Understanding Faculty and Non-Traditional Student Perceptions of Self-Directed Learning in a Practical Nursing Program

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Understanding Faculty and Non-Traditional Student Perceptions of Self-Directed Learning in a Practical Nursing Program
Understanding Faculty and Non-Traditional Student Perceptions of Self-Directed Learning in a Practical Nursing Program

A thesis submitted in partial fulfillment of the requirements for the degree of
Doctor of Education in Human Resource and Workforce Development

by

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ABSTRACT

This study was designed to identify and investigate nursing faculty and student perspectives of self-directed learning in a practical nursing program. It also explored the degree to which student's perceptions of self-directed learning exhibited factors consistent with that of critical thinking. This study is important because self-directed learning and its critical thinking elements are essential in providing safe, competent, effective, and efficient nursing care within practice and education. Using an explanatory case study design the practice of self-directed learning within a practical nursing program was examined through the use of: classroom observations, interviews with nursing faculty, nursing students, and document analysis. Data analysis within this study provided insight into the perceptions that exist between instructors and students and it demonstrated the differences between adult students that understand the role self-direction plays within nursing education and those that do not. It can be argued that changes in the classroom interactions between instructors and students within early courses should focus more directly on enhancing learning experiences by providing deeper instruction on core elements of learning how to learn within a classroom setting. In finding that nursing students need better designed and managed opportunities to learn how to think about and care for patients, the study concludes with recommendations for future research in the field of self-directed learning within adult education.
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DEDICATION

This research is dedicated to my parents Robert and Cathy Burch, my husband Sean Rogers, and our son, Jackson; for without their support and encouragement I would never have come this far.
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I. INTRODUCTION

Many adults spend a considerable amount of time learning new skills and acquiring information. Often this type of learning takes place at the learner’s initiative, and is commonly referred to as self-directed learning. Self-directed learning (SDL) is a core principle of andragogy, the art and science of teaching adults. SDL is characterized by the learner taking primary responsibility for planning, implementing, and even evaluating the learning effort (Hiemstra, 1994). Hiemstra also suggests that most adults, when asked, prefer a preference for assuming such responsibility when it is reasonably possible.

A. SELF-DIRECTED LEARNING

Malcolm Knowles is credited with the comprehensive analysis of adult learning and stated, “adults are self-directing when they undertake to learn something on their own” (1989, p. 91). It is one of the most researched areas within the field and is extremely important when attempting to relate to the social, cognitive, and potentially motivating dimensions of learning (Garrison, 1993). Garrison believes that one reason for its strong advocacy among adult educators is that there is an innate desire for many adults to control what to learn and how to learn it. Knowles (1975) stated that self-directed learning is a “basic human competence – the ability to learn on one’s own” (p. 17). Second, Garrison states that this desire to direct one’s own learning also drives the long-term continuance of adult learning. It is this persistence or drive that transitions an adult from that of a pedagogical learner to one that achieves life-long learning, which is at the core of adult learning theory. The juncture at which the external self-directed activities of the learner are realized and these activities mirror the internal reflective dimension of the individual, the full extent of self-directedness has been achieved (Brookfield, 1986).

The collaborative constructivist view of self-directed learning assumes that the individual takes responsibility for understanding the concept at hand, while integrating the knowledge of
others within the subject area through participatory learning environments (Garrison, 1997). Therefore, meaning and knowledge attainment are both personally and socially constructed, Garrison adds. In addition, the collaborative constructivist view of learning is that “the individual does not construct meaning in isolation from the shared world” (p. 23). In practice, the intention of linking these functions within the learning process is to reflect on the relationships between the social setting of the individual and what the learner actually does during the learning process. An integral part of this transition from dependency to greater levels of interdependence is viewing self-management and cognitive responsibility as reciprocal constructs (Dewey, 1969). Research suggests that both self-management and other meta-cognitive functions of self-directedness are linked through task control of learning activities (Corno, 1994; Pintrich & DeGroot, 1990). Dimensions of self-directed learning, according to Garrison’s model of learning outcomes are comprised of three distinct categories: self-management (control), self-monitoring (critical thinking), and motivation.

The term self-management is specific to the ability of the learner to manage learning activities outside of an educational setting (Garrison, 1997). Self-management or control also refers to the external social and behavioral activities within the learning process. An immediate benefit of self-management is the increased awareness to make learning more meaningful and to take greater responsibility in personally monitoring this process. In an educational setting, self-management is a collaborative effort between the instructor and the student. The instructor provides the support and guidance necessary to complete the task, and the student then utilizes this support to perform the task independently.

Garrison’s model also addresses “the cognitive and metacognitive processes: monitoring the repertoire of learning strategies as well as an awareness of and an ability to think about our
thinking (plan and modify thinking according the learning task/goal” (p. 24). It is the process by which the student exhibits the willingness, mental capacity, or critical thinking ability to direct one’s own education (Candy, 1991). As such, new and existing knowledge is integrated into a meaningful manner through critically analyzing subject matter to ensure that all learning goals are met. Taking responsibility for individual learning is dependent upon both the internal ability and external feedback, which can be provided by the instructor.

Motivation “reflects perceived value and anticipated success of learning goals at the time learning is initiated and mediates between context (control) and cognition (responsibility) during the learning process” (Garrison, 1997, p. 26). It can shape an individual’s focus and persistence in learning activities (Corno, 1994). There are many factors that can influence or decrease motivation, and the challenge is being able to best identify these factors that ultimately lead to goal attainment.

Self-directed learning greatly depends on factors of control, responsibility, and motivation. These elements are at the core of SDL, and learners that have difficulty exercising a mastery of these tenets may find it difficult or may not be encouraged to pursue lifelong learning. Specifically within the field of nursing, SDL is critical to staying abreast of current medical knowledge. It is imperative that nurses remain current within their professional practice, and SDL affords nurses the opportunity to assimilate large volumes of new information and to prevent a career that is unproductive and stagnant (Meyers, Stolte, Baker, Sohier, & Nashedawa, 1991; Schank, 1990).

B. **NURSING EDUCATION**

Traditional nursing education has historically utilized a teacher-directed approach to learning (French & Cross, 1999). In contrast, more progressive forms of teaching in nursing are more andragogical in nature, and rely heavily on student-centered models. Teaching perspectives
on the best way to educate nursing students has evolved, as the growing number of research advocates for a more progressive andragogical strategy. Many nursing educators feel that it is no longer acceptable to teach nursing concepts using traditional methods (Nolan & Nolan, 1997), and a number of nursing programs have placed an emphasis on adult education, including self-directed learning within their curriculums.

Many nursing educators value the self-directed approach to instruction because of its association with professional autonomy (Levett-Jones, 2005). It has been suggested that this approach to nursing increases the nurse’s confidence in his or her own ability, but also encourages the capacity to learn in ‘novel’ situations (McMillan & Dwyer, 1990). Nurses operate in a complex health care environment where social, technological and medical changes present daily challenges, and nurse educators play a vital role in ensuring that students can adapt and respond to these challenges (Majumdar 1999). SDL opportunities are an important vehicle in developing independent learning skills, a sense of accountability, responsibility and assertiveness, all of which, according to Slevin and Lavery (1991) are essential in building a successful nursing career.

The transition from student to nursing professional requires not only clinical competence, but also a significant amount of critical thinking skill to apply theoretical nursing principles to current practice (Schank, 1990). Although both nursing students and faculty in many programs support this philosophy, the ability to transfer both knowledge and skill from one situation to another requires a substantial amount of independent critical thought that may be challenging for some students (Lunyk-Child, 2001). There is a growing amount of evidence to support the enhanced learning experiences of many nursing students through the use of more self-directed learning principles; however, a universal application may not support students in every learning
environment. Oermann (1997) suggested that critical thinking as it relates to self-directed learning “is not developed through one lecture, nor one clinical experience, instead, skill in thinking develops over time through varied experiences” (p.25). This may also be applicable to those students who have not previously been introduced to a self-directed learning environment.

**Faculty perspectives of self-directed learning.** Faculty behaviors greatly influence the behaviors of the students, subsequently affecting the learning outcome (Gorham & Millette, 1997). Behavior of faculty within an educational setting can be heavily influenced by perceptions (Gorham & Millette, 1997). Literature suggests that faculty members often derive their perceptions of student ability on how well the student accomplishes tasks required for successful course completion. The perception of successful course completion can include; (1) completion of course assignments, (2) the student’s success on these graded assignments, and (3) the match between perceived behaviors of motivated students and how students actually behave in class (e.g. attending class, completing homework assignments). Faculty members are more likely to perceive a student as being less motivated, if he or she is not successful in completing coursework. In addition, Gorham and Millette suggest that a student can be perceived as less motivated if the faculty member feels that the student lacks the prerequisite skills necessary to complete assigned work. Other factors that contribute to faculty perceptions can be attributed to the grades that students possess before entering in the class.

A recent study on faculty perceptions of self-direction found that among faculty within a nursing program similar words were used to define SDL, including “choice, individualization of learning needs, expressions of creativity, and identification of strategies unique to each person’s individual learning style” (Lunyk-Child et al. 2001, p. 118). In addition, other questions of inadequacies emerged from faculty such as, “Am I doing it right?” One faculty member
exhibited apprehensions toward the instruction of SDL in fear that she did not measure up to the standard in delivery of SDL course objectives by stating, “I may have four years’ experience, but I might be doing all the wrong things”. Yet another faculty member admitted that problem-based learning within SDL was extremely confusing, and she was unsure about the quality of her teaching in an SDL program (Lunyk-Child et al, 2001). The theme of Searching for Confirmation was apparent after interviewing various faculty and doubts emerged about their inability to effectively implement SDL activities within the classroom was evident. These faculty themes revealed that faculty was able to define the term, but there existed an uncertainty regarding the role they played in a student-centered curriculum. Their perception of SDL was plagued with the uncertainty of how to deliver SDL programming that embraced both the application of critical care, and maintained consistency with program standards.

**Student perspectives of self-directed learning.** The self is generally considered to mature and develop through interpretation and integration of learned experiences (Loevinger, 1976). An individual's perception of reality is derived through these varied experiences, and is considered to be realized when an adult can identify his or her own goals, learning resources, methods of learning, and be able to evaluate a learning activity at its conclusion (Brookfield 1986; Jarvis, 1987). The responsibility for one’s actions, according to Knowles (1980) concluded that learning for adults is optimal when they are enabled to be self-directed. However, both Jarvis and Brookfield contest that learning is contextual, and self-direction can mean something very different to different people.

Lunyk-Child et al. (2001) in a recent qualitative study of nursing students within a four-year undergraduate nursing program determined that student perceptions of SDL were derived through the way in which students defined the term. When asked, "What does SDL mean to
you?" many students understood it to mean something different. For example, one student stated that "self-directed learning is great...we learn for ourselves, but you can't self-direct yourself in everything you do in a university." While another student presented a more defined take on SDL by saying "it means you're responsible for your own learning and you learn at your own pace and you set your own standard...but you're never alone, there's always a [Professor] you can go to." And yet, a third student when answering the same question described SDL completely different from the other two by stating, "it's acknowledging that people learn differently and its allowing us to do so." Evidence from this particular study suggests that SDL can take on a range of different meanings for many students, even those from within the same learning environment.

In another study, Walsh (2004) suggests that students' interpretation of SDL depends greatly on their learning style and other earlier school experiences. A dependent learning style developed during early childhood educational environments may contribute to a student's perception of how SDL should be initiated and performed in later educational experiences. Students having had these types of early learning experiences enter each new learning experience with dependent behaviors. They are partially conditioned to playing a dependent role, while expecting faculty to provide varying levels of direction.

Taylor (1997) suggests that with each new SDL experience students increasingly gain confidence and learning skills. SDL therefore, according to Hewitt-Taylor (2001) represents the fundamental differences among many students. Hewitt-Taylor describes it as the definitions, views concerning, and experiences of students. Its use and implementation within nursing education, therefore, merits further investigation.

C. STATEMENT OF THE PROBLEM

In a constantly changing health care environment many argue that SDL is a critical component within the nursing profession (Fowler, 1998). Reasoning and judgment, an element
of critical thinking, and a principle derived from SDL (Brookfield, 1987), are used by nurses to provide a safe, high-quality environment of care for their patients (Benner, Hughes, & Sutphen, 2008). Beckie, Lowry, & Barnett (2001) , for example state that “increasing complexities of the health care environment and the rapid changes in the delivery of health care demand that nurses master complex information, effectively use technology, and skillfully coordinate a variety of health care experiences for their patients” (p. 18). As a result nursing educational programs need to prepare students to meet the demands of a rapidly changing environment, and to effectively provide the best patient care possible. Currently, it is unknown to the degree how varying interpretations of SDL and critical thinking concepts affect the educational development of students within nursing programs.

D. PURPOSE OF THE STUDY

The purpose of this study is to explore the various meanings, interpretations, and self-perceived SDL experiences of both faculty and students from a nursing program. Specifically, the study will (1) explore faculty and student perceptions and interpretations of SDL within the nursing curriculum, and (2) understand the critical thinking factors that facilitate, motivate, or impede SDL during course instruction.

Context of the study. In 1992, a mandate by the National League of Nursing (NLN) stated that nursing programs must measure critical thinking as an outcome criterion for accreditation. Then in 1993, The Joint Commission, formerly the Joint Commission on Accreditation of Healthcare Organizations, announced publicly that there was an urgent need for nurses to be proactive in identifying ways to improve patient care. Since this directive, research on critical thinking has become an increasingly important component within nursing education (Alfaro-LeFevre, 1995).
The site of this study is an urban practical nursing program in New Jersey. The cumulative graduation rate has remained between 38% and 41% since 2006. Although this exceeds the overall College graduation rate, it is significantly lower than other comparable programs at other institutions within the area (Self-Study, 2011). In addition, the Self-Study also indicated that the average grade point average (GPA) of nursing graduates from this program was a 2.5, which is the minimum required standard for graduation by the accreditation board and the College.

These institutional and accreditation board requirements are the metrics used to evaluate program effectiveness in the training of practical nurses within this program. During the accreditation review process at this institution, the director of nursing and faculty were charged with identifying how their methods of teaching basic nursing concepts adhered to these standards. As the health grant coordinator at this institution, overseeing the federal monetary disbursements and academic progress of students in this program, I witnessed firsthand the behaviors of faculty during this review process. I additionally gained insight into the perceptions of faculty regarding how these concepts were and should be integrated into the curriculum.

During many of these conversations with faculty they expressed their perceptions of students within the program. Many stated that the students were not self-directed and required unnecessary assistance in completing rudimentary tasks. There was a general sense that the students’ possessed a sense of entitlement, or an expectation that faculty should provide this level of attention. As such, faculty entered the teaching environment predisposed to thoughts of student inadequacies and student resentment toward learning. Faculty also admitted to lowering the teaching standards to the absolute minimum to maintain graduation rates, and the long-term sustainability of the nursing program.
The NLN, the accrediting organization of this institution, requires that elements of critical thinking be present within the program’s curriculum. These standards must be met to maintain state and regional program accreditation. The challenges expressed by faculty in providing this level of instruction based on a number of conversations with faculty, is in direct conflict with their accrediting obligations. The question to consider at this point is whether faculty perceptions of students’ inability to direct their own learning impact the way in which the overall curriculum is designed? Are the students graduating from this program equipped with the necessary critical thinking abilities to perform as a licensed practical nursing (LPN) in the field?

As the health grant administrator, I also interact with students within the program to ensure that they are academically progressing within the program. Students within this program have openly expressed to me their feelings of apprehension and self-doubt in their ability to direct their own learning and succeed in the program. The causes of these feelings of doubt are unknown, but assumptions can be made that many fear they are not academically prepared or that their perception of what is required for a nursing program differs from that of reality. If their last experience was in high school, then perhaps the way in which they interacted with their teacher is the way in which they assume their interaction should be. Their expectation would then be based on a prior learning experience, and therefore faculty should direct their learning.

It is not completely understood why faculty and students possess these preconceived notions of self-direction. It is this disconnect that has sparked my interest in the topic, and is the rationale for this study. Differences clearly exist between the two groups and understanding this dynamic of self-directed perceptions will serve to provide an easier transition for new students into this program of study. It may also potentially help faculty develop curriculum that will foster independence, and lifelong learning.

E. SIGNIFICANCE OF THE STUDY
Nurses are the single greatest component of hospital staff, with 3.1 million nurses being employed nationally either part-time or full-time in the United States (U.S. Department of Health and Human Services, 2010). In 2004, despite the increase of nurses since 2001, a shortage existed in many medical facilities across the nation. More than a million additional nurses will be needed to assist with the healthcare needs of Americans (Seila, Renee, & Keller, 2012). The overall safe and effective healthcare of Americans is in jeopardy, if an adequate number of nurses cannot be trained within the next 10-15 years.

Enrollment in many nursing programs is not growing fast enough to meet the projected demand for nurses over the next 10 years. In 2004, the U. S. Department of Health and Human Services stated there was a 14.1% increase in enrollment in nursing programs from the previous year. However, it will need to increase to at least 40% to meet the demand. According to the Department of Labor, nursing is one of the occupations that will have the largest potential for growth over the next decade. (Occupational Outlook Handbook, 2006-2007). To meet this growing demand, county, state, and federally funded programs have encouraged the enrollment of individuals that are unemployed, underemployed, and those seeking a career change to train in a field that is experiencing significant growth (Health Professions Opportunity Grant, 2012). This focus has increased the number of non-traditional students in this nursing program, and other community colleges in the region. The average age of a first-time nursing student is increasing, and with it the way in which educational programs have been developed to train nursing students may no longer meet their special needs (Seila, Renee, & Keller, 2012).

The demand for nurses is increasing nationally and the study site is uniquely positioned to provide vocational training to a predominantly non-traditional student population. This student population is not a monolithic group, but rather one that consists of men and women, racial and
ethnic minorities, single parents, and retired workers (Self-Study, 2011). Through my interactions with them, I have found that this student population has difficulty adjusting back into an academic setting, interacting with their instructors, and using modern instructional tools within the classroom. As such, educational programming should be tailored to meet the needs of a changing student demographic. This research will aid in the development of curriculum that fosters independent learning through a richer understanding of faculty and student perceptions of self-direction.

F. THEORETICAL FRAMEWORK

The overarching theme within self-directed learning has focused on the external management of the learning process. In this regard, the learner exercises a great deal of autonomy in deciding what is important to learn and how to learn it, without regard to entering competencies and contextual contingencies. Candy (1991) argued that the concentration on autonomy has restricted the conceptualization of SDL, and has created disparities when implemented within educational environments. Garrison (1997) believed that the self-directed learning process consisted of more than just learning itself. It also includes the cognitive and motivational dimensions of learning that are sometimes lost within the adult education literature on self-direction. To address these concerns Garrison created a model which consists of the following three foundational concepts: (1) self-management, (2) self-monitoring, and (3) motivation. Garrison’s model will be the theoretical framework used within this study to describe the SDL process of adults within this nursing program. Noticeably absent from the model is the element of critical thinking, however, Garrison includes it within his self-monitoring concept.

Self-management is concerned with the controlling of individual tasks, and it specifically relates to the management of learning activities (Garrison, 1997). An immediate benefit of self-management is the increased awareness to make learning more meaningful and to take greater
responsibility in personally monitoring this process. However, the difficulty within some populations in developing this task oriented ability is that is very difficult for learners to accept ownership for their learning if they have little control, or input into the learning process.

Critical thinking is at the core of self-directed learning. The level of self-direction depends greatly on the learner’s proficiency in these areas (Garrison, 1997). Self-monitoring is the cognitive aspect of self-direction which includes the element of critical thinking. It is the process by which the student exhibits both the willingness and mental capacity to direct one’s own education (Candy, 1991). Dewey (1933) considered critical thinking as both an internal and external process. He believed that knowledge is developed through the interchange between these two abstracts and it is constantly evolving, as an individual matures. The nursing process of critical thinking, according to Yura and Walsh (1983) involves problem-based learning or assessment of the given problem, collection of data to identify what the nature of the problem is, selection of alternative solutions, implementing a plan of care, evaluation of that plan, and finally resolving the identified problem.

Motivation is the involvement within an activity that is critically important to understanding the link between what leads an individual to becoming more self-directed. The degree to which an adult possesses the motivation to learn is a direct result of a "problem in life or its payoff" (Knowles et al., 1998, p. 149). Motivation to learn is determined by the probability of attaining a goal, and the perceived value associated with attainment of the goal (Lewin, 1935; Atkinson, 1964; Rotter, 1966). If an individual is interested in a particular activity, engagement is high, and the motivation to persist increases. Smith (2001) found that the degree, to which adults are motivated to a particular learning activity, is directly influenced by the ability of that adult to connect their personal learning to that of their work. However, much of what motivates
an adult, as stated by Knowles (1984) "...are internal including self-esteem, recognition, better quality of life, greater self-confidence, and self-actualization" (p. 12).

Self-direction is a necessary process for achieving educational outcomes. SDL enhances cognitive awareness and generates opportunities where adult learners, “learn how to learn” (Garrison, 1997, p. 31). As such, Garrison’s self-directed learning model provides the initial theoretical direction for this research.

*Figure 1: Dimensions of Self-Directed Learning (Garrison, 1997)*

**Research questions.** To understand faculty and student perceptions of self-direction, the following research questions will guide this study:

Research Question 1

A. How does faculty define self-directed learning?

B. How do students define self-directed learning?

Research Question 2

A. What behaviors does the nursing faculty perceive demonstrate self-directed learning?

B. What behaviors do nursing students perceive demonstrate self-directed learning?
Research Question 3
A. What are faculty expectations regarding student self-directedness?
B. What are student expectations regarding their self-directedness?

Research Question 4
A. What does faculty perceive to be the relationship between student self-directedness and the profession?
B. What do students perceive to be the relationship between self-directedness and the nursing profession?

Research Question 5
How does faculty develop self-directed learning in nursing students?

Research Question 6
What factors inhibit student self-directedness?

**Definition of key terms.** The following is a list of operational definitions used in this study:

**Critical thinking** – The National League for Nursing Accreditation Commission (NLNAC) defined critical thinking as: the deliberate nonlinear process of collecting, interpreting, analyzing, drawing conclusions about, presenting, and evaluating information that is both factually and belief based. This is demonstrated in nursing by clinical judgment, which includes ethical, diagnostic, and therapeutic dimensions and research (p.8).

**Practical nurse (PN)** – is the basic level of nursing within the field (Kurzen, 2005).

**Licensed practical nursing (LPN)** – refers to a licensed nurse who cares for "people who are sick, injured, convalescent, or disabled under the direction of registered nurses and physicians (Occupational Outlook Handbook, 2011).
Self-directed learning (SDL) - is characterized by the learner taking primary responsibility for planning, implementing, and even evaluating the learning effort (Hiemstra, 1994).

**Delimitations.** Knowles (1975) introduced the concept of self-directed learning as the most important andragogical assumption (Brookfield, 1986; Cullen, 1999). The definition of an adult, according to Pratt (1988), is one that has responsibility for one’s own life, and is therefore self-directed. Merriam and Caffarella (1991) stated self-directed research has become a “salient strand of research” (p. 207). Additionally, it has also produced “some of the most important developments in the area of andragogical study” (Merriam & Brockett, 1997, p. 137). From this perspective, self-directed learning was selected for this study due to its strategic place within the understanding of the development transition from child to adult.

**G. ROLE OF THE RESEARCHER**

**Assumptions of the researcher.** As researcher, I collect, interpret, and report study participants’ perceptions regarding SDL in the nursing program. As the health grant coordinator for this program, my administrative role, allowed me to witness first-hand the opinions regarding self-direction from faculty, staff, and students. Conversations, personal observation, and review of department documentation coupled with my personal perspective have allowed me to gain a perspective of the current phenomenon during my time at the institution.

**Ethical issues.** All required ethical research protocols will be followed to gain access to both faculty and students within the practical nursing program at research site. Students are an especially vulnerable population, according to Burns and Grove (1993). As such, informed consent from all participants involved in the study will be obtained, and consent to participate can be withdrawn at any time without penalty. Individuals will be assured of confidentiality, and data will be coded with numbers and not names of any individuals.
Permission to collect data for this study will be obtained from the Director of Practical Nursing and Allied Health within the College. This authorization will only be obtained after full approval has been received from both the participating community college and the University of Arkansas Institutional Review Boards.
II. REVIEW OF THE LITERATURE

The purpose of chapter two is to discuss the historical and theoretical foundations of self-directed learning (SDL), the research findings, and its implications to the field of adult education. By expanding the concepts that were framed within the introduction, the chapter discusses andragogy and its contributions to adult education, while providing an in-depth explanation of SDL. In addition, the chapter attempts to explain the overall goals of nursing education, while describing how those guiding principles influence the curriculum at the local community college level.

A. SELF-DIRECTED LEARNING

In 1916, John Dewey presented an idea that (SDL) was present in all people at birth, and that it provided every individual an unlimited potential for growth and development. He also believed that education was a catalyst for this growth and educators played a critical role in guiding individuals. He did, however, caution educators not to interfere or attempt to control the process of learning. His belief which is aligned with other humanistic philosophical views of learning suggests that the focus of learning should be on individual self-development, with the expectation that the learner will be primarily responsible for his or her own learning. Adult education literature on self-direction recommends that learning experiences of adults involve participation through collaborative efforts by the instructor and student to develop the capacity to manage one's learning. This dual responsibility was in sharp contrast to earlier pedagogical models of instruction, where the responsibility of what was to be learned was solely in the hands of the instructor (Knowles, 1980).

Houle (1961) is credited with igniting the continued interest of researchers in investigating the extent to which adults engage in self-direction. In the mid-1970's Tough and Knowles who were students of Houle emerged themselves into the adult education literature and
coined the term 'self-directed learning' (Brockett & Heimstra, 1991). Tough's (1971) seminal work demonstrated that adults engaged in self-learning projects based on the benefits received by participating in these projects. Knowles subsequently based his andragogical model on this assumption that adults are self-directing (1975, 1980). Since then SDL has become more prominent within adult learning and the concept has undergone very close scrutiny over the last 20 years with three primary principles emerging: 1) SDL is a process that is self-initiated and focuses on the ability of an individual to manage his or her own learning; 2) SDL is a characteristic of learning; and 3) SDL is a form of organizing learning in some formal settings that allows for greater task control and self-management by the learner; and 4) SDL can be influenced by the learner’s social and educational environment (Brockett & Hiemstra, 1991; Caffarella & O'Donnell, 1989; Caffarella, 1993; Candy, 1991).

Guglielmino contributed to this theoretical concept by suggesting that adults were more self-directed in certain learning environments as opposed to others (1977). She believed that personal characteristics of the individual "ultimately determine whether self-directed learning will take place in a given learning situation...." (p.34). These personal characteristics could be the attitude, values, or cultural beliefs of the individual. According to Guglielmino, “self-direction in learning can occur in a wide variety of situations, ranging from a teacher-directed classroom to self-planned and self-conducted learning projects” (1977, p. 34).

Brookfield (1986) suggested that self-directed learning is a cognitive process that is based on reflection and behavioral action. Dependent learners or those that are not self-directed are cognizant of circumstance, extrinsically motivated, influenced by positive reinforcement, understand the consequences their learning has on others, and view their learning holistically (Witkin, 1949, 1950). Self-directed learners in contrast are intrinsically motivated,
individualistic, and maintain a strong self-identity. The independent self-directed learner is viewed as being the most appropriate learning style for adults.

Brockett and Hiemstra (1991) view self-directed learning as an instructional strategy as well as a personality characteristic. Their view of self-direction is the “process in which a learner assumes primary responsibility for planning, implementing, and evaluating the learning process” (p. 24). Self-directed learning according to Brockett and Hiemstra is based on the learner’s desire or preference for self-direction. The self-directed learning process includes external factors from the instructional environment combined within the internal characteristics of the learner.

Candy’s (1991) definition of self-direction is based on the premise that (1) the interaction is between the individual and his or her environment, (2) knowledge is socially constructed, (3) learning shifts depending on how the qualitative phenomena is viewed, and (4) individuals engage in complex, interdependent relationships with their surroundings. Candy’s theoretical constructs illustrated self-direction as an outcome of education.

SDL is widely regarded not only has important, but also essential to continuous lifelong learning (Candy, 1991). When an adult recognizes that learning is necessary or desired, then the adult will need to determine the following: (1) what is to be learned, (2) where relevant information exists, (3) which sources are most useful, and (4) how or where to obtain the instruction (Knowles, 1984).

**Process of learning.** Most of the literature to date has focused on what contributes to adult learning through the exposure to external stimulants, and how the manipulation of these stimulants can either improve or hinder the learning of adults. The process of learning has minimally been addressed and according to Sinnott (1994), it is the underlying cause of differences in the self-directed ability for many adults. It encompasses more than just maturation
alone, and it is “a process of qualitative change in attitudes, values, and understandings that adults experience as a result of ongoing transactions with the social environment, occurring over time but not strictly as a result of time” (Taylor, Marienau, & Fiddler, 2000, p. 10). Tough's original work signified that a great deal of adults learn outside the formal environment of the classroom (Brookfield, 1985; Caffarella & O'Donnell, 1987). What makes this type of learning different from the learning that occurs in formal settings is that the learner chooses to assume primary responsibility for planning, following through, and assessing his or her own learning experiences.

Personal responsibility is at the core of self-directed learning. It is this willingness to take control of one's own learning that determines the potential for self-direction (Candy, 1991). Adult learners possess a varying degree of willingness to accept personal responsibility for their learning. Assuming this primary responsibility does not imply that learning is to take place in isolation. Adult learners will often seek out assistance in the form of human or other document-based resources. If personal responsibility within adult learning is a characteristic of self-direction, then educators can facilitate the increasing responsibility of learning of their students.

The process of self-directed learning can be conceptualized in a series of interrelated events or activities (Brockett & Heimstra, 1991). The descriptions of these activities can vary, however, they typically mirror the process of SDL as described by Knowles (1975, p. 18) as, “a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes.” This description of self-directed learning was taken from its use within the professional education literature (Barrows & Tamblyn, 1980; Cavanaugh, 1993).
Learner characteristics. The characteristics of self-directedness are extremely important to the field of adult education, however not much attention has been placed on the learning process itself as it relates to the social, cognitive, and potentially motivating dimensions of learning (Garrison, 1997). It is one of the more researched theoretical constructs of andragogy, and suggests that adults need to direct their own learning (Caffarella, 1993). It is the central assumption underlying this particular learner characteristic, and focuses on the notion that adults possess a strong innate desire to control what to learn and how they are to learn it (Chene, 1983; Kasworm, 1992; Garrison, 1997). Knowles (1975) stated that self-directed learning is a “basic human competence – the ability to learn on one’s own” (p. 17). Second, Garrison states that this desire to direct one’s own learning also drives the long-term continuance of adult learning. It is this persistence or drive that transitions an adult from that of a pedagogical learner to one that achieves life-long learning, which is at the core of adult learning theory. The juncture at which the external self-directed activities of the learner are realized and these activities mirror the internal reflective dimension of the individual, the full extent of self-directedness has been achieved (Brookfield, 1986).

Brookfield (1986) suggested that SDL is a cognitive process that is based on being able to make choices, rational reflection, having a strong sense of values and beliefs, and being able to accept ambiguity and diversity (Brockett & Heimstra, 1991). Dependent learners or those that are not self-directed are cognizant of circumstance, extrinsically motivated, influenced by positive reinforcement, understand the consequences their learning has on others, and view their learning holistically (Witkin, 1949, 1950). Self-directed learners in contrast are intrinsically motivated, individualistic, and maintain a strong self-identity. These characteristics provide the
foundation for carrying out the necessary activities associated with self-directed and adult learning theory.

Dewey, Knowles (1916; 1975) and others suggested that all adults are self-directed, but this claim is disputed by Darbyshire (1993), who suggests that some people are more self-directed than others. Adults are willing to assume responsibility for their own learning; however, they will have different aptitudes for certain kinds of learning (Russell 1990). Adults as they age naturally experience greater levels of independence than younger individuals (Blondy, 2007). Autonomous learners on occasion, who desire or prefer to direct their own learning may choose not to exhibit or pursue self-direction (Candy, 1991; Knowles, 1970). Familiarity with content, possession of the necessary technical skills, sense of personal competence, and the context to which the learning takes place can influence the autonomy of the learner (Pratt, 1988). The personality characteristics of the learner or other internal factors like motivation can predispose that individual toward assuming primary responsibility of learning or the lack thereof.

Azman (2007) conducted a study of students within a local university and her research revealed that self-directedness was not correlated with age, but rather with work experiences. Knowles describes the maturation from dependency increases the desire for self-directed learning (1984). While this may be true in some instances, the overall desire for self-directedness has other factors that influence outcomes. These types of learners are also influenced by their society and culture, which is a characteristic that is often not discussed within the self-directed literature (Merriam, 2001; Rogers, 2002). Experience is highly influenced by sociocultural and other historical factors, according to Ahmad and Majid (2010). These values are standards that shape how learners interpret educational experiences. Brookfield (1995) also
stated that other variables like ethnicity for instance, provide adult learners with experiences from which knowledge and other motivational factors are derived.

**Facilitation of learning.** Knowles understood that adults need to make their own decisions, and are capable of taking ownership of their responsibilities. An andragogical environment conducive to learning fosters input and communication of ideas between the learner and instructor. Within this type of environment Brookfield (1985) states that the role of the instructor is not merely to inform but to also be a resource for the facilitation of learning. Tough (1967, 1979) emphasizes the importance of external resources being made available to adults throughout the learning experience. Research suggests that facilitation of learning through local leisure groups, professional societies, and other social networks provide adults with the context to which many SDL activities are derived (Brookfield, 1981). It is through these social contexts that adults learn to become more self-directed, but also to apply these learned concepts to other learning environments. Other environments in which self-direction can occur ranges from “…teacher-directed classrooms to self-planned and self-conducted learning projects” (Guglielmino, 1977, p. 34).

Knowles (1975) and Tough (1979) agreed that the facilitation of self-direction should be incorporated into organized learning. Instructional facilitation provides learners with the opportunity to consider what it is they want or need to learn, how they should learn it, and what criteria should be used to evaluate the satisfactory completion of the learning activity. The other forms of facilitation are differentiated on the basis of who controls the activities within the process (Brookfield, 1984). The first is designed by the learner and is a form of SDL in which the majority of the activities are controlled by the learner. The second form of learning reflects a situation where the activities are controlled by someone other than the learner. Self-direction in
learning is a product of both the external characteristics of the instructional process and the internal characteristics of the learner, where the autonomy of the learner dictates the overall learning experience (Brockett & Heimstra, 1991).

Candy’s (1991) definition of self-direction is based on the premise that (1) the interaction is between the individual and his or her environment, (2) knowledge is socially constructed, and (3) individuals engage in complex, interdependent relationships with their surroundings. Candy’s theoretical constructs illustrated self-direction as an outcome of education. Self-direction as an outcome can then be viewed within two distinctive categories: autonomy and self-management. Autonomy is the adult learners’ independence or freedom of personal characteristics. Self-management is “the willingness and capacity to conduct one’s own education” (Candy, 1991, p. 23).

The collaborative constructivist view of SDL assumes that the individual takes responsibility for understanding the concept at hand, while integrating the knowledge of others within the subject area through participatory learning environments (Garrison, 1997). Therefore, meaning and knowledge attainment are both personal and socially constructed, Garrison adds. In addition, the collaborative constructivist view of learning is that “the individual does not construct meaning in isolation from the shared world” (p. 23). In practice, the intention of linking these functions within the learning process is to reflect on the relationships between the social setting of the individual and what the learner actually does during the learning process.

**Self-management in learning.** Self-management is concerned with the controlling of individual tasks, and it specifically relates to the management of learning activities (Garrison, 1997). An immediate benefit of self-management is the increased awareness to make learning more meaningful and to take greater responsibility in personally monitoring this process.
However, the difficulty within some populations in developing this task oriented ability is that it is very difficult for learners to accept ownership for their learning if they have little control, or input into the learning process. Some learners are able to rise above this challenge through collaborative learning environments where goals and activities can be manipulated in such a way as to construct meaningful knowledge of the content area (Prawat, 1992; Resnick, 1992). However, Garrison suggests that learners should be provided choices of how they would like to proceed with learning activities. For example, “material resources should be available, approaches suggested, flexible pacing accommodated, and questioning and feedback provided when needed” (p. 22). In this manner, self-management of the learning process energizes the learner and encourages lifelong learning.

Control of the management of learning depends greatly upon a variety of variables. However, it is primarily determined by balancing three main factors which Garrison (1997) states are:

(1) proficiency – the ability and skill of the facilitator and the learners,

(2) Resources – a range of support and assistance that is available to the learner within an educational setting, and

(3) Interdependence – the institutional, subject norms and standards, combined with the learner’s own integrity and choice.

Sustained collaborative effort among these factors will determine the degree to which an adult learner is self-managed, according to Garrison (1997). A self-managed adult learner does not necessarily possess complete learner independence, however, a balance between what the learner believes to be worthwhile knowledge and freedom to participate in activities by choice encourages independent thought and self-management. An adult learner that has achieved full
capability of being self-directed has achieved simple task control and can construct meaning through this means within complex moved through a multi-staged process to which simple task control, critical thinking, and construct meaning in complex content areas has been achieved (Garrison, 1997). In theory, an adult must be able to cognitively understand, and be able to take responsibility for their learning through self-management. According to Caffarella, “From this perspective, the focus of learning is on the individual and self-development, with learners expected to assume primary responsibility for their own learning.

**Self-monitoring in learning.** Self–monitoring is the cognitive aspect of self-direction, according to Garrison (1997). It addresses “the cognitive and metacognitive processes: monitoring the repertoire of learning strategies as well as an awareness of and an ability to think about our thinking (plan and modify thinking according the learning task/goal)” (p. 24). It is the process by which the student exhibits both the willingness and mental capacity to direct one’s own education (Candy, 1991). The learner therefore, constructs personal meaning by integrating new ideas and abstract concepts with previously learned information. The responsibility of constructing new knowledge is the commitment by the learner to demonstrate a willingness to learn new information; however, this commitment is not independent of contextual influences by the instructor or environment. Taking responsibility for individual learning is dependent upon both the internal ability and external feedback, which can be provided by the instructor.

Cognitive ability and critical thinking is at the core of self-directed learning. The level of self-direction depends greatly on the learner’s proficiency in these areas (Garrison, 1997). Metacognition is associated specifically with reflective thinking and critical analysis. Reflection encourages the learner to recall experiences in order to “develop learners who are capable of monitoring themselves in a variety of situations” (Candy, Harri-Augstein, & Thomas, 1985, p.
115). For example, “learners must understand whether the requirements of the task are to assess the state of current knowledge, search for additional information, explore new conceptualizations, or confirm new meaning through discourse or action” (Garrison, 1997, p. 25). To assume cognitive accountability is to monitor one’s learning process, assess outcomes, and develop and improve strategies to accomplish intended learning outcomes.

**Self-directed learning and motivation.** Within SDL research, motivation is the involvement within an activity that is critically important to understanding the link between what leads an individual to becoming more self-directed. Motivation is one of the most significant psychological concepts within higher education, according to Vallerand et al. (1992). In the past, nursing programs typically were not concerned with student motivation because it was implied that such a ‘vocation’ only attracted self-motivated students (Regan, 2003). However, today with the influx of open-enrollment within many nursing programs, it is imperative to maintain student motivation within the classroom, which most often remains the responsibility of the instructor.

The degree to which an adult possesses the motivation to learn is a direct result of a "problem in life or its payoff" (Knowles et al., 1998, p. 149). Motivation to learn is determined by the probability of attaining a goal, and the perceived value associated with attainment of the goal (Lewin, 1935; Atkinson, 1964; Rotter, 1966). If an individual is interested in a particular activity, engagement is high, and the motivation to persist increases.

Smith (2001) found that the degree, to which adults are motivated to a particular learning activity, is directly influenced by the ability of that adult to connect their personal learning to that of their work. However, much of what motivates an adult, as stated by Knowles (1984) "...are internal including self-esteem, recognition, better quality of life, greater self-confidence, and self-actualization" (p. 12). Learning theorists suggest that positive feelings of accomplishment
resulting from acceptable performances increase the desire to repeat certain behaviors (Skinner, 1953). Additionally, individuals, especially students, are motivated if they are focused on mastering a skill, as opposed to competing with other students for a better grade (Nicholls, 1984). Motivation, therefore, as a theoretical concept, is defined as the “study of why people think and behave as they do” (Graham & Weiner, 1996, p. 63).

**Faculty perspectives on motivation.** Behavior of faculty within an educational setting can be heavily influenced by perceptions (Gorham & Millette, 1997). Literature suggests that faculty members often attribute their perceptions of student ability on how well the student accomplishes tasks required for successful course completion. The perception of successful course completion can include: (1) completion of course assignments, (2) the student’s success on these graded assignments, and (3) the match between perceived behaviors of motivated students and how students actually behave in class (e.g. attending class, completing homework assignments), and (4) the faculty members communication of high expectations of that success.

Faculty members are more likely to attribute demotivation to performance-related factors such as: students’ lack of success on graded assignments, lack of prerequisite skills or knowledge that may contribute to that lack of success, and the students’ workload both within the course and outside of the classroom. Other factors that contribute to faculty perceptions can be attributed to the grades that students possess before entering in the class.

Faculty will additionally perceive higher motivation in students that possess a positive personality orientation or trait (Gorham & Millette, 1997). These positive traits can lead students to actively participate in discussions or during other instructional activities. Conversely, faculty responds negatively to students that are considered to be passive (Deci & Ryan, 1985). These
students are perceived as lacking internal motivation and as a result can make an instructor feel incompetent or unliked by that student.

Faculty additionally has a tendency to blame lack of motivation among their students to factors beyond their control. Comments such as, "students lose motivation because there is a lot of work in this course," "students have a heavy workload across their other classes and can't handle the very time consuming assignments in this course," "there is a lot of busy work," or "assignments are very difficult and students do not do well on them" were frequent responses from faculty regarding the lack of motivation within their course, according to a study conducted by Gorham and Millette (2009). These responses suggest that many faculty do not believe that it is their personal responsibility to motivate students.

Students' inclination to attribute course-related motivation to factors they bring to the classroom reflects an accumulation of experiences with faculty that do not use motivational techniques, or to those faculty that do not possess motivational behaviors (Gorham & Millette, 2009). Students can identify these factors easily within a course and those that list more teacher related behaviors as sources of motivation earn higher grades on course-specific measures of motivation (Christophel & Gorham, 1995).

**Student perspectives on motivation.** Faculty behaviors greatly influence the behaviors of the students, subsequently affecting the learning outcome (Gorham & Millette, 1997). An equally important theoretical concept to understand is that student intrinsic motivation affects learning (Brophy, 1983; Keller 1979; Wlodkowski, 1978). These combined perspectives allow researchers to further understand how faculty behavior and student learning are interrelated, and the impact this combination has on student motivation.
Gorham and Christophel (1992) found during an analysis of students' perceptions on motivation that most of their motivation could be attributed to factors they brought with them to the course (factors outside of the control of the instructor); their previous grades or grade point average, and their desire to please others namely their parents. Factors that frequently attributed to their de-motivation were a result of teacher initiated behaviors. In particular, these behaviors were poor instructor presentation skills, lack of lecture enthusiasm, and overall choice of instructor organization and course material.

B. CRITICAL THINKING

McPeck (1981) stated that critical thinking involved both a propensity and an ability to learn, and that teaching someone to be a critical thinker involved the use of both cognitive and affective domains of reasoning. As a concept, Dewey (1916) originally proposed that critical thinking involved a suspension of judgment and constructive skepticism. Ennis (1962) from the work of Dewey later suggested that within education students should be assisted in the engagement of thinking that is reflective and reasonable. In recent years critical thinking has also been described as an understanding of making inferences and generalizations and the skills necessary to consider logic and the accuracy of evidence that is received (Boostrum, 1994).

According to Brookfield (1987), critical thinking for learners is the dynamic interplay of four main components; (1) identifying and challenging assumptions, (2) promoting the importance of context, (3) imagining and exploring alternatives, and (4) reflective skepticism. Identifying and challenging assumptions helps individuals to identify and challenge previously known conventions and is considered to be a primary element of the skill. Critical thinkers are mindful of how assumptions can shape their perception of their environment. These individuals challenge ideas that are not well constructed and logical. The second, promotion of context, emphasizes the importance of circumstance before passing judgment within a given situation.
Critical thinkers attempt to understand the problem within context of how that information was received before they can truly make an informed decision. The third component is the ability to visualize and explore alternatives within the thought process. Exploring alternatives is a skill set utilized by critical thinkers to laterally develop solutions to given problems. The final component is the ability to recognize alternatives that go against fixed belief systems, behaviors, and social structures. Individuals using their critical thinking skills under this assumption question universal truths. These types of thinkers are skeptical of those that claim to have all the answers to known problems. Therefore, Brookfield believes that to become a critical thinker, an individual must expand their own thought processes.

Kurfiss (1988) stated "in critical thinking all assumptions are open to questioning, divergent views are aggressively sought and the inquiry is not biased in favor of a particular outcome" (p.2). From this inquiry, an adult learner is able to arrive at a reasonable conclusion that can be justified as accurate. Critical thinking is a way to investigate, question, and explore solutions to problems. Therefore, critical thinking enables an individual to judiciously determine what should be done, how it should be done, but also possess the ability to apply that thought process to other situations (Facione & Sanchez, 1994).

**Critical thinking in nursing education.** Increased demands and greater accountability within the nursing industry require nurses to become higher level thinkers and to have greater reasoning abilities (Oermann, Truesdell, & Ziolkowski, 2000). Nurses must provide multidimensional care often in unfamiliar circumstances and environments. Consequently, nurses should be prepared to provide care in a safe and competent manner in an ever changing clinical environment (Thornhill & Wafer, 1997). Fowler (1998) claimed that practicing nurses and nursing educators increasingly agree that contemporary healthcare requires nurses to be
autonomous learners and critical thinkers. Nurses assimilate and adapt complex information into meaningful information that can be used to make decisions in which there is most often no single or absolute answer (Moreales-Mann, 2001).

Research on critical thinking as a concept and the development of it has become an increasingly important component within nursing education (Alfaro-LeFevre, 1995). Schank (1990) stated that there was a need to reassess nursing curricula, its structural depth, its emphasis on intellectual capacity, and mastery of basic concepts versus just specific learned facts. In 1992, a mandate by the National League of Nursing stated that nursing programs must measure critical thinking as an outcome criterion for accreditation. Then in 1993, The Joint Commission, formerly the Joint Commission on Accreditation of Healthcare Organizations, announced publicly that there was an urgent need for nurses to be proactive in identifying ways to improve patient care. Nursing advocates of this organization envisioned that nurses would do more than document observations as a passive provider of care. Instead, their recommendation encouraged nurses to act on observed patients' needs through constructive thinking (Tanner, 1993). Critical thinking provided the broader outlook and creative solution to address challenges within healthcare (Tanner, 2000).

C. HISTORY OF PRACTICAL NURSING EDUCATION

Unlike the historically untrained or poorly trained practical nurse, who had unlimited and unsupervised freedom to practice, the present practical nurse is often a hybrid. Today’s practical/vocational nursing student is being taught basic skills during the educational program. After licensing, the LPN/LVN [practical nurse] is permitted to perform complex nursing, as delegated by the registered nurse and allowed by the nurse practice act (Hill & Howlett, 2005, p.80).

Practical nursing is the basic level of nursing within the field, and began during the industrial revolution of the late 1800s. Women during this period in history normally provided
domestic services within the home, including those involving the care of the sick (Kurzen, 2005). To meet labor demands within the workforce, many people moved from very rural areas within the country to urban areas to look for work. For of those looking for work were men, however, women also began to contribute more to the financial income of the family, and began searching for careers that met their financial obligation and matched the skills many of them possessed. To support this influx of women searching for opportunities, in 1892 the Young Women’s Christian Association (YWCA) located in Brooklyn, New York, offered the very first practical nursing course. This initial first step toward nursing education sparked a movement with the support of state officials, to begin developing higher education standards for practical nurses, regulating the practice, and improving environments for training. In 1948, Lucille Brown compiled a report that emphasized vocational schools as being a good place for practical nursing programs. Today most practical nursing programs are housed within vocational schools.

Diploma nursing originally known as “hospital nursing” was inspired by the severe growth of hospitals during the 19th century. Training of nurses during this time to work in hospital environments is based on the apprenticeship model, which is defined by nursing students providing direct patient care in exchange for the opportunity to receive educational lectures, housing, and a monthly stipend (King, 1987). This type of educational program became extremely popular for many women because it offered them an opportunity to attain a career with multiple benefits to society including; caring for the sick and decreased cost of nursing services within the hospital because the student nurses cared for the patients (Bullough & Bullough, 1978).

Despite the many benefits this type of educational model appeared to provide, it was heavily criticized by many nursing educators. Goldmark (1923) most notably argued that the
needs of the student and the hospital were incongruent. She wrote “the needs of the sick must predominate; the needs of education must yield” (p. 195). The apprenticeship model trained nurses to provide patient care of those that were sick at that particular time within the hospital. For instance, training in the care for children would be bypassed if there were no children that were sick in the hospital, and a greater number of elderly patients needed to be attended to. Within this type of educational model student patient assignments were not based on a nursing standard, but rather on the hospital’s needs.

To balance the needs of nursing students with their need for clinical training, many nursing educators advocated for university education for nursing students. University education in the mind of many scholars would eliminate the incongruence between the needs of the hospital and the educational needs of the student (Bullough & Bullough, 1984). Dr. Richard Olding Beard in 1909 began the first nursing program at the University of Minnesota. This program was the first baccalaureate nursing program in the country. However, it closely resembled diploma nursing training in that students were required to work 56 hours in the hospital per week.

After the development of university nursing, many other educational programs began decreasing the amount of time students spent working in the hospital, and increasing the total number of hours related to coursework. Adaptations of this new curriculum in university nursing gave rise to many other science related lectures and other clinical experiences (e.g., medical surgical, pediatric, and obstetrics). Through this evolution to the field of nursing, awareness of educational practices and training was thrust to the forefront and a way in which to standardize nursing education was needed (Stewart, 1943).
During the middle of the 20th century this change within the curriculum standards continued to thrive, and higher standards were necessary to meet the rapid changes that were occurring within healthcare. Advances in medical technology, and the expansion of knowledge in treatments for diseases required nurses to have a stronger preparation in applied theoretical concepts (Melosh, 1982). These changes were a sign of the future decline in hospital-based diploma nursing programs and the beginning of a new era of nursing education that predominantly would occur within colleges and universities.

As of 2006, there are an estimated 60 diploma nursing programs still remaining in the United States with most residing in the northeast (National League for Nursing [NLN], 2006). Many hospitals continue to support these programs because they supply high-skilled nurses to their hospitals, they are geographically accessible to students living in the local area, the programs can be completed in a relatively short amount of time, and many hospitals provide incentives for their employees to pursue educational advancement through tuition remission programs. Additionally, despite the decline of diploma nursing within the United States some studies suggest that graduates of diploma programs are as competent in research, leadership, and critical thinking skills as graduates from associate and baccalaureate nursing programs (Clinton, Murrells, & Robinson, 2005). Thus it would seem that diploma nursing programs despite its rocky past are persisting and will continue to be an asset to the nursing profession.

**Practical nursing at a community college.** The practical nursing program at this two-year community college in New Jersey began its first class in the early 1960’s as part of a technical institute. In 1968, legislation was passed that created a coordinating agency linking this community college, a private two-year college, with the technical institute, thus initiating a
community college system. The practical nursing program admitted its first class in September 1982 as part of this union.

As of 2011, the practical nursing program changed from that of a diploma to a certificate program offering program completion toward a Licensed Practical Nurse (LPN) in four semesters with an average completion time of one and one half years for daytime classes and two years if only taking night and weekend classes. Depending on the type of elective courses that is selected, general education courses in the program comprise 16 or 17 credits of the total amount. The remaining 36 credits are devoted to nursing courses, for a total of either 52 or 53 credits. Each nursing theory credit incorporates 15 hours, with each clinical/lab credit equal to 45 hours.

Clinical experiences are selected based on their ability to allow students to apply nursing theory and skills to meet course objectives and PN competencies. Students interact with other health care providers in acute, extended care, and community settings, where they work with patients of different ages and backgrounds. The PN program has affiliation agreements with many agencies that meet the Joint Commission and state regulations, and provide a wide range of health care services to support geriatric, adult health, maternal-child, pediatric, and mental health experiences. Students begin the program in either the spring or fall semester with the first nursing course, PNU 190, Nursing Concepts. Students may enroll in general education courses on any of the three main College campuses or elect to take available distance education offerings. There are no distance education nursing classes within the program. Students, however, have access to online resources to supplement their classroom and clinical experience.

Professional standards of practice, expected Licensed Practical Nursing (LPN) graduate competencies from the National League for Nursing (NLN) and National Association for Practical Nurse Education and Services, Inc. (NAPNES), the NCLEX-PN test plan, and New
Jersey Board of Nursing (NJ BON) regulations, all contribute to the selection of content, clinical experiences, and expectations of students within the PN curriculum. A relationship between the PN curriculum objectives, competencies, learning outcomes, and learning activities is demonstrated within each nursing course. Faculty members review course implementation after each semester and regularly review the overall curriculum to ensure that the philosophy and outcomes remain valid. It is the overall goal of the program to prepare graduates who possess the necessary knowledge skills, and attitudes to provide safe and effective care, but are also able to acquire information that they need for practice.

The learning outcomes flow from the philosophy, program goals, and curriculum objectives. Students’ attainment of theoretical knowledge and clinical techniques is evaluated at intervals throughout each PN course. Written measures, such as examinations and clinical paperwork, and observation of behaviors, are used as indicators for achievement of outcomes and objectives. Students are advised, as necessary, during each semester of their performance and areas that require improvement. Course implementation and clinical experiences are evaluated each semester by faculty and students. Graduates evaluate the entire curriculum plan and overall satisfaction with the program. Potential changes to enhance nursing courses and student learning, such as course content, texts, and clinical experiences, are reviewed and considered prior to implementation.

The curriculum framework is an integration of nursing and general education courses, generating growth as the student progresses from the foundational courses through the curriculum. Student learning begins with the basic concepts of nursing process and continues to the emergence of critical thinking skills and greater independence in practice. Students continue to develop organizational, communication and nursing care skills as they advance in the
curriculum. Faculty members integrate a variety of teaching methods and learning activities to assist students to synthesize content from curriculum, including simulation, journal readings, and class presentations. The following is the PN program faculty teaching philosophy as written within the Practical Nursing Student Handbook (2012).

**Nursing faculty teaching philosophy.** The faculty believes that nursing is one of the critically important professions within the health care delivery system and that practical nurses play an integral role in assisting clients to attain an optimal level of health. Health is viewed by the faculty as a level of functioning in which an individual or group, such as a family, has achieved a balance between physical, mental, emotional, and social well-being. Practical nurses are part of a collaborative team of professionals that, within the framework of the nursing process, seek to implement caring behaviors and clinical competence to promote client self-care and health. Nursing practice incorporates knowledge from the biological and social sciences to provide a holistic approach when interacting with individuals, families, and communities. Nurses provide safe, accountable, and effective care to promote, maintain, and restore health, appropriate to the self-care abilities of the client(s). Caring is an essential element of all of the interactions in assisting clients to meet their physiological, psychological, sociocultural, and spiritual needs.

Students from diverse backgrounds are provided with the opportunity to pursue their academic and professional goals. As active members of the educational process, students learn to apply theoretical principles and develop problem-solving abilities. The faculty believes that individuals interact, are influenced by, and respond to the environment and other members of the family, community, and society. The environment encompasses all of the surroundings and
stimuli that individuals and groups are exposed and respond to, including an emotional atmosphere of harmony or dissonance.

Individuals experience changes as they progress through the developmental stages that affect their physiological, psychological, sociocultural, and spiritual well-being. Individuals, as consumers, are participants in the recognition of self-care needs and achievement of their optimal level of health. Society is composed of a wide variety of individual members and groups. The society exists to support the needs and activities of its individual diverse members within families and communities. Nursing identifies and responds to the health care needs of the individual within the context of the society. The faculty believes that education is a continual process. Nursing assists in meeting the self-care needs of individuals within the society as it moves forward. This requires the acquisition of updated theoretical knowledge and technological skills and the incorporation of information from a variety of related disciplines. Education provided within a college environment offers opportunities for students to broaden their perspectives by interacting with individuals from other fields. Students are exposed to the availability and value of continued education and articulation to higher levels of nursing. The faculty believes that it is critical for students to continue their education in nursing, whether formally or informally, in order to provide safe and effective care.

Students build upon a foundation of theoretical knowledge and clinical skills as they move through the curriculum. Learning occurs with the integration of knowledge, behaviors, and attitudes that are necessary for assuming the role of a beginning practical nurse. The faculty believes that an educational environment needs to be created where teaching methodologies and student activities will promote growth and active participation in the learning process. Students
play an active role in the educational process by taking the initiative to seek out current, relevant information from a variety of sources and disciplines and integrating it into their practice.

The faculty believes that the graduate of the program will demonstrate the ability to function as a new member of the health care team and provide care that is appropriate to the client’s self-care needs and respectful of the individual’s dignity as a human being.

**Faculty expectations of nursing students.** The overall curriculum framework of the nursing program is an integration of nursing and general education courses, generating self-directed growth as a student progresses from the foundational courses through the curriculum toward more advanced courses. Self-directed learning begins with the basic concepts of the nursing process and continues to the emergence of critical thinking skills, and greater independence in practice. Faculty members attempt to integrate a variety of teaching methods and learning activities to assist students in this transition through simulation, journal readings, and class presentations. According to the nursing faculty,

Faculty expectations of students based on the stated teaching philosophy is that each student learns to build upon a foundation of theoretical knowledge and clinical skills as he or she moves through a rigorous curriculum. Learning occurs through the integration of knowledge, behaviors, and attitudes that are necessary for assuming the role of a practical nurse. The faculty believes that an educational environment needs to be created where teaching methodologies and student activities will promote growth and active participation throughout the learning process. The goal within this type of teaching strategy is that students will play an active role in the educational process by taking the initiative to seek out current, relevant information from a variety of sources and disciplines and integrate it into their learning. The faculty additionally believes that by using these strategies a graduate of the program will be able to demonstrate the
ability to function as a new member of the health care team, and provide care that is appropriate to the patient’s needs (Practical Nursing Program Student Handbook, 2012).

**Student perspectives regarding self-directed learning.** Student expectations are a lot less known based on the limited amount of research the College and the nursing program has placed on understanding their perspectives. However, through personal interaction with different students at varying levels within the program many of them do not clearly understand what expectations they should have, especially entering the program as a new student. Most have expressed their anxieties about program participation, a perspective gained from other program graduates, non-completers, and current students. Through conversation, their understanding is that the program is extremely difficult, the faculty overly strict, and that faculty are unwilling to provide academic support outside of regular class time. Many are shaken with so much worry about what to expect in this program, that they have fretfully sat in new student orientations with expressions of fear on their faces. This anxiety continues throughout the semester and has caused students to pass out during class lectures, or at the start of an examination period and some have had to receive medical attention due to severe panic attacks in school restrooms and hallways.

By comparison the high schools and other educational experiences the students’ have had may not academically compare to the rigor of this nursing program. Many students can only assume that they are prepared enough to take on this type of responsibility, until they enter the program and learn otherwise. The key student concern is that they feel as though it is the duty of the faculty to support their learning throughout the program despite their level of education or experience.

**D. CONCLUSION**

Andragogy as a theoretical concept assumes that individuals are ready for self-direction when they feel they must cope with a life-related situation or challenge. As in the principles of
Maslow’s hierarchy of needs, individuals accomplish and fulfill the lower levels of the hierarchy, as they gradually become more self-actualized and wise (Maslow, 1943; Huitt, 2007). Likewise, Knowles’ (1984) assumption of adult learning suggests that as learners grow and mature, they become more and more capable of being self-directed and wise due to their experiences and past knowledge. Contemporary theorists of adult learning, like Knowles, believed in this humanistic philosophy of learning and focused on the individual's ability to assume responsibility for their own learning (Knowles, 1975). According to Knowles, “adults are self-directing when they undertake to learn something on their own” (1989, p. 91). Knowles believed that andragogical based instruction allowed the learner to accept responsibility for their own learning.

Learning can take the form of many different structures from formal courses in educational settings, to on-the-job professional training, to other familial communities. All types of learning, no matter within what context, should be recognized as an invaluable tool, one in which opportunity can improve the well-being of adults. Knowles (1968) recognized that the overall learning of adults differed dramatically from that of children. Based on his research he proposed a set of assumptions that included self-direction that would assist adult learners in the learning environment based on a set of shared characteristics. Self-direction has remained at the forefront of adult learning theory and practice within education for many years. It continues to be analyzed to ensure that it remains to be a valuable construct within a continuously changing multicultural society. Andragogy as a whole must be able to respond to circumstances that are present as a result of varying life roles and responsibilities. Similarly, roles and responsibilities are often times influenced by cultural factors that must also be considered. Self-direction is the drive first initiated by the adult, and is based on the internal desire to move toward more
autonomous learning. Adults naturally develop self-directedness but some adults may exhibit less self-directedness because of prior unlearned experiences (Knowles, 1990).

Throughout history nursing education programs have provided training as a direct result of social, political, and economic trends within the United States. Nursing educators have responded to changes within the healthcare environment, and practical nursing will continue to meet the needs of society with effective educational preparation of its students. Increasing accreditation standards remain consistent, and the field of nursing practice today is evidenced by patient-centered approaches to teaching and learning that the profession strives to maintain.
III. METHODOLOGY

A. RESEARCH DESIGN

This chapter describes the study's research methodology and includes the following discussions: (a) rationale of the research, (b) site selection, (c) sample selection, (d) instrumentation (e) data collection methods, (f) data recording, (g) data analysis, (h) trustworthiness of the data, and (i) limitations of the research.

Research rationale. Qualitative research is based on constructivist philosophical views and is concerned with examining the social situation in a particular context at a particular point in time (Patton, 2002). Within the framework of qualitative design, this study used a case study approach to develop a holistic understanding of the perceptions of self-directed learning among students and faculty within a practical nursing program.

Case study methodology is used when research requires the “close examination of people, topics, issues, or programs” (Hays, 2004, p. 218). Case studies are particularly useful in the social sciences to recognize details from the viewpoint of the participants through the use of multiple sources of data (Stake, 1995). Additionally, Yin (1994) presented four reasons why case study methodology should be used within the social sciences:

1. To further understand interrelated concepts within real-life situations.
2. To explain the context of which that situation occurred.
3. To explain why certain interventions should be used.
4. To examine situations where the determined intervention being assessed has no apparent set of outcomes.

Yin (1993) identified three types of case study methodologies: exploratory, explanatory, and descriptive. Exploratory cases are often used to define a framework, or for use as a prelude for additional work to be conducted later. Explanatory case studies seek to describe how or why
an experience took place. Often the purpose of this type of research is to identify a cause-and-effect relationship. Finally, the descriptive case study requires the generation of a theory prior to starting the research. It is used to present answers to a series of questions based on theoretical constructs (Yin, 2003).

An explanatory case design was used within this research to help further understand, the self-directed learning perceptions of nursing students and their program faculty. Case studies by nature are built on multi-perspectives and require not only the voice of the participants to be heard but also the individuals surrounding the participants. The first stage, as suggested by Yin (1994) is to develop a case study protocol. The research protocol is critically important in keeping the overall progress of the project on task, and it improves the reliability of the study (Tellis, 1997).

The protocol will include the following:

1. Overview of the project - this is inclusive of research objectives, relevant participants’ issues and concerns, and information to the participants regarding the topic under study.

2. Field procedures - participants shall be reminded about the overall procedures and required IRB approval.

3. Case study interview questions – these are the actual questions being asked of the participants during the data collection phase of the study.

**Site selection.** The selected site for this study was a two-year public community college in New Jersey that enrolls approximately 13,000 full and part-time students, and over 20,000 non-credit and continuing education students. The College operates four campuses and its
practical nursing program is housed at the smallest of the four campuses serving about 1,500 students.

This program was chosen due to its policy of open enrollment allowing any student that met the minimum admission requirements to register and enroll in the program based on program space availability. If open seats in any given semester were not available then program deferment will be granted to the student for the ensuing semester. Students were enrolled in the program on a first come first serve basis, and with so few enrollment requirements; there is greater access for a broader population of students to take advantage of a nursing education. The open admission policy at this community college was an optimal choice for selecting a wide-range of academically prepared nursing students with differing educational and personal backgrounds. The nursing program currently had a student population of 350 taking one of four program courses within the curriculum (Practical Nursing Program, 2011).

The practical nursing program admission requirements included; (1) having successfully passed the General Education Development (GED) test or have obtained a high school diploma, (2) have completed all required English as a Second Language (ESL) and developmental course work, and (3) have at least a minimum of a 2.5 cumulative GPA upon applying to the program. Students that have completed course work at another accredited nursing program may receive credit for that coursework at the College. Transcripts are reviewed on an individual basis by the Program Director. A minimum grade of ‘C+’ in nursing course work at another accredited institution is required for consideration of credit being given for such course work.

**Sampling procedures.** The research design of this study used a systematic sampling technique, also known as an *Nth name selection technique*, to select participants based on their year within the program. A list of current students was obtained from the director of nursing, in
an excel format. The list was originally in alphabetical order by last name; however, to reduce sampling error the list was then sorted by student ID number. Every fourth student from the listing of students was then contacted for participation. There are four courses within the practical nursing program, and two students from each of the upper three courses were selected using this procedure. Six student perspectives were obtained, no first year students were asked to participate, as a deeper understanding of program expectations was needed to inform this research.

At the time of the research, the practical nursing program had seven full-time faculty members who provided classroom and clinical instruction for day, evening, and weekend classes. At least 85% of the full-time faculty members held a minimum of a master’s of science in nursing (MSN). One full-time faculty member is a registered nurse with a baccalaureate of science in nursing who holds a master’s of science degree in human service administration, but at the time of this research was obtaining a master’s in nursing. The remaining faculty member has a doctorate in nursing practice (DNP). The present requirements for full-time faculty included a minimum of a master’s of science degree in nursing, clinical expertise, and experience in nursing education. Three full-time faculty members were asked to participate based on their teaching assignment to one of the three program courses being studied. The selected full-time faculty members were asked to participate only after having received the active permission of the director of practical nursing. Gender was not considered in determining participants, as there was no male faculty within the department.

In addition to faculty and students, the director of practical nursing and allied health liaison was asked to participate in the study. While she was not faculty, she possessed a terminal degree in nursing, was a licensed nurse, taught specific subject matter within the selected
courses, and held department chair responsibilities. The program director is not considered to be faculty as in other academic departments, but rather is an administrator of the College. Her responsibilities include practical nursing program curriculum development, faculty supervision and evaluation, course teaching, and overall program administration. Her perspective provided insight into the educational goals of the department, and anticipated learning outcomes.

**Instrumentation.** Case study research, like other forms of empirical studies, must take into consideration construct validity, internal and external validity, and reliability (Yin, 1989). Data source triangulation or multiple sources of evidence confirm that the research process is valid, according to Denzin (1984) and Yin (1994). The multiple data sources within this research are structured interviews, in-class observations, student handbook, and the faculty curriculum and program manual.

Individual interviews were conducted with the specific intention of exploring the past and current experiences of students in relation to self-direction. Each interview was designed to inform the participant of the nature of the study, to build participant trust, and to obtain details of the learning experiences prior to entering the program and during their tenure as a nursing student. Additional interviews were also conducted of three faculty members, and the program director.

Document reviews were a source of data triangulation for this study. The rationale for using document reviews was to take elements from the individual interviews and compare it to the written documentation of the department. If the responses from both students and faculty were not consistent with that of the department guidelines, then a possible disconnect may exist between what the department stated it was doing, and what was actually occurring within the program. The two primary documents that were analyzed for consistency were: (1) the Practical
Nursing Program Student Handbook, and (2) the Practical Nursing Self-Study Report. The student handbook provided information to students regarding expectations, program curriculum, course policies, and other College related information. All students were responsible for all information contained within this document and are held accountable for this information beginning the first day of orientation. The self-study was a required document outlining the overall objectives of the program and teaching responsibilities of the faculty. It was a required document to maintain accreditation with the New Jersey Board of Nursing and the National League for Nursing Accrediting Commission. During the accreditation review process for this institution, the Self-Study was emailed to the accreditation commission, reviewed, and then used to determine compliance with nursing standards during the commission’s visit.

Another source of data triangulation that was used for this study was nonparticipant observation within three of the four nursing program classes. Observation is an important tool for collecting data within qualitative research (Angrosino, 2007; Creswell, 2012). Observation allowed the researcher to witness the interactions between the students and faculty within the classroom. The students were not notified prior to the start of class or during the in-class observation the nature of my visit to their classroom. However, each faculty member agreed to allow me to observe their classroom during the study. The observed classes were those being taught by the faculty participating within the study. Each classroom held no more than 30 students and I positioned myself in the back rear corner of each room, so as to not distract the students or instructor during the lecture. During this time within the classroom, notes were taken to document how independent learning strategies, described within the faculty handbook, were actually used within the classroom. Comparisons were then made between all the classrooms.
once each observation was documented. The data was manually recorded without direct involvement with the participants during classroom lectures.

**Data collection.** Permission to collect data for this study was obtained by the Director of Practical Nursing and Allied Health within the College. This authorization was obtained after full approval had been received from both the participating community college and the University of Arkansas Institutional Review Boards. Participants prior to their interview will read a statement of research purpose, will be informed of their right to confidentiality, and additionally be asked to sign a statement authorizing their consent to participate.

Two nursing students from three courses were selected using a systematic sampling technique. Selected students for both the interviews and subsequent meetings, if necessary, were notified via email to setup their interview time and location. Faculty that instructed at least one of the three selected courses was also interviewed. Selected faculty was notified via email to setup their interview time and location.

In addition to program faculty, the program director was interviewed to provide her insight into how she worked with faculty to develop the course curriculum, and to provide her perception of both faculty and student program expectations.

**Data management.** Each interviewing session was recorded with the active permission of the participant and later was transcribed, coded, and analyzed to identify emerging themes. Electronic data was maintained in a password protected excel file, with hard copy data housed within a locked file cabinet with access to the cabinet remaining with the researcher only. All participants names were alphanumerically coded with the code key within a password protected Excel spreadsheet.
Data analysis. The constant comparative method of data analysis was used to observe and collect data, then categorized based on the interrelated findings from the participants, as suggested by Stake (1995). Each sentence from the prescribed interviews was converted from speech to a text transcript that was examined to identify emerging concepts and themes. Data was analyzed using a systematic open coding approach, where information was coded based on the responses given during each student and faculty interview. Responses that were similar were grouped within a particular category based on dominant themes that emerged from each conversation. Creswell (2012) suggests labeling each emerging theme using a technique called “in-vivo” coding. This type of coding labeled each theme with a name that was the exact word used by each participant.

Within the second phase of data analysis, categories and their subcategories were linked using axial coding procedures. Axial coding created a representation of specific conditions held within the environment of the participants, and helped to explain the occurrence (Brown, Stevens, Jr., Troiano, & Schneider, 2002). Actions and interactions can sometimes be constrained under certain conditions. Axial coding served to identify and understand these conditions which further explained the phenomenon.

Data saturation was reached within the third phase of coding, which according to Brown, Stevens, Jr., Troiano, and Sneider (2002) is the appropriate time to notice this occurrence. Saturation was attained when no new information was received from each response provided by the participants. Within this stage of analysis, a central theme was identified that linked the other subcategories to the main category. This process attempted to explain and build the overall theme of the research (Yin, 1993). Variation within the categories was identified to support the theme and as patterns within the data were revealed, categories were sequenced. This
identification of varying categories was represented using a data matrix of themes from each of the interviews.

To ensure data trustworthiness, Creswell (2012) suggests using at least two different methods to corroborate evidence that supports the research. The first method used within this study was a peer review. The selected individual had knowledge of case study methodology and periodically met with the researcher during “peer debriefing sessions” throughout the study. This method is recommended by Lincoln and Guba (1985) to continuously review the methods used during the study, and to keep the research valid. The second method, an external audit, was used to review the process to ensure its accuracy. This phase of the research was conducted by an external individual not affiliated with the institution. The evaluator had no connection to the study, which eliminated any research bias from the audit (Lincoln & Guba, 1985). The final interpretive report phase of the case study was one of the most important elements, from the researcher perspective (Tellis, 1997; Creswell, 2012).

**Limitations.** This research was limited by the experiences of a few students and their faculty within a single practical nursing program in New Jersey. Student and faculty participants were asked to voluntarily participate in interview sessions, and therefore the accuracy of the data is limited to only those students that responded to the initial request, and not representative of the students that chose not to participate. Additionally, students that may have been struggling within the program may have already dropped out of the program because of failing grades or other experienced challenges. The remaining students in the program during the time interviews were conducted were those students that were passing after the midterm examination.
IV. ANALYSIS OF DATA

A. INTRODUCTION

This chapter presents the analysis and findings for the data collected during the study. A detailed description of the procedures used for data analysis is discussed below. Concepts, subcategories, and final themes are discussed while providing a detailed description of the phenomena being examined. Four major themes were identified from faculty data which included (a) lifelong learning, (b) intrinsic motivation, (c) critical thinking, and (d) expectation. Four major themes emerged from the analyzed student data which included (a) time management, (b) extrinsic motivation, (c) academic ability, and (d) expectation.

A. DESCRIPTION OF THE PROCESS

Interviews were conducted with 10 faculty and students regarding their perceptions of self-direction after receiving IRB approval from both the University of Arkansas and the participants’ institution. All interviews were audio recorded with the active permission of the participants. Extensive field notes were also taken to augment the audio recording. The audio recordings were transcribed verbatim. Subsequent in-class observations were conducted within two of the three subject courses of the nursing program. All transcripts, field notes taken during the interviews, and in-class observational notes were entered into an Excel spreadsheet for analysis.

Data analysis is an important stage within a research study and must be effectively analyzed through a systematic process to report accurate findings (Krueger, 1994). Analysis involved continuous organization of what had been observed, heard, and read in both the classroom environment and during individual interviews using the constant comparative analytic strategy described by Stake (1995). Goetz and LeCompte (1984) state:
As social phenomena are recorded and classified, they also are compared across categories. Thus the discovery of relationships, or hypothesis generation, begins with the analysis of initial observations, undergoes continuous refinement throughout the data collection and analysis process, and continuously feeds back into the process of category coding (p. 182).

Stake (2005) states “It gains credibility by thoroughly triangulating the descriptions and interpretations, not just in a single step but continuously throughout the period of study” (p. 443-444). Therefore, observations, interviews, readings, and other written notes were reviewed and processed weekly for any emerging themes that needed further examination. Through continued review of collected data while simultaneously gathering additional data the design of this qualitative study maintained its direction and focus as it progressed. Data from the transcripts were organized and divided into meaningful groups. The goal within this phase of research was to identify key words, frequency, or the extensiveness of the comments used within the interviews to identify major expressed themes.

Through the use of code mapping, which is a recommended method of dividing data into categories, transcripts were reviewed and data coded into major topics (Krueger, 1994). This analysis included an audio review of all interview tapings, a visual review of all field notes, and a visual review of all transcripts. Faculty data were reviewed first and once completed student data was reviewed using the same process. Transcripts were reviewed line by line and once a concept was identified in a line, or within a paragraph, a code word was developed and placed in a table to later be used for analysis. As the review and coding process continued, concepts with similar meaning were grouped together. During this process openness to varying perspectives and thoughts remained a priority for the researcher to ensure a continued unbiased review of subject data.
The data analysis identified concepts that were articulated by the respondents, and important themes can be found in Appendix L: Concepts, Subcategories, and Final Themes from Faculty Data Analysis and Appendix M: Concepts, Subcategories, and Final Themes from Student Data Analysis. Final themes were then linked to the research theoretical framework.

Once the transcripts were reviewed, the audit tables, shown in Appendices M and L, were re-examined for patterns and subcategories. For example, the faculty concepts of "Memorization" and "Getting through the program" were grouped into the subcategory "Intellectual Curiosity." The grouping into subcategories was conducted for all original concepts that were identified. These subcategories are shown in Appendix L: Concepts, Subcategories, and Final Themes from Faculty Data Analysis. Finally, the identified subcategories were examined to determine final themes encompassing relevant subcategories. For example faculty subcategories of "Externally driven" and "Excuses" were combined to form the theme "Intrinsic Motivation." The outcome of this analysis was linked to the research theoretical framework. For example, the final theme "Critical Thinking" was linked to the conceptual framework of "Motivation (Entering/Task)" as evidenced in Appendix L: Concepts, Subcategories, and Final Themes from Faculty Data Analysis.

C. FACULTY PERCEPTIONS

In an attempt to understand the perceptions of self-direction among nursing faculty four major themes emerged from the data analysis, which were (a) lifelong learning, (b) intrinsic motivation, (c) critical thinking, and (d) expectation. Each faculty member discussed her perception of self-direction which was influenced by her previous educational, clinical, and general life experiences.

Research Question One. Research question one explored how faculty defined self-directed learning? The current nursing and educational literature would suggest that faculty have
difficulty defining the term *self-directed* in common terms. However, the nursing faculty within this program had an extensive knowledge of not only the definition of self-directed learning, but also how it related specifically to nursing practice. They may have used different terminology to describe it, but all the concepts were consistent with the general understood meaning of self-direction. Three different faculty excerpts are provided below:

(1) Self-directed learning means to me, what I do….I seek out other information. I supplement books or journal articles that I have.

(2) I would say it means that you have an internal motivation to learn and that you are able to be independent and organized.

(3) Self-directed learning is a student that seeks out a learning experience based on their own self-evaluation of their learning needs.

*Research Question Two.* Research question two explored what behaviors the nursing faculty perceived to demonstrate self-directed learning? This question asked faculty to identify both behaviors they identified as being self-directed as well as behaviors they felt were the opposite of self-directed within a series of similar questions. Faculty identified that students who exhibited self-directed behaviors asked a lot of questions. One faculty member stated, “They’ll bring me information that they’ve read in either another book, or they’re always eager. These are the students that have intellectual curiosity.” Another faculty member commented by saying, “The ones I think tend to be more successful have more self-direction.” And another commented, “They utilize alternative resources if they need to.” Students that brought their questions to faculty exemplified behaviors that faculty believed to be patterns of self-directed behavior. Students were provided with information and those that sought new and additional knowledge to supplement what they have been taught were self-directed in the minds of faculty within this nursing program.
When faculty were asked, “What self-directed behaviors do your students lack?” responses ranged from students not being able to see the bigger picture to students not following directions, which in their mind, prevented students from understanding homework questions or other take-home assignments. One faculty member responded to this question by stating:

One thing I notice in common with students that don’t succeed, they don’t seem to follow directions. These are the students, just to put it in a simple way, that probably don’t know their ID number. And then they forgot their calculator. And then they need me to go over their schedule one more time. They’re just not able to follow directions.

Other common factors among students that faculty believed lacked self-direction were these students still asked a lot of questions, but their questions were not due to a desire for more knowledge, but rather because they believed the more questions asked the more potential test questions could be correctly answered on an upcoming examination. For example, their line of questioning was directly related to specific test questions, which as noted by one faculty member is not the key to educational attainment:

The key to success is not the more questions they answer. While it’s helpful for test-taking, the fact remains, if they get a question wrong, they just dismiss it. And I tell them, if they get a question wrong, either in the self-assessment or the review books, they need to go back then and figure out why they got it wrong.

According to most faculty responses, the end goal of self-directed students and those that were believed to not be self-directed were quite different. Faculty understood the self-directed behaviors among students to be that of; seeking knowledge for lifelong learning, however, students that lack this type of direction seek knowledge to pass an exam or for an immediate benefit.

*Research Question Three.* Research question three explored faculty expectations regarding student self-directedness. One item was consistent among all faculty, the expectation
from students that faculty should provide all the information necessary to pass the course without any input from the student. One faculty member stated:

I think they expect me to share my experience as a nurse, and my philosophy of what I see nursing is, and how I address patient care. So I think they expect that. I also think many of them just expect us to give them all the information they need without too much input from them, some of them. Certainly not the majority. But many of them think that they’re going to learn everything they could from me, and that’s going to be the stopping point. And they don’t see that education is a continual process, even when they’re in school.

Or a similar comment from another faculty member stating:

They expect, of course, theoretical knowledge. They expect me to be a role model at the bedside and in the classroom. I think they expect me to show them how to find the answer because no one could memorize everything. But if I can teach them how to find the answer when they need to, that’s good.

Faculty perceptions of students within the program were that they have difficulties seeing the bigger picture. According to a faculty participant:

Students that have the most difficulty also need to transition to see the bigger picture. They’re saying to me, what do I do with these five problems, instead of seeing the common denominator with all five. Faculty cannot possibly teach or discuss every medical situation, but students should be able to recognize broad concepts and apply it to a particular situation."

The faculty felt that their role was to teach the students how to find the information to problems, not just to give answers. It is the understanding that concepts learned today, can and will be used later within the nursing profession. The educational value of this type of teaching is the hope that students can use these techniques to continue learning and critically developing their nursing skills well into the profession.

Research Question Three also helped to further understand concepts related to intrinsic motivation and behaviors associated with self-direction from research question two. This was not
its intent, but a finding that will be further discussed within Chapter Five.

When asked to describe the behaviors that students lack?" one faculty member responded by stating:

I don’t know, but they just don’t have that internal self-direction and motivation. Either they want to be a nurse, but they don’t really know how to study. Or they’re so distracted by all their personal life issues that they don’t have the time. And nursing is not something that you can just study the facts and pass the test and get a good GPA and be a good nurse. I think it’s more than that.

Another faculty member when asked, "How do you encourage students to take responsibility for their own learning?" stated:

We tell them that they are responsible for certain amounts of material. We give them resources. We tell them you have to do this and this and this. And if you only read the textbook, you’re limiting yourself. I mean, unfortunately we find that mandating things works better than just asking them to be responsible. Voluntary? It’s pretty much prescribed for them, what they have to do. But you see some voluntary, you know, behavior in – more in the clinical setting. You’ll see students that independently initiate learning on their own, and then you’ll see students who just want to, like, well just sit. If they have free time, they’ll just sit at the desk.

Faculty believed that many of their students are not intrinsically motivated to learn on their own. Students were only motivated to learn the material that they were required to learn. Their motivation was not linked to intrinsic factors like many adult educators prescribe as being the trigger for continued education. However, their motivation was linked to external factors as noted by a third faculty member when asked, "What factors influence your student's motivation to complete coursework?"

Getting through the program. That’s not to diminish because I think a lot of them want to learn and be well, you know, be good and get jobs when they graduate. But I think many of them it’s just we’ve got to get through, get through, get through. It’s almost like that, almost resignation of suffering, for lack of a better word. Which still leads them to the higher goal, which is good...

Another faculty member when asked the same question stated, "Well, certainly they want a passing grade. The grade is important, and the clinical passing." To faculty the motivating factor
was not that of learning new information, but more so to pass the course, get a good grade, and get through the program. This seemed to be the perception from faculty regarding student motivation.

Research Question Four. What do faculty members perceive to be the relationship between student self-directedness and the nursing profession? Faculty believed that nurses must be critical thinkers because their role is extremely demanding and each day healthcare becomes more complex due to the influx of new medications and standards of care. One faculty member stated, “It’s the nurses that are running the show many times in the hospital settings and all those decisions about who you see first, what do you do next…what do you do if you see this, this is the essence of nursing.” Another commented by saying, Nursing is all flat. Like there’s medications; there’s care and all that sounds the same until you interact with a patient. And then you realize, okay, if I put all these facts together with the patient’s picture, what decisions do I need to make?

The importance of a positive relationship between critical thinking and the profession was evident in all faculty responses. To be a nurse within the field, a connection must be made between what is learned within the classroom to adequate patient care in a clinical environment. There may not be the opportunity to ask a doctor for the answer or another superior on the floor. Decisions must be made using the knowledge gained from prior learning experiences and the vital signs taken from the patient. Being able to critically analyze the situation and provide the best resolution to the problem is an important aspect of nursing.

Research Question Five. How do the faculty members develop self-directed learning in nursing students? There were mixed opinions among faculty regarding this concept. Critical thinking is at the core of self-direction and when specifically asked, “In what ways can faculty develop these skills in nursing students” one faculty member stated:
I’ve been a big expounder all the time that you can’t teach critical thinking. We try to teach concepts. So we’ll teach the concepts and the theory. I try to apply it to practice, with all the other dimensions that go into practice, and then see how the students respond to it. But could I actually teach it? No.

Others believed also that an instructor may not be able to teach it directly, but indirectly you can provide problem-based learning through case studies and other methods that utilize self-directed concepts to develop these skills in students. Case studies were used frequently within this program as a way to encourage students to use information previously learned to identify solutions to current problems.

In-class directions were another strategy used by faculty to provide students with assistance in answering homework questions or other related problems at home. Instructions were given at the beginning of the semester normally within the first two lectures, regarding what students were to do if they encountered a problem that they were unable to answer, as captured below in a statement by one faculty member:

Every semester I go over in the beginning of the class and then sporadically the first couple lectures that I have with them about what to do if you personally, as a student, are having difficulty with a concept. I remind them that of course they have the online learning, but if they still are really stuck, I show them on the smart screen how to go into the web and go to a nursing website and find an article about the problem, the issue that they’re having problems with. And then I will also include the library website in that, so that they know how to research an area that they’re unclear about.

Although it is believed that certain self-directed learning skills cannot be taught, students were not left without instruction on how to find answers to problems they did not understand. Faculty was willing to provide assistance, at least earlier on in the course, to students that may have experienced challenges in guiding their own learning outside of the classroom.

*Research Question Six.* What factors inhibit student self-directedness? According to faculty, personal factors were the main reasons that student inability to self-direct their own learning existed. It is believed that students were too distracted to focus on their work outside
and sometimes inside of the classroom. One faculty member discussed openly about the challenges that one of her students experienced while enrolled in the program:

I had a student tell me, that she comes to class and leaves her kids alone at night. So now I have to address this – I don’t know how old her kids are. They could be 18 and 20, or they could be five and eight. I don’t know. It could also be personal issues. It’s hard to see what motivates other people because I know the main motivation is to just want to get in and get out. I think most of them do like to learn and are anxious to learn and to be good. I really honestly do believe that.

Other issues like family, marriage, divorce, and children, also prevented students from more self-directed learning at home. Another faculty member stated, “I think external issues affect students’ motivation. If they just lost their house, if they have money issues, marital problems, I think that can affect them and their learning is going to move down on their priority list.”

The sentiment among faculty was the understanding that dealing with adult students came with more complexities than the average undergraduate or technical student. Adult students combat multiple issues daily just to attend classes, and all these issues must be sorted out individually by the student and prioritized accordingly. The difficulty was that many students struggled on how to separate their personal life from their education. Adult students were forced to deal with complex problems that unfortunately found their way into the classroom which may have prevented self-directed learning.

D. SUMMARY

A total of 21 concepts and a total of 9 subcategories were identified as important as a result of the faculty data analysis. Four themes of self-direction emerged which were identified as (a) lifelong learning, (b) intrinsic motivation, (c) critical thinking, and (d) expectation.

E. STUDENT PERCEPTIONS OF SDL
Through data analysis of the perceptions of self-direction among nursing students, four major themes emerged; (a) time management, (b) extrinsic motivation (c) academic ability, and (d) expectation. Each student discussed his or her perception of self-direction which has been influenced by many factors including; prior educational experiences, family responsibilities, and other life experiences.

Research Question One. Research question one explored how students defined self-directed learning? The current nursing and educational literature suggests that students at different levels may have difficulties defining the term (O’Shea, 2003). Within this program the students generally could define the term. Most of them could define it, but only by putting the term into context, rather than reciting a textbook definition. Students provided the following definitions:

Student One: “They want us to teach ourselves”

Student Two: “I think that’s just self-explanatory. You’re directing yourself. You’re teaching yourself.”

Student Three: “Self-direction is knowing what you want to do… either with support from family, or without support from family, and support from other individuals.”

Student Four: “By teaching myself? Well, basically I’m reading my book, and I’m just doing it….Yeah, it’s all about teaching my own self.”

Student Five: “To somebody that didn’t know. I mean, self-direction with learning… if you’re in this program, you have to want to be a nurse. You have to have a compassion for it. You have to have, enthusiasm about what you’re going to do in order for you to sit down and read 10 chapters. So it’s like you have to get into that mindset. If you don’t want it, you’re not going to do it.”

Student Six: “It’s what you want…it’s something you want to follow. It’s what you want to accomplish”
Most of the students defined the term singularly, meaning *self-direction* could only be accomplished through the absence of support from an instructor or another individual. The term self-directed does not exclude receiving information from an instructor in the form of directions, or that a student cannot ask for clarification or help with the assignment after it has been given. However, through additional comments made by the students many felt the concept of *self-direction* was influencing the lack of support from faculty, which many felt occurred within the program. For example, one student provided this statement immediately following her definition of self-direction:

They want us to know everything, and we can’t know everything. We’re not at the level that they’re at. We don’t have the years of experience they have. I had the opportunity to go to school. I have a bachelor’s. I do have good study habits, but some people don’t have that. So they’re, here, and they don’t know what to do. So they kind of don’t have self-direction, where as I kind of do because I’ve already been to school. So I know how to study. I know independently how to study, what to look for, and certain clues, context, how to not kill myself in reading.

Or this comment by another student:

You’re directing yourself. You’re teaching yourself. And that was the hardest part, I think, for me, just because usually you have a question. Okay, you went to class, you asked the professor the question, and you get the answer. But with this program, you come to class, you ask the professor a question, sometimes you get an answer, and sometimes you don’t get an answer. Sometimes they tell you, well, you’ve got to look it up yourself. That really was a big surprise, you know, because that’s not what I was used to. You come there, you have a question, okay, I’ll just ask the professor, and I’ll get the answer. But sometimes you don’t get the answer. Like this one professor, if you ask her a question, the first thing she says, “Who can answer that question for this person?” Like she’ll throw it to the class. She won’t directly answer the question. And depending on the information that comes from the class, she’ll either maybe clarify, if there needs to be some clarification, or actually in her estimation if there needs to be clarification. She may clarify it, and she may not. Sometimes she’ll just say, well, do you get the point? Like she won’t answer the question herself. You know what I mean?

The perception from many students was that self-direction meant that professors were not able to answer questions or provide additional instruction within assignments. The process of
learning a new concept, then reviewing supplemental information to aid in this understanding, and finally coming to class with unanswered questions regarding that concept was not well understood by students within this program. There was not a clear understanding of the level of support provided by faculty in-and-out of the classroom by the students, as noted from their comments. The mere definition of self-direction complicated the students’ understanding of their role within this learning process.

*Research Question Two.* Research question two explored what behaviors do nursing students perceive demonstrate self-directed learning? Students may not be able to provide a textbook definition of self-direction, or understand that faculty support can still be considered during the self-directed learning process, but they unanimously know what types of behaviors are exhibited by self-directed nursing students. One student in particular previously stated that faculty support was not a part of the self-directed learning process, however, included faculty support as an integral part of the learning process for self-directed nursing students. As noted below:

Well, you would take the syllabus, and in the syllabus of the program is an outline of what we’re covering. You would read the material. And at that point, if you have any questions pertaining to the material after the lecture, you know, keep a diary. Make notes of what you need help with. Go to the professors. If you can’t get everything you need from the professor, you can go to the learning center, where they have students, nursing students who are there to help you. Do research online. Do your own research. This is a good program. There’s a lot of hands-on from the faculty.

Or this comment provided by one of the students that felt faculty did not appropriately answer questions from students during class time:

All right. First of all you read, and you follow direction from the instructor. And if it’s not understood, then you go back to the instructor and ask them to help you understand it. And then you go from there and then make the best of it.
**Research Question Three.** Research question three asked what are student expectations regarding their self-directedness? This question was answered in several different ways from a student perspective as identified in Appendix K. The questions ranged from, “As a student, what do you think faculty expect from you?” to “What are your responsibilities as a learner to ensure you are successful in this program?” Additionally students were asked, “Whose responsibility is it to motivate you to complete your course assignments?” The general response to these questions was varied, and only a few students felt that the responsibility to ensure an understanding of new learning concepts rested in the hands of the faculty alone. One student that ultimately felt this responsibility was that of faculty did initially have difficulty answering this question, as noted below:

I don’t want to be judgmental. I mean, I’ll say it’s both. It’s both the student and the faculty. I mean, I would say the faculty. It is…it’s the faculty. It doesn’t matter how much a student reads. Just because they read it doesn’t mean they understand it.

This feeling was also shared by another student that described the responsibility as being that of the faculty for the following reason:

It’s the professor’s responsibility because, if I were a professor or a teacher anywhere, it would be my responsibility to make sure my students learn, and that they understand, at least to the point where I know that they understand the material.

These two students did not feel that it was the professor’s responsibility to motivate them to complete their assignments, but in terms of understanding the material it was a generally agreed upon concept that should be the responsibility of the instructor. Motivation was an intrinsic factor in some regard, but students were also extrinsically motivated by family members that
held nursing degrees, the prospect of increasing financial stability for future generations, and by the mere thought of the humanitarian work of nurses around the country.

The students were then asked, what they thought faculty expected of them, and the answers were all very similar in nature. Students commented by providing examples of the many ways that students could fulfill faculty expectations. One student specifically stated,

I have to say, what they expect from you is definitely clear. They want you to read. They don’t want you to work (employment) because it is a lot of reading and a lot of work you have to put into it. It’s very time consuming. So their expectation of you is really clear.

Students had a very well understood grasp of the faculty expectation of success within this program. Students then had no difficulties in correlating the factors of success, according to faculty expectation, with that of other self-directed factors like motivation and faculty support.

*Research Question Four.* Research question four asked what students perceived to be the relationship between self-directedness and the nursing profession. Students understood the importance of self-directedness, specifically the element of critical thinking within self-direction, as being one of the most critical components of nursing. Every student answered this question unequivocally with a resounding; “Yes” without critical thinking nurses would not be able to perform the duties of the job successfully within the field. One student explained the importance of being able to critically think through a situation by stating:

Yeah, definitely. Well, like I said, if there was an emergency or a trauma situation with a patient, and you don’t know what to do, it’s definitely going to be a problem. Or let’s say the person might have some type of heart problem, and the doctor prescribed a certain medication, but there are parameters, and you can’t administer the medication because they’re experiencing a certain side effect. You have to be the one to make that call; I can’t give it to them, even though the doctor prescribed the medication. You have to think, like, am I going to do it anyway? Or because technically it’s going to fall back on you, not the doctor.
Some students may have provided an example to show the importance of being able to make decisions without the assistance of others in the field, but the relationship between that decision in the classroom was not always made. Some students were very adamant about only wanting to learn the information directly related to an upcoming test or to their licensing certification examination. However, each student including those that only wanted to learn what was to be given on a test, understood the value of critical thinking and being able to direct one’s own learning without the supervision of another medical professional.

Research Question Five. Research question five asked students to identify ways that faculty have developed their self-directed learning within either a classroom environment or clinical setting. Of all of the questions students had the most difficulty answering this series of questions that related specifically to research question five, gave them the most challenges. The first question asked students to describe an instance where their instructor allowed them to choose how they were to learn a new nursing-related topic within the classroom. Most of the students answered this question in similar terms, explaining that concepts were taught in a particular way as determined by the instructor; however, students were permitted to review the material in any manner that they chose with recommendations suggested by the instructor.

The difficulty in answering questions came when students were asked specifically, in what ways have faculty either helped them to develop their critical thinking skills in the classroom or clinical environment. One student response which mirrored the other responses was, “I don’t think they have done that.” However, when asked, how faculty has shown you how to use your critical thinking skills, the responses were much clearer and easier for students to provide. They spoke about being given a variety of nursing scenarios to work out during class time or while they were in their simulation lab and were instructed to assess a patient using a
case study model of an actual patient incident. These hands-on drills were much easier for students to recall and explain during the interviews. These students also expressed their enjoyment of using these types of strategies more in the clinical environment as opposed to case studies provided during class lectures.

Research Question Six. Research question six asked what factors inhibit student self-directedness? There were a variety of factors that inhibited student self-directedness; however, these factors primarily related to family responsibilities and being able to manage personal time. For example, many students spoke about their obligation to financially provide for themselves or their family which has prohibited their pursuit of nursing full-time as recommended by the faculty within this program. One student provided the following explanation regarding family responsibilities:

   Everybody has obstacles. I mean, of course I would love if I didn’t work because then I could have all this time to study. But it’s not feasible. I have bills to pay. I’ve got a loan, you know, stuff. I can’t not work.

Another student commented by stating that personal issues that happened in her life did not prohibit her from completing the program, but it made it harder to complete the program at the same rate as another student without personal obligations. She explained below:

   Well, I don’t think they prevent me from being motivated. But sometimes it prevents me from putting a hundred percent into things. Like my dad isn’t well. Unforeseen situations with my daughter as far as being sick, staying home from school, takes time away from me being able to study, or maybe I may have to stay home a day because I can’t leave her alone, miss a class. I don’t live in New Jersey. It’s not an easy commute, you know, especially from Staten Island. It’s a lot of traveling. So if I’m having car trouble that prevents me from getting to class. Although, thank goodness, it hasn’t really affected me this semester that much.
And then other students learned how to deal with these types of distractions and no longer were affected by them. One student openly described her battle with personal distractions and how she felt as though she arrived at a point in her life where she had to overcome challenges by prioritizing her activities. She stated, “I’ve learned to become self-disciplined and kind of block out all of the other obstacles and, you know, just set it aside for now.” As a follow-up question she was asked to elaborate on prior obstacles that she experienced which prompted her current time management action toward blocking out distractions. She described her experience below:

It seems as though when you’re trying to study or when you’re trying to reach your goal, everything pops up. And, I mean, it can be little things. It can be the kid’s sick, or you’re thinking about other things, like bills and, you know, finances. So some of these things sometimes can become a blockage. But like I said, you have to put them aside and just say, well, I’ll have to deal with this later. And then sometimes, you do get discouraged because you feel it’s like you’re reading, you’re studying, and then when you get back a test you feel as though, oh, my god, look at my grade, what have I been doing. So, I mean, you just have to stay focused. And, you can’t let distractions pull you down, and lead to depression. And you just have to keep a good mindset. And I’ve seen a few friends that started off in the RN program, and they ended up right here in the LPN program. They finished the LPN program, and they went on and they made the transition, and they’re RNs.

Students experienced challenges that in some instances abruptly altered their educational course. However, many students refused to allow these challenges from completely halting their progression within the program. This program was primarily comprised of adult students that because of a life changing experience have decided to pursue nursing as a field of study. The students that can best prioritize their experience and use it as motivational tool were more likely to succeed. Just about every student interviewed has overcome some type of hurdle or obstacle while in this program, but through various interactions and interviewed sessions with students it is how they dealt with these challenges that were the most telling.

F. SUMMARY
A total of 22 concepts and a total of 10 subcategories were identified as important as a result of the student data analysis. Four themes of self-direction emerged which were identified as (a) time management, (b) extrinsic motivation, (c) academic ability, and (d) expectation.

G. IN-CLASS OBSERVATIONS (TIMELINE OF EVENTS)

In class observations took place in April towards the end of the semester with only a few weeks remaining prior to final examinations. The students were well aware that material discussed within the course at this juncture within the semester may be information that would be a part of their final examination. The following is a written account of the events that took place within two of the three courses being studied within this research. The first course, identified as Practical Nursing Course (1), is the second course within a four-course sequence at this community college. The second observation took place within the final course, identified as Practical Nursing Course (2), which is the last course of the four-course sequence within the same program. Students enrolled in this course upon successful completion were eligible to take the National Council Licensure Examination (NCLEX) practical nursing licensing test. The interactions between the students and their instructor were documented with additional field notes describing the environment to which these events took place. Conclusions and other recommendations will be discussed in further detail within chapter five.

Practical nursing course (1). The first class observation took place within the first of the three courses being studied within this research. This class contained about 25 students and began at approximately 9:00 a.m. The instructor started her lecture by posing a question to the class, "What is this class about?" Many of the students laughed at her question, seemingly as if she was joking. Her purpose for asking this question, which was later explained, was to determine if the students were prepared for the class by having read the topic of that day's discussion prior to coming to class. Students were expected to come to class prepared; however,
many of them did not, according to faculty within the department. The instructor then began asking a series of questions related to the day's topic of discussion. The students responded immediately by answering the questions, some opening textbooks to search for answers, and those students that printed out the PowerPoint slides prior to the start of classes began searching for the answers and highlighting what they believed to be the correct answer. This question and answer period continued for approximately 15 minutes and those students that were not answering any of the questions were frantically writing down answers, and highlighting discussion points in their notes.

10:15 a.m. - After 45 minutes of lecturing many of the students were no longer taking notes. This was a four-hour course and before the start of the second hour many of the students were not engaged in the lecture, and were not asking any questions of the instructor. The instructor could tell that she was losing the students and again began asking questions, although this time it took significantly longer for students to respond. At this particular time, it was unclear whether the students were losing interest in the lecture, or whether the questions were significantly harder than her opening series of questions. The mood within the classroom had definitely changed from eagerness to a calmer lull. Some of the students inferred by her line of questioning that they needed to continue to pay attention and began answering questions and asking questions of their own with some enthusiasm. Although there was continued dialogue between the instructor and the students there were obvious signs that some of the students were beginning to lose interest, if not already. The following examples were documented during this second hour of the course:

- A couple of students were closing their eyes almost appearing to be asleep for a brief moment.
- Some students' heads were now being supported by their hands propped up on their textbook.
Those students sitting along the outer wall of the classroom were now using it to lean on.

Two students sitting in the front row were frantically taking notes and highlighting in their textbook even during the class breaks and instructor pauses. It would appear they were writing information directly from their textbook and not from the lecture. They continued this behavior for the entire first two hours of the class.

Also during this second hour three students walked out of class into the hallway, and a student began eating her second snack and was opening up a new tube of lip gloss. The instructor noticed that the class was distracted and asked if the class needed a break. The students responded with a resounding "No," while at the same time one student asked if they could have a break at the beginning of the third hour instead. The instructor agreed and continued her lecture by asking another series of questions. Most students were answering the questions this time although with a lot less enthusiasm as they did during the first hour of the class. The instructor again noticed that the students have lost interest and she asked someone to pass up the sign-in-sheet. Once the sign-up sheet was received she began to call names listed on the attendance sheet and the students started laughing and giggling at her actions. The instructor reiterated that she was serious, and that when she asked a question she expected an answer. At this point yet another student walked out of the classroom, but the instructor continued to call students’ names, however, this time no one in the class acknowledged that their name was called. Most of the students laughed and giggled again at her reaction to no one answering the question until finally a student pointed out the person whose name was called, but who did not answer her question. This back and forth between the students and the instructor did not at all appear to bother her or prevent her from continuing with her lecture. It seemed as though from this classroom observation that the instructor was used to this type of banter from the students. She did not allow their behavior to redirect the lecture, nor did she seem unnerved by their lack of attention.
10:45 a.m. - Prior to the start of the third hour another student walked out of the classroom. Another student asked a question that invoked other questions from other students. The instructor noticed that students were confusing two unrelated topics and she took time to further explain the difference between the two by providing examples. During her explanation there was a lot of talking amongst a particular group of students sitting in the back of the classroom. A low comment was made by one of the students within this group, and it was only heard by a few students sitting around her, she said "I'm glad you're finally teaching us this stuff." Other students sitting close to her laughed at her statement but the instructor did not react to the comment, and it was unclear whether she actually heard it. Despite this separate discussion among this group of students it appeared, at least at that moment, that students were more alert and engaged than they were even a half hour earlier. Five minutes later a student interrupted the instructor and asked a question that was clearly unrelated to the discussion. The instructor paused to reflect on how to answer the question then simply stated, "Ok" and moved on to the next topic. The students laughed loudly at her reaction to the student’s question. A moment later the same student that made the comment about the instructor finally teaching something, now remarked that she was confused because the topic was never discussed or reviewed prior to that class. Then immediately, another question was asked about whether they needed to know this information for the upcoming exam. This started a lot more discussion among the students. The instructor noticed the loud discussion and proceeded to quiet the class by answering the question. It appeared that the students understood the instructor’s answer to the question because the same student that made the comment before about not answering any questions, under her breath, now said, “Thank you for answering the question.” She additionally added, “This is the first time a
question has really been answered in this class.” A few students sitting around her laughed at her statement. The class then took a 30 minute break and was told class would resume at 11:30 a.m.

During the break, a couple of students approached the instructor with additional questions. During the class lecture these students for some reason did not want to ask their question in front of other students, but were more inclined to speak with the instructor privately. Just before the break ended one last student thanked the instructor for explaining one of the questions that was posed by a student during the lecture.

11:30 a.m. - The third hour of the class began with the students taking several minutes to settle down after the break. The class was quiet and the only noises that could be heard were students still eating chips and other food items leftover from their lunch. The instructor asked a few questions of the students to start the lecture and a few students provide examples from their personal experiences. Within the hour some students have already stopped taking notes, except for the same two students sitting in the front row that were feverishly taking notes throughout the first two hours of the class. They were still continuously writing at this point.

12:00 p.m. - The instructor has been lecturing now continuously for about 30 minutes and the classroom was extremely quiet. Students were showing responsive behavior by nodding their heads, but no questions were being asked from the students. The silence was only broken when the instructor began discussing the sexual activity of patients after having a medical episode. Some of the students found this to be extremely funny and laughed out loud. By 12:15 p.m. a couple of questions were asked and a personal experience by the instructor was used to further clarify the topic being discussed. The mood changed among most of the students at this point and was very quiet and almost somber. Fewer questions were being asked and one student was now asleep, while another was leaning his head on his hand for support. Many students were getting
restless and were doing things to occupy their mind besides listening to the lecture like, flipping pages continuously in their textbooks. Some students were shuffling papers around on their desks, looking around the room, searching for items in their bags, and one student again walked out of the room.

12:30 p.m. - The instructor began to ask students questions and some answered out loud, others mumbled, but most said nothing. One student again left the room but this time only for a brief moment and came back into the classroom with a can of soda and Pop-Tarts. The instructor could tell that the students had lost interest in the lecture; however, her motivational level remained high as she energetically continued her lecture. She was smiling; projecting her voice well to reach those sitting in the back of the room, and variation in her voice tone showed how excited she was to be teaching this topic. Towards the end of the last hour the mood had not changed much within the classroom. A lot more questions were being asked of the instructor at this point reaffirming that new concepts were understood by the students in the class. However, not many students answered any of these questions and the ones that were answering the questions were not doing so correctly. Most students by now were noticeably yawning and stretching and appeared to be bored or uninterested in the lecture. Another student exited the classroom at this point while the instructor continued her lecture and kept asking questions of the remaining students that were still paying attention. The instructor realized that there were only about 20 minutes remaining in the class period and she began to move much quicker through her PowerPoint presentation. A student commented on how quickly she was moving through the slides as compared to the pace of her lecture at the beginning of the class. The class ended at 1:00 p.m. exactly.
Practical nursing course (2). The second class observation took place within the last course of the three courses being studied within this research. This course within the program was the last one that students must complete prior to graduation. This class contained 13 students, started at approximately 9:00 a.m. and began with the instructor reviewing previously taught material.

9:00 a.m. - The instructor opened the class with a brief review of material that was discussed during a previous class period. Students then began to lead the instructor by discussing areas that they felt they already knew. The students were mostly quiet during this time and only commented on material that they felt they knew as the instructor continued to review material on the PowerPoint slides. Very few students were taking notes, and some had open textbooks but not much other activity was taking place during the lecture. The instructor continued to ask several questions throughout the lecture and students responded quickly and enthusiastically. Students seemed to be paying very close attention and were reviewing each slide intently. By 9:30 a.m. most of the students were able to finish the instructor’s statements before her sentence was complete. Students were also helping each other to answer questions that were being asked of the instructor. One male student asked a question that he should have been familiar with and the instructor asked him did he read the chapter. He commented jokingly by saying, "Yeah, in 191." Other students including the instructor laughed at his joke, because 191 is the course taken by all the students in the class two semesters prior to the one they were in currently. This humor only lasted a brief few minutes and the class regained its focus and the instructor continued the lecture.

9:45 a.m. –Within the first hour students interacted with the instructor by answering questions that were being asked, in addition they asked questions of their own. Of particular
interest was a question that was asked of a student that was immediately answered by the instructor. A few other students realized immediately that the question was answered incorrectly by the instructor. They politely informed her of the mistake and provided the correct answer. Upon realizing her mistake, the instructor apologized profusely to the student. The interaction during this exchange between the instructor and the students was much different than what was witnessed during the prior nursing course. The instructor within this course played a role as if she was on a peer level with her students. Through this classroom observation there was an atmosphere of mutual respect between the instructor and students. One can assume that the level of mutual respect was due to the fact that these students would be colleagues of the instructor within a matter of weeks. Shortly after this exchange of information the instructor played a short video to reiterate the concepts being taught within the course. Students attentively watched the video; however, no one was taking any notes while the video was being played.

10:00 a.m. – After the short video was played within the first part of the second hour of class, the instructor began asking additional questions of the students directly from the video. The students answered the questions immediately and it seemed as though the instructor was pleased with the responses the students were giving. The instructor additionally commented on how advanced the video was in relation to the practical nursing curriculum. The students laughed quietly to themselves in agreement. The students did not seem to be bothered that they were learning information that was not required to graduate from their program, or learning a required standard to successfully pass their licensing examination. This contradicted the behaviors observed in the prior course and what was expressed during the interviews of nursing students within the earlier courses. Shortly after the video the question and answer period was completed, and a student posed another question to the instructor. She was very gracious in how she
addressed the instructor and the response that was given to her was equally polite. This same student again asked another question to help clarify the material being discussed. The specific question that the student asked was not directly answered, however, the instructor explained that the question being asked was not as important as the context to which the event happened within the clinical unit. The instructor concluded her statement by explaining that nursing was a field of holistic learning, not specificity. Unlike the comments that were made within the prior course, the student was not bothered by her question not being answered directly, but was more so satisfied with understanding the total context to which her question might appear within the nursing environment. The other students seemed to also understand the point being made by the instructor and most of them nodded their heads in agreement. After this brief discussion, the students were allowed to take a 30 minute break before the start of the second half of the class.

10:30 a.m. – After the break the students were instructed that they would conduct the remainder of the class within the computer lab to practice taking online licensure preparation tests. After a short walk to the computer lab, students began logging into the computers and getting settled. They were initially a little loud, laughing and talking amongst themselves for the first several minutes. The instructor eventually had to quiet the students down when the chatter continued for too long. During this observation was the first time any of the students had to be warned for behavior that was not becoming of senior nursing program students. Shortly after the instructor quieted down the class they began working intently and the only sound that could be heard was the occasional student reading a question out loud for clarification. The instructor did not interfere with the students much during this time period of test question review online. There was one instance where a student did not understand a question and the instructor came to her, read the question to her aloud and it could be heard that the student was attempting to break
down the parts of the questions softly under her breath. The instructor attempted to rephrase the question in terminology that the student would understand. Eventually, the student answered the question correctly with help from the instructor. Over the next several minutes the instructor walked in and out of the computer lab while the students worked independently. One student did ask another in a very soft whisper, “How long are we to answer these questions before she will let us go?” The other student shrugged her shoulders, and shook her head to seemingly tell the student that she too did not know.

10:50 a.m. – The instructor walked back into the room after a brief few minutes away, assessed how far along the students had gotten taking their online tests, and answered a few of the students questions about how to print out their results. However, no further questions were asked, nor were there any other instructions provided by the instructor. The instructor did continue to walk around for a few minutes to make her presence known that she was there to help students complete the test, but none of the students really acknowledge her presence at that moment. They were all busy answering questions online questions.

11:00 a.m. - Within the next 10-15 minutes the first student had completed the online assessment and she asked if she could begin taking the other assessments that were available on the software. Some of the students had already taken the second portion of the assessment and asked if they could leave early. There was a campus event taking place during this class period and some students expressed an interest in attending. The instructor understood that students were excited about the event and wanted to allow them a special treat for working so diligently throughout the semester and during their online assessment. The students were pleased that they could leave class early and many of them did. There were some students that stayed longer and completed their second assessment while the instructor again walked in and out of the classroom.
After about another 30 to 45 minutes there were only a few students remaining in the class. The last few students completed their assessments and then the class ended at approximately 12:15 p.m.

**H. IN-CLASS OBSERVATION (SUMMARY)**

Within the first upper division course of the nursing program the interactions between the instructor and students were more pedagogical in nature as opposed to how the literature recommends the training of adults. No efforts were being made to encourage collaborative learning among the students and most of them were passive participants within the course. They were unenthusiastic about answering questions asked of the instructor and appeared to be uninterested in the lecture. The communication between the instructor and students was extremely transactional in nature, with the instructor asking a question and the students responding to the question. The students were not inquiring of any additional information outside of what was being asked during the transactional periods of the lecture. The students also exhibited behaviors that would likely be seen in a high school classroom. Inappropriate comments were made about the instructor not explaining course material adequately, students entered and exited the room at will, and many were preoccupied with eating, drinking, and talking amongst themselves.

The opposite of the first course was observed during the second observation of the last course within the nursing program. The most obvious, being that the student to instructor ratio was significantly less. The level of maturity presented by the students was imminent based on observed student behavior. In addition, students were very respectful, only once correcting the instructor politely when she made an inaccurate statement regarding a topic that was being discussed. Students sat quietly and attentively watched the video presentation despite it being more advanced than the nursing curriculum required. The interaction between the instructor and
student was more peer-to-peer, as opposed to instructor-to-student. The dialogue between the two parties was also more developed and showed a high level of respect between the two.

The overall impression after having observed both classes was that the students in the beginning upper division nursing course still had a lot of growing to do both academically and personally. While the students in the last course within the program acted more in line with what could be expected from a professional within the field of nursing. Students in the last course behaved professionally, and it appeared they all shared a common level of respect for the instructor, and her teaching methodology.

I. ETHICAL CONSIDERATIONS

According to Christians (2005) there are four primary guidelines to the code of ethics which include informed consent, non-deception, privacy and confidentiality, and accuracy. All four guidelines were supported within this research study. Each participant was treated with respect and received detailed information regarding the nature of the study, then was given the opportunity to voluntarily participate in the research study. Deception was avoided in the case by explaining the research in terms that the participants could understand and by allowing each one to read a written statement of the reason for conducting the study.

Privacy and confidentiality were maintained to the highest level possible throughout the data collection process. All recipients received code names and all materials were kept in a password protected excel spreadsheet, or if documents were printed, each one was kept in a locked file cabinet with access maintained by the researcher only. Confidentiality agreements were read and signed to protect the rights of each participant. In addition, all interviews were conducted in private locations to ensure the privacy and comfort level of each participant was maintained. Christians (2005) also stated “ensuring….data is accurate is a cardinal principle in
social science codes as well” (p.145). All data was handled in a way to avoid any misleading information from being reported in this research study.
V. DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

A. RESEARCH SUMMARY

The purpose of this case study was to explore the self-directed perceptions of faculty and students within a community college nursing program. Chapter five provides an overview of the study’s findings from a detailed review of 10 in-depth interviews, in-class observations, one document review of the faculty teaching manual, and one document review of the student nursing handbook. In addition, conclusions will be drawn from the data analysis and existing literature. Recommendations for practical nursing programs, faculty, students, and future research will also be addressed. The following research questions guided this study:

Research Question 1
A. How does faculty define self-directed learning?
B. How do students define self-directed learning?

Research Question 2
A. What behaviors does the nursing faculty perceive demonstrate self-directed learning?
B. What behaviors do nursing students perceive demonstrate self-directed learning?

Research Question 3
A. What are faculty expectations regarding student self-directedness?
B. What are student expectations regarding their self-directedness?

Research Question 4
A. What does faculty perceive to be the relationship between student self-directedness and the profession?
B. What do students perceive to be the relationship between self-directedness and the nursing profession?

Research Question 5
How does faculty develop self-directed learning in nursing students?

Research Question 6

What factors inhibit student self-directedness?

B. DISCUSSION AND RECOMMENDATIONS

Faculty members at all levels were able to accurately define SDL using terminology that was consistent within the literature. Past theoretical views of SDL within nursing education has primarily regarded it as a pedagogic teaching methodology and as a result it is not uncommon to find nursing faculty opposed to using it within their current classroom or even sometimes clinical environments. As a result, learners become accustomed to interacting with their faculty in a dependent role, while faculty members assume the responsibility of providing all of the instructional direction for students. Institutions of higher education need to continue educating nursing students consistent with the expectations of being professional within the field. Nursing faculty members have an obligation to guide nursing students as they learn to care for patients in both a classroom and a clinical environment through the use of critical thinking strategies. While nursing students are obligated to communicate their learning needs to their faculty on ways to encourage safe, competent, effective, and efficient nursing care.

The themes that emerged from this research all related to the development of critical thinking within SDL concepts. “Critical thinking underlies independent and interdependent decision making. It encompasses questioning, analysis, synthesis, interpretation, inductive and deductive reasoning, intuition, application, and creativity” (American Association of Colleges of Nursing, 1998, p. 9). Additionally, the National League for Nursing Accrediting Commission (NLNAC), the accrediting body of this institution, in their Accreditation Manual with Interpretative Guidelines by Program Type for Post-Secondary and Higher Degree Programs in Nursing (2005) stated that programs must maintain compliance by demonstrating critical
thinking, reflection, and problem solving” (p. 84). Cognitive ability and critical thinking are at the core of self-directed learning. The level of self-direction depends greatly on the learner’s proficiency in this area (Garrison, 1997). Meta-cognition can be associated with reflective thinking and critical analysis. Reflection encourages learners to recall experiences to “develop learners who are capable of monitoring themselves in a variety of situations” (Candy, Harri-Augstein, & Thomas, 1985, p. 115).

Garrison’s model of self-directed learning included three foundational concepts: (1) self-management, (2) self-monitoring, and (3) motivation (1997). Within this model self-management was concerned with the controlling of individual tasks, and it specifically related to the management of learning activities. Self-monitoring included the critical thinking element of self-direction, and was the process by which the student exhibited both willingness and the mental capacity to direct his or her learning. Motivation was the final element within this model and it involved understanding the action that leads many adults to becoming more self-directed. Using Garrison’s model critical thinking is a subset of an adult’s ability to monitor his or her own action and is paired with the willingness of that learner to self-direct learning. However, this study infers that critical thinking is not merely a subset of a larger self-directed action, but should stand alone as a critical component to the development of independent learning. Based on the findings within this study, a modified version of this model is better suited to describe the tendencies of adult learners within this institution’s nursing student population. A revised dimension of self-directed learning is shown in Figure 2 below. The element of critical thinking has been removed from its subset of self-monitoring and now is shown as a separate entity within the development process of self-direction.

Figure 2: Revised Dimensions of Self-Directed Learning
The emerging themes provided an insight into the faculty and student perceptions of SDL within the nursing curriculum at this two-year community college. The analysis of data produced four final themes for both the faculty and student perceptions. The four faculty themes were (a) lifelong learning, (b) intrinsic motivation, (c) critical thinking, and (d) expectation. The four student themes were (a) time management, (b) extrinsic motivation, (c) academic ability, and (d) expectation.

**Lifelong learning.** Faculty understands the need for students to continue learning new nursing concepts throughout their tenure as a nursing professional, and not just as a student. *Lifelong learning* was the first identified theme within this research. This ongoing and voluntary act in their belief enhanced personal and professional development, but also increased a student’s employability within the field. It is extremely important for faculty to instill within their students that continuous learning is not confined to just what is being learned while in a nursing program, but throughout life and in a variety of environmental situations. Students that understand the importance of this type of educational goal, in the mind of faculty, generally are better prepared for the challenges faced by nurses every day.
The challenge within this program was that faculty assumed that nursing students understood the role lifelong learning played within the field. It is this assumption that has led many faculty members to become increasingly frustrated by the behaviors exhibited of their students when those behaviors did not confirm to their belief. Lifelong learning, as defined by the Department of Health (1998) is a continuous development of an individual to meet the current needs of patients and to deliver health care outcomes which enable a nursing professional to expand and fulfill his or her potential. At a conceptual level lifelong learning has continuously evolved over the last three decades, and at a practical level the application of this concept can depend largely on the perceptions of the individual (Gopee, 2001). As in this case, faculty perceptions of lifelong learning are that students should know the importance of it for their professional growth and be able to relate concepts learned within the classroom to this outcome. However, the students did not necessarily understand this connection, especially those that were still in the earlier stages within the program. At the core of self-directed learning is the fundamental principle that adults enter a learning environment for a specific reason and their readiness to learn a task is based on how that task can be related to their own-life (Knowles, 1984). According to the literature, adult learners learn better and faster when they apply their learning in the context of real-life situations. As a result, adults want to completely know and understand why they must learn something before they learn it. However, contrary to adult learning theory the findings through student interviews and classroom observations indicated that these students were much more interested in learning concepts that would help them succeed in the present day, as opposed to learning concepts that would help them succeed as nurses. They did not want to know how the concepts they were learning within the classroom could be applied to situations they would experience in the field of nursing. They had difficulty seeing beyond their next
examination or clinical evaluation. As a result, classroom conflict between the instructor and students were most present when instructors taught material that would not be present on an examination, or if instructors provided students with examples of nursing situations that were most likely experienced by nurses in higher levels of the field, like a registered nurse (RN), for example. Despite the fact that many students indicated that they wanted to further their education beyond practical nursing to RN.

**Recommendation (1).** To progress towards higher levels of autonomy or self-direction students must be able to fully understand that the field of nursing is inclusive of professional development and the continued process of learning new information to provide the best patient care possible. Self-directed learning is widely regarded not only has important, but also essential to continuous lifelong learning (Candy, 1991).

When an adult recognizes that learning is necessary or desired, then the adult will need to determine the following: (1) what is to be learned, (2) where relevant information exists, (3) which sources are most useful, and (4) how or where to obtain the instruction (Knowles, 1984). Within the classroom environment faculty need to find ways to associate activities learned within the classroom with professional and lifelong learning objectives. An adult learners' willingness to learn is strengthened when learning resources relate to real-life problems and to personal development goals (Knowles, 1984). SDL is widely regarded not only has important, but also essential to continuous lifelong learning (Candy, 1991). When an adult recognizes that learning is necessary or desired, then the adult will need to determine the following: (1) what is to be learned, (2) where relevant information exists, (3) which sources are most useful, and (4) how or where to obtain the instruction (Knowles, 1984).
Faculty perceptions of students’ understanding of this concept prior to entering into this program are based on their own feelings of the importance of lifelong learning. It cannot be assumed that students enter into this learning environment with this knowledge, and it also cannot be assumed that they will automatically learn this self-directed concept while in the program without specific guidance from faculty. Faculty need to adopt and facilitate problem-solving methods and self-discovery techniques based on the assessment of their students' needs. Both the faculty member and the students together should not only diagnose learners' needs, but also develop related learning objectives and goals.

**Intrinsic motivation.** The second identified theme, *intrinsic motivation*, refers to the motivation that is within each individual student. It is the pleasure obtained from the task itself or the sense of satisfaction in working on the task, even if the task is not complete. According to the adult education literature on self-direction adults can be motivated by external factors, such as promotions and salaries. However, internally motivated adults resolve lifelong problems in their life such as increased job satisfaction, self-esteem, quality of life, and are afforded more opportunities to self-actualize (Knowles, 2005).

This feeling of internal motivation is absent among many of the students within this program, according to faculty. Students within this program are often distracted from concentrating on the program to their fullest capabilities because their lack of internal motivation does not allow them to separate personal issues from the work that must be done to succeed in the program. The perception of faculty is that many students truly do not want a nursing degree or to pursue higher levels of education within the field because they are enrolled in this program not by choice, but by necessity. They are externally driven by the high employment rates within the field of healthcare, or by family pressure because nursing is a respected field within their culture or
simply a familial tradition. The true desire to pursue nursing is not internal and faculty can see the continuous motivational levels drop as students’ progress into higher levels within the program. This lack of internal drive is frustrating to many faculty members because they want students to possess the same level of interest in the field as they have personally, as a former student and as a current professional.

**Recommendation (2).** Dependent learners or those that are not self-directed are extrinsically motivated, and are influenced by positive reinforcement (Witkin, 1949, 1950). Self-directed learners in contrast are intrinsically motivated, individualistic, and maintain a strong self-identity. Students within this program are inherently not intrinsically motivated, however, that does not necessarily mean that they cannot learn to harness their external drive to foster their lack of internal motivation. An individual's transformation of regulatory processes that are external in nature to processes that are more internal are essentially internally motivated (Müller & Louw, 2004). Within this research many students talked about their motivation to complete this program of study based on family responsibilities, financial constraints, and other personal obligations. An adult learner, according to Müller and Louw, will perform an activity for its own sake and will inherently be more internally motivated, if the activity: (a) is of interest and meets their curiosity, (b) taps into the natural human tendency to pursue interests and exercise capabilities, and (c) can help a student experience “flow”, defined as a feeling of enjoyment that occurs when they have developed a sense of mastery and are concentrating intensely on the task at hand.

The full responsibility of motivating externally driven students does not rest on the faculty alone, however it should be a collaborative effort shared between the faculty and students. Self-direction implies that learning does not take place in isolation, but more so as a
result of the collaborative efforts between both the instructor and student (Candy, 1991). Faculty need to find ways to satisfy their students' internal desires by reinforcing how program completion can help to alleviate some of the stress and pressures many students feel while completing this program of study.

**Critical thinking.** The third theme, *critical thinking*, was identified throughout many of the responses to research questions and various elements of it and self-directed learning are central to this entire study. Critical thinking is a type of reflective reasoning, and can be thought of within healthcare as a way to decide future actions regarding proper patient care. It is important to healthcare professionals because how to effectively treat a patient may not always be written in black and white, and it is a significant part of the formal training all nurses receive within this program and at other educational institutions. Faculty understands the importance of critical thinking within the profession and attempt to incorporate it within the curriculum. Faculty do not always have confidence in that students value its importance, nor do they always believe that students have the mental capacity and prior educational training to learn these types of concepts at this level. Teaching critical thinking, in their opinion, is not always possible; students must come into the program knowing how to take what is learned in the classroom and apply it to a variety of nursing situations. The ability to critically analyze new information is a skill set that must be developed over time, and students within this program do not always come prepared with this type of knowledge.

**Recommendation (3).** Perceptions of critical thinking among nursing faculty need to be continuously investigated and re-evaluated to increase awareness about how educator’s perceptions influence the student’s perceptions of critical thinking in the practice of nursing. When asked about how faculty incorporated critical thinking into their lessons, some faculty
members were very forthright in their feelings that critical thinking cannot be taught. This perception regarding critical thought can be extremely damaging to students that may need additional support in achieving this level of inquiry. Many students within this program come from educational backgrounds that have not allowed them to be active participants within their educational environment, and as such many students simply have not learned to critically analyze problems. Understanding this concept should encourage the continued use of advanced critical thinking activities in the classroom setting, thus promoting innovative opportunities for students to engage in critical thinking experiences.

**Expectation.** The final theme, *expectation*, or as several faculty described it as being a “sense of entitlement” is present within almost all of the students in this program regardless of age or socio-economic background. Faculty believed that students assumed that they should be provided with all of the information required to be successful within the program, with little or no input from the student. It is because of this expectation that caused some students to develop a false sense of reality that greatly increased their confidence level, but not in a way that encouraged self-determination and drive. This over-confidence led many students to think the program would be easy and that no additional studying outside of the classroom would be required. The faculty understands that nursing required a great deal of time to learn new concepts and to understand the foundational principles, but they were unsure that students’ realized the magnitude of this commitment prior to enrolling in the program.

**Recommendation (4).** If personal responsibility within adult learning is a characteristic of self-direction, then educators can facilitate the increasing responsibility of learning for their students. Personal responsibility is at the core of self-directed learning. It is this willingness to take control of one's own learning that determines the potential for self-direction (Candy, 1991).
Adult learners, according to the literature, possess a varying degree of willingness to accept personal responsibility for their learning. Some adults, according to Guglielmino, are more self-directed in certain learning environments as opposed to others (1977). Many students in this program did not come from nursing backgrounds and may possessed feelings of inadequacy within the learning environment. Their expectation was that faculty would support their learning efforts despite the level of knowledge that they possessed when they entered the program.

Faculty in the same regard understood that it was their responsibility to assist the needs of students, however, the degree to which faculty supported learning was not at the same level as perceived by students.

To encourage the increase of responsible learning within this type of environment, faculty should engage in learning activities that gradually move students from that of dependent learner to more independent levels of thought. Faculty expectations of students based on the stated teaching philosophy is that each student will learn to build upon a foundation of theoretical knowledge and clinical skills as he or she moved through the nursing curriculum. Thus learning would occur through the integration of knowledge, behaviors, and attitudes that are deemed as necessary for assuming the role of a practical nurse. The educational environment should be one in which both teaching strategies and learned activities promote growth and active participation, despite the level of knowledge the individual possessed upon entering the program. Students should also play an active role in the educational process by taking the initiative to seek relevant information on their own and incorporate it into their learning.

**Time management.** One of the primary concerns of students within this program was their inability to find time to prepare for class lectures and examinations. The first theme of, *time management*, was easily identified by almost all of the students as the single most important
factor in properly preparing for class lectures and examinations. Time management is the conscious act of exercising control over the amount of time spent on specific activities. Managing one's time or self-management within the adult education literature is the ability to manage not only the amount of time spent on learning activities but also the ability to manage self-control as it relates to these individual tasks (Garrison, 1997). Self-management is the increased awareness to make learning more meaningful and to take greater responsibility in personally monitoring this process. However, the difficulty for some adult learners in developing this task oriented ability is that it is very challenging to accept ownership for their learning if they have little control, or input into the learning process. Without control of their learning, or control over what is to be learned, nursing students within this program took less ownership of their learning activities, and therefore placed greater importance in other aspects of their life.

Adult learners engage in self-directed learning projects based on the perceived benefit of that project (Tough, 1971). Self-directed learning in general is a process that is self-initiated and focuses on the ability of an individual to overall manage his or her own learning (Brockett & Hiemstra, 1991). It also is a form of organized learning in a formal setting that potentially will allow for greater task control and self-management by the learner (Caffarella & O'Donnell, 1989). The students have to "own it" when they enter into the learning environment. If what is to be learned is not important to them, then they will not complete the task and ultimately will struggle and perhaps never become completely self-directed.

**Recommendation (1).** Time management strategies as it related to the development of self-direction within adults can be influenced by the learner's social and educational environment (Caffarella, 1993). The students felt that utilizing their time wisely while outside of the classroom by prioritizing studying, completing nursing care plans, and reviewing newly learned
content was a challenge, but was an absolute necessity for successful program completion. Some adult learners may have difficulty openly admitting that they need additional support to help develop better time management skills. In fact, many adults do not even realize that they have a problem at all. Many times the issue continues to increase and causes more problems as the learner continues to move towards higher more academically rigorous levels of education.

A dependent learning style developed during early childhood may contribute to a student's perception of how self-directed learning should be initiated and performed in later experiences. Students having had these types of early learning experiences enter each new learning experience with dependent behaviors. They are partially conditioned to playing a dependent role, while expecting the instructor to provide greater levels of direction. In this instance, time management strategies may need to be incorporated within faculty lesson plans to assist underdeveloped students in managing this task. Through the use of instructor provided assignment due dates planning, goal-setting, and prioritizing activities based on their level of significance, students can be taught, even those that have never learned this task oriented structure independent learning techniques. Some students may need additional support from faculty in the earlier courses to adjust and learn how to manage their time using these strategies. This added support once they have reached upper division level courses can be gradually removed from the curriculum to encourage greater levels of independence. Other alternatives could be to incorporate a freshmen seminar course within the nursing curriculum that would aid in developing these skills in new students. Courses like these encourage the development of students' task orientation by teaching academic preparation techniques such as; study skills, time management, and financial responsibility which may help students who are experiencing challenges manage these aspects of their lives.
**Extrinsic motivation.** The second theme, *extrinsic motivation*, is the motivation that is derived from sources outside of the individual. An extrinsically motivated student can work on an assignment, or in this case enroll in a program of study that is of little interest because the satisfaction is not with the assignment or program of study, but with the anticipated outcome of performing the task. Learners that are externally driven; (a) are more approach and avoidance ego-oriented, (b) study less regularly, (c) show less excitement in learning activities, (d) have decreased persistence, (e) score lower on examinations typically overtime, and (e) are less interested in the course (Simons, Dewitte, & Lens, 2004).

Students within this program admittedly discussed their reasons for enrolling in this nursing program of study and very few talked about their internal desire to become a nurse. Most of the reasons for enrolling in this program were based on the need for financial and economic security, the need to care for an aging parent or other sick family member, or because nursing was a career often pursued by members of their family. The students within this program were almost always extrinsically motivated in their pursuit of nursing as a profession.

**Recommendation (2).** If a student is presented with a task and is either provided with an external incentives or experiences feelings of external motivation, that activity my never develop into an intrinsic motivation to learn (Müller & Louw, 2004). In addition, Müller and Louw state that if a student is provided external incentives to perform a task that they would naturally find motivating, their potential desire to perform the tasks can actually decrease significantly. In general, when students focus on external incentives, the reward intuitively becomes the end, rather than it serving as a means to accomplish their long-term goals (Simons, Dewitte, & Lens, 2004). Adults are motivated to learn after they experience a need in their life situation (Knowles, 2005). For that reason, according to the literature, learning within educational environments
need to be problem-focused or task-centered. Adults want to be able to apply what they have learned as quickly as possible in support of their personal and professional goals. If the learning activity is clearly relevant to their needs, the effort a student puts into the will to accomplish the task is more meaningful (Simons, Dewitte, & Lens, 2004).

Students within this program expressed their desires as being primarily externally motivated. Faculty working conjunction with the student will need to find ways to cultivate that external desire and translate it into a more intrinsically rewarding factor. If a student's goal is to become a nurse solely to help an aging parent then finding motivating factors to support this goal that are linked to what the student may find personally satisfying is a way in which to help encourage intrinsic behaviors. Students may find the work to be much more worthwhile and the motivating factor now becomes the means to which students accomplish their goals.

**Academic ability.** The third theme, *academic ability*, was a common concern amongst the students being interviewed. Their concern was often only realized as they reflected during our interview on past failures and unexpected challenges. It was at that moment that many of them realized that their lack of academic ability could have contributed to these unsuccessful prior experiences. Academic ability, as it relates to this study, is the degree of competence a student has in performing healthcare related activities within the program. Many students felt that their prior educational programs of study did not adequately prepare them for the level of academic rigor necessary to complete a nursing program. Many students discussed their inability to address questions being raised within the classroom and in the clinical environment as new students because they were not used to being active participants within the learning environment. Students were used to an instructor lecturing and not actively attempting to engage students within the learning process. These students talked openly about being more comfortable with
passive learning environments and having to quickly adjust their level of thinking to meet the demanding requirements within this nursing program.

Self-monitoring is the cognitive aspect of self-direction, according to Garrison (1997). It addresses both cognitive and metacognitive functions, and is the process by which learners exhibit both willingness and the mental capacity to direct their learning (Candy, 1991). The learner therefore, constructs personal meaning by integrating new ideas and abstract concepts with previously learned information. The responsibility of constructing new knowledge is the commitment by the learner to demonstrate a willingness to learn new information; however, this commitment is not independent of contextual influences by the instructor or environment. To assume cognitive accountability is to monitor one’s learning process, assess outcomes, and develop and improve strategies to accomplish intended learning outcomes. Within adult education, learning how to learn is often a function of pedagogical models of instruction and is deemed more appropriate for younger learners. Primary and secondary educators normally hold the responsibility of developing this academic ability in students. However, students in this nursing program have not experienced this level of metacognitive growth. Learning to learn should be a part of the curriculum within practical nursing and emphasized as much as other areas within the field.

**Recommendation (3).** Fink (2003) summarized Dolence and Norris’ 1995 report on the transformation of higher education in the age of information as, “Society and individual learners now have different needs, both in terms of what people need to learn and how they can and should learn (p. 295).” For this reason, Fink also noted that the focus of education has shifted from teaching to learning and faculty roles of lecturing are now shifting towards roles focused primarily on the design of the learning environment. This change in focus includes how to
diagnose the learner's need for learning and how to become self-directed. This new direction in education enables adult learners to continue learning with greater effectiveness and control, which is an important skill to have as the need to increase basic knowledge and skills continues to grow as a result of advances in technology and patient care within the field.

Taking responsibility for individual learning is dependent upon both the internal ability of the learner, and external feedback provided by the instructor. For example, “learners must understand whether the requirements of the task are to assess the state of current knowledge, search for additional information, explore new conceptualizations, or confirm new meaning through discourse or action” (Garrison, 1997, p. 25). Preparing students for the “challenges in the workplace and in an interconnected world with emphasis on educating students to be intentional learners who are purposeful and self-directed, empowered through intellectual and practical skills, informed by knowledge and ways of knowing, and responsible for personal actions and civic values is the responsibility of colleges and universities” (American Association of Colleges and Universities, 2002, p. 65). Specifically, the AACU recommends that students should learn to; (a) effectively communicate orally, visually, in writing, and in a second language, (b) understand and utilize quantitative and qualitative analysis to solve problems, (c) interpret and evaluate information from a variety of sources, (d) understand and work within complex systems and with diverse groups of people to broaden this ability, (e) demonstrate intellectual agility and the ability to manage change, (f) transform information into knowledge and knowledge into judgment and actions. Within a collaborative environment which is encouraged within adult education, faculty and students can work together to design activities that will utilize these best practice methods to encourage intellectual stimulation and will serve as a bridge toward continued lifelong learning. Finally, the AACU suggests that connecting personal aspirations, to
formal education and work may develop naturally for many students when one becomes an adult. Deliberate action must be taken on behalf of the instructor to provide opportunities for continual reflection and goal attainment.

**Expectation.** The final theme of expectation from student participants matched the perceptions of faculty in that many students thought this educational program of study would be the easiest among all other nursing career fields. This perception is largely due to it being at the starting point for many nursing students with the goal of obtaining their bachelor of science in nursing. In addition, there are many students within this program that were unsuccessful in completing their RN program of study, and only enrolled in this program in hopes it would allow them to continue their goal of becoming a nurse. What many of them did not realize was that the core of nursing is the same for both the LPN program and the RN program. The foundational nursing concepts are the same for any nursing program of study, and the perception that this program would be easier because it was an LPN program was an unrealistic expectation that has plagued many students within this program. These students quickly realized that the same level of effort would have to be applied to this program as it would to any other higher level nursing program.

**Recommendation (4).** According to Chickering and Gamson (1987) adult learners expect course and program requirements to be communicated effectively and clearly, which also includes specific assignments. Faculty can help communicate their expectations of their students more effectively if they, (a) develop a well-informed policy on matters pertaining the institution, (b) familiarize students with course structure and examinations, (c) provide clear instruction on course assessment requirements and rubrics, (d) set very strict expectations from the very first lesson, and (e) guide students on how to properly prepare for examinations by delivering proven
techniques that have helped students in the past be successful within the course, rather than merely providing students with answers to questions. Faculty noted during their interviews that they do provide students with a handbook of policies and procedures, which also states in some degree their expectations.

Adult learners appreciate well-prepared and clear presentations because they, (1) likely have limited time in class and want to get the most out of the lecture, and (2) are more experienced and normally have higher expectations (Chickering & Gamson, 1987). However, students within this program do not necessarily possess these same qualities. Students within this nursing program may need additional assistance in identifying the expectations of the faculty and the department as whole. More deliberate actions may have to be placed on how these expectations are presented to students. In addition, constructive feedback may be necessary to emphasize expectations of faculty that are not met. Faculty can provide relevant feedback as necessary by being clear and specific and timely in their responses. Summaries on areas to improve upon can also be of assistance to an adult learner that may not clearly understand what the goals of the course are or who has inaccurate expectations.

**F. CONCLUSIONS**

The NLN, the accrediting organization of this institution, requires that elements of critical thinking be present within the program’s curriculum. These standards must be met to maintain state and regional program accreditation. This study provides transference of insight into the current practice of nursing education among students within a practical nursing program. In particular, this case study presents a new perspective about the perceptions of self-directed learning among adults. Thus, these findings may be considered as potentially transferable to other similar settings (Lincoln and Guba, 1985). The findings present the challenges of the actual practice of educating nursing students from the perspective of both faculty and students.
Through this case study students were able to reflect upon prior challenges that they had experienced and for many of them this was their first attempt at critically analyzing their education. For faculty in the same regard understanding elements of self-direction, like critical thinking, is not the same as being able to apply it within an educational environment. Knowledge of how to formally educate nursing students and how their ability to think critically is developed, influenced, and practiced in this type of educational setting can be challenging. The NLN and other nursing accrediting organizations challenge nursing faculty to think about teaching and evaluating critical thinking. Through this research there emerged a clear need to further understand nursing education from a student perspective and aligning those viewpoints with that of faculty. Both nursing students and faculty need opportunities to learn together on how best to educate the next generation of nurses.

G. AREAS OF FUTURE RESEARCH

This research was limited by the experiences of a few students and their faculty within a single practical nursing program in New Jersey. The perspectives obtained by this sample population may not be generalizable to every student or the entire field of nursing. In addition, participant verification to confirm information was accurately documented within this research after each interviewing sessions was not conducted. One area of future research may be to broaden participant populations to other educational fields where the need for lifelong learning and critical thinking are prominent within the field.

Another area for research is further understanding whether the lack of self-direction or independence is correlated with other areas of dependency within an adult's personal life. The foundation of this research was based on the increased focused by the United States government in providing financial assistance for unemployed, underemployed, and other incumbent workers to advance their economic standing within society by receiving training through community
colleges and other trade schools. Many of these workers are low-income and are dependent upon
the government to provide them with financial assistance to sustain the living conditions of their
families. An interesting research focus might be to learn if there are any correlations between the
dependency behaviors of adults in academic settings with that of other factors present within
their life.
REFERENCES


the health care of older adults (pp. 31-46). Mahwah, NJ: Erlbaum.


MEMORANDUM

TO: Carmen Rogers
    Kit Kacirek

FROM: Ro Windwalker
      IRB Coordinator

RE: New Protocol Approval

IRB Protocol #: 13-02-524

Protocol Title: Understanding Student and Faculty Perceptions of Self-Directed Learning in a Community College Practical Nursing Program

Review Type: ☒ EXEMPT  ☐ EXPEDITED  ☐ FULL IRB

Approved Project Period: Start Date: 03/06/2013  Expiration Date: 03/05/2014

Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form Continuing Review for IRB Approved Projects, prior to the expiration date. This form is available from the IRB Coordinator or on the Research Compliance website (http://vpred.uark.edu/210.php). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval. Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

This protocol has been approved for 11 participants. If you wish to make any modifications in the approved protocol, including enrolling more than this number, you must seek approval prior to implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 210 Administration Building, 5-2208, or irb@uark.edu.
Dear Nursing Program Student:

My name is Carmen Rogers, and I am a doctoral candidate at the University of Arkansas conducting a study to understand the perceptions of self-direction in practical nursing students. I would like to ask for your help by participating in an interview to discuss your development of self-direction throughout your past learning experiences. It is my goal to understand the meanings, variations, and self-directed perceptual experiences of both faculty and students.

To participate in the study you must be a currently enrolled practical nursing student registered in one of the following three nursing courses: PNU 191, PNU 210, or PNU 211. This interview should take no more than one hour to complete, and your participation is entirely voluntary. The conversations held during this interview will be recorded, and all information collected will be kept confidential to the extent allowed by law and University policy. Any information you provide will in no way be linked to any personally identifying information. In the event that this study is published in an academic journal, all results will be coded so that no individual response can be identified.

There are no personal risks or dangers by you participating in this study. Refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. Your responses will help the research community better understand self-direction in adults, and may ultimately benefit adult students, the nursing profession, and other educational institutions that enroll non-traditional students.

If you would like to volunteer, please contact me by telephone at (386) 299-9506 or by email at: cmr008@uark.edu.

If you have any questions about your rights as a research subject, you may contact Iroshi (Ro) Windwalker the Institutional Review Board Compliance Coordinator at:

University of Arkansas - The Office of Research Compliance
210 Administration Building
Fayetteville, AR 72701
Tel: (479) 575-2208
Email: iwindwal@uark.edu

//signed//

Carmen Rogers
Doctoral Candidate

************************

University of Arkansas IRB Approval Notice:
This recruitment notice and research protocol was approved by the University of Arkansas Institutional Review Board for the Protection of Human Subjects on [March 7, 2013], and expires on [March 7, 2014].
Appendix (C) – Faculty/Staff Participant Request Letter

Dear Nursing Program Faculty and/or Staff:

My name is Carmen Rogers, and I am a doctoral candidate at the University of Arkansas conducting a study to understand the self-direction in practical nursing students from a faculty and/or staff perspective. I would like to ask for your help by participating in an interview to discuss your thoughts regarding the development of self-direction in your students. It is my goal to understand the meanings, variations, and self-directed perceptual experiences of both faculty and students.

To participate in the study you must be a full-time practical nursing faculty member currently teaching one of the following courses within the program: PNU 191, PNU 210, or PNU 211. This interview should take no more than one hour to complete, and your participation is entirely voluntary. The conversations held during this interview will be recorded, and all information collected will be kept confidential to the extent allowed by law and University policy. Any information you provide will in no way be linked to any personally identifying information. In the event that this study is published in an academic journal, all results will be coded so that no individual response can be identified.

There are no personal risks or dangers by you participating in this study. Refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. Your responses will help the research community better understand adult development, and may ultimately benefit other adult students, the nursing profession, and other educational institutions that enroll non-traditional students.

If you would like to volunteer, please contact me by telephone at (386) 299-9506 or by email at: cmr008@uark.edu.

If you have any questions about your rights as a research subject, you may contact Iroshi (Ro) Windwalker the Institutional Review Board Compliance Coordinator at:

University of Arkansas - The Office of Research Compliance
210 Administration Building
Fayetteville, AR 72701
Tel: (479) 575-2208
Email: iwindwal@uark.edu

//signed//

Carmen Rogers
Doctoral Candidate

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University of Arkansas IRB Approval Notice:
This recruitment notice and research protocol was approved by the University of Arkansas Institutional Review Board for the Protection of Human Subjects on [March 7, 2013], and expires on [March 7, 2014].
You are being asked to take part in a study to understand the perceptions of self-direction in practical nursing students. The overall aim of this study is to explore the meanings, variations, and self-directed perceptual experiences of both faculty and students. Specifically, the study will (1) explore faculty and student perceptions of self-directed learning, and (2) understand the factors that facilitate or impede self-direction. Please read this form carefully and ask any questions you may have before agreeing to take part in the study.

This interview should take no more than one hour to complete, and your participation is entirely voluntary. The conversations held during this interview will be kept confidential to the extent allowed by law and University policy. It will be recorded to capture the interview in its entirety. However, any information you provide will in no way be linked to any personally identifying information.

There are no personal risks or dangers by you participating in this study. Refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. If you have any questions about your rights as a research subject, you may contact Iroshi (Ro) Windwalker, the Institutional Review Board Compliance Coordinator at:

University of Arkansas - The Office of Research Compliance
210 Administration Building
Fayetteville, AR 72701
Tel: (479) 575-2208
Email: iwindwal@uark.edu

You will be given a copy of this form to keep for your records.

Statement of Consent:
I have read the above information, and have received answers to any questions I asked. I consent to take part in the study.

Your Signature _________________________________ Date _________________________________

Your Name (printed)
___________________________________________________________________________

In addition to agreeing to participate, I also consent to having the interview tape-recorded.

Your Signature _________________________________ Date _________________________________

Signature of person obtaining consent
___________________________________________________________________________

Date _________________________________

University of Arkansas IRB Approval Notice:
This recruitment notice and research protocol was approved by the University of Arkansas Institutional Review Board for the Protection of Human Subjects on [March 7, 2013], and expires on [March 7, 2014].

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You are being asked to take part in a study to understand the self-direction in practical nursing students. The overall aim of this study is to explore the meanings, variations, and self-directed perceptual experiences of both faculty and students. Specifically, the study will (1) explore faculty and student perceptions of self-directed learning, and (2) understand the factors that facilitate or impede self-direction. Please read this form carefully and ask any questions you may have before agreeing to take part in the study.

This interview should take no more than one hour to complete, and your participation is entirely voluntary. The conversations held during this interview will be kept confidential to the extent allowed by law and University policy. It will be recorded to capture the interview in its entirety. However, any information you provide will in no way be linked to any personally identifying information.

There are no personal risks or dangers by you participating in this study. Refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. If you have any questions about your rights as a research subject, you may contact Iroshi (Ro) Windwalker the Institutional Review Board Compliance Coordinator at:

University of Arkansas -The Office of Research Compliance  
210 Administration Building  
Fayetteville, AR 72701  
Tel: (479) 575-2208  
Email: iwindwal@uark.edu

You will be given a copy of this form to keep for your records.

Statement of Consent:
I have read the above information, and have received answers to any questions I asked. I consent to take part in the study.

Your Signature ____________________________ Date ____________________________

Your Name (printed) __________________________________________________________________

In addition to agreeing to participate, I also consent to having the interview tape-recorded.

Your Signature ____________________________ Date ____________________________

Signature of person obtaining consent ____________________________ Date ____________________________

University of Arkansas IRB Approval Notice:
This recruitment notice and research protocol was approved by the University of Arkansas Institutional Review Board for the Protection of Human Subjects on [March 7, 2013], and expires on [March 7, 2014].
APPENDIX (F) – STUDENT INTERVIEW PROTOCOL

Research Title: Understanding Faculty and Student Perceptions of Self-Directed Learning in a Community College Practical Nursing Program

Date: ________________________________

Time: ________________________________

Location: ______________________________

Interviewer: ___________________________

Purpose: The overall aim of this study is to understand your experience, directing your own learning after you have received instruction from your professor. Specifically, the study will (1) explore your perception and definition of self-directed learning, and (2) understand the factors that either encourage or hinder your ability to direct your own learning.

Rationale: This research will expand the field of adult education by exploring the perceptions of students and faculty regarding the development of self-direction. It will additionally attempt to understand how these perceptions influence the educational environment within a nursing program.

Demographic Information:
Please state the following:

Age: _____  Sex: _____

Ethnicity: Are you Hispanic or Latino? Yes _____ No _____
Race: Please indicate one or more races that apply among the following:
_____ American Indian or Alaska Native
_____ Asian
_____ Black or African-American
_____ Native Hawaiian or Other Pacific Islander
_____ White
_____ Other

Please indicate one of the following:
Marital status:
_____ Single
_____ Married
_____ Divorced
_____ Widowed

Please indicate one of the following:
Employment:
- [ ] Full-time
- [ ] Part-time
- [ ] Self-employed
- [ ] Unemployed
- [ ] Never Employed
- [ ] Retired

Education:
Please indicate the highest level completed:
- [ ] Some High School
- [ ] High School Graduate
- [ ] General Educational Development (GED) Test
- [ ] Some College
- [ ] Nursing or Medical Certificate
- [ ] Associate Degree
- [ ] Bachelor Degree
- [ ] Master’s Degree

Questions: Self-Direction (Self-Management, Self-Monitoring, Motivation)

Opening Questions

1. What made you consider nursing as a field of study?
2. Tell me why you chose to enroll within this practical nursing program.
3. What has your experience been like during your program?
4. As a student, what do you think faculty expect from you?
5. How do you expect your professors to support you while you are in this program?
6. Explain what the term self-direction means to you in your own words?

Self-Management (control)

7. Based on your definition of self-direction, describe how a self-directed nursing student would approach the completion of assigned course work.
8. What are your responsibilities as a learner to ensure you are successful in this program?
9. Within your classes, describe an instance where your instructor allowed you to choose how you wanted to learn a new nursing concept.

**Self-Monitoring (responsibility/critical thinking/ reflection)**

10. In your opinion, whose responsibility is it to ensure that you understand the concepts that you are being taught within your courses?

11. As a student, I am interested in knowing your perception of critical thinking. Please describe what you think critical thinking means, in your own words.

12. Can you describe a time when you were able to use your critical thinking skills in a classroom setting?

13. Describe a time when you were able to use your critical thinking skills in a clinical environment?

14. How have your instructors helped you develop your critical thinking skills?

15. How have your instructors shown you how to use your critical thinking skills in the classroom?

16. How have your instructors shown you how to use your critical thinking skills in a clinical setting?

17. When taking care of a patient, do you feel that you need additional help in understanding which patient care method should be used? Or do you think your instructors have done a good job in preparing you for patient care? Explain.

18. Is it important to have critical thinking skills within the nursing profession?

**Motivation (task)**

19. Whose responsibility is it to motivate you to complete your course assignments?

20. How have your instructors motivated you to complete your course assignments?
21. Outside of the classroom, who or what motivates you to complete your program?

22. Are there obstacles within your life that you believe prevent you from being more motivated?

23. Is there anything else that you would like to mention about this nursing program, your instructors that we have not covered within this session?

**Why these Questions:**
As the interviewer, my objective is to learn the perceptions of self-directed learning from nursing students at a community college in New Jersey. All of my questions are designed to learn what factors, if any, influenced their self-direction and what impact these factors have had on their educational experiences.
APPENDIX (G) – FACULTY INTERVIEW PROTOCOL

Research Title: Understanding Faculty and Student Perceptions of Self-directed Learning in a Community College Practical Nursing Program

Date: ________________________________

Time: ________________________________

Location: ________________________________

Interviewer: ________________________________

Purpose: The overall aim of this study is to explore faculty and student perceptions of self-directed learning, and to understand the factors that facilitate or impede self-directed learning among students.

Rationale:
This research will expand the field of adult education by exploring the perceptions of students and faculty regarding the development of self-direction. It will additionally attempt to understand how these perceptions influence the educational environment within a nursing program.

Demographic Information:
Please state the following:

Age: _____   Sex: _____

Ethnicity: Are you Hispanic or Latino? Yes _____ No _____

Race: Please indicate one or more races that apply among the following:

_____ American Indian or Alaska Native
_____ Asian
_____ Black or African-American
_____ Native Hawaiian or Other Pacific Islander
_____ White
_____ Other

Please indicate one of the following:

Marital status:

_____ Single
_____ Married
_____ Divorced
_____ Widowed

Please indicate one of the following:

Employment Status:
Faculty (Not Tenure)
Faculty (Tenure)

Prior Work Experience:
- General Family Practice
- Nursing/Wellness Facility
- Hospital
- Higher Education
- Home Care
- Other

Education:
Please indicate all credentials received:
- Registered Nurse (RN)
- Bachelor of Science in Nursing (BSN/BN)
- Master of Science in Nursing (MSN)
- Doctor of Nursing Science (DNSc)
- Doctor of Nursing Practice (DNP)
- Advanced Practical Nurse (APNs)

Educational Institutions:
Please list the names of the institutions where all credentials were received:

______________________________________________________________________________

Faculty Questions: Self-Direction (Self-Management, Self-Monitoring, Motivation)

Opening Questions

1. Tell me why you chose to accept this teaching position?
2. What has your experience been like during your tenure here?
3. As an instructor, what do you think your students expect from you?
4. What does self-directed learning mean to you?
5. Talk about the types of self-directed behaviors that you see among your students?
6. What self-directed behaviors do your students lack?

Self-Management (control)

7. Describe how a self-directed nursing student would approach the completion of assigned course work.
8. With which type of assignments would you expect students to seek instructor assistance?

9. Within your classes, describe how you create opportunities for students to choose how they learn a new nursing concept.

10. How do you encourage students to take responsibility for their own learning?

**Self-Monitoring (responsibility/critical thinking/ reflection)**

11. In your opinion, whose responsibility is it to ensure that students understand the concepts that you are teaching them within your courses?

12. How do you expect your students to demonstrate understanding of course content?

13. As an instructor, I am interested in knowing your perception of critical thinking. Please describe what you think critical thinking means, in your own words.

14. In what ways can faculty develop these skills in nursing students?

15. What strategies do you currently use to develop critical thinking among your students?

16. What is the value of critical thinking for a nursing professional?

17. How do you expect your students to demonstrate critical thinking?

18. How do your students demonstrate critical thinking in the program?

**Motivation (task)**

19. When you assign a task for completion outside of the classroom, how do you assess their motivation for completing that task?

20. Whose responsibility is it to maintain the motivational level among your students?

21. What factors influence your student’s motivation to complete coursework?

22. What is the biggest threat to student motivation?
23. Is there anything else that you would like to mention about this nursing program, your students, which we have not covered within this session?

**Why these Questions:**
As the interviewer, my objective is to learn the perceptions of student self-directed learning from faculty at a community college in New Jersey. All of my questions are designed to learn what factors, if any; they believe influence the self-direction of nursing students and what impact those factors have had on the educational environment.
APPENDIX (H) – STAFF INTERVIEW PROTOCOL

Research Title: Understanding Faculty and Student Perceptions of Self-directed Learning in a Community College Practical Nursing Program

Date: ________________________________

Time: ________________________________

Location: ______________________________

Interviewer: ______________________________

Purpose: The overall aim of this study is to explore faculty and student perceptions of self-directed learning, and to understand the factors that facilitate or impede self-directed learning among students.

Rationale:
This research will expand the field of adult education by exploring the perceptions of students and faculty regarding the development of self-direction. It will additionally attempt to understand how these perceptions influence the educational environment within a nursing program.

Demographic Information:
Please state the following:

Age: _____ Sex: _____

Ethnicity: Are you Hispanic or Latino? Yes _____ No _____
Race: Please indicate one or more races that apply among the following:
_____ American Indian or Alaska Native
_____ Asian
_____ Black or African-American
_____ Native Hawaiian or Other Pacific Islander
_____ White

Please indicate one of the following:

Marital status:
_____ Single
_____ Married
_____ Divorced
_____ Widowed

Please indicate one of the following:

Employment Status:
_____ Faculty (Not Tenure)
_____ Faculty (Tenure)
Prior Work Experience:
_____ General Family Practice
_____ Nursing/Wellness Facility
_____ Hospital
_____ Higher Education
_____ Home Care
_____ Other

Education:
Please indicate all credentials received:
_____ Registered Nurse (RN)
_____ Bachelor of Science in Nursing (BSN/BN)
_____ Master of Science in Nursing (MSN)
_____ Doctor of Nursing Science (DNSc)
_____ Doctor of Nursing Practice (DNP)
_____ Advanced Practical Nurse (APNs)

Educational Institutions:
Please list the names of the institutions where all credentials were received:
______________________________________________________________________________

Faculty Questions: Self-Direction (Self-Management, Self-Monitoring, Motivation)

Opening Questions

1. Tell me why you chose a career in the nursing profession?
2. Why do you think many of your students chose to pursue a nursing as a field of study?
3. Why do you think they selected this nursing program?
4. What has your experience been like during your time here?
5. As the director of nursing, what do you think faculty expect of you?
6. As the director of nursing, what do you think students expect of you?
7. What does self-directed learning mean to you?
8. Talk about the types of self-directed behaviors that you see among students?
9. What self-directed behaviors do the students lack?
Self-Management (control)

10. Which type of classroom related assignments would you expect students to seek additional instructor assistance?

11. What type of situations in a clinical environment would you expect students to seek additional instructor assistance?

12. Can you describe how faculty creates opportunities for students to choose how they learn a new nursing concept?

13. In your opinion, how does faculty encourage students to take responsibility for their own learning?

14. The assumption within adult education is that adult students want to direct their own learning. However, some of the nursing students in this program were against this type of learning. Why do you think they are so adamant against these types of learning environments?

Self-Monitoring (responsibility/critical thinking/ reflection)

15. In your opinion, whose responsibility is it to ensure that students understand the concepts that they are being taught within the program?

16. How do you expect students to demonstrate an understanding of course content?

17. As an administrator and a nursing professional, I am interested in knowing your perception of critical thinking. Please describe what you think critical thinking means.

18. In what ways can faculty develop these skills in nursing students?

19. What is the value of critical thinking for a nursing professional?

Motivation (task)

20. Whose responsibility is it to motivate your students while they are in this program?
21. Some of the students have come out and openly stated that they only want to learn what they are to be tested on. While other students sitting in the same classroom like the idea that this program prepares them for a variety of situations that they might face in the workplace. Why do you think there are such major differences in the perceptions of students sitting in the same classroom hearing the same lecture?

22. What factors influence your student’s motivation to complete coursework?

23. What are some of the biggest challenges that students face that might prevent them from being motivated or self-directed in this program?

24. Some students have admitted that this program was a lot more difficult than they ever imagined it would be. What factors do you think may have shaped this expectation?

25. Is there anything else that you would like to mention about this nursing program, the faculty, or students that we have not covered within this session?

**Why these Questions:**
As the interviewer, my objective is to learn the perceptions of student self-directed learning from faculty at a community college in New Jersey. All of my questions are designed to learn what factors, if any; they believe influence the self-direction of nursing students and what impact those factors have had on the educational environment.
APPENDIX (I) – IN-CLASS OBSERVATIONAL PROTOCOL

<table>
<thead>
<tr>
<th>Descriptive Notes</th>
<th>Reflective Notes</th>
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<tbody>
<tr>
<td><strong>General:</strong></td>
<td></td>
</tr>
<tr>
<td>(1) What are the interactions like between the professor and students in the classroom?</td>
<td></td>
</tr>
<tr>
<td>(2) What is the engagement level at the beginning of the class compared to the end?</td>
<td></td>
</tr>
<tr>
<td>(3) What types of questions are the students asking during the class?</td>
<td></td>
</tr>
<tr>
<td>(4) How is the instructor answering these questions, and how are the answers being received by the students?</td>
<td></td>
</tr>
<tr>
<td><strong>Chronological timeline of events:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Chronological timeline of events:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Chronological timeline of events:</strong></td>
<td></td>
</tr>
</tbody>
</table>

Length of Activity: 4 Hours
APPENDIX (J) – CONCEPTUAL DIAGRAM

6-8 Students / 3 Faculty Participants

Develop Interview Guide for Faculty Members
Use research questions / literature/ my experience

Pilot Interview Guide

Edit Interview Guide as Needed

Interview / Observe Faculty

Analyze Data

Peer Debrief / Member
Check Audit Trail

Create Student Interview Guide

Interview / Observe Students

Analyze Data

Peer Debrief / Member
Check Audit Trail

Main Themes
Patterns / Differences

Peer Debrief / Member
Check Audit Trail
# APPENDIX (K) – FACULTY DEMOGRAPHIC PROFILE

Table 1.  
*Faculty Demographic Profile*

<table>
<thead>
<tr>
<th></th>
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<th>Percentage</th>
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<tbody>
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<td><strong>Age</strong></td>
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<tr>
<td>51 to 56 years old</td>
<td>1</td>
<td>25%</td>
</tr>
<tr>
<td>57 to 61 years old</td>
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<td>50%</td>
</tr>
<tr>
<td>Over 62 years old</td>
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<td>25%</td>
</tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Employment Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenured Faculty</td>
<td>3</td>
<td>75%</td>
</tr>
<tr>
<td>Department Chair</td>
<td>1</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Prior Work Experience</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
<td>2</td>
<td>50%</td>
</tr>
<tr>
<td>Institution</td>
<td>2</td>
<td>50%</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma in Nursing</td>
<td>1</td>
<td>25%</td>
</tr>
<tr>
<td>Associate in Science</td>
<td>1</td>
<td>25%</td>
</tr>
<tr>
<td>Bachelor of Science in Nursing</td>
<td>3</td>
<td>75%</td>
</tr>
<tr>
<td>Master of Arts in Nursing</td>
<td>2</td>
<td>50%</td>
</tr>
<tr>
<td>Master of Science in Nursing</td>
<td>2</td>
<td>50%</td>
</tr>
<tr>
<td>Registered Nurse</td>
<td>2</td>
<td>50%</td>
</tr>
<tr>
<td>Advanced Practical Nurse</td>
<td>1</td>
<td>25%</td>
</tr>
<tr>
<td>Doctor of Nursing Practice</td>
<td>2</td>
<td>50%</td>
</tr>
<tr>
<td><strong>Educational Institution</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boston University</td>
<td>1</td>
<td>25%</td>
</tr>
<tr>
<td>Massachusetts General Hospital School of Nursing (a Harvard affiliate)</td>
<td>1</td>
<td>25%</td>
</tr>
<tr>
<td>New York University</td>
<td>2</td>
<td>50%</td>
</tr>
<tr>
<td>Rutgers, The State University of New Jersey</td>
<td>1</td>
<td>25%</td>
</tr>
<tr>
<td>Rush University</td>
<td>2</td>
<td>50%</td>
</tr>
<tr>
<td>Seton Hall University</td>
<td>2</td>
<td>50%</td>
</tr>
<tr>
<td>Union County College</td>
<td>1</td>
<td>25%</td>
</tr>
<tr>
<td>William Paterson University</td>
<td>1</td>
<td>25%</td>
</tr>
</tbody>
</table>
# APPENDIX (L) – STUDENT DEMOGRAPHIC PROFILE

Table 2. 
*Student Demographic Profile*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 to 26 years old</td>
<td>1</td>
<td>16%</td>
</tr>
<tr>
<td>36 to 40 years old</td>
<td>2</td>
<td>33%</td>
</tr>
<tr>
<td>40 to 45 years old</td>
<td>1</td>
<td>16%</td>
</tr>
<tr>
<td>Over 46 years old</td>
<td>2</td>
<td>33%</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>3</td>
<td>50%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>1</td>
<td>16%</td>
</tr>
<tr>
<td>Haitian-American</td>
<td>1</td>
<td>16%</td>
</tr>
<tr>
<td>Hispanic/African-American</td>
<td>1</td>
<td>16%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>5</td>
<td>83%</td>
</tr>
<tr>
<td>Male</td>
<td>1</td>
<td>16%</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>2</td>
<td>33%</td>
</tr>
<tr>
<td>Single</td>
<td>4</td>
<td>66%</td>
</tr>
<tr>
<td><strong>Employment Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>1</td>
<td>16%</td>
</tr>
<tr>
<td>Part-time</td>
<td>3</td>
<td>50%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>2</td>
<td>33%</td>
</tr>
<tr>
<td><strong>Prior Work Experience</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td>1</td>
<td>16%</td>
</tr>
<tr>
<td>Real Estate Agent</td>
<td>1</td>
<td>16%</td>
</tr>
<tr>
<td>Laid Off</td>
<td>2</td>
<td>33%</td>
</tr>
<tr>
<td>Home Health Aide</td>
<td>1</td>
<td>16%</td>
</tr>
<tr>
<td>Accountant</td>
<td>1</td>
<td>16%</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School Graduate</td>
<td>4</td>
<td>66%</td>
</tr>
<tr>
<td>Associate in Science</td>
<td>2</td>
<td>33%</td>
</tr>
<tr>
<td>Bachelor of Science</td>
<td>1</td>
<td>16%</td>
</tr>
<tr>
<td><strong>Educational Institution</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edison Vocational Technical School</td>
<td>1</td>
<td>16%</td>
</tr>
<tr>
<td>Institution</td>
<td>Count</td>
<td>Percentage</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>Franklin Delano Roosevelt High School</td>
<td>1</td>
<td>16%</td>
</tr>
<tr>
<td>Moore Catholic High School</td>
<td>1</td>
<td>16%</td>
</tr>
<tr>
<td>South River High School</td>
<td>1</td>
<td>16%</td>
</tr>
<tr>
<td>Pennsylvania State University</td>
<td>1</td>
<td>16%</td>
</tr>
<tr>
<td>Union County College</td>
<td>1</td>
<td>16%</td>
</tr>
</tbody>
</table>
Appendix (M): TABLES OF RESEARCH AND INTERVIEW QUESTIONS

Opening Questions

Faculty

1. Tell me why you chose to accept this teaching position?
2. What has your experience been like during your tenure here?

Students

1. What made you consider nursing as a field of study?
2. Tell me why you chose to enroll within this practical nursing program?
3. What has your experience been like during your program?

Closing Question

Faculty

23. Is there anything you would like to add?

Students

23. Is there anything else that you would like to mention about this nursing program, or your instructors that we have not covered within this session?

Research Question 1

A. How does faculty define self-directed learning?

B. How do students define self-directed learning?

<table>
<thead>
<tr>
<th>Interview with Faculty Participants</th>
<th>Interview with Student Participants</th>
<th>Post-Observation Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. As an instructor, I am interested in knowing your perception of critical thinking. Please describe what you think critical thinking means, in your own words.</td>
<td>11. As a student, I am interested in knowing your perception of critical thinking. Please describe what you think critical thinking means, in your own words.</td>
<td></td>
</tr>
</tbody>
</table>
Research Question 2

A. What behaviors does the nursing faculty perceive demonstrate self-directed learning?

B. What behaviors do nursing students perceive demonstrate self-directed learning?

<table>
<thead>
<tr>
<th>Interview with Faculty Participants</th>
<th>Interview with Student Participants</th>
<th>Post-Observation Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Talk about the types of self-directed behaviors that you see among your students?</td>
<td>7. Based on your definition of self-direction, describe how a self-directed nursing student would approach the completion of assigned coursework.</td>
<td></td>
</tr>
<tr>
<td>6. What self-directed behaviors do your students lack?</td>
<td>12. Can you describe a time when you were able to use your critical thinking skills in a classroom setting?</td>
<td></td>
</tr>
<tr>
<td>12. How do you expect your students to demonstrate understanding of course content?</td>
<td>13. Describe a time when you were able to use your critical thinking skills in a clinical environment.</td>
<td></td>
</tr>
<tr>
<td>17. How do you expect your students to demonstrate critical thinking in the program?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. How do your students demonstrate critical thinking in the classroom?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Research Question 3

A. What are faculty expectations regarding student self-directedness?

B. What are student expectations regarding their self-directedness?

<table>
<thead>
<tr>
<th>Interview with Faculty Participants</th>
<th>Interview with Student Participants</th>
<th>Post-Observation Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. As an instructor, what do you think your students expect from you?</td>
<td>3. As a student, what do you think faculty expect from you?</td>
<td></td>
</tr>
<tr>
<td>7. Describe how a self-directed nursing student</td>
<td>5. How do you expect your professors to support you</td>
<td></td>
</tr>
</tbody>
</table>
would approach the completion of assigned course work.

8. With which type of assignments would you expect students to seek instructor assistance?

10. How do you encourage students to take responsibility for their own learning?

20. Whose responsibility is it to maintain the motivational level among your students?

while you are in this program?

8. What are your responsibilities as a learner to ensure you are successful in this program?

17. When taking care of a patient, do you feel that you need additional help in understanding which patient care method should be used? Or do you think your instructors have done a good job in preparing you for patient care? Explain.

19. Whose responsibility is it to motivate you to complete your course assignments?

21. Outside of the classroom, who or what motivates you to complete your program?

---

Research Question 4

A. What does faculty perceive to be the relationship between student self-directedness and the profession?

B. What do students perceive to be the relationship between self-directedness and the nursing profession?

<table>
<thead>
<tr>
<th>Interview with Faculty Participants</th>
<th>Interview with Student Participants</th>
<th>Post-Observation Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. What is the value of critical thinking for a nursing professional?</td>
<td>18. Is it important to have critical thinking skills within the nursing profession? Why or why not.</td>
<td></td>
</tr>
</tbody>
</table>

Research Question 5
How does faculty develop self-directed learning in nursing students?

<table>
<thead>
<tr>
<th>Interview with Faculty Participants</th>
<th>Interview with Student Participants</th>
<th>Post-Observation Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Within your classes, describe how you create opportunities for students to choose how they learn a new nursing concept.</td>
<td>9. Within your classes, describe an instance where your instructor allowed you to choose how you wanted to learn a new nursing concept.</td>
<td></td>
</tr>
<tr>
<td>11. In your opinion, whose responsibility is it to ensure that students understand the concepts that you are teaching them within your course?</td>
<td>10. In your opinion, whose responsibility is it to ensure that you understand the concepts that you are being taught within your courses?</td>
<td></td>
</tr>
<tr>
<td>14. In what ways can faculty develop these skills in nursing students?</td>
<td>14. How have your instructors helped you develop your critical thinking skills?</td>
<td></td>
</tr>
<tr>
<td>15. What strategies do you currently use to develop critical thinking among your students?</td>
<td>15. How have your instructors shown you how to use your critical thinking skills in the classroom?</td>
<td></td>
</tr>
<tr>
<td>19. When you assign a task for completion outside of the classroom, how do you assess their motivation for completing the task?</td>
<td>16. How have your instructors shown you how to use your critical thinking skills in a clinical setting?</td>
<td></td>
</tr>
<tr>
<td>20. How have your instructors motivated you to complete your course assignments?</td>
<td>20. How have your instructors motivated you to complete your course assignments?</td>
<td></td>
</tr>
</tbody>
</table>

**Research Question 6**

What factors inhibit student self-directedness?

<table>
<thead>
<tr>
<th>Interview with Faculty Participants</th>
<th>Interview with Student Participants</th>
<th>Post-Observation Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. What factors influence your student’s motivation to complete coursework?</td>
<td>22. Are there obstacles within your life that you believe prevent you from being more motivated?</td>
<td></td>
</tr>
<tr>
<td>22. What is the biggest threat to student motivation?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix (N): CONCEPTS, SUBCATEGORIES, AND FINAL THEMES FROM FACULTY DATA ANALYSIS

<table>
<thead>
<tr>
<th>Concepts</th>
<th>Subcategories</th>
<th>Final Theme</th>
<th>Conceptual Framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education is a continual process</td>
<td>Intellectual Curiosity</td>
<td>Lifelong Learning</td>
<td><strong>Self-Management (Control)</strong></td>
</tr>
<tr>
<td>Only want to learn what will be tested</td>
<td>Internal self-direction</td>
<td></td>
<td>The controlling of individual tasks, as it specifically relates to the management of learning activities. The increased awareness to make learning more meaningful and to take greater responsibility in personally monitoring this process.</td>
</tr>
<tr>
<td>Can't see the bigger picture</td>
<td>Relevance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can't see beyond what is given to them</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Getting through the program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memorization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ask questions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use other resources</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distracted</td>
<td>Externally driven</td>
<td>Intrinsic Motivation</td>
<td><strong>Motivation (Entering/Task)</strong></td>
</tr>
<tr>
<td>Focus</td>
<td>Excuses</td>
<td></td>
<td>The involvement within an activity that is critically important to understanding the link between what leads an individual to becoming more self-directed.</td>
</tr>
<tr>
<td>Personal issues</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiple life roles</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical Skills</td>
<td>Mental Capacity</td>
<td>Critical Thinking</td>
<td><strong>Self-Monitoring (Critical Thinking)</strong></td>
</tr>
<tr>
<td>Academic Preparation</td>
<td>Understanding</td>
<td></td>
<td>The cognitive aspect of self-direction. The awareness of and an ability to modify thinking according to the learning task/goal. It is the student’s mental capacity to direct one’s own education.</td>
</tr>
<tr>
<td>Higher thinking process</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem-based learning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Capacity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understanding</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reality</td>
<td>Perception</td>
<td>Expectation</td>
<td><strong>Motivation (Entering/Task)</strong></td>
</tr>
<tr>
<td>Confidence</td>
<td>Certainty</td>
<td></td>
<td>The involvement within an activity that is critically important to understanding the link between what leads an individual to becoming more self-directed.</td>
</tr>
<tr>
<td>Fear of failure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxiety</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Appendix (O): CONCEPTS, SUBCATEGORIES, AND FINAL THEMES FROM STUDENT DATA ANALYSIS

<table>
<thead>
<tr>
<th>Concepts</th>
<th>Subcategories</th>
<th>Final Theme</th>
<th>Conceptual Framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>Following directions</td>
<td>Preparation</td>
<td>Time Management</td>
<td><strong>Self-Management (Control)</strong></td>
</tr>
<tr>
<td>Reading</td>
<td>No Time</td>
<td></td>
<td>The controlling of individual tasks, as it specifically relates to the management of learning activities. The increased awareness to make learning more meaningful and to take greater responsibility in personally monitoring this process.</td>
</tr>
<tr>
<td>Taking Notes</td>
<td>Prioritize</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asking appropriate questions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family responsibilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No family support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Studying</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reviewing PowerPoint</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laid off from work</td>
<td>Employment</td>
<td>Extrinsically Motivated</td>
<td><strong>Motivation (Entering/Task)</strong></td>
</tr>
<tr>
<td>Need a better job</td>
<td>Parental Advice</td>
<td></td>
<td>The involvement within an activity that is critically important to understanding the link between what leads an individual to becoming more self-directed.</td>
</tr>
<tr>
<td>Lost a parent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse in the family</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not properly trained</td>
<td>Critical Thinking</td>
<td>Academic Ability</td>
<td><strong>Self-Monitoring (Critical Thinking)</strong></td>
</tr>
<tr>
<td>High School Diploma</td>
<td>Passive Learning</td>
<td></td>
<td>The cognitive aspect of self-direction. The awareness of and an ability to modify thinking according to the learning task/goal. It is the student’s mental capacity to direct one’s own education.</td>
</tr>
<tr>
<td>Not academically challenged</td>
<td>Ownership</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engagement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsibility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unsuccessful in RN program</td>
<td>Perceptions</td>
<td>Expectation</td>
<td><strong>Motivation (Entering/Task)</strong></td>
</tr>
<tr>
<td>No prior healthcare experience</td>
<td>Unfamiliar</td>
<td></td>
<td>The involvement within an activity that is critically important to understanding the link between what leads an individual to becoming more self-directed.</td>
</tr>
<tr>
<td>Healthcare experience at a lower level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LPN programs are easy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other academic programs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>