaknesses of their own ways of learning and emphasize the importance of transformative learning theory in nursing. I hope that this knowledge may provide an opportunity for teachers to reflect on their learners' ways of learning and to change their own teaching practices accordingly.

Assumptions

In attempting to identify the ways of learning experienced by adult nursing learners, the researcher had five assumptions in mind:

1. Individuals have their own ways of learning, which differ from individual to individual,
2. Recognizing their own ways of learning will enhance individuals' learning,
3. Developing critical reflection in practice and learning is imperative in nursing,
4. Post-RN learners will be good participants due to their wealth of prior experiences in different learning environments,
5. Participants will be willing to describe their learning experiences.

Summary

Learning is one of the most important universal processes in which experience, knowledge and individual interact. As a result of this interaction, transformation of knowledge takes place in different degrees. Today, the student population of baccalaureate nursing programs consist of more post-RN learners who are independent, mature, self-directed, and experienced adults with various obligation to family life and work life. These learners have their own ways of learning and potential for learning. It is necessary
for nurse educators identify these potentials and ways of learning in order to help post-RN learners to learn successfully and enhance their personal and professional growth.

Nurses need to develop and apply critical thinking skills in their work situations. In turn, nurse educators have a responsibility to understand the ways of developing reflective learning skills in nursing learners. To this end, it is pivotal to identify the ways of learning applied by mature, adult nursing learners. In this study, the ways of learning of post-RN learners were explored, identified, and described from their perspectives together with their application of reflection and critical thinking in developing nursing knowledge.
CHAPTER TWO

Literature Review

Introduction

The enormous collection of data about the adult learner and learning in the general literature as well as in the nursing education literature provided a broad scope of knowledge to understand the different ways in which adults learn (Cleverly, 1994). This chapter will examine the literature related to the concept of learning. First, the literature related to "adult learner" and then, "learning" described by the theorists are identified. Next, the trends in nursing education are examined. Finally, the learning theories and models advocated by the theorists are analyzed.

The Adult Learner

Andragogy, which is based on humanistic assumptions, emphasizes the psychological and individualistic nature of the learner. According to andragogy, the learner is an autonomous person who possesses a self-concept; a wealth of prior experience that can be used in learning; a readiness to learn due to perceived need and desire of self-improvement; an internal motivation to learn; and with a capacity for self-directed learning. The learner is the one who decides his or her own learning needs regarding the context, setting, and the way of learning (Knowles, 1984); creates his or her own knowledge actively by establishing and reworking patterns, relationships, and connections rather than receiving the knowledge; and learns continuously with or without the teacher (Tanner, 1998). Lindner and Harris (1992) view the self-regulated learner as an “intrinsically motivated, self-directing, self-monitoring and self-evaluating” individual with an internal locus of control (p. 29). They conclude that self-regulated learning has a
great influence on successful academic performance.

Pratt (1998) describes six types of learners. The learner may be (a) an “empty container/sponge” that is waiting to be filled/absorbed, (b) “an instrument” that needs to be refined through practice and drill, (c) “an independent agent” who is competent and self-directing, (d) “a computer” with a mind that needs to be restructured and reprogrammed, (e) “an evolving identity” in the community, and (f) a “product of the society” (pp. i & ii). The learning process differs from one to the next.

Adult learners who enter higher education differ in their learning orientation. This orientation is most likely personal, involving conceptions of learning and previous educational experiences. Adult learners have different levels of motivation and of processing information (Entwistle, 1997; Messick, 1985). Individuals do not try to examine their learning process unless they have a problem with acquisition of new knowledge or skills. At the beginning of a learning program, their learning may be limited to acquiring information and reproducing it accurately in examinations. These learners develop their own understanding when they recognize the disadvantages of simply acquiring and reproducing information. As a result, they are able to broaden their conceptions of learning (Entwistle). Their decisions of what data to ignore and what to accept depends upon their own ways of learning (Messick).

According to feminist pedagogy, women may have different learning needs than men. The socio-cultural context of learning that is based on power relations, greatly impacts on women’s learning. Tisdel (1993) suggests that connected teaching-learning environments of feminist emancipatory education help women identify and deal with power issues as well as think positively of themselves as “independent thinkers and
constructors of knowledge” (p. 98) Through processes, women are driven towards to lead social action (Tisdel).

On his or her way of self-actualization, the adult learner has short-term, job related objectives and long-term goals of becoming autonomous and responsible (Mezirow, 1997). Mezirow (1990) categorizes the adult learner into one of three types according to the way he or she reflects upon information. The ways of reflecting include: non-reflective action, reflective action, and critically reflective action.

Although different authors use different terms to discuss the adult learner and the way each individual learns, the general consensus is that adult learners are experienced, self-directed, self-motivated, and independent thinkers. Although authors agree that each adult learns according to his or her own way, some authors refer to this uniqueness as learning style while others refer to it as cognitive style. My concern lies not on the term used to describe the learner or the way of learning, but on how authors describe the process of adult learning in their theories.

**Learner and Learning**

Entwistle (1985) states that instead of discussing learning as a whole, models tend to present “some aspects of learning or learning under certain conditions that has some metaphorical connections” (p. 27). Although these metaphors help us to “understand abstract ideas in terms of more concrete experiences, they do not deal with total learning experiences” (Entwistle, p. 27). Sims and Sims (1995) also state different definitions of learning emphasize various aspects of learning. We know very little about such aspects of adult learning as “the process of acquiring, processing, and utilizing new knowledge” (Merriam, 1993, p. 5), or who is most likely to participate and why, or when and where
the learning takes place.

Psychologists were the original group who studied how adults learn. Later, adult educators such as Knowles continued to research this area. Traditionally, the field of education emphasize the "mechanical conditioning of children into information, facts, and routine skills" which results in efficiency but fails to identify underlying values and beliefs (Carr, 1992, p. 220). Recently, other perspectives (Mezirow, 1990) have been developed to help us to understand the nature of adult learning (Entwistle, 1997; Merriam, 1993).

Kothalawela (1992) describes three different perspectives of learning. She states that the behaviorist perspective of learning focuses on conditioning and reinforcement. Resultant learning is a behavioral change. The cognitive perspective considers learning as an internal process. Learning means acquiring knowledge by means of different ways of learning (styles). The humanistic perspective focuses on the learner as a whole. Learning takes place in both cognitive and affective domains and is influenced by personal autonomy and self-determination.

Learning is not just transmitting knowledge, but is creating new knowledge (Usher, 1992). Furthermore, learning is not simply a behavioral change or an acquisition of knowledge (Grabove, 1997). Rather, learning is a complex set of processes involving variations with such factors as the learners' level of development, the nature of the tasks, and the learning environment (Gredler, 1997). Wilson (1993) describes learning as an "individual and internal mental process in which knowledge is acquired and stored for use" as needed (p. 72). Wilson also states that knowledge and learning cannot be understood without the context in which that learning occurs. Because of the complexity
of the process of human learning, quality of learning can only be ascertained through an examination of the mode of perception and the method of processing information (Cowmen, 1998).

"Learning has to do with knowing differently rather than knowing more" (Arseneau & Rodenburg, 1998, p. 117). During learning, new knowledge links with the prior knowledge. Therefore, teachers should promote "a structural and morphological change in learners' thinking" (Arseneau & Rodenburg, p. 117) rather than simply adding facts to prior knowledge. Teachers should also bridge the gap between prior knowing and new understanding.

Pratt (1993) views learning as an "objective perception of the world as it is, unmediated by personal interpretation or distortion" (p. 16). Knowledge is dependent on the "way of perceiving and understanding" (Pratt, 1998, p. 25). The learner's understanding is shaped by the experiences. Stimulation and reflection are essential components of learning and the best learning occurs in the presence of problems (Tanner, 1998).

According to Jarvis (1987) learning is "the transformation of experience into knowledge, skills, and attitudes" (p. 164). Experience, which is natural or artificially created, is the potential base of all kinds of learning. Different people give different interpretations to their experience. If they are able to give a meaning to their experience, it is a meaningful experience through which they learn. On the other hand, meaningless experiences do not provide an opportunity to learn. All and Havens (1997) emphasize that meaningful learning enhances progressive, long standing knowledge of the student and depends upon the quality of the previous knowledge, learner's level of motivation, new
learning material, and the integration of prior knowledge with new knowledge.

Mezirow (1997) states that learning is understood as a process of using prior interpretation to construe a new or revised interpretation of the meaning of one's own experience in order to guide future action. We attempt to understand the validity of the assumptions made by others as well as ours, through dialogue (Mezirow, 1990). Individuals have "habits of mind" (habitual ways of thinking) and "points of view" such as beliefs, judgments, and attitudes (p. 5). We transform our assumptions on habits of mind and points of view through critical reflection and correct our distorted beliefs and ideas using several ways of learning (Mezirow, 1997).

Theorists cannot agree upon a single learning theory. The generally accepted idea is that learning occurs when an individual adapts or modifies his or her own behavior patterns thereby influencing future performance or attitudes. Cleverly (1994) states because education is the most important process of change, learners should be encouraged to become more flexible in their modes of thinking rather than allowing them to maintain or accept their habitual patterns of learning. As learning through reflection has become important in education and crucial in professional development, it has been discussed widely in recent nursing literature (Atkins & Murphy, 1993; Brix, 1993; Daly, 1998; Facione & Facione, 1996; Paterson, 1995, Richardson & Maltby, 1995).

Trends in Nursing Education - Reflection and Critical Reflection

In the process of linking theoretical knowledge to practical knowledge, nurse learners need to identify and analyze their beliefs, values, and conceptualizations, which is imperative in the absence of critical thinking. In this sense, reflective skills are important for professional growth of nursing learners (Paterson, 1995). Despite its importance to the
nursing profession, reflective practice is debatable and not properly conceptualized (Clarke, James, & Kelly, 1993).

To understand our own experience, we need to be reflective. Reflection is an interaction between thought and action and the link between transforming experience and learning in adult education (Usher, 1992). Reflection helps one to explore the experience in order to provide meaning (Jarvis, 1987), and it is an essential element of nursing education (Barry, 1999). Gillings and Davis (1998) state that by facilitating and challenging learner’s perceptions, the learner is encouraged to take more responsibility for his or her own learning, which in turn, the learner’s ability to question and learn reflectively is enhanced.

Reflection is defined as an “examination of the justification for one’s beliefs, to guide action and reassess the efficacy of the strategies and procedures used in problem solving” (Mezirow, 1990, p. xvi). In his early work, Mezirow (1981; as cited in Jarvis, 1987) described seven levels of reflectivity ranging from “reflectivity” as lowest to “theoretical reflectivity” as highest. Paterson (1995) describes reflection as "a deliberative and conscious activity, which permits the individual to contemplate behavior, events, and responses to them" (p. 212). Clarke et al. (1993) describe four domains of nursing knowledge in which reflection can take place. They also describe two types of reflection: deliberative reflection that helps in professional growth; and deep reflection, which helps us to know what we know and how we know. Barry (1999) cautioned, although reflection is important to learning and professional growth that can involve the danger of emotional exposure due to a lack of awareness of facilitators regarding their learners. She suggests that learners be encouraged to select safe and comfortable learning situations in order to
Several authors discuss the need for critical thinking skills in nursing (All & Havens, 1997; Burns & Egan, 1994; Daly, 1998; Facione & Facione, 1994; Haffer & Raingruber, 1998; Paul & Heaslip, 1998). Facione and Facione (1996) cite critical thinking as the navigator of the processes of knowledge development and professional judgment in nursing (p. 129). In critical thinking, one changes accepted visions, truth and authority (Jones & Brown, 1991). Paul and Heaslip (1993) emphasize that nurses need to develop knowledge rich with critical thinking ability to provide safe, effective, and quality nursing care to clients. Brix (1993) emphasizes the importance of improving critical reflection to guide practice and to increase empowerment of nurses.

Critical thinking is equivalent to neither problem solving nor nursing process (Tanner, 1993). Daly (1998) states, “critical thinking is crucial to understanding personal relationships and envisioning alternative ways to organize information and evaluating personal perspectives” (p. 329) and is associated with “knowledge, cognitive skills, reasoning, argumentation, belief, actions, problem identification, evidence, and the envisioning of alternative forms of reference and possibilities” (p. 325). These associated aspects contribute to the interaction between the learner and the learned and as a result, a clearer understanding of the problem develops (Daly). Learning experience that combines critical thinking process with knowledge in deriving logical answers may enhance the student’s ability to manage complex situations (Burns & Egan, 1994).

Van Halen-Faber (1997) identifies critical reflection and transformative learning as the principles of reflective practice. Critical reflection is interpreted as the “assessment of the validity of the presuppositions of one’s meaning perspectives and examination of their
sources and consequences” (Mezirow, 1990, p. xvi). Mezirow claims that experience becomes a sort of learning when it makes sense to us. In this learning process, reflection helps us to correct our distorted beliefs and ideas. In other words, critical reflection is necessary to critique our presuppositions. Transformative learning is a result of the critical reflection of our “habits of mind” and “points of view” (Mezirow, 1990, p. 5). In modern societies, we do not depend on others’ beliefs and judgments, but make our own interpretations through autonomous thinking. Transformative learning facilitates autonomous thinking and leads to reflection and critical thinking (Mezirow, 1997). Transformation theory that focuses on adult learning “seeks to establish a general, abstract, and idealized model which explains the generic structure, dimensions, and dynamics of the learning process” (Mezirow, 1996, p. 166).

Critical thinking helps nursing students to transform the nursing information into knowledge that enhances gradual development of expertise knowledge. This in turn ensures the quality nursing care to clients.

**Learner and Learning Models**

Although there are numerous models of learning, this section of the thesis will examine eight models that are significant to nursing education. Experience is the most important aspect of learning in the models described here. Wherever learning takes place, experience is the bedrock of knowledge (Johnston & Usher, 1993). Therefore, it is impossible to describe adult learning in the absence of experience.

**Self-directed learning**

Self-directed learning is viewed as the essence of adult learning and is based on three principles. These principles are the ability of individuals to plan and manage their
own learning, personal autonomy, and learner control settings. The learner and the
learner's experiences are the vital parts of the learning process. The critical perspective of
self-directed learning emphasizes reflective thinking so that, learners can better
understand and respond to the context that shape their learning (Caffarella, 1993).
Mezirow (1997) defines autonomy as "the understanding, skills, and dispositions
necessary to become critically reflective of one's own assumptions and to engage
effectively in discourse to validate one's beliefs through the experiences of others who
shared universal values" (p. 9).

Usually, adults are not prepared for self-directed learning, but when learners
discover their ability to take responsibility for their own learning, they start with deep ego-
involveement and therefore, their motivation should be triggered (Knowles, 1970). In self-
directed learning, the learner controls his or her own learning by reflecting on personal
needs and assumptions (Pilling-Cormick, 1997).

Problem-based learning

Self-directed learning skills are encouraged in problem-based learning. In this
model, learning is organized around a problem (Dolmans & Schmidt, 1995; Gibbon,
1998). Problem-based learning bridges the gap between theory and practice (Gibbon). The
problem serves as the major factor that activates students' learning and provides an
opportunity for students to discover the adequacy of their own capacity of knowledge and
skills to deal with the problem. This encouragement of self-directed learning provides the
learner with an opportunity to become an independent, life-long learner (Dolmans &
Schmidt). Deep approaches to learning are encouraged in problem-based learning
(Gibbon). The influence of individual ways of learning in self-directed learning and the
reason for why individuals differ in their problem solving skills are not clearly discussed.

**Socio-cultural learning**

The socio-cultural view of learning described by Nuthall (1997) emphasizes educational change as a cultural change. Learning means restructuring concepts. When an individual enters a field as a novice, he or she becomes a member of that community. Then, the learner tries to develop his or her own identity in that community by acquiring culturally significant knowledge. During this learning process, the learner moves from the periphery to the center of the community and applies his or her knowledge to the situations of the community. Gradually, the individual becomes an old member or expert in that community. This method of learning takes place in areas such as nursing that have a community of practice. Mind (thinking) and knowledge are deeply embedded in this learning process and the learner learns by participating legitimately in community situations. Although this socio-cultural learning model has been the dominant way of learning in nursing education, its application has become less prominent as a result of moving nursing education from hospital settings to academic settings. A new era of learning in the academic setting stresses the necessity for nurses to develop their critical thinking skills.

**Meaningful learning**

Ausebel (1985) differentiates the reception versus discovery learning, and rote versus meaningful learning. In reception learning, the understanding that is acquired by the learner develops through presentation of knowledge by somebody else rather than through discovers by the learner. In contrast, meaningful learning is a result of an interaction between the learner’s previous knowledge and the present knowledge. If the
learner does not have prior knowledge relevant to the subject, he or she internalizes whatever has been taught. As described, new knowledge and prior knowledge are modified in the learning process and meaningful learning, involving assimilation of new information results.

Information-processing model

The information-processing model discussed by Gredler (1997) focuses on the “transformation of input” (p. 153). Learning is a result of the interaction of the learner’s prior knowledge, nature of information, and the activities. Gredler also states “human memory is a complex and active processor and organizer of information that transforms learning into new cognitive structures” (p. 356). The level of knowledge “the individual brings to the learning situation influences all aspects of processing” (Gredler, p. 154).

Experiential learning

Learning is a matter of attributing meaning to experience. Kolb was the first person to describe experiential learning (Jarvis, 1987). Experience is an integral part of adult education that helps the adult learner to produce and acquire new knowledge (Usher, 1992). Kolb (1984) defined learning as the process whereby knowledge is created through the transformation of experience.

In his experiential learning theory, Kolb (1984) identified four components of learning: concrete experiences, reflective observations, abstract conceptualizations, and active experimentation. He described four learning styles namely, convergent, divergent, assimilation, and accommodative learning styles. According to Kolb’s definitions, convergers use abstract conceptualizations and active experimentation and are efficient in problem solving, decision-making, and practical application of ideas. In contrast,
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diversers learn by concrete experience and reflective observations and are aware of meanings and values. Assimilators use abstract conceptualization and reflective observation and they can create theoretical models through inductive reasoning. The fourth learner, accommodator, possesses the strengths opposite to those of assimilator, using concrete experiences and active experimentation. Accomodators are risk takers and ready for trial and error (Kolb).

Kolb’s (1984) learning theory provides a model of learning and adaptation processes relevant to human cognition, growth and development. The model conceptualizes the learning process and identifies the “differences of individual learning styles and corresponding learning environments” (Hodges, 1988, p. 341). Claxton (1985) states that experiential learning is “re-learning to experience one-self” rather than learning through experience (p. 126). We are born with natural abilities, but society leads us to construct a set of beliefs about ourselves which are not really our own. Thus, we behave according to others’ values and judgements. Experiential learning helps individuals to recapture the abilities that have been withheld (Claxton).

Arnold and Boggs (1989) state that the experiential learning format provides a more humanistic alternative to the traditional lecture-discussion format. The content used in experiential learning is cognitive, affective, and skill-oriented. In their experiential learning model, they describe five steps in the process of experiential learning: active involvement; collegial sharing of experience; analysis and synthesis, which is the most critical aspect; integration of content; and application of knowledge. The goal in this model is to “enable a student to learn, grow, and develop new insights about concepts based on generalizations made from one’s own activities” (Arnold & Boggs, 1989, p. 2).
A Few authors point out weaknesses of Kolb's (1984) learning theory. Jarvis (1987) argues that the theory is restricted to a particular type of learning, which needs participation or emotional involvement. Johnston and Usher (1997) question the ability of one using the theory of experiential learning to claim that learning has taken place. They suggest another way of understanding experience by describing four types of experiential learning. According to Johnston and Usher, experience, which helps in knowledge production and acquisition, is a tool in training and efficiency. Furthermore, experience is the most important resource in self-directed learning. Experience, a part of the definition of adulthood in the androgogical perspective, is the bedrock of knowledge, and critical reflection is the link between experience and knowledge. However, the experience is not analyzed or processed and how the experience is transformed into knowledge is also not clearly described (Johnston & Usher).

Much of the literature on nursing education has focused on Kolb’s (1984) experiential learning theory. For example, Cleverly (1994) used the model for development of an eclectic model of learning styles. Most of the nursing researchers who have studied learning styles of nursing students have used Kolb’s Learning Style Inventory (LSI) as a measuring tool. (Hodges, 1988; Laschinger, 1986; Highfield, 1988; Sherbinski, 1994). Using Kolb's LSI as the research instrument, some researchers have focused only on characteristics of the learner while others have focused on learning situations. Some researchers identified the tool is lack of construct validity. DeCoux (1990) questions the validity and reliability of Kolb's (1984) LSI as a measuring tool. She argues that of using the Kolb's LSI to measure learning styles among nursing students is inappropriate due to weakness and the lack of significant relationship between learning
In experiential learning, experience is considered as a resource as well as an instrument that can be used to increase motivation and to maintain the interest of the learner. Therefore, the emphasis is on how to develop experiential skills rather than the ways of generating knowledge through experience.

Reflective learning

Boyd and Fales (cited in Baker, 1996) describe six aspects of reflective learning. These are: (a) a sense of inner discomfort, (b) identification or clarification of the concern, (c) openness to new information, (d) resolution, (e) internalization of a new perspective, and (f) decision making and problem solving accordingly. Baker identified that reflective learning has contributed to improving critical thinking skills, growth of self-awareness, self-actualization, and development of new knowledge. Reflection in relation to learning has been studied by several nursing researchers. (Atkins & Murphy, 1993; Paterson, 1995; Girot, 1995; Haffer & Raingruber, 1998; Landeen et al., 1995; Powell, 1989; Smith, 1998; Wong et al., 1995).

Transformative learning

Mezirow (1990) defines transformative learning as "the process of learning through critical self-reflection, which results in the reformulation of a meaning perspective to allow a more inclusive, discriminating, and integrative understanding of one's experience. Learning includes acting on these insights" (p. xvi). Mezirow (1990) states that all human actions are non-reflective, reflective or critical reflective actions and learners are categorized accordingly as non-reflectors, reflectors, or critical reflectors (with ex post facto reflection). All thoughtful actions with reflections (i.e. playing chess)
are not critically reflective actions but the actions that assess and correct our assumptions critically (ex post facto reflection) are critically reflective actions (Mezirow).

Mezirow (1996) describes two domains of learning that are based on “different purposes, logic of inquiry, and modes of validating beliefs” (p. 162). These domains are instrumental learning or learning to perform something and communicative learning or understanding the meaning of others' by communication. In instrumental learning, we reflect on the procedure and the strategies to solve problems. Communicative learning involves, the learner’s critical assessment of values, beliefs, and purposes rather than simply agreeing with others (Mezirow, 1990, pp.7-8). When the learner’s critical thinking is triggered, transformation of new knowledge is evident through expanding, establishing, validating, and transforming new points of view through reflective insight or by critical assessment. Critical reflection is the cardinal sign of the four processes of transformative learning of adults (Mezirow, 1990). These processes will be described later in the discussion of the framework for the study.

A few nursing theorists have applied the theory of transformative learning in their work (Atkins & Murphy, 1993; Landeen et al., 1995; Powell, 1989; Richardson & Maltby, 1995; Wong et al., 1995). Powell seems to be the first nursing researcher who studied reflection based on Mezirow’s (1991) theory of transformative learning. She identified the highly abstract qualities of Mezirow's work as the reason for its lack of use in previous studies. In her attempt to discover the relationship between experience and learning through reflection Powell used Mezirow’s seven levels of reflectivity (as cited in Jarvis, 1987), derived from his early work in 1981, as the tool. She concluded that the nursing students in her study did not reach the higher levels of reflectivity.
Richardson and Maltby (1995) studied, through the use of reflective journals, the extent and level of reflection in learning achieved by nursing students during their community health care experiences. These authors used the same research tool developed (based on seven levels of reflectivity) and used by Powell (1989). They also found that most of the students (94%) used reflectivity at lower levels. Landeen et al. (1995) studied the lived experiences of psychiatric nursing students using reflective journals and emphasized the critical reflection described in Mezirow's transformation theory. They found reflective journals as a useful learning tool.

Wong et al., (1995) who emphasized Mezirow’s theory, assessed the learners' level of reflection using reflective journals. Based on Mezirow's model of reflection (1990, p.7) they identified three categories of learners: non-reflectors, reflectors, and critical reflectors. They suggested that the tool was a reliable and straightforward way to assess the learner's level of reflection. Although it measured the learners' ways of thinking on learning, learning in relation to Mezirow's four levels of learning was not identified or discussed in the findings.

Atkins and Murphy (1993) identify Mezirow as one of the key educational theorists who has "proposed reflection as a learning tool and analyzed the process of reflection" (p. 1188). They agree that seven levels of reflectivity exist, ranging from an “awareness of uncomfortable feelings and thoughts” to “theoretical reflectivity which involves challenging one’s underlying assumptions resulting in a changed perspective” (Atkins & Murphy, p. 1189).

Clark (1993) states that transformative learning directly addresses the learning process and reflection. She suggests that we examine the process of learning from a
different perspective by analyzing learning as meaning making that results in a change of consciousness. In this way, we may be able to obtain a broader understanding of how adults learn through transformative learning.

According to these models, self-directed learning and problem-based learning encourage reflective thinking. Experiential learning highlights learning styles and learning environment but includes reflection in one of the four learning styles. The socio-cultural view of learning involves cultural change and integration. The meaningful learning and information-processing model describes reflection but not critical reflection. Transformative learning emphasizes critical reflection and directly addresses learning process through critical reflection. Although an emphasis on reflection and critical thinking skills has developed in nursing recently, very few nurse researchers have focused on learning theories addressing these processes such as transformative learning theory.

Gaps in Knowledge

Most research studies in nursing education have focused on experiential learning theory or have used Kolb’s (1984) LSI as the tool. Despite changes of the learner, context, and content in the field of nursing education that demand critical thinking skills from nursing learners, how these skills could be developed has not been examined adequately. Barry (1999) also claims that in spite of encouragement on reflective practice in nursing, the possible effects of reflection on nursing learners has not been examined at length. Theories that define ways of learning in relation to critical thinking and reflection such as in the theory of transformative learning exist, but the possibility of applying those theories in nursing education has not been identified adequately. Learning theories such as the experiential learning theory, the adult learning theory, the feminist pedagogy, and the
social learning theory have been studied repeatedly. Findings of few studies that have
used the theory of transformative learning have been limited to identifying the level of
reflection or to categorizing the learners.

The four ways of learning described in the transformative learning theory,
emphasize the ways we develop our knowledge. The four ways include: expanding our
previous knowledge, establishing new knowledge, changing some of our views, and
changing our ways of thinking as a result of critical reflection. It is time to question how
extensively our mature nursing learners use critically reflective action and critical
discourse as Mezirow (1990, 1991) suggests in his two domains of learning. When there is
remarkable emphasis on critical thinking and reflection in nursing education and practice,
we must determine whether our nursing learners use reflective learning, which needs a
deep approach to learning or superficial approaches such as rote learning (by memorizing
and reproducing). Do they really practice autonomous thinking that encourages reflection?

Identifying the ways of learning used by nursing learners will enhance more
effective teaching of the faculty members and provide guidance for curriculum
development. In this regard, it is important for faculty members to identify what learning
theories guide educators in facilitating learners’ critical thinking skills, and recognize the
approaches used in learning. Sims and Sims (1995) emphasize that knowledge about the
learning process and skill in facilitating individual and group learning are more important
for teachers than skills pertaining to subject matter.

Most of the educational research done in the past used quantitative methods and
different tools, thus were limited to pre-determined boundaries. As most of those tools
were mechanical, the ability to understand the nature of the learner and his or her learning
from their measurements was questionable. Powell (1989) argued that those approaches were inadequate and emphasized the necessity of meaningful discussion on a personal level in order to identify learning through reflection. In contrast to the methods used in the past, qualitative research methods allow participants to interpret their own feelings, beliefs and experiences. Thus, qualitative methods provide better opportunities and insights to investigate and explore learning from learner's perspectives.

Although there is a large amount of literature on nursing learners and their learning, and nursing learners have been the group of health care providers that have participated most frequently in research studies, how mature nursing learners construct their nursing knowledge has not been explored. As this knowledge is equally important for the educators as well as learners in facilitating learning, research on this area is of paramount importance. Next, I will present the theoretical framework that guided the study to identify the ways of learning of post-RN learners.

**Framework for the Study**

Mezirow's (1991) theory of perspective transformation provided the framework that guided the study. Mezirow (1990) conceptualizes transformative learning as the process of change in our “habits of mind” and “points of view” through discourse in communication and critical reflection. According to Mezirow’s model (1990, p. 7) there are three types of learners: non-reflectors, reflectors, or critical reflectors. He also describes two domains of learning: (a) instrumental learning (enhances the efficacy in improving skills by means of manipulating or controlling the environment or other people); and (b) communicative learning (focuses on critical discourse in communication to reflect on underlying assumptions, values and beliefs).
Mezirow (1997) notes four ways of learning that adults may experience. The first involves, learning through existing meaning schemes (points of view). Although we are not aware of the values and assumptions of the existing knowledge, we use those when we want to differentiate or expand the intensity of our present knowledge. The second way of learning involves, learning through new meaning schemes. Without changing our meaning perspectives or meaning schemes, we create or establish the scope of our knowledge with new meaning perspectives and meaning schemes. Learning through transformation of meaning schemes is the third way of learning. Some experiences challenge our assumptions and premises and drive us to critical reflection. As a result, we transform our meaning schemes (points of view, which are easy to change). The fourth way of learning is, learning through perspective transformation. Over a period of time, become aware of our own biases of meaning schemes and we gradually transform our meaning perspectives (habitual ways of thinking, which are concrete ideas).

**Definition of the Terms**

As a result of the literature review the following terms have been defined for the purpose of the study.

**Learner.**

The learner is defined as an adult, who has previous experiences in learning as well as in nursing practice; attends university to learn after a period of interval; and has his or her own way of learning and reflection.

**Learning style.**

Learning style is defined as the patterns developed by an individual learner as a result of an interaction among the learner characteristics, expectations, demands of the
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Ways of learning is defined as the way an individual assesses, validates, or revises his or her own values, beliefs, assumptions, judgements, and habits of mind, with or without reflection, in order to accept or reject new information received by him or her during learning.

Reflection.

An exploration to justify our points of view such as values, beliefs, judgements, and assumptions in order to lead to new understanding that will guide our action.

Critical reflection.

Looking back and forth to recognize own bias and to correct the distortions in own reasoning.

Summary

The adult learner is described in the literature as an autonomous individual with a wealth of prior experience; a readiness to learn with internal motivation; a desire for self-improvement; and a capacity for self-directed learning. According to his or her own needs, the learner decides the most appropriate learning environment, what to study, and how to study. Thus, the learner constructs knowledge through active learning.

Different education theorists describe in different ways how adults learn. Some of these views are include: learning as a behavioral change or an internal process that is influenced by personal autonomy and self-determination; a complete set of processes; linking or integrating prior knowledge with new knowledge; constructing meaning through personal experience; and transforming experience into knowledge, skills and
attitudes. Some of these views emphasize the quality of learning rather than quantity of learning.

In the process of linking theoretical knowledge into practical knowledge, nursing learners need to identify and analyze their beliefs, values and conceptualizations through critical thinking. Critical thinking in turn, guides nursing practice and enhances empowerment. Nursing learners will be able to develop reflective practice, based on critical reflection and transformative learning. The present academic environment of nursing education emphasizes the necessity of identifying the ways to improve critical thinking and reflection skills of nurses.

The next chapter will present the research method I used in attempting to understand the ways of learning as experienced and described by post-RN learners.
CHAPTER THREE
Proposed Approach

Introduction

This chapter will present the research method employed in the study to explore and describe the learning experiences of post-RN learners from their perspectives. I have selected the naturalistic inquiry method to study the phenomena, and will present how I have applied this method in selection of sample, data collection, and data analysis. In addition, I will discuss ethical considerations, limitations, and the way I maintained the rigor of the study.

Research Method

Denzin and Lincoln (1994) describe qualitative research as a set of interpretive practices that utilize different approaches, and are common to a variety of contexts of human disciplines. Qualitative methods are particularly useful when describing phenomena from the insider’s (emic) perspective (Morse & Field, 1995). Thus I have chosen a qualitative approach to describe learning experiences from learners' perspectives.

Sandelowski, Davis, and Harris (1989) state that when there is little available knowledge about the phenomenon of study, the researcher may select the naturalistic design and natural settings that are crucial in understanding the realities. Naturalistic ontology prevents using pre-conceived ideas (Lincoln & Guba, 1985; Sandelowski et al.). The naturalistic researcher believes in constructed, subjective, and complex reality that can be best investigated in the natural settings through interactions between the researcher and the participants. In this sense, naturalistic inquiry guides the researcher to discover the truth without predicting or controlling (Lincoln & Guba). This interaction in turn,
provides opportunity to identify realities analytically and constructs theory inductively. For these reasons, naturalistic inquiry approach was the research method best suited to explore and describe the phenomena of “the ways of learning experienced by post-RN learners” from their perspectives.

**Selection of Participants**

Lincoln and Guba (1985) acknowledge that using humans as the “data gathering instruments” (p. 39) provides better opportunities to understand and evaluate meaning in different interactions. As a result of this appropriately implemented human inquiry, the researcher is able to find out the tacit knowledge that can be utilized in the study. Human subjects are best suited as the sample in naturalistic inquiry because the participants are able to verbalize reality qualitatively in their narratives. The, naturalistic researcher always selects a purposive or theoretical sample (Lincoln & Guba). In addition, with purposive sampling the researcher is able to focus on the most relevant, accumulated information as the data collection proceeds. Because of these reasons participants were selected intentionally for the study.

**Selection criteria and the sample**

Criterion for selection is consistent with “informational redundancy” (Lincoln & Guba, 1985, p. 202). When no new information is revealed from participants than what has been learned already, the sample is considered adequate (Lincoln & Guba; Morse & Field, 1995). In this study, a purposive sample of 12 post-RN learners was recruited. The following were the criteria for selection:

(a) were post-RN learners,

(b) were studying in the fourth year of the baccalaureate program in nursing,
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(c) had completed the course on critical inquiry in evidenced based practice in nursing,

(d) were not registered in any course taught by the Principal investigator.

The rationale for selecting post-RN learners was that their prior learning experiences in nursing would be richer than generic nursing learners. The rationale for fourth year was that the post-RN learners were accessible as a group only among the fourth year students of the baccalaureate program in nursing. The rationale for the completion of the critical inquiry and evidenced based practice in nursing course was that the learners would have been introduced to critical inquiry and therefore, they would have developed more critical thinking skills. As a result, they would have been able to look at learning in a critical way.

The sample consisted of 11 female participants and one male participant. Before and after the focus group interviews, engaging in friendly discussion with the participants provided me an opportunity to collect some important data about them. The sample of post-RN learners represented a length of experience in nursing practice that ranged from three to 33 years. These learners have completed their secondary education eight to 37 years previously. Most of them went through the traditional method of primary and secondary education in which knowledge was transmitted from teacher to learner and learners learned by memorizing and reproducing knowledge in examinations. Most also obtained their basic registered nursing education a long time ago, and recently returned back to university for their higher studies. Some of them had studied nursing by distance. They found that when they returned back to learning, the philosophy of education had changed. These learners ranged in age and belonged to different ethnic groups, but
chronological age and ethnicity were ignored because such information was not considered as important for the study. Because these experienced post-RN learners possessed more tacit knowledge about the phenomena of study than generic nursing learners in the same program, I was able to collect richer data from them.

Recruitment procedure

After Behavioral Research Ethics Committee approval, permission was requested by a letter, from the Director of the School of Nursing at the University of British Columbia, for recruitment of post-RN learners as the participants for the study. Upon the granted permission, two faculty members responsible for two nursing courses were contacted by phone and through the committee chairperson to obtain permission to enter their classrooms. Post-RN learners in the fourth year of the baccalaureate program were contacted initially in their classrooms before the lecture sessions began. After a brief introduction to the study regarding the topic, purpose, and the benefits of the study, the letter of invitation (appendix A) was given to each of the learners. Voluntary participation was requested. After a week, those classrooms were revisited before and after lectures and participants who volunteered were recruited.

By the end of the first week, six participants volunteered and by the end of the second week, four more volunteered. I visited the same classrooms repeatedly to find new volunteers. I was surprised by the extra support shown by some of the participants in recruiting volunteers by introducing and encouraging their colleagues. By the end of the third week, there were 12 volunteers. I obtained their names and contact telephone numbers. Later, one of the volunteers did not respond to the telephone calls and this decreased the number of the participants to 11. Times for focus groups were established at
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the convenience of the participants. Telephone calls were made on the evening prior to each focus group to remind participants about the interview.

Data Collection

Initial plans for data collection included four focus group interviews and reflective journals of the participants. Instead, I was able to conduct only three focus group interviews and despite reminding participants repeatedly over the phone to hand in reflective journals, I received none.

Focus groups

Focus group research has gained increased acceptability within the academic situation (Krueger, 1995). In focus groups, attitudes and perceptions are developed as a result of interactions among participants (Morse & Field, 1995). A focus group is considered a group interview with interaction occurring within the group rather than between researcher and participants. The strengths of focus groups are: easy to conduct, ability to explore topics, decreased researcher control over data, and opportunity to collect data on group interactions. As such, focus groups are well suited to explore attitudes and cognition (Morgan, 1988). In studying such a complex phenomenon as the ways of learning from the perspective of a specific population such as post-RN learners, focus groups provide better insight (Asbury, 1995; Morgan); and act as a “self-contained means of collecting data” (Morgan, 1988, p. 10).

As this data collection method fits with the phenomenon of the study, three focus group interviews were conducted. Although I had planned to have four participants in each group, one participant joined on her own in one focus group. I did not turn her away because one of the expected participants was late. After about ten minutes the late
participant arrived and joined with the group. Therefore, one focus group consisted of five participants. On the fourth day of the same week, the second focus group discussion was planned with another four participants. However, only three participants attended. At the end of the second week, the third group discussion was planned but only one participant came. I rescheduled the focus group and made my apologies to the participant for the postponement. I asked the participant to return on the next scheduled day. A week later, I conducted the third focus group discussion and again out of four expected participants only three actually took part. Although I had planned four focus group interviews, it was not possible to schedule another since it was the end of the term and the learners were busy with their course assignments, presentations and with final exams.

Participants agreed that half-an hour after their classes finished for the day was a convenient time to participate in the focus groups. Accordingly, I reserved a classroom, in the School of Nursing at University of British Columbia for two days a week for three weeks. The room was available for two hours. Therefore, I had a limited time for the group discussions. Before the focus group sessions, I obtained informed consent (appendix B) from each participant. I considered that the participants might be hungry and tired after class so I provided some refreshments for them in the same room before each group. I was worried about attendance because no participant confirmed attendance with me. Two of my colleagues from the Master’s program, one at each session, helped me by keeping a speaker log and field notes. Some external disturbances occurred during each group discussion so that, I had to stop the audiotape recording, disrupting the smooth flow of the discussion. The first focus group discussion lasted one hour and twenty-five minutes, the second, one hour and fifteen minutes, and the third, one hour and forty
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minutes. Each group met once.

Participants were given another introduction to the focus of the study and my expectation of hearing how they learn at the beginning of focus group sessions. I requested that each participant speak slowly and clearly for me to understand. Permission was obtained from each group for the presence of my colleague to keep the speaker log and to take the field notes, as that was not mentioned in the letter to the participants (appendix A) or in the informed consent form (appendix B).

Lincoln and Guba (1985) state in an unstructured interview, the researcher seeks the respondent's reaction to the phenomena of the study rather than seeking normative responses. To this end, I started my unstructured interviews with the trigger question of "what do you mean by learning?" From that point onwards the participants continued the discussion. They were very good participants and gave detailed descriptions about their complex experiences of learning. Two of the group discussions were completely unstructured and the participants responded well. My interruptions were limited to seeking clarification something one had said or when there was a need to bring participants back to the focus, or when they stopped talking. One of the three groups was different from the other two. Often, the discussion would drift towards the work life issues. Therefore, I have to bring the discussion back to the focus by using different structured questions such as "tell me about your learning experience in the past and in which way those experiences differ from today?" Then they waited for me to ask questions. Hence, the discussion tended to be a semi-structured interview. Almost all of the participants took turns, without interrupting others. When necessary they presented their views on other participants' narratives. It was obvious that most of the participants were enrolled in the research in
nursing course because they related their present learning experiences to the research course.

Audio taped interviews were transcribed verbatim. Group sessions were terminated according to the participants' wish to end the discussion as well as the end of the reservation time. As a whole, the focus group interviews were overt, unstructured or semi-structured, open ended, and in depth because of the exploratory nature of the study.

Reflective journals

Reflective journals provide rich material on learners' experiences and a different level of communication (Landeen et al., 1995). As well, journals can be used as an evidence of the level of reflection (Wong et al., 1995). Paterson (1995) states that journals empower students to think critically about their learning. She states that the level of reflective skill, trustworthiness, nature of the expectation, and the quantity and quality of feedback greatly impact on reflective journals. Thus, the researcher is able to identify the ways of learning as described in the written descriptions.

In this study, participants were requested to enter a minimum of two incidents they experienced during their learning, one about a clinical experience and the other about an experience of a lecture or discussion. This request was mentioned in the letter to the participants (appendix A), informed consent form (appendix B), and at the beginning of each focus group discussion. Later, I telephoned participants to remind them of the request. In spite of these requests, I received none of the reflective journals. Therefore, I conducted my analysis without data from reflective journals.

Data Preparation

I listened to the audio taped focus group interviews first, and then, started to
transcribe without seeking an outsider's help. At the beginning, it was difficult to understand everything that participants said since each one had her own accent. After transcribing word by word, tapes were replayed five times to correct the errors of the data sets to ensure the verbatim transcription. At times, I sought help from my colleagues who participated in the focus group discussion, to clarify the accent of some complicated phrases of data. Finally, except where voices overlapped, I had clear data files.

**Data Analysis**

Inductive data analysis is utilized in naturalistic inquiry. Coding of the data termed "unitizing" and "categorizing" occurs in the process of inductive data analysis (Lincoln & Guba, 1985, p. 3). This "units of information" serve as the "basis for defining categories"(Lincoln & Guba, 1985, p. 344). Units are described as pieces of narratives that are aimed at some understanding that the researcher needs to study. The pieces of information must be interpretable in the absence of any additional information (Lincoln & Guba).

Data analysis started after the collection of the first set of data. While listening to the audiotapes during transcription and reading transcription repeatedly, I was able to develop a good sense of the sets of data and to obtain an idea of what processes occurred in their learning. This understanding in turn, helped me to identify the categories of data. I used a method similar to the qualitative content analysis because of the sense I developed during the data preparation stage. I examined units and underlined and made marginal notes. With these notes in my mind, I re-examined the units to understand categories more fully. This thought process gave me a sense of some patterns of their learning experiences. Then, I compared these categories with one another for similarities and
differences and clustered them into categories. I gave descriptive labels to the categories according to the similarity of the data.

In response to my grand tour question, participants described what they do with information. At the beginning, I was able identify four broad categories, which were temporarily named as: (a) how they interact with information, (b) the way they construct knowledge, (c) their attitudes and the ways of improving learning, and (d) comparison of past learning to present learning. In my second copy of data sets, located segments were sorted out and highlighted with different colors according to their similarities in the content. These were noted in memos but were not be able to manage because there were too much data accumulated under the broad categories. At the same time, I found that there were sub categories within those three broader categories. At this point of the analysis, I turned towards the theoretical framework of the study.

Sandelowski (1995) cautioned about using a pre-organized framework for the reason that it may mask alternative ways of organizing data that could reveal the real truth. Thus, I did not limit my reconstruction of meanings to the theoretical framework. I simply used the framework as a guide for viewing the same categories in a structured manner. I looked for the relationship between the analyzed units and the framework. There were close relationships according to my preliminary analysis. After that, I reorganized my data analysis process such that a new solid set of categories emerged. As such, some realities illuminated in the data that did not fit with the framework. There were some inconsistencies and gaps that the theory did not address. At that point, I looked at the data through a new scope and partly rearranged the categories, arriving at a final set of categories.
In the third copy of the data sets, the newly identified, transcribed data segments were highlighted in different colors according to the similarities of the content. These segments were re-examined closely and clustered into categories. Most of the names given to these categories were extracted from the transcribed segments of the participants when they described their learning experiences. Also I constructed some names for other categories after examining the units closely. I found that some of the categories related to others. After further clarification, these categories were clustered into themes. Finally, as a result of the data analysis process, four themes, 15 categories and 27 sub categories emerged from the learning experiences as described by the post-RN learners.

This analytic process was guided by the constant comparison method. As stated by Lincoln and Guba (1985) constant comparison involves: (a) comparing coded data with other relevant data that can be applicable to each category and grouping upon the similarities; (b) “integrating categories and their properties” (p. 342), to provide steady and significant sets of categories; (c) delimiting the theory by reducing the categories; and finally, (d) writing the theory grounded on critical explanations of the data.

**Ethical Consideration**

I ensured the rights of the participants by submitting the proposal to the University of British Columbia Behavioral Sciences Screening Committee for Research for review and approval. As well, to recruit the post-RN learners as the participants and to conduct the study in the school of nursing, permission was obtained from the Director of the School of Nursing.

A written consent was obtained from each participant before the focus group interviews begun. The form outlined, the purpose of the study, the nature of the participant
involvement such as audio taping of interviews, voluntary participation and the freedom to withdraw; ethical considerations such as privacy and anonymity of the taped materials, journals, and other documents; and how those would be destroyed. Verbal approval was also requested for the presence of my colleagues who kept the speaker log and field notes.

An ethical issue arose regarding privacy and confidentiality because the research participants shared information with the researcher as well as with the other participants during group sessions. I acknowledged this issue during my introduction. The participants verbalized their feelings and personal life events freely and comfortably. Thus, the topic did not appear to cause them any discomfort.

Rigor of the study

Lincoln and Guba (1985) emphasize trustworthiness as an aim of naturalistic inquiry. They comment on truth value (credibility), applicability, consistency, and neutrality as important components. Morgan (1988) states that group interviews can produce useful data with relatively little direct input from the researcher. The researcher’s goal is to report and validate how group members view the phenomenon. Thus, the credibility is supported and maintained.

Although informational redundancy is achieved, there is a threat to applicability because of the small sample. However, the findings can be applicable to similar groups.

Consistency was not expected in this research because of the distinct nature of humans. Nevertheless, there were instances in which different ideas were integrated during the discussion.

I supported neutrality by maintaining non-judgmental behavior. Although validating some of the data with participants, would have contributed to trustworthiness,
the time pressures on participants did not permit me to check back with them. In addition, I met the thesis committee chairperson and the second committee member to discuss the data analysis process.

Limitations of the Study

A number of factors affecting data collection limited the study. For instance, I was not able to conduct any further focus group interviews to ensure validity. The stress of final examinations and a heavy course workload made any time commitment for another group discussion difficult for the participants. Furthermore, workload and stress prevented participants from writing reflective journals, and limited my ability to recruit the planned number of participants.

The limited amount of time that a classroom could be reserved also limited the data collection. I could have collected more information from participants if I had been able to use the classroom for a longer period of time.

My inexperience as a moderator and interviewer affected the quality of data. Although the present data is rich, a more experienced moderator/researcher may have been able to collect even richer data from these good participants.

The findings were limited to post-RN learners in the baccalaureate program in nursing and may not be applicable to generic baccalaureate students in nursing. As the focus was on ways of learning, I did not encourage the participants’ desire to talk about the effects of family life and work life during the discussion. This discouragement limited collection of important data that may greatly influence learning in post-RN learners. This issue should be addressed separately.
Summary

This research study applied the naturalistic inquiry approach as the research method, to explore and identify the ways of learning as experienced and described by the post-RN learners. A purposive sample of participants was selected according to the criteria. Although data collection was planned as both focus group interviews and reflective journals, it consisted of focus group interviews alone. The focus groups were audio taped and transcribed verbatim. Data analysis, which was guided by the theoretical framework of the study, was consistent with qualitative content analysis and the constant comparison method. The findings of the data that were conceptually rich will be presented in the next chapter.
CHAPTER FOUR

Presentation of Findings and Interpretation of Data

Introduction

In this chapter, I will present the findings of the study derived from the focus group interviews and my interpretations to those findings. Post-RN learners' ways of learning was examined in this study. In order to maintain anonymity, feminine pronouns will be used for both male and female participants. During the presentation the terms "learner" and the "participant" will be used interchangeably.

An overview of the series of progressive activities identified in the data will be presented first. This will be followed by the detailed descriptions of the main concepts. In this section, the ways the participants defined learning will be discussed and then, I will examine relationship between learning and prior experience. This provides a basis to understand the ways of learning as experienced by post-RN learners. Next, will be the exploration of identified themes and categories. The first theme illustrates the ways the participants developed understanding of new information and the different strategies used to understand the information. The next theme identifies the ways the participants built up new knowledge. The relationship between new information and previous knowledge, and different ways of evaluating and integrating the new information will be explored in this section. After examining the ways of preserving the knowledge for future use as the third theme, I will present positive and negative views of learning and the factors influencing learning as articulated by the participants, the last theme. Some additional findings unrelated to the themes will be presented at the end of the chapter.
Overview

Learning was identified by post-RN learners as an experience that helps to expand knowledge by acquiring new knowledge through combination of formal education and experience and was defined as a continuous process. Prior experience appeared to be the most influential learning resource for the participants. Prior experience helped them to understand the content well. They looked back to prior experience in comparison with new information. As a result, they built new or extended knowledge upon the prior knowledge.

When they identified new information, learners tried to understand it by using different strategies. By means of communication or application, they tried to increase their insight about that information. They looked back and forth for prior knowledge, consciously or unconsciously for the similarities or differences between their prior knowledge and new knowledge. When necessary, they used thinking skills to evaluate the content. Throughout their learning, they were involved in activities, which helped them to understand the content. Those were identified as categories of one of the major themes, “approaches to understanding” that constitutes a part of the ways of learning that describes how those participants perceived information they have been taught.

When they understood the content thoroughly, it was added into the previous knowledge. Sometimes, they expanded their previous knowledge with additional information. Other times, they changed their previously constructed knowledge because of the identification of their misconceptions or inappropriateness of the assumptions and premises. In this manner, they constructed knowledge. A few categories were identified under this theme of “knowledge constructing”. This theme and the categories describe
how those participants integrated the information that has been understood, and provides another part of the "ways of learning" as experienced by the post-RN learners.

The constructed knowledge (new or extended knowledge resulting from the interaction between prior knowledge and new information) was preserved for immediate or future application. The theme "preserving the knowledge" describes what learners do with the integrated knowledge. Later, this retained knowledge seems to be the base for new learning (figure 1, p. 50) because preserved knowledge becomes past experience (thus, prior knowledge of the learner in the next learning situation). This is the last part of the "ways of learning" as experienced by post-RN learners.

Most of the participants identified different factors that affected their learning in a positive or negative way. In addition, they had their own ways of thinking about learning which had an impact on learning, on both understanding and knowledge building. As those were the factors that greatly impacted the aforementioned functions of learning, they were explored and discussed under another theme, "conceptions of learning". Several categories were identified in this segment as being positive and negative influences on learning. The participants viewed learning as an opportunity, as a struggle, and as a strength. They also recognized the factors that supported learning along with the barriers to learning.

During the group interviews, most of the participants compared the differences between the past and present learning. Those were presented at the latter part of the analysis. The participants were "spoon-fed" in the past and thus, learning was easy for them. Now, they learned by themselves before being taught by the teacher.

The interpretation of the data of the study of the ways of learning as experienced
Ways of Learning by post-RN learners is summarized in Table 1 (p. 51). Column one consists of the major themes as identified in the data, which were common to all participants. The categories are presented in the column two, and sub categories are described in the column three of the table were possible strategies or approaches used in learning by the participants. In addition, each sub section of the table will be elaborated upon as shown in the table, at the beginning of the description of each theme.

**Learning**

Participants defined learning in different terms but the underlying idea of each definition was closely related. Learning was identified as gaining new knowledge, expanding the knowledge, and acquiring new knowledge. It was also referred to as a continuous process. In addition, the participants defined learning in relation to experience as well as being a combination of formal education and experience. P 6 (participant number six) articulated:

Learning is gaining new knowledge. Something that I didn’t know or wasn’t aware of, in the past.

For this participant, learning means broadening of basic knowledge. P 12 (participant number 12) described it in this way:

What I mean by learning is, broadening my basic knowledge that I have already got and expanding on it. And- whether it will be theory or work experience (not clear) combination of those.

Learning is not only acquiring and familiarizing oneself with new knowledge; it includes refining previous knowledge too.

Learning for me is acquiring new knowledge and basically refining what you already know. Familiarizing yourself with things that you are not familiar with. Basically that’s it (P 8).
Figure 1

Ways of Learning

Prior Knowledge

New Knowledge

Application

Preserving the knowledge

Ways of Learning

Approaches to understanding:
- Increased insight
- Focused on needs and goals
- Reflected upon past experience
- Opened a channel of thought

Knowledge constructing:
- Stretched the mind
- Searched for meaning
- Viewed things with a new vision
- Changed mentality

Influences on Learning

Conceptions of learning:
- Positive
  - Learning as an opportunity
  - Learning as a strength
  - Supports to learning
- Negative
  - Learning as a struggle
  - Barriers to learning
Table 1: Themes

<table>
<thead>
<tr>
<th>Approaches to understanding (Descriptions of the strategies used to identify, understand and evaluate the information)</th>
<th>Increased insight</th>
<th>Communication: verbal and other forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focused on needs and goals</td>
<td>Reflecting upon past experience</td>
<td>Professional goals</td>
</tr>
<tr>
<td>Professional goals</td>
<td>Looked back for experience in learning</td>
<td>Relating to personal life</td>
</tr>
<tr>
<td>Looked back for experience in problem solving</td>
<td>Thinking to understand</td>
<td>Thinking to apply</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Knowledge constructing (Descriptions of the ways of building new knowledge after the interaction between prior knowledge and new information)</th>
<th>Stretched the mind</th>
<th>Extended or elaborated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Searched for meaning</td>
<td>Viewsed things with a new vision</td>
<td>Validated</td>
</tr>
<tr>
<td>Viewed things with a new vision</td>
<td>Changed mentality</td>
<td>Looked for the meaning</td>
</tr>
<tr>
<td>Changed mentality</td>
<td></td>
<td>Discussed with others</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Change of views (Critical thinking)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Change of beliefs (Critical thinking)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Preserving the knowledge (Descriptions of the ways of retaining the constructed knowledge)</th>
<th>Imprinted in the brain</th>
<th>Prior knowledge is reassessed and retained (use critical thinking)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>New information is processed and retained (use critical thinking)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Conceptions of learning (Descriptions of the factors that affect positively and negatively on learning)</th>
<th>Positive-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning as an opportunity</td>
<td>Personal</td>
</tr>
<tr>
<td>Learning as a strength</td>
<td>Professional</td>
</tr>
<tr>
<td>Supports to learning</td>
<td>Personal strength</td>
</tr>
<tr>
<td></td>
<td>Professional strength</td>
</tr>
<tr>
<td>Negative-</td>
<td>Group support</td>
</tr>
<tr>
<td>Learning as a struggle</td>
<td>Academic support</td>
</tr>
<tr>
<td>Barriers to learning</td>
<td>Personal support</td>
</tr>
<tr>
<td></td>
<td>Social barriers</td>
</tr>
<tr>
<td></td>
<td>Professional barriers</td>
</tr>
</tbody>
</table>
Learning is a continuous process that never stops, said P 11.

Two participants defined learning related to experience.

I agree with both [gaining new knowledge and continuous process] as well. I find that learning to me is an experience (P 10).

Learning for me is formal education combines with experience. I enjoy that combination and I tend to gravitate towards that type of education (P 9).

Participants mentioned learning in relation to experience throughout the interviews. It seems clear that experience is an important aspect in learning. The next section will examine the relationship between learning and prior experience.

**Relationship Between Learning and Prior Experience**

Learning is an experience as articulated by the participants. During the interviews several participants spoke of the influence of prior experience on present learning.

Previous experience helped the participants to understand content more easily. P6 articulated how the experience helped her to understand the course material that she was learning at present. She was happy because she had many years of previous experience that could be used as a learning strategy in present learning.

I think for me- experience as a nurse and other life experiences really help me to understand a lot of material that we are learning to day. And I’m glad I’ve done my- you know, that I have done it this way. We have taken the diploma program first and then- then the BSN program after so many years of experience.

Another participant also verbalized the importance of experience. As she said that the experience before entered into the baccalaureate program was added to what she received during the program. This was how P10 illustrated:

I think experience is important. And like you said, experience before and then going through and getting more. That’s the learning and it’s like I said augments more, whatever you have.
Another participant shared that new knowledge was, for her, always based on the previous knowledge. When she was studying in high school she had an idea that every word had to be read in order to pass an exam. But when years passed by, she realized that it was not the case because most of the time, new information was built on the concepts that she touched earlier in her learning.

...there's that high school. You feel that you have to read every word to be able to pass and write the exam. Where as, you get into post secondary education and gradually you realize that you don't have to read every word because they are building on concepts that somehow you touched in your previous education (P 9).

The same participant described how she used the information to build her knowledge. She added new information to her previous knowledge to construct the new knowledge. She connected a "block by a block" as constructing a building.

I build on what I have. Like number 8 is saying- is- that you have some information. And then you take that information and you build on it. And because I've been in education before I know now that I don't have to know this. I have confidence that I know this. So I don't have to learn this part all over again unless I haven't used it. So I can take that block; I already have that block; and I can build on that block. So I need to learn this part over here. Or, may be I know a little bit more of that. So then I have to learn a half of it. And I have to learn whole other block. And then, it all comes together. You have to build in (P9).

Some of the participants repeatedly stated that their experience helped them to become more familiar with the new knowledge.

...building you know, on what you know already....It may be new knowledge or may be something that you are bit familiar with. But you are familiarizing yourself more about that kind of knowledge (P 8).

These quotations exemplify the impact of previous experience on learning. All of the participants identified the importance of their previous life experience, clinical nursing experience, and learning experience in understanding the course materials. Therefore,
experience is closely related to their learning new information. It was apparent that learning and prior experience were interwoven. The ways of learning experienced by the post-RN learners were not be able to be described in absence of prior experience. In fact, prior experience appeared to be dispersed in almost all over the quotations used in the text to explore the categories and sub categories. In the next section, I will examine how those participants described the ways they tried to achieve understanding of the information they were learning.

**Approaches to Understanding**

This theme describes a part of the ways of learning experienced and described by the participants. The strategies used by the participants to understand new information are discussed in this section.

**Table 2: Approaches to Understanding**

<table>
<thead>
<tr>
<th>Approaches to understanding (Descriptions of the strategies used to identify, understand and evaluate the information)</th>
<th>Increased insight</th>
<th>Focused on needs and goals</th>
<th>Reflect on past experience</th>
<th>Opened a channel of thought</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication: verbal and other forms</td>
<td>Professional goals</td>
<td>Relating to personal life</td>
<td>Looked back for experience in learning</td>
<td>Looked back for experience in problem solving</td>
</tr>
</tbody>
</table>

As mentioned earlier, this theme is related to the ways in which learners attempted to maximize their understanding. When they experienced new information, they interacted with others in the class. Some information was completely new and in other cases, it was something a little familiar to the participants. Before the new information was accepted, learners tried to understand it. They tried to interpret what was told or written in order to
increase insight about the information. This was done through verbal communication or other forms of communication such as reading, listening, and searching in the Internet. When the information was something familiar, the participants reflect back to their prior experience to identify what it was.

Increased Insight

Before taking it for granted, the participants tried to understand the information. Different types of communication helped them to enhance their understanding. Readings as well as discussions with peers played a major role. The participants used verbal and other forms of communication in order to clarify what others have been told or written in the text.

...discussion from other people brings greater value to my learning (P 7).

Most of the participants valued communication with others as a great support for their learning.

Communication: verbal and other forms.

When they were learning in the classroom settings, the participants discussed with each other or asked the professor to explain the difficult areas of the course material. This discussion and explanation helped them to understand what they had read. They needed people to have verbal exchange, which was pivotal to understanding the content. This quotation exemplifies the way they understand through discourse:

If you’re in the class, you have the Prof. who is putting across the main ideas and the reading is going to support that. And that gets reinforced in the class. And usually there’s somebody in the group sort of twig just to what the main ideas. I still may miss it but somebody can say like- oh! I have thought of that. And it may be just a word that triggers the whole bunch of other stuff. And that- that’s sort of bonds and cascade things. Then all of a sudden, you got it- that the – you sort of got over that little part of the course because you grasp what is that they wanted to
get...Actually, we got to have some stuff by lessons and I’m not looking forward to it. And I can see them already and apply looking, who is doing what- when- and can I have your phone number? Because you need people to binds things off and to discuss things...So, if I get a verbal exchange going under difficult material then, you know, I- I get a better idea of what’s about (P 1).

Participants especially enjoyed the communication within the study group because it supported their learning in various ways. Within the group, they “bounced their knowledge” with each other to get explanations and understandings. As a result of that interaction, they were able to identify the extent of their own knowledge.

I agree with number six because sometimes, you know, you might be struggling to understand certain things. And- and next colleague could understand that same concept so much clearer than you do. And when you study, you’re bouncing of knowledge with each other. And sometimes they come and explain things so nicely (P 11).

Furthermore, participants developed a communication network to help each other. Therefore, it was easy for them to find help from a colleague when they faced a difficult situation.

If you get stuck, you can always phone a friend which I do all the time. I think that net working really helps you in learning process. Because what I have to overlook-may be the other person can point me in the direction (P 11).

When participants identified their doubts and weaknesses related to certain areas of the content, communication over the telephone was useful for clarification. One participant identified that the reading alone did not help her to understand the meaning of the article. Thus, she recognized the usefulness of telephone communication on her learning.

Sometimes I can- I can read the objectives a million times. I’m still trying to say myself, so what do they want? So you know, I call-up (name of one of the participant), call-up other students. And I said, what is this means like? This is what I understood. Is that right? Then they tell me what their view is. And I got oh! That makes sense. So that’s it. I really value group discussion (P 4).
Learners used analogies to explain things better. One participant used an analogy to describe the difference between learning during their diploma in nursing and learning nursing in the university.

...there is a movement from tertiary level of prevention to the primary level of prevention. And in- in the BSN program- like the main focus is on primary health care, right. What is basically going out there and preventing, you know, conditions and diseases from happening as oppose to healing the disease there, you know. It’s- it’s the good analogy is the- the river. You know, people are falling in to the river and then, you’re picking them up. It’s good in a way but it is better to see why are they falling into the river, right. So it’s you know, you preventing things from happening as oppose to treating it right there and then. I think that’s the big difference in diploma and you know, university nursing (P 8).

In the classroom, participants had the opportunity to discuss the course readings with the teacher. Misconceptions of their understanding were corrected at the same time because of the feedback given by the teacher or by peers. Some of the participants who had the experience of learning at distance found it difficult to learn in isolation. They considered feedback and validation as important aspects of their learning. One participant remarked how she experienced the disadvantages of the lack of communication in distance learning.

Yes, number eight is right. You get validation from doing. I’ve done distance courses and I think one of the most difficult parts of the distance learning courses is- is that is structured. You follow through the objectives. You do all the reading on the material. But then you come back and you think, now did you answer. Is that what they’re looking for in this objective? And there is nobody, there to validate that yes, you are right. And- so you waste this energy again worrying about, is this what they were looking for....Where as, in a classroom situation you know, we- we just speaking what do you take from the lecture material and you apply. You have validation right away. You have instant learning. You have learned something and you’ve applied it. And you have been validated (P 9).

Communication helped another participant understand and learn. It was difficult for her to understand the readings. She wanted someone else to explain the concepts.

When it is some dry subject like- like research course, it just saying ok, what is internal validity external validity? I don’t know how to find that in the article. I
need somebody to say ok, well, when you are looking at this article, this is what internal validity would be. This is what external validity is. And this is how you understand that. You know for sure, this is the right answer to it (P 6).

Learners found that language was a crucial component in understanding.

Sometimes they had some difficulty in understanding course material because of the terminology. The following comment indicates what one participant did when there was a problem of using some terms of language in learning. To familiarize herself with the terms, she prepared audiotapes and played them in the car while driving. Her intention was to listen repeatedly in order to become familiar with those terms.

I made a couple of tapes- like audiotapes. Just playing in the car like reading my notes. Really boring (laughing). I can't- (laughing) But actual exercise of doing it-kind of like- am getting me through some of the language things. Because lot of learning new stuff is language....If you can get familiar with terms that are used in this particular specialty, then it's sort of a key to get into other stuff...(P 2).

Some other participants took a different action for the same problem with understanding the terminology. They increased their insight through various approaches. If it was difficult to understand they read variety of written viewpoints to identify some aspects of the language.

I just have a problem with the language usage, which is a part of the concept and I'm not getting in. And then, I'll read a variety of viewpoints, written viewpoints on it. Then sometimes I can get the information that I need in that way (P 1).

This participant was not satisfied with the information given to her. She wanted to find out more details relevant to that concept. She talked with doctors to find out the current way of thinking or went to the library to read more about that concept.

I would, may be speak to- may be some doctors to see if they- if they heard about the latest concept or the study. Then I might go to the- you know, the library at the hospital or here and do some research and see what's the current way of thinking. So I try to use everything that's around me to get another point of view. Not just you know, what's been given to me (P 12).
Another participant also did the same thing but more extensively. She used an advanced technology of communication, the Internet.

Well, if there is a word that I don't understand, that how it is apply to this idea. So I look it up. Ok, there are several meanings to it. Ok, fine. I- I think about the idea or whatever, concept or whatever, I read on. And if it validates how I understand it, then yes. If not then, I totally scrap that book in there somewhere else (laughing). Because there is some- some people explained it much more clear to me than others....if I don't find something, I go to Internet. If I don't see it in the Internet I go somewhere else, I ask my husband... (P 10).

In this manner, the participants in this study clarified the meanings of the information they had learned, through different types of communication. Through various approaches to communication, new information was identified, reinforced, validated and accepted. Group discussion, reading variety of written viewpoints, feedback, and questioning helped them to recognize the adequacy or inadequacy of their own knowledge. In summary, communication between the teacher and the learner, and within the group, as well as accessing other sources of communication were successfully and adequately used by the participants during their learning.

**Focused on Needs and Goals**

Sometimes the participants in the study appeared to be involved with purposeful learning. They learned something because they had a real need to improve certain skills or to achieve certain goals. Therefore, their learning was task oriented or intentional. As their intention was to gain expertise in their field of practice, or advance professionally, they developed a greater interest on education to achieve academic credentials. In fact, learning was focused on professional goals or personal goals. Sometimes they had both goals in their minds.
Professional goals.

Most of the participants experienced the power relations among the nursing community. Others identified the need to improve their knowledge in their present practice of nursing. This participant wanted to use the knowledge in her practice. Because of her task-oriented focus, she was able to learn better.

I learn by my necessity. And I find that when I learned by necessity it is ingrained and I am able to teach others about that— that using experience (P 10).

Some participants’ motivation to learn was driven by the expectations of career development. One participant described the effect of power relations within nursing, and aspired to be on the same level as those co-workers in higher positions. Her motivation was driven by the need to have power and authority to take decisions and to make the changes. Therefore, she wanted to have credentials.

...we [they] don’t like your idea coming from someone in your position. And— so you’re forced to go back to school and get on that ladder to have credentials in a piece of paper. To be on a level with these people to say, there are hundred ways to skin a cat, and I am going to give you another one. Then I get accepted...So that’s also annoying. It’s a kind of confusing in a way when you come here to— to be you know, to get your paper; to be able to be heard from people who are already and have their paper; and are those positions of power... (P 2).

Two other participants articulated that in order to have a professional voice they came to pursue the baccalaureate degree. P 9 illustrated:

I felt that it was important for me to go back and get my degree is because I want to have voice in my profession. And that— that will give me a professional focus....Because, I really feel that nurses as far as I’ve concerned are front line soldiers. You identify the problem, you initiate the change right there, and you by pass a lot of political rhetoric that goes on. But we don’t have to get credit for it.

Despite their intentions, some learners focused on searching causal relationships in the information. Moreover, they tried to apply knowledge to improve both of their
professional and personal life.

I am finding, taking this BSN course has been very stimulating and interesting and beneficial. And I tried to use what I have learned not just in nursing, but also in the other part of my life...ok, now, who wrote this article. And why did they write it....How is it going to help me in my practice or how will it help me in my personal life even. So it is interesting. That- I think with my maturity, I have learned, not just for the sake of learning but also for applying it to improve my life (P 6).

Some participants described situations, learning because of their personal requirements.

Relating to personal life.

This participant became an expertise on breastfeeding utilizing the opportunity of learning, which supported her in coping with a stage of her personal life. Although it was her personal need, she tested what had learned about breastfeeding.

I had a choice of doing other nursing clinical like looking after children or families or older adults. I decided to look at the new family because that is the stage of my life where I was. And as soon as I got that course, I- of course had my baby and I thought, I would like to learn more about breast feeding- liked to learn more about this. And so during my course, I was learning about being a new parent and I was able to apply that in my course and I understood it so well (P 10).

Many participants decided what to learn and what not to learn. Rather than learning the whole lot of information in a particular unit of study, they selected what was most important to them. This selection was dependent upon the learner’s personal interest. One participant described her way of studying smarter but not harder.

...in another words, study smarter but not harder. Because sometimes you know, they give you a chapter to read, and say for two pages. You are going to say, oh! If you have a temperature of- over 37.5 and that’s fever. You know you have a fever. They are going to tell you about that in two pages. What you can actually just- you know, read quickly through it. And just get the whole point as oppose to going into too much details. And sometimes going to too much details- you don’t retain anything. Because you- you are over loaded with information. But now I found that I go through the conclusion right away. And then you know, if it clicks, if it makes sense, then I don’t have to go to the too much details (P 8).
Sometimes learners focused on examinations. They described learning differently for examinations. The following quotation exemplifies the difference between the ways they learn for the examination and to improve the knowledge.

> We have to know how to write the exam. You know, that is essential and that is the first thing that comes to our mind. Hey, we have to pass this course. How do we study for the exam? But then, while you’re doing that, basically subconsciously, you also learning that the course itself... (P 11).

Most of the participants oriented to learning with an idea of self-development. They tried their level best to learn according to convenience and necessity. Professional and personal goals motivated them towards different focuses. In this task oriented learning process, they selected what to learn and what not to learn. This decision was dependent upon their rationale.

**Reflected Upon Past Experience**

During their learning, participants looked back for their previous learning or looked back for their previous experience of problem solving in order to understand the present learning. When they entered the baccalaureate program in nursing, participants brought a broader range of experience and knowledge relevant to the field of nursing. The learners’ previous knowledge provided a rich base for understanding. They used that previous experiential knowledge to judge present knowledge and identified the value of their previous experience in present learning.

> I think I have shown a lot more respect and trust for my knowledge and past experience than I did when I went to nursing school (P 6).

Learners utilized their experiences by tying the past to the future. The first thing they did in attempting to understand new experience was to look back upon their own accumulated
knowledge, that acquired through past experience. One participant remarked on how she bound her previous experience to present learning:

I try and tie my previous experience with what I am doing right now. And see how that previous experience can help me- do things better at the present (P 11).

**Looked back for experience in learning.**

Learners utilized their prior experience to enhance learning. They identified and evaluated information by means of their previous experience. They learned by exchanging their experience with others. One participant described her way of sharing and applying experience in learning:

...each of us did our research. And we come together, and we discussed it. So, we were learning a lot from each other while get- you know, preparing for this presentation. So learning from each other helped a lot because it decreases the workload for each of us...we come with our own perspectives and with our own experiences....While I was reading something I say, oh! Yes, this is true because this is how- this is what I saw in the community. They were in my practice. So yes, this is valid. I believe this research is true (P 6).

When the participants came across new information, they looked through their own scope and compared it with their previous knowledge before accepting it. They always justified the information by reflecting back on previous knowledge.

I have had experiences where senior nurses have- have been- let us say doing a procedure in a certain way. And then a new-grad like me for instance, well, you know, works with that senior nurse and you see something different. And you try to- you know, that clarify something. It's because sometimes you think of- go and get it well or- do I understand it properly or- is she doing it in the wrong way or- is that the right way. You know, sometimes you get those questions, which you can go back to with your opposing and knowledge that you have previously to what you have now (P 8).

This participant identified the gap between the theory and practice. She valued experience more than theoretical knowledge and learned from the people who had more experience, combining that with her theoretical knowledge.
I learned from those people who had less education than I did but they had practical knowledge. And I could take what they taught me and build on it with the theories that I had. But you can learn all that you want out of the book. But when you take it out and you try to apply it in a social situation. People are unpredictable. I mean it just doesn’t happen like it happens in the book. You have to be flexible and you learn out from life experience (P 9).

Past experience always guided them to move forward. P 1 articulated it in this way:

Well our background. But I think we can sit back and our background tells to us that we are learning and going forward.

P 3 described the way the previous knowledge could be able to guide future activity:

...you can actually utilize that information what you said before in your day-to-day function in your nursing or your thinking. It just broadens.

Learners compared and analyzed the present situation with a past situation in problem solving, through which they identified better strategies for the situation. This process enabled them to take the proper decision. These quotations illustrate that idea:

...because of our experience, I can visualize something that happened in the past and say ok, This is better, this would have been a better way of doing in that situation or, may be it would not have been better in that situation. So I can visualize an actual situation and say ok. This is applicable or is not applicable (P 6).

...my experience from the past is actually led me to- yes, this is- This is what you did before but there’s other ways of doing it (P 10).

In essence, the participants tied past experience to the present in order to learn better as well as to solve problems. Reflection upon past experience seemed to be an important strategy for their learning. Whenever, there was new information learners reflected back and looked through their scope of previous knowledge to understand or improve the new situation. In this manner, they investigated the relationship between their previous experience and the present learning experience by looking back at their previous
learning or problem solving strategies to understand, accept or reject that information.

**Opened a Channel of Thought**

Some participants had their own strategies of learning, which had not used earlier in life. They thought about information in order to understand or to apply it. They were not just listening to the teacher but make mental notes about the meaning of the information. Because of this approach to thinking, present learning made a big difference in the way they built concepts. One participant commented on it in this way:

> It made a big difference. Not in the actual concepts but it’s on how you build them because for example, our research course has opened a whole kind of channel of thought into why do I do that. Like you know, I’ll be sitting and the teacher will be talking. Yes, now that makes a lot of sense, why was it done or why are we not doing it (P 3).

As participants articulated, prior learning experience had given them the knowledge to deal with their new learning demands and helped them either to understand or to apply learned knowledge.

**Thinking to understand.**

Several participants related that it was difficult for them to grasp the ideas when there were more details such as statistical data in the assigned readings. Therefore, they organized and re-organized such information according to their own patterns. They looked back and forth to identify what information was crucial to their learning.

One participant described the way she dealt with information. She thought a lot when selecting the information and looked for the main concepts and the relationships between those. She also looked for the tiny details before eliminating any part of it. When necessary, she went back to the information that she decided to eliminate earlier.

> ...there is so much information coming towards us and it is very different kind of a
subject. It's something very new to me and to grasp all little tiny data that they have is very difficult. So what I do is, the main definition or the main concept that is given in the book- I have to write them down. I have to be very selective and I say, ok, this goes together with this one. So these three concepts go hand in hand. Then I am very selective and if there is lot of statistics there, lot of tiny details, then I eliminate them because I say let me to understand this one first. Then I can always go back to that one....But sometimes when I need to back to them, I did go back to them (P 11).

The selection of information varied form one participant to another and depended upon the learner’s own rationale. That is, learners had their own priorities for deciding what they should learn. In doing so, they reflected upon and investigate the importance of the information to fulfill their learning requirements. Another participant described the way she thought before selecting information that was deemed more relevant.

In my philosophy you have- there are three kinds of information. The ones you must know, the ones you should know; and the ones you- you know, you can know or you could know. And the must knows have to be the priority. Because I mean, there are lot of information that you can’t gather but you really need them. And sometimes, we get side tract with information. Oh! It’s interesting but do we really need it. Do we- must we know that type of information? Does it apply to what we were doing? (P 8).

Most of the participants manipulated the information in different ways to get the idea well. One participant described looking back and forth several times to identify different aspects of the information, which helped her to understand and correct false conceptions. This is how she verbalized the process:

...so I look up my research. Try to analyze it like I am referring to our research course. I pick up a research, I divided, I might break it all and I re-work and re-work it. And then sometimes I feel....I am a genies. And I go back to the book and I think, Oh! My God! I am the idiot of the day. I missed this- I missed that. And I go back and forth (P 1).

Another participant described questioning new information and trying to apply it in order to see whether she understood well. If not, she searched again by reading and questioning
until she finds the correct answers. These are her words:

I look at the new information and try and apply it to see if I understand it correctly. And then, I read further like I research it more. Basically, I ask questions to myself- whether I understand what they are saying- by asking questions. Then I read through. Oh! Yes, it perfectly- it answers my questions previously before going on. Like, that’s how I learn (P 10).

Some participants articulated that they looked back to their previous experiences before accepting new interpretations. They had to think deeply and decide on the correct meaning. This involved a great deal of critical thinking. This is how one participant explained how she selects the “correct” meaning:

I will try to see what is common thing that comes up in all the discussion and different people’s views. What is the one or two main thing that keeps defeating itself that make sense. So that must be the answer. That must be the way (P 4).

Another participant verbalized it in this way:

...because people are putting in their input. Sometimes, can be found that some people could have an idea like- about what they think. And in those- I allowed the only thing what is right and try to impose it (P 3).

Thinking to apply.

Learners thought about information differently when they had to apply it to specific situations. Some participants described how they thought of applying knowledge in different situations. Critical thinking helped them to look at the valid reasons for different experiences. They looked for the validity, reliability, and the transferability of that information before applying it. P 11 articulated:

Critical thinking makes you to look for reliability and the stability of things. In this sense, if you find anything- if you learned anything in the class, then you said to yourself, Gee, I’v learned a new thing. How can I take this thing with me and said, that it is ok to apply this thing into my clinical setting. That I know that- it’s valid; that is transferable; you know, that it is reliable; that the results are reliable. So I can use it.
Another participant analyzed the information before applying it. She looked for causal relationship in order to find a better solution.

I question how things work; how things happen; how things come to be. And then I find that- like analyzing. I used to do lot of analyzing. I think may be I used the word reflecting on something that happened. How can I do something better? How can I make thing more difficult for the position to- you know, to have them changed their ways of thinking or way of practicing that you know is wrong (P 10).

Some of the participants discussed the use of logical examination before application. For example, one participant described how her thinking had changed since she began the baccalaureate program. Previously, she just listened without much objection; now, she questioned without hesitation in order to verbalize her feelings and ideas.

What you are saying is that actually utilize the facts. Instead of just throwing blanket treatments, utilize the facts. If you have a conflict, then let it be logically examined and put into place. So that you are not just doing things....I think this is one thing that this course- this coming back allow us to do is to- I wonder, why- why do we do that always like that? How about if we did like this....Did you have choices? So, just questioning and putting- not being afraid to say, what you know and feel is right rather than just listen to people go on and on and on (P 3).

Another participant described how was her previous learning was greatly different from present learning. Previously, she absorbed knowledge without thinking. She described learning to think more and wanting to apply new knowledge. She believed that application was a higher type of learning.

Like number six said, we were spoon-fed. Everything came from the book- we just regurgitated everything. But how to apply that is a different- I think that's a higher type of learning. If we can apply ideas, knowledge and improve on practice then, you are showing yourself to be autonomous in your practice (P 10).

In summary, the participants described manipulating information in different ways. They selected and organized special pieces of information; they compared present learning to the past; and they accepted or rejected the information during their learning.
During those activities they used critical thinking skills. Their learning opened a new channel of thought in front of them, which guided them in questioning and identifying valid reasons for their decisions.

**Knowledge Constructing**

The second theme comprising ways of learning is identified as knowledge constructing. Constructing knowledge differs from approaches to understanding by integrating the learned information into existing knowledge. Sometimes it occurred through establishing new knowledge, and other times, it was through extending or validating prior knowledge. Participants defined learning as an experience unique to each individual. During learning the participants searched for interpretations for what they experienced. The participants came to the present field of education with their previous experience of basic nursing knowledge. In some situations they attempted to relate new knowledge to previous experience and this helped them understand new information (i.e. management in nursing course). In absence of that previous experience, it was difficult for them to understand new knowledge and interpret new experience because not all the post-RN baccalaureate program is based on the basic knowledge. For instance, subject areas like statistics was more difficult for them to understand, as there was nothing in their previous experience for them to relate to new information.

I think experience has a big influence for me. Makes a big difference for me- and understanding things…(P 6).

As described in the previous section, to construct the knowledge, participants attempted to understand and manipulate the learning experience in relation to the previous knowledge. Their prior knowledge, which was based on experiences from different fields
of nursing and from various aspects of their lives, was identified as the best resource of their learning.

Table 3: Knowledge Constructing

| Knowledge constructing (Descriptions of the ways of building new knowledge after the interaction between prior knowledge and new information) | Stretched the mind | Extended or elaborated Validated  
| Searched for meaning | Looked for the meaning Discussed with others  
| Viewed things with a new vision Change of views (Critical thinking) |  
| Changed mentality Change of beliefs (Critical thinking) |

According to the data, constructing of knowledge took place in different ways. During learning, if they found any familiarity with the learned information, they stretched their minds to identify what it was. If it was a completely new experience, they searched for the meaning of that experience in order to understand. In some other instances, as a result of their thinking process they viewed things with a new vision. Not always but sometimes their ways of thinking also influenced by the new information and as a result, they saw things from a different perspective.

Stretched the Mind

Participants described stretching their minds by extending, elaborating or validating their previously acquired knowledge. However, when they learned new information, they reflected back to their previous learning to identify that information (third sub category in the previous section). If information was familiar to them they tried to differentiate it from the previously acquired knowledge. They learned from the instructor as well as from other participants' experience. Thus, they took maximum
advantage of their experience during learning. They stretched their minds by sharing their knowledge and experiences with colleagues.

**Extended or elaborated.**

In their learning, participants described extending their range of the knowledge by adding new information to old information. The way of extending the existing knowledge was expressed by one participant using these words:

> If you learned something and you know that is a cup, you don’t even think about it. You know it’s a cup and- and all you need to know now is what you want to do with it. So the additional information is added on as a bank...to what you already have and you keep on expanding it (P 3).

She knew what it was, but wanted to know what else she could do with that information. She needed additional information to add to what she knew.

Another participant commented on adding new information to her previous knowledge. As a result, she developed more familiarity with the new knowledge.

> Just like nursing- you know, we do our basic program. And then, we build or we add more knowledge to what we have from before, basically. So, adding more knowledge to what you already have. It may be new knowledge or may be something that you are bit familiar with. But you are familiarizing yourself more about that kind of knowledge (P 8).

Most of those participants learned in groups. As identified in approaches to understanding (theme one), group learning was viewed as helpful. Within the group, experiences were shared, which triggered learners’ thinking and deepened the intensity of the knowledge. In this example, the participant describes about stretching her mind.

> When you are getting into a group of people you have all these wonderful ideas that will be shared. And- and you- you stretch your mind and you start thinking about things in different ways. And when you have experience in nursing, you build on what that experience is (P 9).

In their daily lives they learned form the people who were experts in different areas. As a
result of those learning experiences, the participants’ knowledge became greater. This augmentation of knowledge in turn, helped learners to build their credibility.

I agree with her- experience. We build on that experience. And what you are learning in the university- taking your BSN program just augments more of what you- what knowledge you have. Add to it. And then it just built your credibility with other disciplines I think (P 10).

Another participant described how she elaborated on ideas during her learning. During the group discussion she identified different views from different people that helped her to elaborate the most suitable or applicable one.

When you came into your group and you’re discussing the same topic, listening to different ideas. Different views from other people make you like- at least it helps me to have better understanding. That to what my understanding was from my own personal reading. So I think group discussion does help…. It is the same topic, same issue. But then it is discuss among six people. Six different ideas came in. So you can really elaborate from that one- that topic (P 4).

Validated.

Some other participants validated their previous knowledge when they experienced something new. It was easy for them to relate new information to something from their previous experience.

Everyday you are learning from other people who have the expertise and you just absorbing this knowledge. It’s amazing what you can do now- than when you are going to the BSN program. Because certainly you know, relate to some of what your learning into what experience you had in the past. And just validate (P 10).

The participants realized the knowledge they had from previous learning might not be accurate or adequate. Whenever they learned something new, they validated or updated the knowledge. P 8 articulated:

...because sometimes you would know something but it doesn’t necessarily have to be right knowledge that you know. So if I gained new knowledge, I guess it would either validate your previous knowledge or it would change it (P 8).
She further described how validation could occur:

Well, based on the information that’s that I acquire either from school or from instructors or from the RNs or from the book or research. Because sometimes you know, things change over time- new findings on- on some things. So you got to update your knowledge (P 8).

In essence, during knowledge constructing, participants added new information to their previous knowledge. As a result of new information, the existing knowledge was extended, elaborated or validated.

Searched for meaning

When constructing knowledge, the participants established or added new experience and extended the scope of their previous knowledge. By looking for the meaning of the new information through reading or by discussing with others to understand new information, learners tried to increase insight about the concept. Different ways of communication helped them in this aspect.

Looked for the meaning of new information.

Participants looked for the meaning of the new information by reading and re-reading, which helped her to understand the material. One participant illustrated:

I learn things at – Let say, I am learning. If something fairly new and if it was new information I read it once; I read it twice. First, I just read them because you know; I just wanted to know what’s in there. And then in my second reading, I will try to identify that what the material is trying to bring out of that point. Overall I just try to understand. I don’t think I have ever memorizing things. I try to understand (P 4).

Another participant searched the meaning using a different approach. She read the material, wrote down the important points, and questioned herself or others, in order to understand. This process assisted her to see information from every angle. This was her remark about comprehending the information:
I could do independent reading by myself and I could highlight things. But unless I write that points down, I don’t comprehend it right away. Then, after I write it down, I have to question about it. And then, I can see the entire process (P 11).

When participants came across some concepts that were really difficult to understand, some of them had a habit of looking for the same information in a variety of materials relevant to the topic, to find out different interpretations.

If I am on my own and- I’m really stuck. And there is a difficult concept that I am trying to get hold on. I’ll go and get other textbooks. And I will read the same thing in several textbooks. Just to get somebody else’s angle. And that’s sort of like written way of getting a group input….I just have a problem with language usage which is a part of the concept. And I’m not getting in. And then, I will read a variety of view points- written viewpoints on it. Then sometimes I can get the information that I need in that way (P 1).

**Discussed with others to understand new information.**

Other participants reported searching for different interpretations through group learning. They gained better understanding with this approach because within the group they discussed their personal understanding and the interpretation related to their experience. This quotation exemplifies the way they understood and learn through group interaction:

Well, I find sometimes the group can aid to bring more focus….They keep different perspectives. For sometimes you get into a group and the group just goes to each and every direction the topic discussed and you know, that’s pertaining to the issue. So sometimes I find the group is very helpful. It gives you a different perspective. It gives you a sort of three dimension of...(P 3).

Every participant did not have an ability to understand on her own. Some of them sought supportive measures from others. Some of them needed somebody to guide them through specific lessons. Learning through metaphors was helpful for those participants.

I learn by examples, by concrete examples. If the teacher is talking about a concept, I need to see a visual picture of that you know, because I can’t just see it
Ways of Learning

in my own head. I need to have it diagrammed for me (P 6).

When learners were able to interpret the meaning of the information or the experience, they built up their knowledge by linking that information to the existing knowledge. For example, this participant had an idea of the concept after her reading but she did not have a clear visual image. After she got support from the instructor and used a metaphor, she was able to see the concept clearly. She described it in this way:

When the instructor is teaching a concept, initially I am trying to grasp the concept... Today, we were in the research course... She gave a very concrete example. And then, I was able to apply that example to the concept and I could see a bigger picture... Give a concept and give an example, and then right away you can see a bigger picture. Also, she is trying to say that, and it makes things clearer for me (P 11).

The same participant described how she complimented knowledge by establishing new information. Although it was familiar, her knowledge did not seem complete. In such instances, participants added new information to their prior knowledge without much hesitation. This is how one participant described such an experience:

Each time you learn something different, you're always learning something higher. And you say, well I kind of knew that but I really didn’t know it in this particular way (P 11).

In summary, by searching for meaning or giving interpretation to the new experience, participants established or added more knowledge to their existing knowledge. With regard to new information, the participants always verbalized the way they try to understand it. Before accepting new information they searched for meaning by reading, questioning or discussing it with peers or with the instructor to understand it properly. The notion of “searched for meaning” was given on that realization. The goal of reading different texts or discussing with peers is, to find some different version of the
information. This practice in turn, added and broadened the scope of their conceptual knowledge.

**Viewed Things with a New Vision**

Learning helped participants to identify more information about different things. With this identification they reflected back on their previous experience, which opened a new channel of thought in front of them. As a result of this critical reflection, participants identify some of the assumptions and premises they had made earlier in some areas were incorrect. This realization led them to think more about assumptions. Later, they changed some of their previous views. This participant expressed her idea about the way she saw things in a different perspective:

> I like to listen to what people think about the material. Also I find that my discussions are always bringing a new approach or a side to think that I hadn’t seen before and it enlighten the whole work (P 1).

**Change of views.**

Participants’ previous learning made them to develop views on various topics or situations. Later, learning guided them to think differently. As a result of this different way of critical thinking, they changed some of the views they had acquired in earlier learning. They entered the BSN program with their basic nursing education that had more emphasis on vocational training. When they found that the focus of learning was broader than the previous learning, their viewed the client and caring with a new vision. Following is a comment of one participant:

> When I took my diploma nursing I had a patient focus. And now, when I am eight months into my degree, I have more on the global focus….And I am looking at things and viewing things in the new vision. I am paying attention or identifying things in my surroundings, in my community that are community based and global based. Things that I have newer focused before (P 9).
Another participant described how her views on the capabilities of nursing had been changed from her basic nursing education to the baccalaureate program. Gradual incremental increases in knowledge made her think that she could do wonders.

Until I started the program all I was thinking is, well, I’ll get my degree program- I’ll do floor nursing as I’m now. Now, my idea has changed. Because you get to know different things that you can do with your nursing, which I didn’t know is existed. So that’s how narrow-minded I was because nursing for me was floor nursing. And that’s about it. Now I know I can do wonders and it’s changed and Oh! My goodness, I can do so many things (P 4).

This participant verbalized the refreshing nature of new knowledge. She recognized the possibility of a change of views that made people think about preconceived ideas. New information provided them with a new vision. She utilized her thinking skills to evaluate new information with her existing knowledge and to accept it.

Well, I mean learning is not static. And especially when your friends that working in a teaching hospitals- there are so many opportunities to learn. Even, if it’s not something that in your own field, you may have an interest in it. And then, may be down the road, you found yourself in another focus. That was because of that lecture that you- you know, changed your focus. Or may be from that student who twig something and make just start thinking again (P 12).

She described one of her experiences:

And I remember onetime a student – they were learning about pushing and not holding your breath. Print on sets of your concept- is very affluent to me and so I learned something on her theory base. And I click exchange that for you know, my experience (P 12).

Participants reflected upon their past experiences. During the process of learning, they compared those experiences to the present situation and identified better ways of doing the same thing. As one participant noted, although she knew what was the most suitable solution, it was not easy to apply. As she had the awareness she might use the new solution later. This quotation is an example of that:
I reflected on what had happened and incidents that had happened in the past. And by using the knowledge I had learned in the course - the Leadership and Management course, I saw how I could handle that situation better... It's not always easy to apply what I've learned now. But at least, the awareness is there. And I think, yes, we are trying to use that information that I've learned by reflecting what I did in the past and what would probably work better in the future (P 6).

Learning and critical thinking caused participants to change their views and challenge the norms. This participant had changed her stereotyped views since she entered the degree program for post-RN learners.

I have learned since I've come back here that destroyed - that stereotyped in nursing for me. It's that you expected to use some critical thinking and expected to ask questions. You're expected to challenge norms; you have an opinion and will be respected it or - I mean- it doesn't mean everybody agrees with it but it won't be put and dismissed (P 7).

According to this participant, she just worked on the ward without thinking much about the routine occurrences. But new learning had helped her to think more than previously.

You know, basically you work in a ward and you take temperatures all the time. And you never even you think... But now with the research course inside- you say, aha! That was a research thing done. May be by a nurse. And- this is- may be you are going to be- working- we could do a research now. See, you're- you're motivated and start thinking that way, which was not there previously (P 11).

In sum, after reflecting back and comparing their own experience to new information, participants realized whether the existing knowledge was accurate or not accurate. As a result of that reflective thinking, some of their views had been changed and they started to think in a new way.

Changed Mentality

This category represents a different type of change that occurred due to learning. Critical thinking changed some of the culturally bound habitual ways of thinking of the participants.
Change of beliefs.

Over a period of time, participants changed their deeply embedded ways of thinking because of the different facets of new knowledge. When they reflected back on their prior experience, the participants realized that their previous culturally inculcated ways of thinking had been replaced as a result of new knowledge and approaches to learning. As adult learners, their interests and skills are different from those of their childhood. The previous beliefs, skills, interests, ambitions and wishes had been replaced with new ones. One participant described about the ways her perspectives about education had been replaced with new ones. This participant remarked on comprehension, values about learning, and her learning behaviors. She realized that her mentality was very different.

....with my age group now, comparing with before or earlier, the depth of my comprehension is very different....I could certainly quit it whenever I needed to go to a date or what ever I mean. While now, my priority is on my learning. Because I absolutely want to, not just pass but also I would like to get a very good grade. I would like to- to become the best nurse that I can be. I wanted like- I want so much more from the course than what I used it want. Because when I took nursing I want to be a nurse and I couldn’t begin to think of the grades....Last night I was tired. I wanted to change my mind about whatever was happening in my home. I picked up one of the research. And I was glad to see that I had well read that. Because it was really on the line....and it was like a good friend to me. So you see the mentality is very different. Like my intent is a lot more focus and concentrated and I am studying (P 1).

Another participant elaborated how her thinking about nursing had been transformed. The growth of knowledge made her think and see from different perspective. These are her words:

We have to master certain skills and you have to be safe and competent within yourself. And say, I can do this independently on my own. And then, with the BSN degree you are able to see that total picture and you have more choices....it makes you grow to an optimum of your knowledge. Because it makes you see
things from different perspectives. You’re not only have a tunnel vision. But you are able to - you are able to utilize this knowledge that you have gained- say from research study. And that already makes you see things in a different view-
different approach (P 11).

When they recollected the past learning, they saw a real change in the way they perceived learning. Earlier as learners, they had never questioned their teacher because they felt they did not have much knowledge. Every word was new to them because they did not have any prior knowledge related to what they were learning at that time. Thus, they accepted what was given to them by the teacher without questioning. But now, their perspectives had been changed.

I remember, you know, they sat there- they said things. In fact, I hardly remember any question been asked because they were the law. And there was a different approach to knowledge. They were giving you the knowledge and it was totally new you never heard....I think for me, this- that maturity level. And now we are able to challenge the professor. How does that actually happen? How do you relate that? We are coming from a point of being through a lot. We know a lot. We hear from different focus. We want to know things not just to know that, you know, that’s it. We want to know the reason why? Therefore, the retention is approached differently that it were before (P 3).

Another participant stated that, although she thought about grades at the beginning, her attitude had been changed. She was really self-directed and stimulated by what she heard.

It did not matter what the marks were because she was now internally motivated.

"It is funny because now after I just handed out a few papers last week. I cannot begin to really care about what the marks I am going to get because I was totally stimulated during my research and during my writing. I just loved that so much. If I get a mark that goes with fairly well, I feel it’s like an icing on the cake. I don’t really need the mark, because I enjoy what I was doing in it. I feel I am moving forward. So I don’t really need to find the backing it (P 1).

During learning, participants developed some culturally accepted ways of thinking. With experience, they realized that their previous ways of culturally bound thinking had been changed due new critical thinking skills and knowledge received later in their life;
that is, transformation of attitudes and beliefs had taken place as a result of their learning.

In brief, participants built up their knowledge by extending their existing knowledge, by establishing new knowledge, by changing their views and by transforming their beliefs. In all those strategies to construct knowledge, participants used either reflection or critical reflection.

Preserving the Knowledge

Participants did not use the constructed knowledge immediately. Sometimes they preserved it for later use. The third theme discusses about the retaining of information of the participants. When participants described their ways of constructing the knowledge, valuable information about the next stage of learning after construction evolved from data. According to the data, participants did not utilize everything from their knowledge base immediately. They kept the constructed knowledge preserved until there was an opportunity to apply it.

<table>
<thead>
<tr>
<th>Preserving the knowledge (Descriptions of the ways of retaining the constructed knowledge)</th>
<th>Imprinted in the brain</th>
<th>Prior knowledge is reassessed and retained (use critical thinking)</th>
</tr>
</thead>
</table>
| Imprinted in the Brain

The participants spoke of imprinting, assimilating, recalling, and applying the information once it was constructed. They did this by reassessing prior knowledge, or processing the new information and then retaining it.

If you are going to do something later to that aspect, you can tap into that
knowledge and actually utilize it (P 3).

Prior knowledge is reassessed and retained.

As was mentioned in earlier discussion, participants reflected upon their previous experiences and as a result they developed a broader understanding of what they already knew. They thought about prior knowledge in relation to new information repeatedly as they meditated on and stored that information. These are the words of one participant:

By the time you have a broader understanding of what already knew—saving more of the information that is new to me now. Oh! I knew a little bit of— but now I know little bit more. So I think about it. I meditate on it…. That way, I sort of store it in my brain (P 4).

Another participant described the way she recalled knowledge. She used previously constructed and preserved knowledge in her present learning. Her life experience gave her the ability to recognize what was needed. She used her memory to recall information, but she was not able to explain it clearly:

By using my memory to recall you know, get the sort of information that being requested to learn or that I feel that I should know. And use it another time.

That means- are you memorizing?

For some things, yes. Other things— because of your age has certain experience, and so for the reasons that I don’t quite understand, things sort of fall into place and you can see logically. What would happen or what information would be needed. It’s from life experience (P 2).

New information is processed and retained.

Most of the participants talked about writing information in order to remember. For example, one participant imprinted the information after she built it. She wrote the information and went through it. Once she was able to repeat it, the written flash card was useless because, by that time, the information was imprinted in her brain. P 2 articulated:
If it’s something that’s very mechanical… I’ll write out of flash cards. So then, I know how to get back to that part of the screen or that part of the program. And then, once I repeated off … I don’t need that anymore. It’s a sort of imprinted in my brain (p 2).

Another participant described how she read, re-read, and wrote and then remembered the material. Later, she would be able to recall that information as a whole. She appeared to use a sort of organization system for the information by writing it down.

I review things again, and again, and again after I’ve written down. So that when I recalled them, I recalled them as a snap shot of a whole (P 7).

Another participant also needed to write down whatever she wanted to remember. Although it was time consuming, she had to use this strategy. Then it would be easy for her to understand first, and then, to remember.

I’ve learned how to learn. That’s one thing. What I mean by that is this. For me to learn a difficult concept I have to read it; I have to see it; and I have to write it. I have to write it and sometimes it takes a lot- it takes me twice as long. I have to write it out to be able to remember… I can’t just read something and memorize it. I have to understand the concept before I retained it (P 9).

One participant talked about processing information. As an adult learner, she had to do engage in self-learning before went to the class. She processed information while learning. But her previous learning approaches were different: the information was given and she accepted it without processing it. This participant identified that memory had faded away because it was not refreshed.

What I learned then really- I can’t really apply to my life today because it was off from my memory except the multiplication table. I think that has been wonderful. That comes in very handy…. Whereas like the way that we are learning today…. will always stays with me. Now because we- we have to learn before we taught where as, the other way, we were just been given the information and we were not really processing it…

*What kind of processing*?
The thinking- and the analyzing, and- the accepting, and- rejecting. I think those are the parts of processing when you are reading something (P 6).

Another participant remembered things in a different way. She used mnemonics to aid her to remember by relating the information to something that of prior experience or an analogy.

I try to understand. So the same issue comes along. And after all you know. That's the way, I- I remember them as a- like mnemonic. I remember them by like a… (name of a participant) was saying you related to something (P 4).

Another participant described her idea about retaining information:

...I associate it with a picture and then that way I find it easier to go back and retain that information. But I find that the more significant that information is to me, the better the memory or the imprint of it or the quickness of imprinting is. And to what [name of a participant] was saying, I think intuition comes a lot in. As number two was saying a lot of intuition comes into that (P 3).

This participant thought critically about the information. She described how she worked with her study group. She received the information, manipulated it, brought it back to her study group and got the feedback, later, reworking through it. This process helped her to retain the information strongly.

It helps me when it provides me with new ideas. And then, I take those ideas, bring it home, think about it and- and not analyze it. But you know, work it through and see how it works for me. And then, I bring it back to the group and they give me more ideas and then, I worked through again. And then it stays with me longer because then the back of my mind, I can bring out those ideas and apply it (P 10).

Another learner assimilated the new information, as described here:

What I do if it's a new concept- that- I'm trying to- to kind of assimilate (P 12).

In summary, after constructing the knowledge, participants kept it in their memory in different ways. Previous knowledge was reassessed and retained or new knowledge was processed and retained. When they processed the new knowledge, participants found easy
ways such as using metaphors to recall it. It was apparent that the memorization that occurred in the learning of those participants was different from the memorization they had practiced in their childhood because now they processed the information using critical thinking skills before storing in their memory.

Conceptions of Learning

Participants described supports and barriers to their learning. This last theme identified the positive and negative influences on their learning.

Table 5: Conceptions of Learning

<table>
<thead>
<tr>
<th>Conceptions of learning</th>
<th>Positive-</th>
<th>Negative-</th>
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<tbody>
<tr>
<td>(Descriptions of the factors that affect positively and negatively on learning)</td>
<td>Learning as an opportunity</td>
<td>Learning as a struggle</td>
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<tr>
<td></td>
<td>Learning as a strength</td>
<td></td>
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<tr>
<td></td>
<td>Supports to learning</td>
<td>Barriers to learning</td>
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<tr>
<td></td>
<td>Personal</td>
<td>Struggle to complete the tasks</td>
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<tr>
<td></td>
<td>Professional</td>
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</tr>
<tr>
<td></td>
<td>Personal strength</td>
<td>Commitments</td>
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<tr>
<td></td>
<td>Professional strength</td>
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<tr>
<td></td>
<td>Group support</td>
<td>Personal barriers</td>
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<tr>
<td></td>
<td>Academic support</td>
<td>Social barriers</td>
</tr>
<tr>
<td></td>
<td>Personal support</td>
<td>Professional barriers</td>
</tr>
</tbody>
</table>

Participants expressed their different views about learning. Throughout the data, I was able to identify different conceptions about learning held by the participants. Some of these were positive thoughts and others were negative. Although I did not encourage them to talk about their personal life, participants could not help themselves from discussing their difficulties, because their personal life and work life were interwoven with the student life. Sometimes they saw learning as a struggle and at other times, it was an opportunity offered to them. Whether learning was a struggle or an opportunity, learning had given them a strength. Participants also spoke of the supports and barriers that had an
impact on their learning.

Learning as an Opportunity

Some participants expressed their ideas about learning in a positive way. They found some sort of satisfaction in studying for a degree in the middle of their difficulties. Some participants embraced learning as an opportunity to come out of their daily routine. Different personal reasons made others to consider learning as an opportunity given to them.

Personal.

Returning to school was a gift for one participant. As she was away from nursing due to personal reasons, she enjoyed the re-developed relationships with other nurses and saw things in a new vision. She took that opportunity to learn, as a gift to her life.

I see coming back here as a gift. And- and not a gift in a general sense, but a gift to my life....coming back to class and meeting other people and realizing their experiences and hearing their frustrations and their joys has been a gift. It’s- it’s renewed how I see myself; how I see nursing; how I see what is nurturing relationship would be (P 7).

Another participant had developed a disability. But she did not stay back at home thinking of this as an unfortunate incident. She considered it as a change, and as an opportunity. Instead of grieving for the loss, she accepted the change and looked forward to the opportunity of advancing her education.

You know, it’s basically your attitudes, your positive attitudes ok. I mean how can I see this change affecting minds or that can- that can change the entire issue. Because it’s interesting how I came into BSN program....then it’s funny, I had disability. And through disability I came into the program but at the bottom of my heart that’s always something I wanted to do. So that was the change; that was an opportunity. I could have sat home and mourned my losses, my grieving for my disability. But now, I saw that as an opportunity...(P 11).
Ways of Learning

Professional.

For another participant, learning was an opportunity offered to enable her to reach a higher level in the professional ladder. She looked at herself and identified the areas of inadequacy of her own knowledge. She grasped the opportunity and tried to bring herself to a new level.

I always think that’s offered to me. Feeling grasp that opportunities and look at those. What’s you know. Like, it looks lacking in some areas. You add to that. Look at those opportunities and just take it. And then, once you take it, you actually learn things. Bring yourself up to another level (P 10).

Several participants considered learning as an opportunity that was offered to them. They utilized that opportunity with different intentions. Some of those intentions were personal and others were professional in nature.

Learning as a strength.

Learning provided more energy, confidence, and the feeling of self-sufficiency to many participants. It was beneficial and also empowered them. They felt they had a personal strength, and sometimes, a professional strength.

Personal strength.

I’m studying, probably a way too much but so I’m feeling strong enough (P 1).

Some participants shared that learning gave them more confidence. With that confidence they had the power to face the challenges of their daily lives.

Yes, learning definitely gives me a lot more confidence of myself. It’s- it’s how I find it (P 6).

All the courses we have taken so far is very appropriate to make us to grow, personally, educationally, and independently. And it also gives you- I know within myself. It has given me lot of confidence that I can do this (P 11).
Education often gave the feeling of self-sufficiency and empowerment, as expressed by one participant:

I think the education place a major role in terms of giving the individuals the feelings of self-sufficiency I guess. Or you know, empower (P 8).

Professional strength.

One participant described the importance of education in nursing practice and said that every nurse should have this education in order to come out of her stereotyped routine of practice. She expected to see additional education as a professional requirement.

It should be built into employment requirements that you do have continuing education. Because it broadens your mind and gets you away from that focus of the- it’s sort of the daily grind. And it’s only come back to school and you spend time in the education environment and then, you go back to work. Even as soon as you pick up your issues- and it gives you into the focus. You have more energy (P 2).

Another participant saw education as a way to give a stronger voice to the profession:

...getting more knowledge and understanding how research works and what impact it has. Perhaps nurses could have a stronger voice (P 12).

By being knowledgeable consumers of research, and by means of education, nurses will be able to improve their positions and accountability as professionals, as stated by P 8:

...to do the changes that are necessary, I think nurses are becoming more involved into education. You know, getting higher education in terms of getting- let’s say the BSN, which is an important credentials to have- to protect you- you know, the professional basis of- of nursing....the use of research. I think that’s an important thing. That’s in the BSN program. It allows nurses to be knowledgeable consumers of research, which adds to the professionalism and accountability of nurses (P 8).

Learning provided the participants with greater courage, strength and confidence, personally as well as professionally. This in turn, supported them in facing the challenges of their personal and professional lives. With that empowerment, they were able to balance every aspect of their lives.
Supports to Learning.

Another sub category, which evolved from data, included the factors that supported learners in learning. Group support, academic support, and personal support were identified as the main areas of support. Communication, encouragement, group learning, experience, feedbacks, facilitation, different teaching strategies, confidence, self-check, self-encouragement and past experience were identified as the sources of support.

Group support.

The participants received group support in various ways. This support was available through communication, interaction, encouragement, and feedback through group learning. One participant shared how she found moral support through communication if she identified any kind of difficulty with her learning, such as inability to understand. Communication helped her to identify that this was not her fault or a disability, but occurred due to the abstract nature of a concept. That realization in turn, reduced her anxiety and enhanced the confidence, giving more energy to work further with the difficulty.

When you hear other people are struggling with something, I find that it some how is calms me down and may give me some support. And I learn better when I’m feeling supported. And I’m able to do something. So I feel well, if they’re struggling and I’m struggling. I’m not so silly any- you know. I’m ok. I just have keep working at this. So I find that’s very helpful when people communicate their struggle as well as I’m doing (P 1).

Participants used different learning strategies. Almost all of them learned in groups. Group learning helped them to interact with each other. It gave them a better vision about a concept. Following are two examples:

I can’t take distance. I don’t have the discipline. I specifically came to campus for interaction to support my learning (P 7).
That’s what I missed at this time because I’m doing at distance. And I don’t have that interaction and I’m totally- totally lost. Like- I’m coming- I’m going. I don’t know what the expectation is (P 4).

Another participant needed encouragement to support learning, not only from the family, but from the colleagues too:

You need that encouragement, you need that. You have the families very encouraging. Yes, but you also need your colleagues to encourage you. You look for it; thrive for that encouragement (P 4).

Learning strategies used within groups were major factors that were highly valued by several participants. Group discussions helped them to understand better and supported their learning in different ways.

I find it easier to study with other people because they have for example, number 11 has a really a good way of studying. She will come up with questions. We will be learning some facts and she will say, ok, now. You know, she is going into a question and that really helps me to understand things better (P 6).

Participants admired and used collegial support in their learning. When they wanted to justify their interpretation or receive some feedback about what they did, their colleagues were there within reach to ask for support. Therefore, they developed a habit of searching for peers rather than searching for the professor. Collegial support was the most important, available, and accessible supportive system that provided them with positive feelings about learning and also helped them to be successful.

...it is from peer feedback and things like that. Any papers I’ve done or anything like that a sort of gotten her [one of their colleague] to look at them. And get some feedback to see if I am on the right tract. And I find a lot of where I go to is- is to my peers to find out what rather that haunting a professor....I think a lot of peer feedback- just- you know, we just finished writing a stats exam....There were four of us who was standing and looking at it. And later at that point [name of one of the participant] decided. We put study group together before the final. So we were all be on the same page hopefully, higher marks page....If I am turned in on it, that’s the feedback from- the feedback is getting you touch (P 7).
Another participant verbalized her experience on group learning:

I always find brainstorming has been excellent in a group. That’s exactly what we did at the first day. First couple of meetings we brainstormed and then we looked at similarities between all of us. And we kind of aired everything, putting everything on the table. And that’s when ideas come up and grow. And then, by the time we got to the third, fourth meetings it was easy with no problems because we knew exactly what each other’s- where each other stand (P 10).

Academic support.

Learners reported expecting support from every direction to enhance their learning. Feedback from the professor, facilitation, and different teaching strategies were considered as the ways that they could get academic support. Confirmation and reinforcement supported one participant in her learning and she expressed how she felt supported by the remarks of the professor:

It enriches as well, I think. You know, sometimes you- that you did something and you sort of new eyed. Then you hear it from the professor and all of a sudden it becomes like wow! She thinks that. Well, she is the professor. That’s how I was thinking. So you are- you know, it’s reinforced by the leader. And so it is quite empowering (P 1).

Another participant felt that the faculty member also needed some feedback from the learners on an ongoing basis to support their learning, not only at the end of the course.

We might actually even have something to offer that might twig the professor to you know, key in on something....So feedback from students I think is really important (P 12).

Learners needed facilitation to continue critical discourse in the classroom. Many of them had the idea that, instead of encouraging critical thinking skills, they had a discouraging environment. In such instances, they avoided participating in the discussion.

When you hear things that are controversial in a lecture....how you respond to it depends on the instructor. But then exactly how much encouragement you get in providing controversy. And sometimes you know to keep your mouth shut even
though you don’t agree with or you feel you have something to add to the discussion (P 9).

This participant was happy that her professor encouraged her to ask questions:

...coming back to this- I found little threatening at first. And I had in one of my courses- a wonderful professor who- when I wanted to ask a question, he would put a little pressure on me to elaborate, where normally I might not go on and keep on thinking it. He constantly trying to get things out of people and it was just really wonderful because then after a while my thinking became- I was at a higher level than I had been (P 12).

Another participant suggested the benefits of using different teaching strategies in supporting learning. Instead of using the traditional lecture format, she wanted the lecture to be active and with audience participation; otherwise the learners would lose their concentration as expressed here:

...how I can make it interesting. Just because you know, if someone is doing a lecture and you know, lecture is just talking, talking and not- not asking audience to participate. And becomes boring even if the topic is interesting, right. And I find that during the course of the workshop. It’s very important well, my point of view to have audience participate, one way or another. And the other thing that I found out is, you’re sitting down for quite a long time. It’s kind- it’s kind of loose concentration (P 8).

**Personal support.**

Different personal factors also had an impact on their learning. Self-check, confidence, self-motivation and prior experience were among those. At the end of the day, reflecting upon what had been learned also found as a useful support by some other participants. She described it as self check:

Even at the end of the day, like she was saying, just going over. Even at the end of the lesson just testing you know, what did I really get from that lesson. I think just self- self check sort of making anything more. Even writing like you were saying. I find that’s quite useful because you can actualize what really went on that lesson (P 3).

Most of the participants identified that they needed confidence to support their learning.
One had to develop confidence on her own rather than waiting for others’ support to build it. Confidence was way of self-support. Before searching for confidence from outsiders, one had to build it up within oneself. Once one had that internal support, the thought process will occur according to the learner’s commands. This is how one participant described the importance of the confidence in learning and the way to develop it:

...lots of us don’t think about it that there’s a lot of confidence involved here. What do you feel about yourself and can I really do this. It’s huge barrier. I used to ask me could I really do this. Just having the confidence you know....I may not get 100% “A”s, all “A”s but I am putting my best efforts. Putting the best efforts, it’s not constantly. And that’s why we have those, you know, in wanted to put the support us, just the confidence. It’s from so many directions, you know. Not only just your colleagues but even your family. All of that is confidence....Self support, before we go outside for any support from anybody.... That internal support is where all begins and we can have that....go back to yourself all the time. And if you get that support, well and good but fast, your brain will function how you tell it to. And if you tell your brain- if we tell our brains I’m ok, I may not be forced in my head but I’m ok. The brain starts picking up the stuff. It does, it credit, and it just picks up so much esteem from that- from that point on. How much your learn depends on- how you tell your brain (P 3).

Confidence appeared to have a great impact on participants’ learning. Another participant talked about confidence and commitment is being core and fundamental to learning. This quotation is from her:

The core and fundamental solution to learning is what you really believe in your heart....You have to really believe in something. And you have confidence in you and commitment. When you have that confidence you think, aha! I can do this because- because then the confidence gives you; it enhances your knowledge skill. And you know what you have to look for (P 11).

The same participant spoke of the self-motivation as a support:

...right away you are here because you want to be here. That’s a big difference and it’s education, more knowledge (P 11).
The extent of learners’ experience also supported their learning. If they have more past experience it was easy for them to grasp the meaning. One participant described three reasons for her increased knowledge in nursing.

I think experience has a lot in helping us to learn new material. So everything that I have learned in this course, I have been able to grasp better for one reason, because it was not spoon-fed to me. Secondly, I was motivated to do it. And then, thirdly, I have got the experience to help me to understand the- the material… (P 6).

In summary, the participants identified different factors as supports to their learning. Those were categorized as group support, academic support, and personal support. Out of those, the collegial support was the most used and admired source of support articulated by the participants.

Learning as a Struggle

Participants described when they were young; learning was not that hard for them. During primary, secondary and nursing education learning was a part of their life. Now it was different. Most participants struggled to learn. They were struggling to complete their tasks of learning and to fulfill their commitments. Participants articulated different types of struggles.

Struggle to complete the tasks.

Participants described struggling to read and understand. The following quotation is from one participant who struggled to read, understand and retain information:

For me learning is very different now. Because when I took my courses when I was younger, I didn’t have family and the demands were different. And there seems to be a lot more time to spend on and retaining information. Right now, I really- I really struggle to meet- to complete all reading. To consume it off, read faster. I really- really struggle (P 7).

When this learner returned to learning after a long period of time, she did not know how
to study. The demands of the adult education were not as the same as those that had been
experienced earlier in their life. At the beginning, this participant struggled to learn
because she did not know how to meet the demands of the BSN program.

I have been struggling through the first term of this course, nor knowing how to
study. That’s- that’s one of my major problems. Not knowing how to study (P 6).

Learners were from different fields of nursing. Sometimes they knew nothing about the
content being presented. If they did not have a background related to the content, it was
very hard and took a great deal of time for them to become familiar with the content.

...he was sharing all of his information and I was hearing nothing. What he was
saying and it had to deal with, where I was. And it took fairly length of time before
I- I got to the point. Like, I actually understand and get my mind working. And
understand what he was saying. So I think, it- it depends on where you are coming
from. Like, what’s your starting point is in education? Are you just coming into
the education system or it has to do with material? Like, is this material interesting
to you does it something you have to take? Like it’s this part of the curriculum and
you have to take it whether you are interested in or not....if you are interesting you
consume it but if you are not interested it’s hard to take it (P 9).

In addition, learners struggled to find the time to retain the information. Although they did
not memorize as children, they now fed the information into the memory. They found it as
a difficult task because they need time to organize the information before feeding into the
memory.

...my biggest struggle is actually sitting down, reading, and I’m struggling to
retain it. Finding- finding that time. That’s not- I’m not just consuming it but I am
retaining it. I find that is my biggest struggle (P 7).

Commitments.

During learning participants committed themselves for personal reasons and
reasons related to their family. One participant struggled to reach the classroom in time
because group discussion was a valuable learning strategy for her. Even though she was
sleepy after her night duty, she drove for two hours to attend the class.

...even if I have to work nights, one of my- one of my eyes open- I can’t manage to drive- two hours here- at least to get the discussion at the classroom because that really help. And then, you get better understanding and you get- you know where you are going (P 4).

Participants committed their supplementary time on studies. Initially, they did not realize that they had to sacrifice a lot of things to learn. It seems like they underestimated the demands of their learning.

It requires a lot of planning; it requires discipline- it requires. I- I put out things. I am going to put apart- put aside an extra amount of time to learn this. And then I’m going to do this. And realized I have loaded my supplement time. I’ve under- I’ve under estimated my needs and that does effect my learning (P 7).

The responsibilities of participants’ family lives also gave them a hard time. Several participants described how they struggled to learn in the middle of their family life and work life responsibilities. They had spent a great deal of time on those responsibilities.

You have other things occupied in your mind too, you know. I think- to be honest, I think about. I give myself three hours a day to just concentrate of reading and taking notes and trying to do- prepare for some presentations or what so ever. Because of the rest of the time, I’m thinking of paying of bills or I’m going to plan my vacation...we don’t really get into the mood when you want to study....yes, pre occupied with a lot of other things to do (P 4).

Unlike other adult learners, these post-RN learners were struggling throughout their learning lives. The circumstances were not the same as with other adult learners. The study participants had a life with greater responsibilities beyond their student life. Therefore, they committed themselves to maintaining the balance between both family life and learning life. Furthermore, their return to education after a long period of time caused another struggle if they did not know how to study. As they were not aware of the learning demands at the time they enrolled, this aggravated the struggle to fulfill the demands of
Barriers to Learning

Another category, which evolved from data were barriers to learning. When the participants focused on ways to improve their learning, they identified the possible barriers to their learning. Participants considered those as important aspects to be aware of in order to improve learning. Barriers to learning were identified as personal, social, and professional barriers.

Personal barriers.

As many of the participants had children of school age, responsibilities as mothers were the biggest barrier to their learning. One participant commented about the influence of their personal life on their learning:

Right here right now, I’m at a different age and I think, even though you don’t want to know our side of lives, I think they have a huge impact on how we learn. And the reason I say that is because if I’m stressed about my child not being well, and I’m back in the class. I’m sorry, my concentration and absorption level are not going to be as it was. If the child is fine it could (P 3).

Especially as mothers, participants felt guilty for not providing care as expected by their children. When children were under stress, participants were compelled to show their love and affection towards the little ones. As a result, they could not find time to complete assigned readings.

And another thing that effects the learning, that I find is guilt. Like, if I am not spending enough time and I’m not giving what my son needs, and I am not looking over things but studying, you feel guilty. And I insist, oh! You know, I can repeat study afterwards, I have to see what he is after and what has been in school or what is bothering him. You know, they come back from school with his long face and you know something has- you know, your mother complex kicks in and say, something has wrong. And he wants to bring it out. And then, one hour, two hours gone. And then, so I can repeat study afterwards and afterwards never come (P 4).
Another participant, who missed a class because her child was sick, also agreed with this.

She felt guilty for not being able to spend enough time with her seven-year old son. That realization caused her not to attend a class.

You know that guilt is a good point. I never thought of it as spending as guilt. But last week I missed a class. I missed a nursing class because the night before, when my son got to bed- he’s seven years old- and I was putting him into bed and he got- I had two presentations to do and two papers. So he was really getting a sort of- and he was sticking up…when I put him into bed he stared crying. He said, I really missed you mummy; I really missed you. And the next morning, I got up, took him to the school and sure enough by nine o’clock…“he is not feeling well. Will you please come and get him”. So I ended up with missing class (P 7).

Some participants verbalized the difficulty in understanding information as a barrier. It was not that they did not understand, but it took time to understand. These participants expected guidance to move along with other learners in the class.

Well, I have been struggling to with this course and I went to the instructor and what she suggested was to go through the key words at the beginning and look at the objectives and then look at the key notes. And I found that was helpful in studying, like, reading this last three chapters (P 6).

Social barriers.

Because of their profession as nurses, the participants had considered the expectations of the people around them such as relatives and friends. Although these people were aware of the participants’ new role as a learner, they did not bother to think of it, thus, expecting help from these participants continuously in sorting out their problems.

...people around you have expectations that you always were able to fill.... And you know it’s changed now. You have told everyone that’s- that was to be the case. That your school wants my case; my school is my priority right now....it doesn’t work. Just put one thing and let everyone to hold. You know, even they see the piles of books and you’re frenetic. And it’s like my problem, now- you fix it (P 1).
Another participant also agreed with this point. Lack of support was also another barrier to learning. Everyone around the participants wanted to see their success, but they do not pay much attention in supporting them.

I think that’s a very good point. Yes, they do want you to be successful and they do. But do this first. I want everything on the road for you, right after you finished with me (P 7).

Professional barriers.

Participants had both professional and academic barriers to learning. Both are examined in this section. Most of the participants verbalized their disappointment for not having the opportunity to ask questions in the class and they identified this as a barrier. At times, they needed to search more about the information or had conflicting ideas due to past learning. Unfortunately, they had little time to be involved in critical discourse.

I find actually very disappointed with my experience so far in terms of professors and lecturers. They actually remind me of high school because people just listen. They don’t ask questions. And when you ask questions you know, like you’re getting the impression of lot of time like you know, I only have this much time for present the material. But here I am and I need to know this….So it’s very disappointing (P 12).

In agreeing with her, another participant expressed her idea in this way:

...there’s a lot of guest speakers and I’ve enjoyed the guest speakers. But there is no time that scheduled in there for sharing of experiences or for questioning (P 9).

The same participant identified lack of encouragement for promotion as a barrier to learning:

I just thinking that nursing do not encourage promotion....I bet it. Every one of us in this room here has initiated their learning on their own. They have not been encouraged in any way to promote their learning. And to me, that is frustrating (P 9).
Although participants had to spend a lot of money and time on education, which could be used for the benefit of the family, they were not professionally rewarded. One participant analyzed the cost of the education, which was a barrier:

...when you take your BSN, you take off like I'm taking off a year of my time. That costs me over 50,000 dollars, the cost of taking your education. And you come back and you earn 100 dollars more a month. You've kept up 50,000 a year. Like, if you are going to invest four years of university education if you're just studying. Why would you come to this profession, when- if you have potentials and intelligence to take something that could earn you like....earn over 100,000 dollars a year (P 9).

Participants' responsibilities toward others greatly influenced on their learning. Responsibilities as a mother, wife, and in other social relationships had forced them to ration their time, which adversely affected on their learning. According to the participants, lack of support, limited time for class discussion, lack of encouragement from family members and professionals, difficulties in understanding, and cost of education affected them in different levels and had various degrees of impact on their learning.

Past versus Present Learning

During the interviews the participants always compared the present learning to the past and described the differences. One participant articulated that her focus was broader and deeper than earlier. She also described how learning affected her thought process. Previously, she engaged in rote learning and she memorized everything without using her thinking skills. Now she thought before applying learning in real life situations.

I think we were spoon fed a lot; you know, in the old way. So this way of learning is entirely new and important to me. And it's been quite difficult process. You know, switching to different way of learning like I am in doing presentation. We never did that like when I want to school you know, we never. Teacher was up there, did all the teaching. We took notes, we learn by rote and exam was ahead and all were handed in your memory. And now, I don't remember anything that I learned from you know. But I think this way of learning is better because you have
thinking about it and then you are applying it to your life. And I think it will stay with me for the rest of my life you know. When there is new information comes and then I will be adjusting my way of thinking and may be my way of learning too (P 6).

Earlier this participant did not challenge what she was taught, but later, she did.

The main difference between my high school and present experience is that I went through high school. The information was given to me and I took it, no problem, I didn’t challenge it, I had to know it. It’s on the exam. My aim is to pass the exam. I’m served like this and I think that is because there were very little I was competing my brain for that information input....we are much more challenging. In high school we were not challenging the information that teacher said something, that’s what it was. Even, my nursing school (P 3).

Another participant remarked on learning she had in her registered nurse program.

Subjects were related to each other more than currently, which made learning easier; In addition, there was a support system where learners helped each other. Learners reported that, in the post-RN program, they learned entirely different subjects together.

In the RN program every lesson built on the other. But everything was cohesive and cord into another....I doesn’t have it at the university level. You don’t have that. And so the cohesiveness is gone in my structured learning....so we all study together and collectively. And there was a support system. If so and so wasn’t doing well on math or whatever, we didn’t leave it. We didn’t leave anyone to flying around on their own....we supported one another and made sure we all learned to same level (P 7).

She further articulated:

My ability to learn in the past was easier in as much as I had more control of my own environment, and my time, and the material, and how I choose to learn it. I don’t have that any more (P 7).

Learners just absorbed what was taught. These were the words of another participant:

You just absorbed the whole bottle of that because you were so immersed in the culture...(P 1).

In the past learning, subjects were cohesive and participants were “spoon fed”.

They just absorbed and memorized the knowledge. Learning was easier for them than
today because there was a relationship between lessons and also had a support system.

Summary

In this chapter, findings of the data related to post-RN learners’ ways of learning as they experienced and described, was presented with my interpretations. It was apparent from the data that their learning was a continuous process with different levels of activities. The first, approaches to understanding describes the strategies used by participants to understand information. Communication helped them to understand what they were learning. Through verbal and other forms of communication, new information was reinforced, validated and accepted. Feedbacks from colleagues and from the teacher played an important role. Almost all participants were motivated with an idea of self-development. So, they learned according to their necessity. They reflected upon their past experience, before accepting or rejecting any information. In this process, they use critical thinking skills to select, organize or compare the information.

The second theme explored how the participants built up their knowledge by integrating the information. If it was something familiar, they reflected back to their previous learning and added, validated, or extended their existing knowledge by stretching their minds. The participants searched for meaning by reading and questioning the new information. Establishing, differentiating, or adding was dependent upon the novelty of the information. Sometimes they identified inconsistencies of their previously accepted assumptions and premises. When participants realized their misconceptions, they changed their views and accepted the new views. After a period of time, due to critical thinking, they changed their views and accepted the new views. After a period of time, due to critical thinking, they changed some of their culturally accepted ways of thinking. In these
ways, they constructed their knowledge.

Preserving the knowledge for later use was identified as the third theme. Participants used their memory to imprint, assimilate, or to store. This memorization was different from the way they did in their earlier years of life. They used the thinking skills to select and organize the information in their own ways before they preserved in the memory. The next proceeding of the integrated information was explored in this section.

The findings revealed a fourth theme, important aspects that influenced learning positively and negatively. These were identified as conceptions of learning. The study participants had their own family life that forced them with lot of responsibilities. To maintain the balance between family life and student life, these participants committed themselves in different ways. Therefore, learning was a struggle for most of them. Learning was an opportunity that offered to some other participants. They learned with different personal intentions. Whether learning was a struggle or an opportunity, it provided a great deal of strength, confidence, and empowerment to the participants. There were some barriers that had adverse effects on their learning: responsibilities due to personal and social bonds; lack of support and encouragement; inadequate time for critical discourse in the classroom; and various learning difficulties, which negatively impacted on their learning. In contrast, communication, experience, collegial support, confidence, self-checking, and encouragement had a positive effect on their learning, thus, supporting them to become successful. In addition, data revealed how these participants defined learning and their thoughts about past learning opposed to present learning.

In the next chapter, I will discuss the findings in relation to the framework for the study and the literature.
CHAPTER FIVE

Discussion of Findings

Introduction

In this chapter I will discuss the findings of the study as presented in the previous chapter. First I will examine the relationships of the themes and categories in conjunction with Mezirow's transformation theory (1991), which guided the theoretical framework of the study. Next, the other themes and categories of the findings that have an impact on learning will be discussed in relation to the literature. It was apparent from the data that the real world of the post-RN learner was not exactly the same as seem in most of the education literature. The findings of the study provided a picture that was inconsistent with some of the theoretical literature.

As stated by Entwistle (1985) learning models presented by theorists do not discuss learning as a whole. Similarly, the theoretical framework applied in this study was not sufficient to describe the whole world of the post-RN learner. Although theory explains a great deal of the way adults learn, the real world of the study participants extended beyond those cognitive boundaries. All of the important findings did not ultimately fit within the framework used to guide the study. Therefore, I revisited literature to find explanations for those unexplained areas. Although the framework guided me to identify the ways of learning experienced by post-RN learners, I did not limit the data analysis only to cognitive aspects. The first three themes are related to cognitive aspects, but the fourth theme is not. My doubts about existing transformative learning in the nursing context are resolved as I found transformative learning existed among the study participants. It seems clear that post-RN learners use transformative
learning to construct their knowledge. In this discussion, I will use the terms “past experience” “prior knowledge” and “existing knowledge” interchangeably to refer previously acquired knowledge.

According to Knowles (1984), the adult learner is an autonomous individual with rich prior experience who has readiness to learn, is internally motivated with desire for self-improvement, and has a capacity for self-directed learning. The data in this study revealed that almost all participants had these qualities. Participants had experience in different fields of nursing and were self-directed and self-motivated. They had long-term and short-term professional goals, which motivated them to learn. Knowles also states that the learner is the one who decides his or her own learning needs regarding context, settings, and the way of learning. For me, there is a question of agreeing with this notion because in this study, certain things regarding learning were beyond control of post-RN learners. For example, context and settings were fixed. The only other alternative form of learning was distance education, which for many, was more difficult. The participants were not completely free to select which subjects to learn and when to learn them because a limited number of courses were available in a semester. Whether the participants liked it or not they had to choose from courses offered at specific times.

Clark (1993) identifies transformational learning as being connected to the developmental process. She states that transformational learning rests on a humanistic understanding of the person, thus, creating an obvious change in people. Transformation theory explains the structure of adult learning and the process of learners’ interpreting experience in order to change or to transform perspectives. “Transformation theory suggests a form of developmental progression in adulthood that does not follow clearly
defined steps or stages (Mezirow, 1991, p. 152). Mezirow also notes that movement towards reflectivity that increases the ability to validate prior learning through critical discourse and act on the resultant insights in adulthood is a characteristic of the development of adults.

Prior knowledge is the key component in understanding present or new information. “Experience strengthens our personal meaning system by refocusing or extending out expectations about how things are supposed to be” (Mezirow, 1991, p. 5). It was evident in the data from this study that the participants constructed new knowledge based upon their previous knowledge. In doing so, participants used their thinking skills to examine new content in comparison with their previous knowledge. This activity involved reflection on past experience. The more experience participants had in the past, the better they understand in the present.

The research question of the study was: what are the ways of learning experienced and described by post-RN learners? The findings provided insight how learners constructed their nursing knowledge, how they used reflection, and how they saw the difference between past learning experience and present learning experience.

According to the transformation theory, making meaning involves making sense of an experience by interpreting it. Learning means utilizing those interpretations in decision-making (Mezirow, 1990). The two themes of “approaches to understanding” and “knowledge constructing” describe the way participants made meaning. As they articulated, they had already applied knowledge in problem solving or they were planning to apply it later in their personal and professional lives, when they gained more power and authority in their practice. Until that time, knowledge had to be preserved. The third
theme, “preserving the knowledge” describes the link between making meaning and application. The last theme, “conceptions of learning” describes the positive and negative influences on making meaning and how learners see the difference between past and present learning.

Approaches to Understanding

The first key finding pertains to how study participants perceived information and approached understanding that information during the learning process. According to the focus group interview data, some of the participants achieved this end by reading, writing, and applying [testing] whereas others, read, saw, questioned and tried to understand new information. The participants clarified information with the learning group or with the faculty member to validate their understanding. While engaging in these activities, communication helped learners to increase their insight about the course materials. Messick (1985) states that the decision of what data to ignore and what data to accept depends upon the individual’s ways of learning. These participants selected information, which was important and actually meant something to them. Some of them looked at their personal life requirements in order to select what to learn.

All of the participants had their own long-term professional goals and none came to the university just with an intention to expand their nursing knowledge. The participants had short-term ongoing goals according to their personal life requirements. It was apparent in the findings that participants’ main aim was to have credentials for professional development. In order to achieve this, participants engaged in task-oriented problem solving by applying their new learning. Mezirow (1990, 1991, 1996) identified those as two domains of learning: communicative learning and instrumental learning. The
main focus of communicative learning is making meaning through critical discourse whereas instrumental learning focuses on manipulating people through problem solving. Data revealed that participants of this study used both domains of learning as described in Mezirow's transformation theory.

"Knowledge is a function of association and communication" (Mezirow, 1991, p. 57). Therefore, participation in dialogue was necessary for the participants to understand new information or validate what they already knew. Participants engaged in verbal and other forms of communication with the faculty member or with peers to increase their insight about the information. Sometimes, participants looked for different texts to find different views on the same concept. Mezirow (1990, 1999, 1997) states that meaning exists within our personal experience rather than in books, and we validate and acquired those through human interaction and communication. Thus, new information is interpreted according to the past experience and accepted through different levels of communication. Therefore, communicative learning increased the insight of the participants with the aid of description and explanation of concepts.

Dialogue "involves either implicit or explicit claims regarding the justification or validity of what is said, implied, or presupposed" (Mezirow, 1991, p. 66). Because of the possibility to criticize valid claims, the learner corrects mistakes and learns from those (Mezirow). Participants' discussion about the course material with peers and the faculty member supported them in identifying different views pertaining to a concept. Feedback from peers and faculty members reinforced their understanding or helped them to recognize their mistakes. The participants searched for the meaning of what they read in the text primarily through their scope of past experience and secondly, through
communication with others through which they evaluated what they heard or identified as important.

As described in transformation theory, instrumental action predicts the applicability and validity of the observable events, determining the cause and effect relationships, and task oriented problem solving. “This instrumental learning and empirical verification are based on and dependent upon a foundation of communication learning” (Mezirow, 1991, p. 74). Data in this study revealed that when the participants “focused on needs and goals”, they recognized information through communication (by reading and group discussion), identified different views and perspectives related to the issue, and applied new information to see how it worked in problem solving. As a result, they took valid decisions regarding the concepts. Feedback from the faculty member or the colleagues provided learners with valid reasons for reinforcing ideas or with assistance in identifying their mistakes. This is consistent with Mezirow’s claim that most learning involves both communicative learning and instrumental learning. “Most adult learning is multidimensional and involves leaning to control the environment, to understand the meaning as communicated with others, and to understand ourselves. It often involves critical reflection as well” (1991, p. 89).

Reflection, which involves the critique of assumptions, is used differently in understanding a concept, or understanding self or in task oriented problem solving (Mezirow, 1991). Participants in this study also assessed and reassessed their assumptions by reading, communicating, and reflecting upon their past experience. Examples of the use of reflection by participants were given under the category entitled “reflected upon past experience”. Participants evaluated their experience or information critically by
participating in critical discourse, and by applying the information in different situations. Without being passive receptors of knowledge, participants questioned the teacher and were involved actively in learning using critical reflection. As a result, sometimes they identified their misconceptions about some ideas and transformed those conceptions to new ones. These experiences were exemplified under the category entitled “opened a channel of thought”.

Jarvis (1987) stated that each individual’s experience is different from one person to another. Experience is equivalent to the stock of knowledge of the individual. According to their own sociocultural backgrounds, learners who have more experience will be able to provide a better interpretation to a new experience during his or her learning, whereas, learners who have less experience may give an inadequate interpretation, as their stock of knowledge is poor. This notion explains for us the reason for the differences in understanding that is unique to each individual. Similarly, participants in this study had different levels of experiences and understanding. The first theme, “approaches to understanding” identified how participants analyzed and understood information. Once they understood information, it was necessary to integrate it into their existing knowledge. The first and the second themes are interwoven; one could not exist in the absence of the other. The second theme, knowledge building, describes the way the participants built up knowledge after identifying core information.

**Knowledge Constructing**

The second theme describes the way these participants constructed their knowledge. As noted in the preceding discussion, participants developed understanding by using communication and task-oriented strategies by reflecting upon past experience, and
by thinking critically. As a result, participants stretched their minds to differentiate or elaborate on the meaning of new information and extended their existing knowledge. Participants searched for the meaning of new information and established that information into their existing knowledge. As a result of critical reflection, they viewed things with a new vision and recognized misconceptions. This recognition in turn, changed the participants' mentality, and transformed some of their inculcated ways of thinking.

Participants looked at the new information to be learned through the scope of prior knowledge, and gave their own interpretation. Mezirow (1991) refers to this scope of prior knowledge or frame of reference, as meaning perspectives. Mezirow describes three types of meaning perspectives: epistemic meaning perspectives, socio-linguistic meaning perspectives, and psychological meaning perspectives. Each of these has its own meaning schemes such as particular knowledge, beliefs, value judgments, and feelings that shape the interpretation. In this study, post-RN learners' prior knowledge blended with the newer information resulting in the construction of new meaning schemes or meaning perspectives. Always, the participants compared and evaluated new information in relation to their prior knowledge rather than taking it for granted.

Transformation theory describes the emancipatory knowledge that is gained through critical self-reflection. According to Mezirow (1991) “learning is a dialectical process of interpretation” (p. 11). During learning we attribute an old meaning to new experience. In transformative learning, we reinterpret our old experience to give new meaning and perspective, in order to guide our future action. The participants in this study reinterpreted the experience during problem solving and attributed new meaning, in order to identify the best solution. Mezirow views learning process as an extension of the ability
to make explicit, associate, appropriate, remember, validate, and act upon with the environment, others or with our own self. During discussion, as well as in self-learning, participants used a great deal of critical thinking to associate, differentiate, validate, and interpret or to imagine new information in relation to their prior experience.

Mezirow (1990, 1991, 1996, 1997) identifies four ways of learning. The first one is expanding the range or intensity of their points of view. Most of the participants returned to education after a period of interval in their learning. Usually, when adult learners returned to learning, expects that they are going to learn whole lot of new things, never heard or learned before. As learning progresses, their preconceived meaning schemes and meaning perspectives help them to realize that the knowledge to be learned is not something strange but “they are building on concepts that somehow you touched in your previous education” (P 9). This realization supports them to gain more confidence and capability to take responsibility of their own learning. So they look at the new information through the scope of their prior learning experience, and through the use of past experience. Thus, they extend or elaborate the scope of their existing knowledge. Mezirow describes this way as learning through existing meaning schemes. The theme “stretched the mind” represents this way of learning because there is an extension of the resultant knowledge.

New information was not always be able to related to past learning if the learner did not have a similar experience. Before taking for granted, they “searched for the meaning” of that information by reading the text and looking back to their prior knowledge, if they found nothing compatible or some sort of inadequacy in existing knowledge was identified, new information would be establish without any changes. This
interaction between prior knowledge and present information requires reflective thinking. This is the second way of learning Mezirow (1990, 1991, 1996, 1997) describes: learning new meaning schemes. In this manner, the study participants also established or created meaning schemes in relation to their prior knowledge and constructed more solid new meaning schemes.

The interpretations and assumptions are assessed and reassessed in reflective learning (Mezirow, 1991). Mezirow suggests that one should use reflection to identify and challenge the distorted meaning perspectives. When the learned assumptions or premises are identified as invalid or distorted, the reflective learning becomes transformative learning (Mezirow, 1990). It was evident in the data that participants of this study also identified that they had some misconceptions and fallacies because critical reflection was not applied when they learn through metaphors or when establishing new knowledge. It was possible to have distortions in their meaning making. Critical reflection helped learners to correct themselves and transform their meaning schemes and later, it led to transform meaning perspectives. "If you gained new knowledge, I guess it would either validate your previous knowledge or it would change it. Depending on which one is right" (P 8).

Through critical reflection, the participants identified their misconceptions about nursing, learning, and patient care. Those transcribed segments were presented under the sub- categories of "view things with a new vision" and "changed mentality". Mezirow (1991) describes these last two ways as learning through transformation of meaning schemes and learning through perspective transformation. During learning participants used critical reflection to gain better insight into their own assumptions of prior
knowledge and present information. This awareness resulted in changing or altering some
of their earlier views, as described in the findings of the study.

"Transformation learning occurs when people revise their underlying expectations,
assumptions, or perspectives. The process may be prompted by a life experience or
dilemma, either positive or negative. It may also be stimulated by, new
perspectives encountered in a learning group or through reading. The learner is led
critically reflect on his or her assumptions or habitual expectations- the notion that
"this is the way things are because this is the way I have always seen them to be"
(Cranton, 1996, p. 29).

The unique experiences that each participant helped her to participate in critical
discourse. This participation in turn, provided both participants and the faculty member an
opportunity “to bounce their knowledge” with each other and construct more valid
meaning perspectives. Validation or justification for our beliefs or prior learning is the
central function of reflection in learning (Mezirow. 1991). Almost all participants in this
study stated they focused on content in a critical manner. They looked for the validity or
reliability of the information. It is evident in the data that the post-RN learners revised
their preconceived expectations, assumptions and perspectives on many ideas and
concepts during their learning. The study findings indicate that post-RN learners used the
four ways of learning, as described by Mezirow (1990, 1991, 1996, 1997) in
transformation theory, to construct their nursing knowledge. Instead of becoming
recipients of knowledge and memorizers, learners reached a broader level of personal
understanding through critical reflection in learning, as described in Mezirow’s notion of
critical approach to the construction of knowledge.

Preserving the knowledge

Another key finding was the identification of ways preserving knowledge for
future use as described by participants. The child may consider it is necessary to be
dependent and obedient as well as to memorize the content whereas, the adult may think of looking for validity or relevance of the information to be learned (Jarvis, 1987). These participants looked for the validity and the reliability of the information, but they also used memorization. However, they did not memorize each and every fact. In their narratives, the participants used terms such as recalling, imprinting, remembering, storing, and organizing, which represent a sort of memorizing. It is also apparent that those concepts had a great influence on their learning. As transformation theory discusses little about memory and remembering I returned back to the literature to find more information.

Merriam (1993) states “it is doubtful that a phenomenon as complex as adult learning will ever be explained by single theory, model, or set of principles” (p. 12). Clark (1993) identifies two other strands of transformational learning with different approaches to the learning process discuss by two other theorists. She suggests that even though Mezirow’s theory describes learning process with more complexity, the pedagogies of other two strands also need to be considered in the learning process. This argument provided me a valid reason about the inappropriateness of my application of a single theory to describe the ways of learning of the post-RN learners.

It was apparent in the data that the participants had their own ways of organizing the information. They found that it was easy for them to remember organized structures. According to the participants, they “imprint those structures in the brain” and recall when necessary, which means they memorize those information. The reader may believe that adults have already passed the age of memorizing and reproducing in the examination. However, those participants were “struggling to retain the information”.

In fact, there was a gap between the construction of knowledge and the
application. The participants constructed their knowledge through the approaches of communicative learning, instrumental learning, reflection, and critical reflection. They planned to apply the constructed knowledge in different situations immediately, or later in their personal or professional lives. West (1996) proposes a different argument, citing memory as not just storage that permits recall but as an active component of learning. Therefore, identifying this aspect is utmost importance in helping many post-RN learners, especially, those learners who have returned to learning after a long period of time away from formal education.

Transformation theory views memory as "an inherent function of perception and cognition, an active process of recognizing again and reinterpreting a previously learned experience in new context" (Mezirow, 1991, p. 6). Remembering is crucial to learning and we learn with the help of our old experience. So it is essential that the old experience to be in the memory. Mezirow (1991) states that immediate identification or awareness of the concept occurs during perception. Remembering depends upon the level of integration of the original experience into past learning and the frequency of called upon in the memory. It involves recognizing the meaning of the experience in relation to past. When the information is no longer recognizable, or if there is a change of the context or meaning scheme, we forget it (Mezirow). In this sense, as time passes, most probably there will be a qualitative changes of our awareness, focus, reflection and integration of knowledge in our learning. Although this description makes sense, it does not seem to provide an explanation of the process of imprinting knowledge in the brain.

The philosophy of constructivism describes how information is processed, coded, and stored in the human memory (Entwistle, 1997). The information-processing model
Ways of Learning describes by Gredler (1997) provides a better explanation in this inconsistent area. As Gredler (1997) describes, new information is influenced by the prior knowledge. She identifies prior knowledge as the internal factor, which is described as the conceptual, meta-cognitive and tacit knowledge. Nature and the organization of the new information are considered as the external factors. Learning means the interaction between those two factors. According to the model, this interaction occurs in four steps: perception, encoding (involves construction of meaning), storing and retrieving the information.

Similar to the transformation theory, the information-processing model also identifies the value of learner’s prior knowledge. “The information that is learned is strongly influenced by the learner’s prior knowledge, the nature of the information to be learned, and the ways that the learner interacts with new information” (Gredler, 1997, p. 153). Thus, the learner views the information through the scope of prior knowledge and filters it before interpret or reconstruct the meaning. In addition, reflection takes place in this activity.

As described in the information-processing model, perception is the first step of learning. The learner uses all senses to comprehend the information. The theme, “approaches to understanding,” describes this more extensively. The second step of information-processing model is encoding the information. General information is encoded through primary rehearsal or elaborative rehearsal. Primary rehearsal, by which memorize the information verbatim and tends to forget easily. In elaborative rehearsal, the information is transformed in relation to the prior knowledge or replaced by another symbol or supplemented by additional information. The elaborative rehearsal is somewhat similar to the way the learner reflects upon the prior knowledge in transformative
learning.

The information-processing model (Gredler, 1997) describes two methods that are used in encoding specific information: imagery and mnemonics. During this step, the learner processed and organized the information so that, he or she will be able to remember it quickly and easily. Participants in this study organized the reconstructed knowledge and remembered information in relation to something else or used mnemonics to memorize. Mezirow (1991) claims “symbols are forms that embody significance” (p. 17). Some participants learned through metaphors. During learning, they used mnemonics, or relate the concept to something, or imagery picture or as a diagram, to memorize the content. Readers may think using metaphors as a kind of children’s game, but according to the transformation theory “metaphors are the tools of communicative learning. We confront the unknown by making associations with what we know” (Mezirow, 1991, p. 80). Mezirow also states that intuition is another way of identifying strange or new experience. “Encoding concepts, principles, and ideas, in contrast, requires the construction of meaningful links between the new concepts or ideas and between the new material and the learner’s prior knowledge” (Gredler, 1997, p. 159). In this sense, though the participants reported memorizing some things, they tended to use critical thinking skills in addition, as noted in chapter four.

Another important factor that the reader must take into consideration is that the storage of knowledge is not the end result of learning. As learning is a continuous process, storage is one of the stages. Based on the newly made meaning perspectives, the learner will apply the knowledge later in decision-making, which according to Mezirow (p. 107, in the text), means learning. This experience then provides the base for subsequent
learning through which the learner will reassess information.

Conceptions of Learning

Although this theme did not describe learning, it had a great influence in learning. The participants’ views on different aspects that positively and negatively affected their ways of learning. It was evident from the data that learning was an opportunity to reach higher level or to face challenges of the participants’ lives. But most of these participants struggled to learn. They struggled to read and understand; they struggled because of not knowing how to learn; they struggled to find time to learn; and they struggled to maintain the balance the life between their families and learning. Whether it was an opportunity or a struggle, they received some supports for learning. In contrast, they also came across various barriers to learning.

Even though they were struggling, some of the participants identified learning as an opportunity and they grasped that opportunity to enlighten their lives.

“Hardy individuals are easily committed to what they are doing in various areas in their life; they believe they have some measure of influence or control over the causes and solutions of problems; and they see changes in life and demands for readjustment as a challenge and an opportunity”

(Kobasa, 1979; as cited in Pagana, 1990, p. 256).

I believe that the nature of the nursing profession has given different levels of hardiness to each and every nurse to cope with various situations in their lives. The same motive has driven the participants in this study to accept the challenges of the higher education in nursing.

To overcome with the issues of their education, the participants expected support from different levels, different angles, and from different personals. The best support they received was from their peers. Their learning was greatly influenced by the peer feedback
by which they identified their strengths and the weaknesses. Pilling-Cormick (1997) states that providing feedback is a key component of learning. There was a network of communication among the study participants. Sometimes they looked for the peers’ feedback than that of the faculty members. Participants felt that most of the time, the faculty members were too busy to attend to their needs. This is another concern that faculty should take into consideration.

When they learn in groups those participants depended upon each other. Rose (1996) states that adults learn best in groups through the use of discussion. Within the groups the participants discussed the communicated knowledge of the course material in order to understand properly and to apply in situations. Armstrong and Yarbrough (1996) state that interdependence is a critical aspect of group learning. This interdependence is the motivating factor of the group. The participants shared their experience with each other and learned from those.

The participants also identified that self-confidence had a great deal of influence on their learning. According to Rose (1996) group learning, which lies at the heart of education, supports to build confidence, self-esteem, and fluency in public speaking. In addition, prior experience of the participants had provided a sense to develop confidence and self-support. Inner support was identified as pivotal to their learning.

As mentioned earlier, the participants struggled to read and understand. Pilling-Cormick (1997) states that learners need assistance regarding learning so that, educators may have to take some responsibility. When the information is completely new, it is difficult for the participants to understand that. Some of them wanted the teacher to "diagrammed for them". Another one was struggling because of "not knowing how to
Ways of Learning

Svensson (1997) views organizing the content to be learned, is the main problem of learning how to learn.

Some of the participants had returned to learning after a long period of interval. They remembered their early school days and expected learning to be the same. Rogers (1996) states when they re-enter to education after a long interval, some adults expect from the teacher to be treated them as children. Caffarealla (1993) also states although adults are self-directed, in some situations they may need to be temporarily dependent on the learning situation. But this notion was not applicable to all the adults who returned to education after a long time. However, as the demands of higher education are high, they were struggling to meet those demands. Faculty should understand these issues and guide learners to become independent, as it is essential in helping post-RN to learn.

Before they returned to face-to-face teaching and the learning environment of the classroom, some of them had the opportunity to experience distance education. Lack of communication with the teacher, and the lack of reinforcement and feedback were the biggest problems they encountered in distance learning. According to transformation theory, learners need to be participated effectively in discourse, to validate what and how one understands (Mezirow, 1997). In this sense, communication with the teacher and communication with peers are pivotal to understanding the content in adult learning.

The identification of the barriers is also an important finding related to their learning. Mahoney (1991) describes external and internal factors that inhibit adult learning. External factors consist of the responsibilities of the workplace, family, and community. Internal factors are mainly personal emotions and attitudes. Almost all of the participants had a family life and some of them had school-age children also. The
responsibility of the mother's role made them to feel guilty for not spending adequate time with their children. Therefore, in the middle of the struggle to learn, they were struggling to maintain the balance of their lives between the family and the school. In this sense, post-RN learners have different and special needs. Schreiber (1998) states that career development process is different for women because of the social context that defines certain roles and expectations for them. Approximately, 90% of the study participants were females. Collard and Stalker (1991) suggest that adult educators must take personal responsibilities to understand issues and concerns related to women learners. They cautioned that if those issues are not handled sensitively and appropriately, women learners will become passive recipients rather than active learners.

Another important barrier as identified by the participants was lack of the time to question or share an experience with guest speakers or with the instructor. In some cases, they thought that faculty did not encourage questioning. Faculty should treat this need of the learner as an important consideration because “within an experiential format, the offering of academic feedback can be viewed as a professional responsibility and commitment to assist in collegial growth” (Arnold & Boggs, 1989, p. 5). All of those barriers identified by the study participants are adversely effect on their learning. Priority should be given to identify those problems and act accordingly in order to help the post-RN learners to learn successfully.

Participant identified that past learning was much easier than present learning. It seems clear that learners had short-term memory in their early learning. They did not think deeply about the information to be learned. As mentioned earlier, as adult learners, the participants thought critically and changed or transformed their points of view and
habitual ways of thinking. Therefore, learning seemed to be deeper than previously. As the participants became autonomous thinkers, they analyzed the information and were not hesitant to challenge the teacher, which had never happened earlier in learning.

The learning environment, the structure of the curriculum, and personal influences on learning were completely different in the present learning situation. The participants found these things positively influenced their learning. Previously, learners experienced more support; however, they preferred the present learning situation because it encouraged deeper approaches and facilitated retention of knowledge.

Summary

In this chapter, I discussed the major findings of the ways of learning as experienced and described by the post-RN learners. Although it was evident that the post-RN learners’ ways of learning were compatible with the ways of learning described in transformation theory, there were some inconsistencies, which were identified and described in relation to other adult education literature.

To understand or validate the information or an experience, participants engaged in communication or task oriented action. They used reflection to assess their learning and learned through existing meaning schemes or through new meaning schemes. Sometimes they used critical reflection and corrected distorted beliefs or misconceptions. As a result, they transformed their meaning schemes or meaning perspectives.

They used memorization in different levels. Although transformation theory addressed memorization its explanation is inadequate to explain the findings of the study. An information-processing model (Grödler, 1997) reviewed in the literature, provided
additional details about memorizing and remembering, going beyond transformation theory.

The learning needs of participants were different from those of general adult learner described in the literature. Their learning environment was not always described as supportive. Lack of the time to participate in discussion was one of the major problems reported in the classroom setting. In fact, learners believed that questioning was not encouraged by some of the faculty members. As critical discourse is crucial to transformative learning, opportunities should be given to learners to engage in questioning and critical reflection with faculty.

Learners need more support to continue their study. They expect that support from family, peers, colleagues, the community around them, and faculty. Group learning was described as the best, most available, and most used learning strategy applied in their learning. The group situation supported the participants by providing feedback and by enhancing confidence and self-concept. These factors were interdependent in order for learners to achieve academic success.

Barriers as well as supports influenced participants’ on their learning positively and negatively. Those self-directed, motivated post-RN learners were committed to learning with goals related to self-development. Although new learning was more difficult than previous learning, participants identified it as beneficial because of the involvement of critical thinking. It was the responsibility of the faculty members to understand those learners, identify their issues, support them to learn effectively and successfully, and most importantly, guide them towards transformative learning that encouraged critical thinking skills.
CHAPTER SIX

Summary, Conclusions, and Implications for Nursing Education

Summary of the Study

Adult education is based on a completely different philosophical foundation than that of primary and secondary education. The learner, content, context, teaching learning strategies, and evaluation processes are different. In an adult learning environment, post-RN learners can be differentiated from other adult learners because of their unique nature as experienced practitioners who engage in ongoing education for varieties of reasons. The literature review identified the need for critical thinking skills to be developed in nursing education in order to develop reflective practice. Transformation theory was identified as a theory that fosters transformative learning through critical thinking. The framework which guided the study was therefore, based on Mezirow’s transformation theory.

The purpose of the study was to identify the ways of learning experienced by post-RN learners, as described from their perspectives. A naturalistic inquiry approach was used to explore and identify the ways of learning experienced by post-RN learners. A purposive sample of 11 participants was recruited. Although focus group interviews and reflective journals were planned as data collection methods, time constrains of participants permitted only, focus group interviews. Inductive data analysis was used, consistent with methods of qualitative content analysis and constant comparison.

Participants identified learning as a continuous process of expanding knowledge and acquiring new knowledge. Their wealth of prior experience appeared to be the most influential resource in their learning. The participants referred to prior experience
whenever they engaged in communication or task-oriented problem solving in learning. They reflected upon that experience in order to understand well. Group learning was identified as the most influential factor supporting learning of post-RN learners. There were some barriers to learning that influenced negatively on learning.

Four major themes emerged from the data: approaches to understanding, knowledge constructing, preserving knowledge, and conceptions of learning. For each theme, categories and sub categories were described (Table 1, p. 51). The findings revealed learning as a process (Figure 1, p. 50) with the first three themes describing ways of learning and the fourth one describing the factors influencing learning.

Findings were discussed in the fifth chapter. Inconsistencies with the guiding framework were identified and the revisited literature was discussed. As transformation theory was not adequate to describe some aspects of learning as described by participants, the information-processing model was used to describe the third theme, preserving the knowledge.

Conclusions

The findings of the study suggest several conclusions about the ways of learning of post-RN learners:

1. Post-RN learners use four ways of learning as described by Mezirow (1990, 1991, 1996, 1997) in his transformation theory. As such, they use communicative learning, instrumental learning, reflection, and critical reflection to construct their nursing knowledge, which is consistent with the descriptions of the transformation theory.
2. Memorization is a significant occurrence in learning, and learners use memory in a different way from their childhood learning. When they use reflection to understand new information, memories of prior learning bounce forward as a good support. Thus, they will be able to reflect upon and think critically on present learning. In addition, by retaining the information in the memory, they will be able to use that knowledge in the future.

3. Learning is a continuous process. Prior knowledge interacts with new information by means of communicative learning, instrumental learning, reflection, and critical reflection. The constructed knowledge is stored in the memory. The constructed, retained, and applied (or not applied) information in the memory provides the base for subsequent learning, which will automatically become past experience.

4. Post-RN learners struggle more to learn than many other adult learners because they have to maintain the balance between the family, profession, and education. Therefore, time is a scarce factor for them. The nature and the difficulties of these learners are not always fully recognized by faculty.

5. Group learning is the best learning strategy for learners to overcome most of the difficulties they face in learning. Self-confidence is crucial in order to learn.

6. Ways of learning are defined as: the ways an individual understands, assesses, validates and revises his or her own values, beliefs, assumptions, judgments, and habits of mind, in order to accept or reject new information and preserve it for future application and learning.
Implications for Nursing Education

The major concern of this study was to recognize the ways of learning described by post-RN learners. It was evident from the data that transformative learning persists with this group of nursing learners. Therefore, faculty should develop a better understanding about transformative learning as it enhances personal growth of the learner, and should be ready to accept the challenges. Identification of the existing transformative learning among the post-RN learners may support the faculty in planning appropriate learning activities.

- Faculty must identify ways to encourage reflection and critical reflection of learners. "The ever changing and increasingly complex state of knowledge development is demanding higher order thinking skills" (Jones & Brown, 1991, p. 533). Reflection can be enhanced through reflective journal writing but in this study, it was difficult task to make the learners write. Time factors might have been the reason for this. Therefore, faculty should find ways to encourage their learners in reflective journal writing, and provide the time for doing so. Designing journal writing as a learning activity may help. Journal writing also provides a different way of communication between the faculty member and the learner, in addition to allowing learners to think critically about problems before writing about them.

- It seems clear that there are boundaries between faculty members and the learner, which are great barriers to learning. More awareness about the needs of the learner is essential to develop a trusting relationship with the learner and thus, facilitate learning. This trusting relationship, in turn, encourages the learner to take more responsibility on his or her own. Tanner (1998) stated to promote learning requires an understanding of the
students’ perspectives and backgrounds, and a willingness to collaborate with them to develop meaningful learning experience. Faculty have an important role in encouraging learners to be involved in critical discourse in order to maintain transformative learning. In this regard, providing them with adequate time for discussion is of paramount importance. By providing feedback as necessary, the faculty member can facilitate learning and support the learner to develop self-confidence. Facilitating learning is always time consuming. However, if the faculty members are to fulfill a professional development role, they must assist learners to improve critically reflective skills in learning.

Group learning is a strategy, which seems to empower the learners. Some learners who are quiet and reluctant to speak in the classroom sessions may participate in small group discussions. They may share their experiences in order to work with others in focused problem solving. Therefore, faculty should encourage learners by providing guidance and assistance for learning in groups. More emphasis should be placed on helping learners to identify the value of learning from each other’s experiences. As prior experience plays a major role in learning, it is important to provide more opportunities to share and use these experiences in learning situations.

Although this study gave a better understanding of ways of learning of post-RN learners, much more remains to be explained about critical thinking used in learning. Recommended direction for future research has emerged from the study. First, research should be conducted to identify the barriers to learning and further supports needed by post-RN learners. This study has identified some of those issues, but they were not elaborated on adequately. This area should be explored more from learners’ perspectives,
to identify strategies that could be useful in facilitating learning with less stress. Another study should be conducted to examine how, despite those barriers faculty members could facilitate learning. This study should examine barriers from the teachers’ perspective.

As a final note, I would like to emphasize that post-RN learners returned to education with higher level of motivation. Their maturity provided them a great deal of experience and knowledge about different aspects of nursing and learning. Some of them are independent and others are interdependent learners. It is a responsibility of the faculty members to understand them, respect their knowledge, and encourage them to take responsibility of their learning. Failure to do so allows learners to go back into their shells, close them and leave the learning environment. It is not easy to identify the learner. The teacher has to spend more time, and needs to take a little trouble to identify the learner if she really wishes to help. This quotation from the poem “This Is a Photograph of Me” (Margaret Atwood, as cited in Rosengarten & Goldrick-Johns, 1993, p. 827) suggests the necessity of careful observation to recognize the learner.

“...I am in the lake
of the picture, just under the surface.

It is difficult to say where
precisely, or to say
how large or small I am:
the effect of water
on light is a distortion

but if you look long enough,
eventually
you will be able to see me”

(Margaret Atwood).
References


Appendix C

Focus Group Interview Guidelines: Trigger Questions

Focus group sessions started with an introduction acknowledging different learning theories that address reflection and ways of learning. The following questions was prepared to stimulate discussion:

1. Could you tell me what learning means to you?

2. Can you describe how you learn from your course materials?
   Do you try to memorize? If not, what are the other ways you use to learn.

3. Describe how you learn new information.

4. How have you approached learning in the past?
   What kinds of learning experiences have you had in the past?

5. Is this different from the way you approach learning today?

6. What did you do if you find conflicting information. How did you select one out of those?