

PEER TUTORING:  
WHAT ARE ITS BENEFITS TO THE TUTOR ?  
TUTORS' PERCEPTIONS OF A PEER TUTORING  
EXPERIENCE IN NURSING EDUCATION

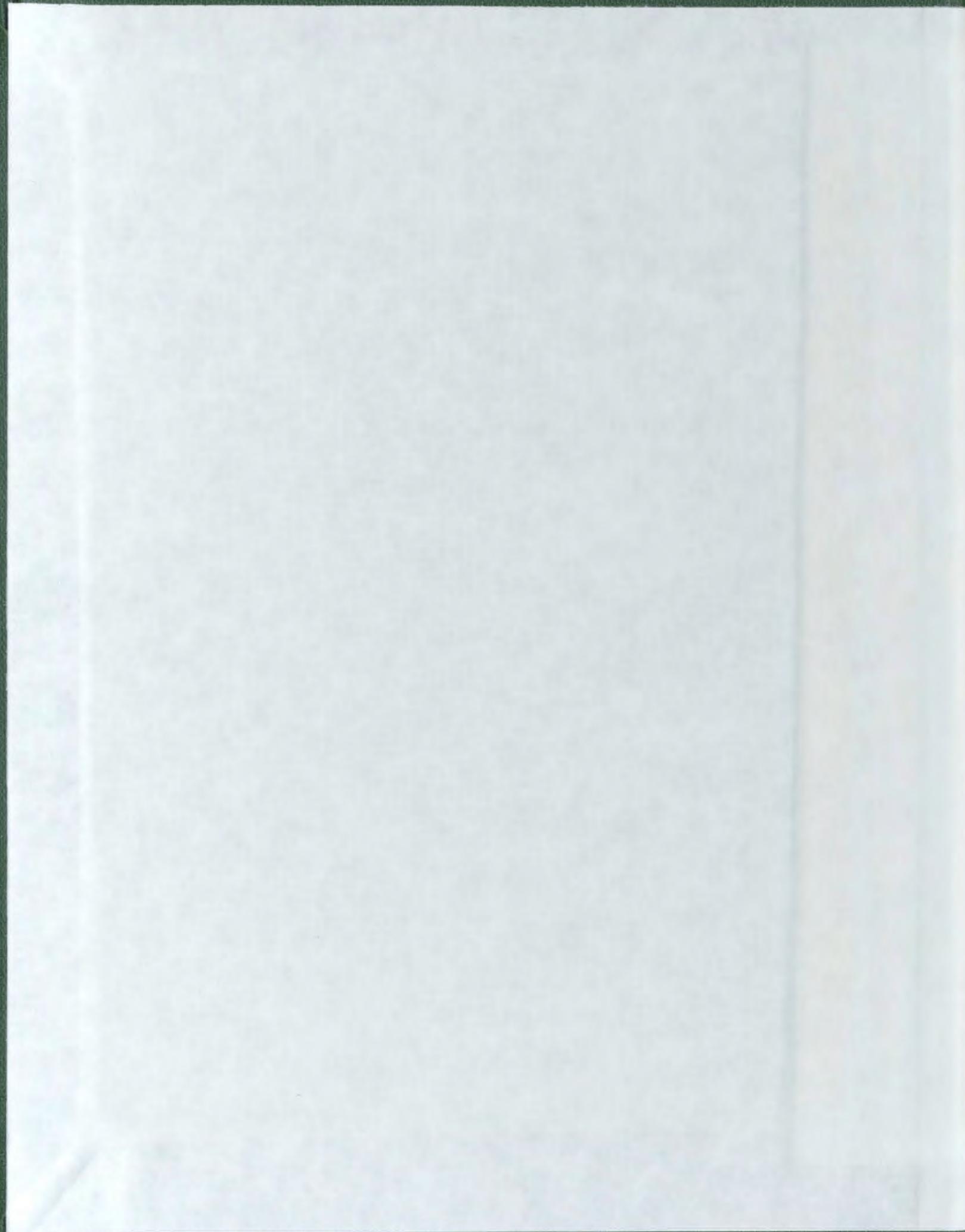
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**Peer Tutoring: What Are Its Benefits To The Tutor ?  
Tutors' Perceptions Of A Peer Tutoring Experience In Nursing Education**

**By  
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**A thesis submitted to the School of Graduate Studies in partial fulfillment of the  
requirements for the degree of Master of Education**

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## **Abstract**

The purpose of this study was to gain insight into the senior nursing students' perceptions of benefits accrued as a result of their experience of 'becoming and being' peer tutors to junior students. Findings from this study could assist nurse educators in determining the value of this teaching-learning strategy in nursing education. Qualitative research using a case study approach was used for this study. Sources of data for describing students' perceptions included in-depth interviews as well as a journal kept by the researcher throughout the interview process. Loving's (1993) model of competency validation was used as a theoretical framework for this study. Four major themes revealed through data analysis were: role perception, peer tutoring as a mechanism for self-discovery, peer tutoring and mastery learning, and peer tutoring as preparation for independent practice. The exploratory nature of the study indicated that peer tutors did indeed reap many benefits from the experience. The results showed that peer tutoring in nursing education fostered personal and professional growth for all participants. Specific outcomes such as development of a sense of community through engendering respect, caring and friendship among students across varying levels of nursing, belief in one's own abilities and potentials, enhanced reasoning and problem solving skills, and enhanced articulation skills are all discussed.

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## **Statement of the Problem**

### **Introduction**

Peer tutoring is an educational strategy that has gained some impetus in nursing education in recent years. In the past, nursing education has been aligned with the education system at large, structured around a belief that knowledge is best transmitted in linear fashion from teacher to learner. In this 'chalk and talk' pedagogy, the teacher dominates and the learner passively receives, records and recites the transmitted information (Biley & Smith, 1998; Chally, 1992; Bevis & Murray, 1990; Allen, 1990). Nursing education has recently begun a shift to a more emancipatory learning format with the aim of dismantling the power of the instructor and developing a more egalitarian learning atmosphere. Nurse educators are thus challenged to develop educational strategies that allow students to construct their own knowledge, gain meaning from experience, think critically and interact skillfully. To truly support this new paradigm, such strategies must be active and thought-provoking, be grounded in the reality issues facing nurses daily, be imaginative, creative and supportive of the imagination and creativity of others, and ultimately support learner maturity not dependence (Bevis & Watson, 1989).

Peer tutoring, a collaborative relationship whereby students learn from each other and learn from teaching has been identified as a teaching-learning strategy that may effect this process (Bruffee, 1993). Peer tutoring serves as a mechanism of drawing the maximum number of people into the sharing of knowledge.

In the nursing literature, the terms peer tutoring, peer teaching, peer leadership, peer collaboration, peer support and mentoring often have the same connotation (Glass & Walter, 2000; Bos, 1998; Yates, Cunningham, Moyle & Wollin, 1997; Goldenberg & Iwasiw, 1992). Although use of the term “peer” is defined by age, rank or experience, clarity of the term rests with the relationship between the learners. There is some evidence in the literature of ‘pure peer’ tutoring, however, a more common occurrence is ‘near peer’ relationships. Because of the connection of student status and the relatively small passage of time in rank differences, the students are likely to function as peers in the process. Since the peer has only recently learned the material being taught, the tutor is more likely to consciously think through the steps of the learning process than one with greater expertise. Thus, the peer tutor and learner will engage in a cooperative, active process of constructing knowledge.

Peer tutoring programs in various forms have been used across the country. A Newfoundland School of Nursing used peer tutoring as a component of a leadership experience for senior students. There has been a significant amount of literature on the benefits of peer tutoring particularly for the junior student. However, most of the literature was in anecdotal form and lacked an empirical base. If peer tutoring is to continue to be used to help prepare nurses for future practice, research is needed to explore the meaning of the experience for the tutor, so that nurse educators can determine the value of peer tutoring as a teaching-learning strategy .

### **Background to the Study**

The concept of peer tutoring is not new to nursing. Keddy and Lukan (1985) commented that, in the early 1900's, nursing education was not a well grounded apprenticeship because novices learned from their peers, not from skilled masters. Most training was experienced on-the-job and junior students were usually the responsibility of senior students. Keddy and Lukan further relate that, even as late as 1890, only 20% of nurses' training was theory. Thus peer tutoring began as an informal process. However, its historical association with service and its lack of a theoretical base caused it to lapse into obscurity in the nursing literature in the face of a curriculum revolution to reform nursing education and raise it to a professional level. With the resurgence of this age-old tradition in a profession that is now much more firmly grounded in theory, it is necessary to relook at peer tutoring, to explore its value from the student's perspective so as to determine whether, as a teaching-learning strategy, it fits within the new paradigm. In this era of fiscal constraints, empirical research is necessary to help remove the skepticism of service associated with this practice.

Learning outcomes associated with the new nursing curricula include, but are not limited, to the development of autonomous graduates capable of independent functioning, self reliance, leadership, discourse and collegueship (McGovern & Valiga, 1997; Allen, 1990; Bevis & Watson, 1989). However, there exists little opportunity, particularly in the clinical setting, for students to develop skills in these areas prior to graduation. Through

nursing research, investigators have found that new graduate nurses lack confidence in themselves (Kramer, 1985). Similarly, in a qualitative study of professional self-concept of senior nursing undergraduates, students reported feelings of inadequacy and a lack of self-confidence (Kelly, 1992). Studies also reveal that nursing students lack self-esteem (Burgess, 1980; Murray, 1983). In another study, a group of senior nursing students were found to have perceptions of having low skills in influencing and leading others and assigned relative unimportance to these skills (Ridley, Laschinger & Goldenberg, 1995). Although the reasons are unclear, there is growing evidence that these problems may be related to the persistence of the historical power-based model of teaching (Wilson, 1994; Kelly, 1992). One of the clearest implications of these studies is that other teaching-learning strategies need to be utilized to develop nurses who are autonomous practitioners, able to make their own assumptions and decisions based on rational thought, articulate their views through interaction with others and have belief in their own integrity.

Bos (1998), in a qualitative study on the perceived benefits of a peer leadership experience, found that peer leadership was one teaching method that provided alternate learning opportunities to a group of baccalaureate nursing students. The findings of this study indicated that peer leadership provided the opportunity for practice in prioritization of nursing care, enhancement of critical thinking skills, enhancement of technical skills, realization of peers as resources, and the development of managerial skills. The nursing literature also discusses similar positive outcomes from various other components of peer tutoring relationships. Such outcomes included enhanced collaborative skills, peer

interdependence (Gerace & Sibilano, 1984); increased psychomotor skills, heightened sense of responsibility (Goldenberg & Iwasiw, 1992); enhanced communication skills (Kammer, 1982); heightened accountability, problem solving and collaborative skills (Flynn, Marcus & Schmadl, 1981); improved teaching and support skills (Aviram, Ophir, Raviv & Shiloah, 1998); increased confidence, improved interpersonal and priority setting skills (Ammon & Schroll, 1988).

Nevertheless, much of the literature was presented as descriptive overviews and as evaluation reports of specific projects. In only one research study were the benefits of a peer leadership experience formally described (Bos, 1998). However, in looking at the design of that study, several limitations are inherent; the experience of being a peer leader was voluntary and limited to twelve students, the experience was only one day in duration, and data collection was in the form of self evaluation (which was significant since the researcher served a dual role as clinical instructor). Consequently, further research is necessary to determine whether the documented findings directly resulted from the peer tutor experience or were influenced by extraneous variables.

The focus of much of the nursing literature has been primarily on the product or perceived benefits of the particular peer program. But what of the process? What is the experience of peer tutoring like for the tutor? How does the peer tutor feel when engaged in the process? How does peer tutoring impact on learning? Does peer tutoring contribute to one's personal and professional development? These are just a few of the questions that need answers in order to understand the process of being a peer tutor.

### **Purpose of the Study**

The purpose of this qualitative study was to explore and describe the experience of being a peer tutor as a senior nursing student. Specifically, the nature of the experience, the meaning of the experience, the perceived benefits and drawbacks of the experience and the perceived impact of the experience on personal and professional development were examined. The researcher attempted to identify whether senior nursing students perceived the experience to be of any value to them as they prepared to make the transition to independent practice. It was anticipated that data obtained from this study would enable nurse educators to make a more objective judgment based on empirical evidence regarding the usefulness of peer tutoring as a teaching learning strategy in nursing education.

### **Significance of the Study**

This research study was conducted on the threshold of a new era for nursing education in Newfoundland. By the year 2000, the minimum educational requirement for entry into practice will be a baccalaureate degree in nursing. To truly understand the significance of this study, it is necessary to present some background organizational and program changes that occurred at the time of this study. At the study's onset, there existed four diploma nursing programs in Newfoundland, a generic baccalaureate nursing program offered on site at the university, and a collaborative nursing baccalaureate program offered both on site at the university and at two off-campus sites. The collaborative

nursing curriculum was developed jointly by the faculties of the four diploma programs and the generic baccalaureate program. In preparation for the changing educational requirements, the diploma schools of nursing commenced their phase-out in September, 1996. Thus began the transition of faculty to the new collaborative curriculum at the off-campus sites. These sites also offered the practical nursing program, which is a newly developed supportive nursing program replacing the former nursing assistant program. June, 1998 saw the closure of the diploma schools of nursing as well as completion of the generic baccalaureate nursing program.

For five years, peer tutoring had been utilized at one diploma school of nursing as a component of a leadership experience for senior nursing students. As part of this experience the senior student would facilitate two to three psychomotor skills laboratory sessions and four to six days of clinical practice for junior nursing students. These senior students had also been part of this experience in previous years as junior students. At the time of this study, the phasing out of the school had been ongoing for two years, and hence there were no junior students. As in the previous year, junior baccalaureate nursing students were engaged for the experience. However, the unavailability of sufficient numbers of junior baccalaureate students due to scheduling disparities between the two schools necessitated extending the peer tutor experience to include practical nursing students as 'junior students' for the clinical component of the experience.

Motivational impetus for this study was, therefore, four-fold: (1) the imminent closure of a nursing program, (2) absence of any formal evaluation of the peer tutor

experience, (3) prior personal involvement with the experience, and (4) lack of empirical studies seeking students' overall perspectives of peer tutoring. These motivating factors were all related and sparked by the imminent closure of a nursing school. In the spirit of collaboration, a new nursing education program was being developed that was to draw on the strengths of all existing programs.

The second and third motivating factors grew out of reflection on a peer tutor experience that seemed to be a strength. Frequent observations and interactions with students during the peer tutor experience, as well as through interactions with other educators in the researcher's work environment, provided the researcher with the view that peer tutoring may be a strength. There existed a general lack of knowledge, however, as to what the experience meant to the senior student.

The final factor was the lack of any empirical studies that addressed the peer tutor's overall perspective on peer tutoring. Consequently, this study was designed to explore and describe more fully, the process of being a peer tutor. A comprehensive description of the process may give new insights into how one develops in this role, as well as the rewards and challenges (if any) of the experience. It could provide the educator with empirical support as to the value of this teaching-learning strategy in nursing education and help determine whether it is a strength that could be operationalized in the new collaborative nursing program .

### **Research Questions**

This study was guided by the following research questions.

1. What is the peer tutor's perception of his or her role as a peer tutor ?
2. What are the stresses, challenges and threats of the peer tutor experience as described by the peer tutor ?
3. What are the learning outcomes, facilitators and inhibitors of learning as described by the peer tutor ?
4. What is the peer tutor's perception of the value of the peer tutor experience ?

### **Definitions of Terms**

For the purpose of this study, the following definitions will apply:

**Peer:** An individual belonging to the same group with membership defined by status (Goodlad & Hirst, 1989, p.60).

**Peer tutoring:** A system of instruction whereby learners help each other and learn by teaching (Bruffee, 1993, p.45).

**Peer tutor:** A senior nursing student enrolled in the second last term of a diploma nursing program who collaborates with designated nursing faculty and shares with them the responsibility for the learning and evaluation of junior students.

**Peer tutee:** A junior student enrolled in a second year baccalaureate nursing program or a practical nursing program who cooperates and collaborates with a peer tutor as a learning partner to achieve learning goals.

**Nursing education:** The process that facilitates acquisition of nursing knowledge, skills and attitudes to prepare beginning practitioners of nursing (Canadian Nursing Association (CNA), 1978, p.7).

## **Literature Review**

### **Introduction**

Peer tutoring as a teaching-learning strategy offers potential long term benefits to the practice setting as well as to the academic component of a nursing program. Upon graduation, nurses are expected to be reflective practitioners, to exhibit collegial interdependence, teaching and leadership skills. However, in traditional nursing programs, there exists a discrepancy between lifetime career demands and initial professional preparation.

The instructor-student relationship as traditionally designed in most nursing programs fosters a form of parallel peer performance incongruent with collegial interdependence required in professional work situations (Diekelmann, 1990; Bevis & Watson, 1989; Gerace & Sibilano, 1984). The customary pedagogical approach, common not only to nursing but to education in general, relies heavily on the 'banking concept' whereby learners are viewed merely as receptacles. Friere (1986) proposed that in this method of education, learners passively absorb received information which may be reconstituted effectively through repeated practice. Such an approach, however, does not encourage deep understanding of the subject matter. Acknowledgment of the outcomes of such approaches to education has led nurse leaders to be strong proponents of learning strategies that encourage reflective practice (Heinrich & Scherr, 1994; Benner, 1984).

Schon (1987) supports this stance of nurse leaders as he asserts that educational preparation of professionals should be centered on enhancing the practitioner's ability to reflect. Mezirow (1981) proposes that it is through self-reflection that we become aware of why we attach meaning to reality. Schon (1987, 1991) defines reflection as both reflection-in-action and reflection-on-action. He explains that reflection-in-action is 'thinking on one's feet; that is, acting or responding to uncertainty or conflict situations. Reflection-on-action on the other hand, takes place when one reconsiders what has been done. Mezirow (1990) further explains that the central point of all reflection is experience. But experience in itself does not constitute learning. Rather, it is how one responds to a lived experience and cognitively reviews and explores the experience to make meaning for self (Wong, Kember, Chung & Yan, 1995; Boyd & Fales, 1983). Shor and Freire (1987) elaborate that reflection "illuminates reality and changes our understanding" (p. 172).

Reflective practice occurs when practice is problematized (Doyle, 1994; Singh, 1994; Benner, 1984). This may occur when taken-for-granted procedures are re-examined, when practitioners are forced to ask why a certain event has occurred or why their practice was a success or failure. Hence, action that is informed by reflection is emancipatory and is concerned with empowerment of the individual subsequent to transformative learning (Rich & Parker, 1995; Richardson & Maltby, 1995; Doyle, 1994; Heidin, 1989).

According to Benner (1984), many practitioners do not move beyond the minimal requirements of competency because they do not respond to the challenge of

problematizing their practice or do not have others who will help them problematize it. Jarvis (1995) feels that peers may fill this role. Such role application is in keeping with Knowles' (1980) theory of andragogy in which he asserts that adults approach learning as problems to be solved and that experience (including mistakes) provides the basis for learning activities. However Jarvis further states that if peers are to be effective in helping others problematize their practice, they need skill in peer collaboration. Peer teaching and group dialogue have been identified as suitable learning activities for such skill development. As students articulate their thoughts through these activities, ideas and feelings are clarified, gaps and discrepancies in knowledge become evident, and knowledge develops and changes (Cust, 1995). Consequently, the concepts of empowerment, community and leadership are fostered. Empowerment seeks to rid classrooms of teacher-dominated power, community emphasizes mutuality amongst peers and leadership provides a means to move empowerment out of the academic and into the practice setting (Yates et al., 1997; Batey & Lewis, 1982).

In this chapter the scope of peer tutoring will be examined, from two perspectives: in a broad sense from higher education, and then more specifically from nursing education. The literature review consists of three sections, beginning with a discussion of the concept of peer tutoring inclusive of definition and theoretical underpinnings. The second section presents findings from an extensive review of education literature. The research findings in this section are organized under the headings of effectiveness, nature of tutor gains, tutor training, typology of peer tutoring and cost effectiveness. The final section provides a

comprehensive overview of the applications of this practice to nursing education. Such an approach to the literature review was taken firstly, to provide the context for understanding the nature of the tutor experience. Secondly, in order to fully address the research questions, it was deemed necessary to identify the trends related to peer tutoring in the education literature and then determine whether there was a consensus on these findings in the nursing literature.

### **Concept of Peer Tutoring**

#### **Definition**

Probably the most succinct definition of peer tutoring within its current context comes from Topping (1996): “ people from similar social groupings who are not professional teachers helping each other to learn and learning themselves by teaching ” (p.322). However multiple definitions of peer tutoring exist and they are not all consistent. For example, Damon & Phelps (1989) refer to a novice-expert approach. However, it is important to keep in mind that not all peer tutors are experts as in some peer tutoring arrangements, the peer tutor may be either of equal ability or be of the same age and be randomly assigned to the tutor role (Bos, 1998; Gartner & Riessman, 1994; Iwasiw & Goldenberg, 1993; Goldenberg & Iwasiw, 1992; Fantuzzo, Riggio, Connelly, Dimeff, 1989).

The literature also shows that the term peer tutoring is often used interchangeably with the terms reciprocal learning, peer teaching, mutual instruction, partner learning and

peer assisted learning (Goldenberg & Iwasiw, 1992; Topping, 1992; Cason, Cason & Bartnik, 1977). Furthermore, it was found that peer tutoring has been seen as one approach to peer collaboration, peer cooperation and collaborative learning (Huff, 1997; Iwasiw & Goldenberg, 1993; Topping, 1992). It was further found, particularly in the nursing literature, that peer tutoring is a type of peer resource programming and shares attributes with peer leadership, peer mentoring, peer coaching, peer evaluation and peer review (Glass & Walter, 2000; Yates et al., 1997; Heinrich & Scherr, 1994; Ammon & Schroll, 1988; Erickson, 1987; Hickey, 1986; Flynn et al., 1981).

### **Theoretical Basis**

Reviewing the literature related to peer tutoring reveals a myriad of different theoretical foundations for this practice, however, no unifying theoretical framework is readily available. What seems evident from the literature is that peer tutoring is underpinned by a constructivist philosophical perspective and that as a teaching-learning strategy, it fits within the andragogical model of learning. This section will be divided to discuss both of these entities.

#### **Constructivism.**

The educational literature on constructivism is enormous and growing rapidly (Philips, 1995). It has assumed a dominance in education that seems to be unparalleled throughout history (Zevenbergen, 1996). There exists an enormous number of theorists

such as von Glaserfeld, Kent, Dewey, Vygotsky and others spanning a broad philosophical spectrum who can be considered as being in some sense, constructivists (Philips, 1995). However, a full critique of their views goes beyond the scope of this thesis. The author will instead use an eclectic approach by drawing on the perspectives of many of these theorists.

Cust (1995) defines constructivist learning as a process in which the learner actively seeks and constructs information on the basis of past knowledge and experiences (p.20). She further elaborates that it is based on the premise that one acts upon the environment rather than simply responding to it. Cust identifies three interdependent components to constructivist learning which are particularly relevant to peer tutoring, namely 1) cognition, 2) motivation and 3) metacognition.

1) Cognition. The cognitive component is described in terms of overlapping active, constructive and cumulative factors. Cust (1995) suggests that in this model, information cannot be absorbed from the teacher or from textbooks but that the learner must encounter knowledge in active and effortful ways. Similarly, Driver, Asoko, Leach, Mortimer & Scott (1994) hold the view that knowledge is not transmitted directly from one knower to another but is actively built up. Constructivism reflects a shift in focus away from the teacher as being responsible for inculcating well-defined skills in students, toward learners whose own interests are brought to the foreground and who now assume greater responsibility for their own learning. Dewey (as cited in Phillips, 1995) advocated that knowledge could be gained only when one was actively involved in its acquisition, for

example, by participating or acting. However, such learning does not occur in isolation. Dewey (as cited in Philips, 1995) stressed the social nature of knowledge construction both in individual learners and with respect to the development of public bodies of knowledge that make up the various disciplines.

As well as being depicted as mentally vigorous, cognitive theorists describe learning as constructivist (Cust, 1995). Draper, McAlteer, Tolmie & Anderson (1994) expound on this by stating that the form of any activity, and thus any learning that occurs, is influenced by knowledge that already exists (that is, by the results of past learning). Thus old knowledge is always revised, reorganized and even reinterpreted in order to reconcile it with new input. This view reflects Piaget's perspective that to understand is to discover, or reconstruct through rediscovery, and such conditions must be met if future individuals are to be formed who are capable of production and creativity and not simply repetition (Prawat, 1995). Therefore, because new knowledge always builds on and makes use of previous information, the learning process is highly cumulative.

2) Motivation. Cust (1995) asserts that students will not engage in the cognitive processes associated with constructivist learning unless they are motivated to do so. Bandura (1977, 1989) proposed the constructs of self-efficacy, perception of control and reinforcement to account for this motivation. Self-efficacy refers to one's internal state or personal judgment of one's competence. According to Cust, such judgments influence the academic tasks students attempt, the degree of study they undertake and the proficiencies

they acquire. Cust further elaborates that using personal control in studying and learning will then strengthen one's beliefs about one's abilities.

Parcel and Baranowski (1981) define reinforcement as the value of a particular outcome. This outcome may take the form of approval by others, approval by self, academic gains or other such consequences. The authors go on to say that behavior is regulated by its consequences but only as those consequences are interpreted and understood by the individual. It is these reinforcers that differentially influence a student's motivation and performance. In terms of the identified constructs, successful students will be those who regard themselves as in control and competent and who generally attribute the quality of their behavior to their own efforts (Cust, 1995).

3) Metacognition. Metacognition is defined as the process of thinking about thinking (Pressesian, 1986; Cust, 1995). According to Pressesian, metacognition involves "students becoming conscious of their own ways of thinking, of exploring various possible routes to resolving a particular problem, of intellectually becoming engaged with the learning experience driven by self motivation, curiosity and sometimes by necessity" (p. 12).

The construct of self-efficacy is also pertinent in this process. Covington and Omelich (as cited in McKeachie, 1990) associate metacognitive performance with a sense of competency in mastery learning. Similarly, Pressesian (1986) relates that emphasis is not only on the ability to do a task but the confidence to know you are doing it well. Cust (1995) states that metacognitive awareness involves reflection on activities that are usually

performed mindlessly, enabling students to learn from experience and to apply the learning in new situations. According to Dewey, reflection guides critical thinking through assessment and scrutiny of one's beliefs and knowledge toward action based on logic and reasoning (Dewey, 1960, as cited in Philips, 1995).

By way of summary, in peer tutoring, either the tutor or tutee can learn by perceiving the way an individual relates to context (Eardley, 1994). Tutors often have to struggle to make material meaningful for the learner and so will need to reflect upon their own learning process (Goodlad & Hirst, 1989). Such reflection is in keeping with a constructivist's perspective that knowledge is intimately related to the action and experience of the learner; it is always contextual and never separated from the knower. The challenge in constructivist learning is the bringing together of knowledge and the knower in coexisting entities (Philips, 1995). Meeting such a challenge should enable learners to move away from dependence on professional authority towards a belief in their own ability to create knowledge (Bruffee, 1999; McLachlan, 1990; Greenwood, Delquadi & Hall, 1989; Cassanova, 1988; Jenkins & Jenkins, 1987).

### **Adult Learning.**

It is not the intent of this author to discuss the literature on adult education extensively. Rather, it is to highlight the characteristics of the adult learner in relation to the learning environment and note how the concepts inherent in peer tutoring support these characteristics.

Malcolm Knowles (1980), a guru in the field of adult education makes the following four assumptions about characteristics of the adult learner (p.45).

1. Their self-concept moves from one of being a dependent personality toward being a self-directed human being.

2. They accumulate a growing reservoir of experience that becomes an increasingly rich resource for learning.

3. Their readiness to learn becomes oriented increasingly to the developmental tasks of their social roles.

4. Their time perspective changes from one of postponed application of knowledge to immediacy of application and their orientation toward learning shifts from one of subject centredness to one of performance centredness.

Knowles (1978) elaborates that “adults have a deep psychological need to be generally self-directed” (p. 43) and, “the psychological definition of adulthood is the point at which individuals perceive themselves to be essentially self-directing” (p.46). The adult learner needs to be perceived and treated by others as capable of taking this responsibility. It is necessary to be an active rather than a passive recipient of learning.

MacKeracher (1996) considers the research of such educationalists as Jack Mezirow, Robert Smith, David Kolb, Malcolm Knowles, Donald Brundage and Patricia Cross to make assumptions about conditions affecting learning. She states that adults will learn best:

- that which has relevance for them as determined by their current meanings and personal model of reality...derived from their needs, life tasks, roles and personal interests.
- when they are treated in ways which are consistent with their existing descriptions of who they are and what they are capable of doing.
- when others respect and acknowledge them and their past experiences and personal knowledge, skills, values, and motives.
- when their learning bears some relationship to past experience.
- when they have a sense of where they are going in the learning process, how they will get there, and how they will know when they have succeeded (p.29).

Peer tutoring seems to have the potential to foster such conditions for the adult learner. Goodlad and Hirst (1989) claim that active involvement is a crucial element of peer tutoring. According to Cust (1995) many educators have recognized that self-direction is more likely when students are involved in activities such as collaborative learning which is facilitated by peer tutoring. The one-to-one dyad or group structure could serve to foster self-concept and encourage the learner to think independently. According to Goldschmid and Goldschmid (1976), the tutor relationship could also increase cooperation accompanied by a decrease in competitive behavior, an increase in motivation and an increase in self-confidence and self-esteem. Such an environment could assist the student to identify own learning needs, take ownership of learning, and take an active role in evaluation, factors which enable the adult student to learn more effectively (MacKeracher, 1996; Goodfellow, 1995).

Peer tutoring allows for a small tutor/tutee ratio which enhances immediate feedback both factually and socially (Jenkins & Jenkins, 1987). Frequent testing, as in learning dyads designed to prompt the right answer on the one hand and informal dialogue on the other, facilitates active participation and engages the learner in goal-setting and structuring of the learning situation (Goodlad & Hirst, 1989). The adult learner then has the flexibility to shape the environment which is of considerable motivational importance (Knowles, 1980).

A reflexive element to learning in peer tutoring is facilitated by the absence of authoritative uncertainty (Goodlad & Hirst, 1989). Similarity in age and interest amongst partners in peer tutoring relationships fosters an environment of openness, mutuality and trust where participants are more comfortable to share rather than question the credibility or value of their own past experiences (Whitman, 1988). The adult learner in a peer tutoring situation may be better able to use past experiences, to make meaning of them or transform them in light of new knowledge in such a way that it may be assimilated by one's partner. (Goodlad & Hirst). Such a learning situation supports the philosophy of constructivist learning in that it provides the opportunity to bring together both knowledge and the knower as coexisting entities.

In summary, the discussion on the concept of peer tutoring and its philosophical underpinnings seems to support the premise that peer tutoring offers an opportunity for adult learners to become actively involved in learning experiences that are relevant to their

goals and needs. According to Knowles (1980) when this occurs, adults will learn fast and well.

### **Peer Tutoring in Higher Education**

Although there are many reports on the use of peer tutoring in post-secondary education, the quantity and quality of empirical research is surprisingly limited. While most of the examples and research in this portion of the review are drawn from the literature in education at the post- secondary level, findings at lower educational levels and from other disciplines have been added where they seem relevant.

### **Effectiveness of Peer Tutoring**

The volume of literature supporting the effectiveness of peer tutoring is quite extensive. Although most of the literature has been conducted at the primary and secondary school levels, the tutoring literature supports the view that peer tutoring seems generally to accomplish at least as much in a post-secondary setting as it accomplishes in earlier levels of schooling (Topping , 1996; Zaritsky, 1994; Grevatt, 1992; Bruffee, 1978). Some studies have aggregated the effects on those being tutored with those providing tutoring, the emphasis being on the tutee (Lidren, Meier, Brigham, 1991; Fantuzzo, Riggio, Connelly, Dimeff, 1989; Cohen, Kulik & Kulik, 1982; Bruffee, 1978). Other researchers have preferred to look at these as two distinct types of effects ( McKellar,

1986; Moust, de Volder & Nuy, 1989; MacDonald, 1991). Despite its widespread acceptance, there are conflicting reports as to the effectiveness of peer tutoring as a learning activity for both tutors and tutees (Allen & Feldman, 1973; Bargh & Schul, 1980; Maxwell, 1990). Bargh and Schul attribute this to the lack of systematic investigation into variables that may make a particular tutoring situation efficacious for the tutor. More than a decade later MacDonald (1991) reported that the questions about tutoring's effectiveness remain unresolved due to the lack of research on the tutoring process and process variables. His view is made quite explicit by his statement: " Students go into this box [tutoring experience], something happens there, and we see if they emerge transformed. What about what happens in the box itself?" (p.2). Lidren et al. echo the concern that there is lack of conclusive evidence to provide a rationale for widespread implementation of effective peer tutoring programs in college settings. Nevertheless, in this study, the author has attempted to investigate the tutor's perception of the value of the peer tutor experience.

### **Nature of Tutor Gains**

#### **Cognitive Gains.**

A number of authors have reported that the process of " Learning by Teaching ," which characterizes the tutor's role, is likely to result in cognitive gains for the tutor both

before and during the tutoring process. According to Topping (1996) “ just preparing to be a tutor has been proposed to enhance cognitive processing in the tutor.” (p.324).

In an experimental study which involved forty-one college students (23 males and 19 females in an introductory psychology course), those who prepared to teach scored reliably higher on an achievement test than those who did not teach (Bargh & Schul, 1980). The authors suggested that preparing to teach resulted in a more highly organized cognitive structure which facilitated the retention of both the relationship between the facts presented and the facts themselves.

Hendelman and Boss (1986) reported similar results from a peer teaching session involving psychomotor skill demonstration. The authors had 65 medical students prepare and deliver a 15-20 minute presentation to a group of 6-8 peers in lieu of demonstration by faculty. The students were assigned their topic prior to lab to allow preparation time. Evaluative questionnaires revealed that, as a result of demonstrating in the laboratory session, students felt they had a deeper understanding of their own material, had a better attitude towards learning anatomy and more commitment to self-study. As well they felt more like student doctors and thought they would be more able to communicate with patients.

Benware and Deci (1984 ) conducted research to determine whether the psychological processes involved in learning are different than those for teaching. Forty-three freshman college students were divided into a control group and an experimental group: the control group was assigned an article to study for test purposes; the

experimental group was assigned the same article and were told they would teach the contents of the article. However, the teaching intervention was not implemented and both groups wrote the same exam comprised equally of rote memory and conceptual understanding of items. Results for both groups were equivalent on rote memory but the higher results on conceptual understanding for the experimental group was statistically significant ( $p < .04$ ). The researchers explained that the higher scores may be attributed to the intrinsic motivation for learning that resulted from the teaching requirement. As a result, there may be more active mental engagement compared to surface adoption of information for exam purposes alone. This finding supports the view of Kirschenbaum and Perri (1982) that allowing students to perceive themselves as being more involved in their education can be a vital motivating factor for increased achievement.

In addition to cognitive benefits accrued in the preparation stage, studies have shown that there may be additional benefits during the process of teaching. Annis (1983) demonstrated that tutors who prepared to teach and actually taught outscored: a) tutors who just prepared to teach b) students who were taught and c) students who had just read the prescribed material for the performance test. Annis proposed that tutoring involved enhanced attending, encoding and association. His results indicated that teaching resulted in better learning than being taught.

The findings of an earlier study by Bargh and Schul (1980) did not support these results. Their research did not find evidence in support of the existence of an effect of teaching in any stage of the teaching process other than the preparation stage. However,

these researchers caution that in their study, the laboratory simulation of the teacher-student interaction was both brief and artificial which may have accounted for their lack of significant findings.

### **Affective Gains.**

On the affective side, many positive outcomes have been documented for the peer tutor. Areas showing significant benefits for the tutor include: self-esteem, locus of control, self-confidence, self-satisfaction, helping relationship, social skills (Moody & McCrae, 1994; Hill, 1994; Goodlad & Hirst, 1989; Whitman, 1988; Pierce, Stahlbrand & Armstrong, 1984; Goldschmid & Goldschmid, 1976). However, support for these claims is primarily anecdotal. Subjective feedback outcome data from informal evaluation of projects is discussed, as little hard data is evident in the literature on higher education.

Kronqvist and Soini (1994) evaluated a Peer Tutor Model utilized in two courses in Higher Education. The authors reported that peer tutors valued the independence that came with the role and they had acquired skills in self-assessment and group dynamics. Nonetheless, the authors raised concerns that the role of the peer tutor was a little ambiguous in this model, which posed a problem in determining its real effects.

Similar findings were reported in a study which evaluated the effects of a pilot peer tutoring scheme in the Department of Law, University of Dundee (Moust, DeVolder & Nuy, 1989). In this study fourth and fifth year students acted as tutors and conducted tutorials for 157 first year students. The project was implemented on the basis of a

systematic and strategic plan with particular attention to tutor training and debriefing. In a debriefing session, student tutors reported a gain in self-confidence, communication skills and sense of community, as well as skills in public speaking, logistical thought and how to deal with the unexpected. Unfortunately, the results were only anecdotally reported, as the major focus of the evaluation report was not the tutor's but rather the tutee's perspective of the project

These findings were congruent with those reported in a quantitative study by Lidren et al. (1991) on the effects of two levels of peer tutoring on the academic performance of 193 college students enrolled in an introductory psychology course. Although the authors reported an improvement in leadership skills, communication, teaching abilities and self-esteem of peer tutors as a result of the peer tutoring, the purpose of this study was not to measure these outcomes. Consequently, results were reported as an adjunct and did not undergo the same systematic rigor and analysis as the key variables.

According to Pierce, Stahlbrand and Armstrong (1984) the most salient characteristic of the role of the teacher is to help another person. They further claim this assumption of the teacher role will change the traditional status of the student from a receiver to a giver of help. Furthermore, they see such a role change may reap psychological benefits. This seems to support earlier findings in a qualitative study by Holzberg, Knapp & Turner (as cited in Goodlad & Hirst, 1989) who found that college students who visited and socialized with clients in a psychiatric hospital experienced

feelings of personal competence which led to more awareness, self-acceptance and tolerance of others.

Despite the widespread belief evident in the literature that teaching (tutoring) is an excellent method of learning, surprisingly there has been little systematic investigation of how this occurs. A review of the literature has revealed that there has been insufficient inquiry into which specific characteristics of the teaching situation are influential to the tutor. MacDonald (1991) feels, in order for the benefits of tutoring to be understood, we must first understand the nature of the process.

An exploratory study by Bargh and Schul (1980) utilizing an experimental design, was an early representation of investigation into the process-product paradigm.

Undergraduate students (n=121) participated in the study as partial fulfillment of an introductory psychology course requirement. The researchers were concerned with the actual tutor-tutee interaction. For both a verbal and a problem-solving task, participants either worked alone, verbalized their thoughts and ideas while working alone, or taught another subject while working on the task. There was no reliable performance differences found between conditions on either task. The results of this study helped to reduce the number of alternative explanations for the learning gains made by the tutors and provided direction for more narrowly based and detailed studies on segments of the process.

In a descriptive study, MacDonald (1991), utilized a systematic approach and a self-developed coding matrix, to examine and perform a microanalysis on the verbal interactions that occur between tutors and tutees. Four tutors and tutees from a

community college met in pairs one hour a week to address the particular content of a specific course. MacDonald concluded that two basic patterns exist during the process of tutoring and that much of the time is spent in tutees and tutors explaining information to each other. He stressed that his results are contrary to the common belief that tutors lead the tutees to answers by asking skillful questions and notes the relevance of his findings to tutor training programs.

In line with previous research, McKellar (1986) studied the tape-recordings of twenty pairs of students engaged in peer tutoring sessions so as to explore the nature of their interactions and identify any relationships that existed between these behaviors and the degree of learning achieved. The positive contribution of the tutor's elaboration and bringing in new information was consistent with the findings of MacDonald's study. McKellar identified modeling as the most frequent behavior used by peer tutors. This result supports the idea that tutors imitate behaviors that have been modeled for them. Negative interactions by the peer tutors in this study included giving incorrect information and asking direct questions of the tutees as to whether they understood or did not understand the material. The authors associated this with the tutor's lack of success in interpreting situational cues or failure by the tutor to discriminate between what was nice to know and what was necessary to know in their communication with the tutee. McKellar concluded that his findings were relevant particularly when planning tutor training sessions.

In summary, there are many claims in the literature attesting to the effectiveness of peer tutoring programs at the post-secondary level. However the focus of many of these studies has been on the cognitive gains of the tutored student. Although affective and cognitive gains for the tutor has been anecdotally documented in many these studies, the tutor has not been the focus of the research. In other studies, research has focused on understanding the dynamics of the tutoring process. Such an understanding could provide valuable insight into what needs to be included in tutor training.

### **Tutor training**

The emphasis on tutor training seems variable in the literature. It is frequently assumed that most persons have an implicit understanding of what it means to teach and that bringing students together and calling one the tutor will automatically produce results (McKellar, 1986; Pierce, Stahlbrand & Armstrong, 1984). However one's perception is probably determined in part by how teaching has been modeled for the individual or by any training in tutoring techniques that the individual has received. It is this implicit understanding of what constitutes tutoring that guides the tutor in choosing behaviors such as discussing, explaining and questioning that are used in the tutoring process (Gourgey, 1992; Whitman, 1988; McKellar, 1986).

LaPlante and Zane (1994) consider training as the heart of any partner type learning systems. Rings and Sheets (1991) and Pierce, Stahlbrand and Armstrong (1984) emphasized that training programs for tutors must keep the theory of student development

and learning principles in mind. Pierce et al. state that tutors who have been trained in methodology as well as content are better performers than those who enter the tutoring situation unprepared. Topping (1994) is also a strong proponent of tutor training and states that, from his perspective, it should include both tutor and tutee. He elaborates that the mechanism of delivery for the training includes verbal, visual and written information coupled with demonstration, immediate practice, feedback, further coaching and subsequent monitoring. He, as well as Ehly and Larsen (1980), caution that the degree of sophistication in training would depend on the background of the tutor and the purpose, goals and objectives of the project.

Whitman (1988), in his review of the literature in higher education, found that there are basically two types of training programs described: those in which peer teachers are trained as a component of a college course; and those in which they are trained outside a formal class session. He cited an example of a formal approach in a peer writing program at Brooklyn College whereby student tutors enrolled in an intermediate writing course prior to tutoring students in a beginning course. Although the focus of the intermediate course was primarily on content to improve personal writing skills, some attention was given to how to give criticism. In a less formal program, students at the University of Cincinnati engaged in role playing as a mechanism to train tutors with a focus on interpersonal skill development. Other sources cited in Whitman's literature review focused pre-tutoring exclusively on content mastery with validation of mastery determined

by oral and written means (Lidren et al., 1991; Mc Kellar, 1986). Little mention is made in any of these studies of skill development in the actual process of tutoring.

Moust et al. (1989) discussed the outcomes of a peer teaching project in law education in which both faculty and senior undergraduate students acted as tutors for freshman students. Both the student and faculty tutors received the same two day tutor training, supplemented with a practice session in which they were counseled by an experienced faculty tutor. The nature of the training sessions was not discussed. Using a t-test statistical analysis, researchers were able to demonstrate that student tutors were rated no differently from staff tutors with respect to the way they stimulated learning, directed the discussion content and monitored the discussion process. It was postulated that quantitatively, this could have been an outcome of the same training program. However, there may have been qualitative differences in behavior which the 'tutor functioning' questionnaire used in this study was unable to determine. This rationale is in keeping with a second finding in this study that students guided by a staff tutor scored significantly higher on a test designed to measure higher order cognitive skills than students guided by a student tutor. The authors attributed this finding to the more elaborate knowledge and experience of faculty tutors. Although these results reinforce the need for tutor training, it casts some doubt on whether peer tutoring by student tutors can stimulate the same level of learning amongst tutees as faculty tutors.

Cohen et al. (1982), in a review of 65 independent evaluations of school tutoring projects reported positive effects of tutor training. Tutor training programs were found to

exist in 39 of the reviewed projects. Utilizing a meta-analysis approach, studies which involved tutor training tended to produce a large effect size (E.S.=.41 for tutee and .34 for tutor) which lends support to tutor training as an essential component of tutor programs.

Conversely, Mallatrat (1994) indicated that tutor training may not be effective in helping tutors meet specified program objectives. In this investigation, four senior students assumed the role of peer tutor for students in a first-year engineering course. Peer tutors attended an intensive 2 day pre-tutor training course. The aim of the project was to promote deep learning of the material they were tutoring and develop skill in providing support to others. Results of the study focused primarily on gains for the tutee. However, it was reported through tutor reviews that 50% of the peer tutors felt more comfortable in delivering content than in supporting study skill development in tutees. Although this could indicate a deficiency in tutor training, it must be considered cautiously in view of the number of shortcomings inherent in the design of the evaluation. The absence of a control group, little attention to the tutor's understanding of the material, learning styles of the tutees, and the extent to which the peer tutor system either supported or confronted these, were obvious limitations.

### **Typology of Peer Tutoring**

Possible reasons for the lack of more consistent findings in the research on peer tutoring in post-secondary education may be the variability in what it means to be a tutor in different situations as well as the diversity of conditions in which peer tutoring exists.

Topping (1994), in an attempt to develop an organizational frame for the array of research on the topic, cites a “ typology of peer tutoring which may include ten dimensions:

1. curriculum content
2. contact constellation
3. year of study
4. ability
5. role continuity
6. place
7. time
8. tutee characteristics
9. tutor characteristics
10. objectives ” ( p. 323 ).

The scope of a curriculum for peer tutoring projects is quite extensive. The literature includes projects in many disciplines some of which involve education (Topping, 1996; Lidren et al., 1991; MacDonald, 1991; Bruffee, 1978), law (Moust et al., 1989; McCrae & Scobbie, 1994), psychology (Hill, 1994; Wildren & Gro,1994), nursing (Bos,1998; Iwasiw & Goldenberg, 1993; Cason et al., 1977), engineering (Mallatrat, 1994; Healey, 1994) and medicine (Hendleman & Boss, 1986). Some of these projects have been knowledge or skills oriented or a combination of both.

Contact constellation has varied greatly. Tutoring has occurred in one-to-one situations or dyads (Fantuzzo et al., 1989; Mc Kellar, 1986) and in small groups with one

tutor working with a group varying in size from 2 to 30 or more students (Lidren et al., 1991; Moust et al., 1989; Bruffee, 1978).

Peer tutoring projects have involved students from the same year of study (Healey, 1994; MacDonald, 1991; Hendleman & Boss, 1986), or students at a more advanced level acting as tutors to more junior students (Mallatrat, 1994; Moody & McCrae, 1994; Johnanson Martenson & Bucher, 1992; Lidren et al., 1991; Moust et al., 1989). In many of these projects students of higher academic standing were selected as tutors (Mallatrat, 1994; Lidren et al., 1991; Moust et al., 1989). However, there is some evidence in the literature, of students with equal ability acting as tutors. One student may have superior mastery of a topic or both students have the same knowledge base and work in dyads or larger groups to obtain a deeper understanding of the subject matter (Gartner & Riessman, 1994; Fantuzzo et al., 1990).

In other peer tutoring situations, the role of peer tutor is assigned and retained throughout the project (Lidren et al., 1991; Moust et al., 1989). As well the roles of tutor and tutee may be switched at strategic points, referred to as reciprocal tutoring (Fantuzzo et al., 1989; Goldschmid & Goldschmid, 1976). This is purported to enable the maximum number of students to experience the role of tutor and accrue associated benefits of the experience

Peer tutoring projects at the post- secondary level have occurred in a variety of settings and at variable times. The majority of projects were implemented during regular class time in the academic setting. Other projects, particularly for remedial or

supplemental instruction occurred outside regular curricular times at the convenience of both parties. Peer tutoring as a course requirement (Bargh & Schul, 1980) has involved highly motivated tutees who volunteer, either for additional course credit or personal fulfillment (McKellar, 1996)), those at academic risk (Brufee, 1978) and or in need of support services (Gartner & Reissman, 1994).

Traditionally, tutors have been selected based on their proven high academic record (Gartner & Reissman, 1993; Lidren et al., 1991; Goldschmid & Goldschmid, 1976). However, recent investigations have shown that both tutors and tutees accrue benefits from the peer tutor experience (Goodlad & Hirst, 1989; Mc Kellar, 1986; Cohen, Kulik & Kulik, 1982; Feldman & Allen, 1976). Some studies indicate the benefits for the tutor outweigh those of the tutee (Annis, 1983; Bargh & Schul, 1980). Consequently, there is increasing support to maximize the tutor role through such strategies as classwide peer tutoring and reciprocal peer tutoring wherein students assume the tutor role regardless of their academic standing.

As such, Gartner & Reissman (1993) have proposed a new model for peer tutoring. In this model, the tutoring process is viewed as developmental, where tutors have had the experience of being a tutee as part of their apprenticeship for becoming tutors. In comparison to the previous model, everyone in this new model becomes a tutor. The authors stress that to strengthen the tutee-to-tutor conversion and to build a shared ownership of the program, tutees need to meet regularly with tutors to reflect on their joint tutoring experience as givers and receivers of help. The following table was

developed to compare the new and previous models for peer tutoring based on information from Gartner and Reissman (1993).

Table I

Comparison of new and previous models of peer tutoring

<b>OLD</b>	<b>NEW</b>
Less proficient tutored by more proficient	Everyone is a tutor
Remedial help	Reinforcement/ Enrichment
Tutee dependency	Conversion of tutee to tutor
Learning by receiving	Learning by teaching
Emphasis on tutee improvement	Emphasis on tutor development
Incremental improvement	Leap in learning
Limited use of student resources	Multiple increase of help-giving resources
Add-on peripheral activity	Basic, central educational strategy
Little impact on school	Peer focus aims to transform school culture

Note. From "Peer -Tutoring: Toward a New Model," by A. Gartner and F. Riessman, 1993, ERIC Document Reproduction Service No. ED 362506, p. 3.

Although there is some evidence in the literature to suggest implementation of this model at the elementary and the high school level, its use at the post-secondary level is not

apparent. Iwasiw and Goldenberg (1993) describe such an approach in the nursing literature which will be discussed in the next segment of this review.

In short, peer tutoring programs have been implemented for a variety of reasons. They may target academic performance (Lidren et al., 1991; Goodlad & Hirst, 1989), social and attitudinal gains (Topping, 1996), or any combination of these (Hill, 1994). Organizational gains may include reducing attrition due to failure and dropout, and decreasing pupil /teacher ratio (Mallatrat, 1994; Lee, 1988).

### **Cost- Effectiveness**

Peer tutoring is thought to be a highly cost-effective teaching strategy, though Topping (1996) points out there is little hard data to validate this assumption. Historically, peer tutoring arose out of the need to educate large numbers of children with very limited numbers of teachers (Wagner, 1982). Because of financial constraints at the end of the 18th century, students were used to assume the role of teacher in the education process. During this era, the education system was modeled on the 'monitorial system' as proposed by Bell & Lancaster (Wagner). In this system, cost effectiveness rather than program effectiveness was the focus with the ultimate goal being education of the masses. With the apparent resurgence of interest in peer tutoring, coupled with national financial constraints and budgetary cuts in education, it is necessary to examine the literature closely to ensure that the appeal for this age-old strategy is not based on economics alone.

A comparative analysis of the cost benefit effectiveness of four educational interventions to improve reading and math in primary and elementary schools was reported by Levine, Glass and Meister (1987). The researchers compared the relative effectiveness of cross-age peer tutoring, reduced class size, a longer school day, and computer-assisted instruction. In terms of student achievement, results showed the greatest effects were associated with tutoring. When costs were estimated, the biggest effect per \$100 spent was with tutoring. Peer tutoring was found to be the most cost-effective intervention being four times more cost-effective than the least (reducing class size). Although these results are not generalizable for further and higher education, they are worthy of consideration.

Lee (1988) found similar results in a study conducted at the post-secondary level. In this study, 93 colleges were surveyed and seven interventions aimed at decreasing student dropout were identified. Results indicated that peer tutoring was both a beneficial and cost effective measure for student retention. On the other hand, Greenwood, Carta and Kemps (1990) have cautioned that expenses such as faculty planning, consultation, tutor training and quality control measures need to be taken into account when determining start-up costs for peer tutoring. Nonetheless, in terms of cost-effectiveness, they speculate that peer tutoring operating costs may be lower than that of other programs such as counseling and stay in school incentive programs, although Goldschmid and Goldschmid (1976) have advised that peer teaching represents one of the few instructional innovations that does not call for an immediate additional financial investment.

## **Summary**

The literature on peer tutoring in higher education indicates support for this strategy. The descriptive literature is replete with overviews of peer tutor programs and identification of benefits for the tutee. Cost-effectiveness of such programs is implied but not validated in the literature. Only a few studies exist that directly or indirectly address the process of being a peer tutor and the outcomes of this strategy for the tutor. While the research literature is scarce, there is preliminary evidence that peer tutoring can foster personal and professional growth (Goodlad & Hirst, 1989; Annis, 1983; Cohen, Kulik & Kulik, 1982; Bargh & Schul, 1980). Nevertheless the need to investigate this strategy from the perspective of the peer tutor is necessary.

## **Applications of Peer Tutoring to Nursing Education**

Studies in nursing education provide evidence of support for the use of peer teaching both in the clinical and classroom components of nursing programs. The various applications of peer tutoring evident in the nursing literature include peer instruction (Iwasiw & Goldenberg, 1993; Goldenberg & Iwasiw, 1992; Kammer, 1982; Cason et al., 1977), peer evaluation (Erickson, 1987; Gustafson, 1980), peer leadership (Bos, 1998; Aviram, 1998), peer mentoring (Yates, 1997; Heinrich & Scherr, 1994), and collaborative learning (Costello, 1989; Gerace & Sibilano, 1984; Krawczyk, 1978). However, the

literature is primarily descriptive in nature and for the most part lacks an explicated theory base.

A number of studies have reported the use of peer instruction methodology in baccalaureate nursing programs (Iwasiw & Goldenberg, 1993; Goldenberg & Iwasiw, 1992; Kammer, 1982; Cason et al., 1977). In an early qualitative case study by Cason et al. using more senior students (n=6) as teachers, researchers found that peer instructional methodology was feasible and superior to the more conventional instructor-led teaching. Results obtained through informal discussion indicated that senior students learned direct management and teaching skills while the junior students (n=12) benefited from the guidance of their more experienced peers. However the researchers indicated that a more rigorous study was needed to determine absolute gains for both tutor and tutee. In a similar study by Kammer reported positive feedback from senior baccalaureate nursing students (n=200) as a result of a shared learning experience in an integrated community and psychiatric nursing course. Shared learning was stimulated by listening to tapes of student / client interaction and observing one another in clinical practice. There were reported gains for all participants which included enhanced communication skills, self responsibility, creativity and skill acquisition in preparation for future professional peer review.

Similar findings were observed in two studies conducted by Iwasiw and Goldenberg (1993) and Goldenberg and Iwasiw (1992). In the earlier study, the researchers described in anecdotal form, a reciprocal learning project involving the

psychomotor skill of a surgical dressing change amongst same year peers enrolled in the second year of a baccalaureate nursing program. Students (n=50) functioned as peer learners or as peer teachers in this experience. To ensure patient safety, students had their technique approved by the clinical teacher before assuming the role of peer teacher. Results indicated that students preferred this method of clinical supervision, that it enhanced mutuality amongst peers, and resulted in a heightened sense of responsibility for their own learning. Using a pre-post experimental design with social learning theory as the framework, the researchers performed a follow-up study. They found by using a t-test analysis that students in the experimental group who were taught by peers achieved significantly higher cognitive improvement scores ( $p < .05$ ) and moderately higher psychomotor improvement. As well, the experimental group rated peer teaching as equal to or better than instructor teaching. Although the emphasis in this study was on the tutee rather than the tutor, anecdotal reports indicated that peer tutors felt a responsibility to prepare for their supervisor experience by reviewing content and principles of teaching and learning. This resulted in cognitive gains and enhanced psychomotor proficiency for tutees who obtained direct external reinforcement from their peers.

Studies describing peer evaluation have also appeared in the literature. Gustafson (1980) reported the outcome of peer evaluation in a dyadic structured, reciprocal learning experience among senior baccalaureate students in a community nursing course while Erickson (1987) described a similar project. Results of both studies supported reciprocal peer evaluation. Reported outcomes included decreased levels of anxiety, positive feelings

of helping and collaboration, enhanced recognition of standards of practice, and skill acquisition in performance evaluation.

Yet another group of studies focused on peer leadership. Aviram et al. (1998 ) described a 12-week leadership experience whereby senior nursing students (n=4) participated in a structured pilot project as coaches for novice students (n=4) during their first clinical rotation. Four coaches were selected based on high academic and clinical performance and attendance at a two-day orientation focusing on coaching skills. In a written evaluation of the project, coaches reported increased confidence, skill development in instruction and teaching techniques, and personal development in relation to role diversity, as well as enhanced knowledge, psychomotor skill development, positive feelings on team work and mutual support. Interestingly, in a meta-analysis of studies in the education literature, highly structured studies and those which involved extensive tutor training, strong effect size for tutee achievement was produced (Cohen et al., 1982 ). Bos (1998), in a descriptive study, investigated what peer leaders perceived as benefits from a one-day peer leadership experience during a medical-surgical clinical rotation. Peer leaders were junior baccalaureate nursing students and preparation for the role was in the form of printed instruction describing their responsibilities as peer leaders. Written self evaluations of the 12 participants were analyzed by the researcher with the following benefits reported: practice in prioritization of nursing care, enhancement of critical thinking skills, enhancement of technical skills, realization of peers resources, and development of managerial skills. However, the findings were to be viewed with caution, as it was difficult

to conclude if the stated benefits resulted directly from the peer leadership experience or were a product of the particular teaching style of the instructor.

Peer mentorship has also been reported. Yates et al. (1997) described a peer mentorship pilot project designed to explore potential benefits of utilizing the past experiences of second year nursing students (n=8) to help beginning students (n=50) reflect upon effective learning strategies. The evaluation process for the project was well triangulated but the key focus of the evaluation was on learning outcomes for junior students. There were items on the questionnaire to ascertain if there were mentor gains. Benefits for the mentor were most notable in terms of improved leadership skills and self-confidence as well as personal satisfaction of assisting others. Most notable benefits for junior students were an increase in confidence and a decrease in anxiety. Because students voluntarily participated in this project, comparison with students who chose not to participate can only be used to speculate about possible benefits. Heinrich and Scherr (1994) also reported on a model to help nurses develop mentoring relationships. They stressed that repeated positive coaching experiences result in internalizing reflection skills with the ultimate goal of becoming one's own coach.

Topping (1996) has proposed that collaborative learning is an outcome of peer tutoring. Since nursing is largely a practice discipline involving much teamwork, the importance of skills in peer collaboration and mutual interdependence is paramount. Gerace and Sibilano (1984) reported on a collaborative teaching model designed to enhance problem solving-skills of junior and senior students. They found that collaboration

was a developmental process, attributed to the initial role uncertainty experienced by the senior nursing students, a consequence of the traditional instructor-student power relationship into which students had been socialized. The existence of such a relationship is well supported in the literature by Chandler (1991), Heliker (1994) and Allen (1990). However, following completion of the experience, the senior students reported gains in self-confidence, whereas junior students acknowledged appreciation for the expertise, skills and support received from their senior colleagues. Similarly, Krawczyk (1978) found that as a result of peer participatory conferences, students became a learning community and began to see each other as learning resources rather than as competitors for grades.

Contrastingly, Glass and Walter (2000) were not in support of cross-level mentoring. They felt that peer mentors should be supportive persons whom the mentee already knows. They investigated the relationship between peer mentoring and professional growth from a critical social science and feminist framework. Although the intended research outcome of professional growth was not reached, they concluded that the peer relationship allowed for discussion of personal issues, a necessary precursor to open discussions of professionalism.

### **Summary**

Generally, the investigators have concurred that use of a peer participatory approach whether it be tutoring, cooperative learning, peer evaluation or peer mentoring is valuable in nursing education. As many of the studies were descriptive in nature and

focused on evaluation of projects, there was little emphasis on the learning process or whether the program contributed to learning effectiveness. The emphasis in most of these studies appeared to be on the junior partner (tutee), while discussion in relation to the peer leader occurred as an adjunct at the end of the investigation. The majority of the literature reviewed included educators' and students' opinions as a result of their participation in a project. Much of the data were gathered through informal discussions or in clinical conference settings with little evidence of formal analyses. There was less attention paid to extraneous variables and how these could have influenced results. Future research needs to be based on more formal or rigorous research studies. Tutor training and comparative analysis of this methodology with other teaching strategies requires more attention in the nursing literature. Additional studies should focus more on the perspective of the peer leader.

## **Design of the Study**

### **Methodology**

The research outcome for this study was to provide an interpretive description of the perceived benefits of being a peer tutor. A qualitative approach was considered to be the best method of achieving this outcome. Mariano (1990) describes the qualitative approach as “interactive; context dependent; holistic; flexible; dynamic; evolving; naturalistic; process oriented; primarily inductive and descriptive. It has, as its foci, perspectives, meanings, uniqueness, and subjective lived experiences. Its aim is understanding” (p.354).

The specific qualitative approach chosen to guide the design of this study was the case study approach of Merriam (1988) and Yin (1989). The purpose of a case study is to provide an intensive, holistic description and analysis of the phenomenon (Merriam, 1988; LeCompte & Preissle, 1993). Yin sees case study research as an investigation which retains the holistic and meaningful characteristics of real life events. Merriam maintains that the main concern of case study design is interpretation within a bounded context. Case study research is recognized “as an important approach when the future of a program is contingent upon an evaluation being performed and when there are no reasonable indicators of programmatic success which can be stated in terms of behavioral objectives or individual differences” (Merriam). She further states that it is a “legitimate

methodological option...to explore the processes and dynamics of practice” (p.xi). Stake (1995) agrees, noting that it is an effective way of studying educational programs. LeCompte and Preissle consider this approach “appropriate for intensive, in-depth examination of one or a few aspects of a given phenomenon” (p.33).

The qualitative case study was chosen as the methodology as the researcher needed to develop a better understanding of the process of being a peer tutor so as to interpret the perceived benefits. It was necessary for the researcher to enter the participant’s personal world, to access such subjective factors as thoughts, feelings and desires of participants in relation to their experience. Of crucial importance was the participant’s individual perspectives. The aim of the case study was not to find the correct or true interpretation of the facts but to eliminate erroneous conclusions in order to convey the best possible, most compelling interpretation. The focus of the study was on the participant’s point of view, while the researcher’s orientation was on understanding.

Yin (1989) has proposed that theory development prior to the collection of any case study data is an essential step. To follow the chronological order of development of this study, this chapter will be divided into two sections: (1) theoretical framework for the study, and (2) methods

### **Theoretical Framework**

Loving’s (1993) model of competency validation and cognitive flexibility formed the theoretical framework for this study. Loving identified two constructs, competency

validation and cognitive flexibility, to explain how nursing students learned clinical judgment.

Competency validation describes the process by which the student's identity as a competent nurse is established. Loving (1993) explains that this process is dependent upon how persons conceptualize their learning. If success of learning is viewed in terms of grades and evaluation, then it is this extrinsic goal that motivates the individual and the focus becomes test-taking skills, exam mastery, and 'pleasing the instructor'. Wilson's (1994) research on nursing students' perspective of learning in the clinical area supports this view. She found that for some students it was not what you knew that was important but rather what the teacher thought you knew. According to Loving (1993), if one views learning as a process in and of itself, then one becomes intrinsically motivated to develop knowledge and skills necessary to solve problems.

This is the foundation for cognitive flexibility which Loving (1993) defines as the ability to find and apply information that is appropriate to problem solution. She considers cognitive flexibility as an essential precursor to learning independent judgment. Cognitive flexibility translates into a self-perception of competence. Contrary to this is the outcome of learning that is extrinsically motivated, which Loving claims results in cognitive rigidity. Such rigidity results in a poor transfer of knowledge, lack of confidence in one's abilities and intellectual dependence.

One of the goals of nursing education is to facilitate students' cognitive development, that is, their ability to employ reason, manage diversity and engage in

contextual decision making (McGovern & Valiga, 1997; Allen, 1990). Several researchers (McGovern & Valiga; Diekelmann, 1990) have disclosed that the majority of nursing students are at the lower level of cognitive development. Others report that nursing students are often unable to relate the cold facts of 'knowing that' with the interpersonal contextual 'knowing how', which often presents as the inability to transfer learning from the classroom to the clinical setting (Benner, 1984; Meerabeau, 1992).

Kelly (1992) found that senior nursing undergraduates perceived themselves as lacking confidence and reported feelings of inadequacy, corroborating similar perceptions of low self-confidence amongst this level nursing student. People act according to their perceptions, and Kelly has stated that self-confidence comes from perceived success in problem solving. Windsor (1987) has noted that it is only when nursing students feel confident that they can perform competently. It seems evident that it is essential to foster self-confidence in order to enhance cognitive flexibility and true cognitive development. One needs to be able to assess and scrutinize one's own beliefs and knowledge, implement action based on reason and logic, appreciate that a decision may be right for some and not for others, and move away from dependence on authority figures to reliance on self.

McGovern and Valiga (1997) have postulated that teaching strategies and curricular approaches can positively influence students' cognitive development. One such strategy that supports this claim is peer tutoring. Peer tutoring provides an opportunity to transform the relationship between teacher and student and among students. It fosters

collegial interaction and creates an environment for the tutor to develop independent judgment and decision making.

Empirical research on peer tutoring in nursing education is limited. One previous qualitative study has examined the perceived benefits of a one-day peer leadership experience for a junior nursing student population (n=12) and how the students' perceptions of educational contexts influence outcome (Bos, 1998). Identified benefits for the peer leader during their brief experience included practice in prioritization of nursing care, enhancement of critical thinking skills and technical skills, realization of peers as resources and development of managerial skills. The present study was undertaken to expand prior research by using a case study design and focusing on a more extensive peer tutor experience by a group of senior nursing students enrolled in one of their last courses prior to graduation.

## **Methods**

### **Participants**

In this study the participants were third- year students from a diploma nursing school who assumed the role of peer tutors as part of a leadership experience. The selection criteria for participation included: (1) those students who had met all academic and clinical requirements and thus were eligible to participate in the peer tutor experience at the time prescribed by the curriculum and (2) students who wished to participate in the study and were inclined to share their experience with the researcher.

These selection criteria were developed since selection of students who were progressing at an acceptable rate allowed the principle of literal and theoretical replication to be accommodated. Such extraneous variables as the influence of remedial work and enhanced support could interfere with cross analysis and consequently replication logic. As well the stated criteria served to bound the case. Secondly, participants who permit us to borrow their experiences and their reflections on those experiences enable the researcher to formulate a deeper understanding of the phenomenon (Yin, 1989; Merriam, 1988).

### **Selection**

In this study, criterion-based sampling was used to ensure a typical case selection for inclusion in the study. The criterion as outlined in the preceding section was used to determine the eligible participants. Because the number of eligible participants was quite large, a random sampling of this group was done through random retrieval of names from an envelope to allow those eligible equal opportunity to participate. As well, the researcher was uncertain whether external conditions such as cross-level tutoring would influence results, therefore, it was ensured that this condition was represented in the random sample.

At first it was difficult to determine sample size. According to Polit and Hungler (1991), the sample size is adequate when the meanings are clear and the data are fully explored. The sample size was considered sufficient when theoretical saturation occurred.

This is said to occur when specific categories consistently emerge and continuing data collection produces less and less new information (Merriam, 1988).

Initially, the sample size consisted of six participants, however, it was later extended to 10 peer tutors. Because the last participant in this first sample was somewhat contradictory to the others in her reports of the experience, the sample size was extended to 10 in an attempt to determine whether this was an isolated report which could be explained by the theoretical propositions guiding this study, or whether other negative examples existed which would mean there was little compelling support for the initial set of propositions.

### **Setting**

Study participants were enrolled in a third-year nursing course of which one component was a peer tutor experience. The context of the study was the third year nursing students' peer tutor experience both in psychomotor skills nursing labs and in assigned clinical areas. The clinical component of the peer tutor experience consisted of two (12-hour) days a week for two weeks in either an acute care setting or long term care facility, with either second year baccalaureate nursing students or practical nursing students at the midpoint of their program. The skills lab component of the peer tutor experience consisted of two to three (2-hour) lab sessions over a one-to-two-week period focusing on specific psychomotor skills, with either first or second year baccalaureate nursing students. Responsibilities for the lab experience included development of a

teaching plan, collaboration with faculty, implementation and evaluation of teaching.

Responsibilities for the clinical experience included collaboration with faculty, selection of client assignments, assessment of student preparation, supervision of skills, monitoring of care, and provision of guidance and support. Students were graded on a satisfactory/unsatisfactory basis based on self-evaluation, input from the faculty member in the clinical area as well as from the tutees.

### **Ethical Considerations**

Permission to conduct this study was obtained from the Ethics Committee, Faculty of Education, Memorial University of Newfoundland and Labrador. Permission to access the study site was obtained from the site director of the school of nursing offering the experience as well as from the director at the school of nursing where the experience was implemented (see Appendix C).

After permission was obtained, all Year Three students were informed of the study. Though all students were eager to participate, five students were not eligible based on academic/ clinical difficulties. They were not excluded from the initial information session as this session was conducted during a regular class period.

Six participants were initially selected followed by another four participants based on the previously outlined criteria. The participants signed a consent form that outlined the purpose of the study, possible benefits of the study, results to the participant and to nursing education in general, as well as measures that would be undertaken to

ensure confidentiality and anonymity, the type of interview that would be conducted, permission to audiotape the interview, the approximate length of time required for the and possibility of a second interview. The participant's right to withdraw from the study at any time was also clearly outlined on the consent form (see Appendix B).

### **Data Collection**

The data for this study were obtained from the following sources:

1) face-to-face, semi-structured interviews with peer tutors 2) journal entries made by the researcher subsequent to each interview .

#### **Interviews.**

Semi- structured interviews were utilized. Merriam ( 1988) describes these types of interviews as being “ guided by a list of questions or issues to be explored where neither the exact wording nor the order of the questions are determined ahead of time. This format allows the researcher to respond to the situation at hand, to the emerging worldview of the respondent, and to new ideas on the topic” (p. 74).

A general interview guide consisting of six broad lead-off questions was used (see Appendix A). These questions were open-ended and aimed at a description of experiences, opinions and values, emotional responses as well as the participant's factual knowledge and understanding of the phenomenon. Alternate form questions were asked throughout the interview to test the reliability of the participant. Descriptive present- oriented questions preceded the more complex questions of belief and explanations. Gentle probing

was used at times to elicit elaboration. The main focus of the interview was to encourage participants to freely describe and explore their interpretations of their experiences, that is “to find out what was in and on their minds” (Paton, 1980, p. 196), and to seek out their personal perspective. Marshall and Rossman (1995) hold that, when the outcome of such research is the subjective view and not objective assumptions as demonstrated by the conceptual framework, interviews may be used as the sole way of gathering data.

Each participant was contacted by telephone to arrange a date and time for the interview that was amenable to both participant and researcher. Interviews were conducted at the most convenient and suitable location for the participant. Seven of the interviews were conducted in a small conference room at the school of nursing and the remaining three were conducted at the researcher’s office in the hospital where the participants were currently working. The choice of the location, either academic or clinical, served both to ensure privacy as well as to bring the participant close to the natural setting in which the phenomenon occurred.

The duration of each interview was approximately 60 minutes. Prior to each interview, three to five minutes was allocated to reacquaint the researcher with the student. These preliminary discussions helped make the participants more at ease and facilitated the establishment of a trusting relationship. Each interview was audiotaped and transcribed verbatim.

The first interview was utilized as a pretest in which the intended data collection plan was used as faithfully as possible (Yin, 1989). Based on this interview, the sequence

and wording of some of the questions were modified, as well new questions were added for clarification. Because of the wealth of information that was acquired in this interview, it was decided to include this interviewee as one of the study participants and do a second interview with the participant at a later date to fill gaps that existed because of the modifications.

### **Journal.**

A reflective log in the form of a journal was kept to fully capture what might be lost in audiotape. According to Marshall and Rossman (1995) “ even in in-depth interview studies, observation plays an important role as the researcher notes body language and affect in addition to the person’s words” (p.80). The participants’ nonverbal cues such as facial expression, emotions, intonation, and reaction to questions were captured in written form subsequent to each interview in order to more fully describe the participant’s perspective. As well, it provided a forum for the researcher to reflect fully on the interview so as to identify gaps, areas for clarification , follow up, redefinment of questions as well as identification of new perspectives and new thoughts. Yin (1989) agrees that for case studies, process notes which can take any form such as diaries, journals etc. are likely to be the most common component of a database.

## **Data Analysis**

Data analysis does not occur in isolation but rather should occur simultaneously with data collection (Merriam, 1988). Following each interview, the audiotapes were transcribed and the researcher read and reread each interview while listening to the tapes so as to totally immerse herself into the participant's world and to identify any inaccuracies or loss of context in the transcription. This was done in conjunction with journal entries. Following the literal transcription, each participant was provided a copy of the transcript and the opportunity to validate the transcribed material, clarify content or expand on material, and provide a measure of content validity for the data. The transcripts were mailed to the participants and a follow-up phone call was made to obtain their feedback. All participants felt that the transcriptions were accurate and as communicated in the interview. However, the researcher felt it was necessary to re-interview three participants to clarify meaning for some vague data and explore significant topics that emerged in other interviews so as to have a clearer and a more global view of the participant's perspective.

“Data analysis is the process of making sense of one's data”. (Merriam, 1988, p.127). The goal of the data analysis is to organize the data into categories to provide structure for better understanding. Adaptation of the methods used for analyzing qualitative data as discussed by Polit and Hungler (1991) and Coffey & Atkinson (1996) was used for this purpose. The data analysis involved: 1) processing the data, 2) analyzing

the data to identify major themes, 3) comparing data, and 4) integrating the data into a case study report.

After the data were transcribed, the researcher thoroughly examined the interview scripts and compared them to journal entries made at the time of the interview. The data were then all manually coded. The coding process enabled the researcher to recognize and recontextualize data, allowing a fresh view of what was there. Coding served to condense the bulk of the data into analyzable units by creating categories with and from the data. The codes were then entered into the qualitative software program, The Ethnograph, for storage and retrieval. This software program greatly enhanced the organization of the data and served to generate concepts. Like concepts were then clustered and examined for themes. The researcher placed emphasis on the negative exceptions as well as on the positive patterns. Following completion of the data analysis, a summary of the themes was sent to each participant to determine whether these themes reflected their experience. A case report was then written using a thematic approach (Paton, 1980).

Regardless of the type of research, it is imperative that others be able to trust the results and feel confident that the study is valid and reliable (Merriam, 1988). The four major criteria defined by Guba (1981) for establishing trustworthiness while conducting qualitative research were used in this study. The four criteria are credibility, transferability, dependability, and confirmability.

Credibility was tested by using multiple interview participants, re-interviews and member checks. Member checks were achieved by taking interview scripts and

interpretations back to participants and asking them if they were plausible. As well, credibility was achieved by clarifying the researcher's assumptions at the outset of the study.

Tests for transferability are concerned with generalization of the findings. Although case study research is not greatly concerned with generalization of findings, some transfer of results between similar situations may have some relevance. According to Merriam (1988) "reader or user generalizability involves leaving the extent to which a study's findings apply to other situations up to the people in those situations" (p.177).

Transferability was provided by the use of thick descriptions as described by Lincoln and Guba (1985). Dependability and confirmability were established through the use of an audit trail inclusive of raw data, ethnograph files, and process notes. As well, an experienced qualitative researcher audited the data and verified that the themes were appropriate and the data were assigned logically.

### **Limitations of the Study**

The credibility of case study research in nursing is increasing (Gray , 1998) .Thus the researcher was particularly astute to standard procedures of this methodological approach. However, several limitations were inherent in the design of this study. It was recognized that because it was possible to conduct the study at only one school of nursing in Newfoundland, the applications and conclusions of the study could only be made within the limits of this group.

As the researcher was the instrument, it was necessary to recognize her personal biases or preconceived ideas prior to the start of the study. Since the researcher had been involved in the facilitation of this experience in the past as a faculty member at the study site, it was her personal theory that the benefits of this experience for the tutor were many, including improved collegiality, enhanced reflective skills, and improved cognitive abilities. Nonetheless, in making this explicit, the researcher was more aware of asking questions in the interview that critically explored both the positive and negative aspects of peer tutoring. It also made the researcher more cognizant of the need for objectivity in the interpretation of data.

As the clinical component of the peer tutor experiences was facilitated across varying levels of nursing, it was recognized that the degree of student-student mutuality and the amount of commitment that students felt towards each other may not have been consistent. Knowing this, the researcher was made more cognizant of the need to establish the typicality of participants' responses who tutored the same level students, of the congruency of data within and across levels and representativeness of the data as a whole.

To minimize response bias on the part of participants, the researcher was not involved in any way in facilitation of this peer tutor experience, since a facilitatory role included student evaluation. The researcher felt this would help to legitimize the data as she would not be perceived in conflicting roles. The researcher also recognized that her involvement with the participants two years previously as a teacher at the study site, could evoke response bias. Although the researcher felt that her former collegial relationship

with the participants was a positive factor in enhancing trust and dialogue, she remained cognizant that there may also be negative implications. Participants might have felt compelled to answer questions favourably because of dependence on a former faculty for a professional reference, or may have projected negative responses in the interview because of reactions to the interviewer rather than to the questions themselves. Recognition of this made the researcher more astute to evaluating the credibility of data and conclusions.

## IV

### **Presentation and Analysis of Data**

#### **Introduction**

This chapter is divided into two sections. The first section provides an introduction to the participants through presentation of demographic information. The second presents the themes as a structural framework for the presentation and analysis of results with excerpts drawn from the participants' interviews and interpretative material to convey the meaning of the peer tutor experience from the participants' perspectives.

#### **Demographic Information**

Ten senior nursing students were randomly selected based on meeting the established criteria for the study. All participants shared commonalities as well as notable differences. Age, sex, distinctive personalities, pre-nursing work experiences, variable post-secondary education credits were but some of the diversities that added to the richness of their stories.

Seven participants were female and three were male. The large number of female participants was not surprising as the gender of ninety-five percent of the target population was female. The participants fell within the age range of 20 to 24 years through to 35 to 39 years. To maintain confidentiality, the specific demographics for each participant are not presented. Likewise, the diversities in post-secondary education and

work experience are not presented. All participants have completed a range of two to five years of post -secondary education prior to entering nursing school with the vast majority having completed two years. Sixty percent of participants had no work experiences, the range of experience varied from 1 to 19 years for the remaining participants.

Just as there were differences amongst the participants, there were variances amongst the participants' experiences with peer tutoring. Although all participants peer-tutored baccalaureate nursing students in the laboratory component of their experience, the level of the students varied from year one to year two. Likewise, there were variations in the clinical component of the experience. Forty percent of participants peer tutored second year baccalaureate students whereas 60% peer-tutored practical nursing students. Diversities existed as well in laboratory content and specific clinical areas.

### **Identification of Themes**

This study sought to discover thematic categories within the data and to identify relationships within these categories. Through analysis, the following themes were identified as essential and relevant to the concepts and processes pertinent to this study. Each theme was subdivided to enhance clarity and understanding. Rich narrative detail is provided in the form of illustrative responses to exemplify the themes. Such responses helped illuminate understandings and insights about the process of being a peer tutor. The following themes will be presented in this chapter:

Table 2

Identification of Themes

<b>What is a Peer Tutor? : Role Perception</b>
• Teacher
• Role Model
• Mentor / Friend
<b>Peer Tutoring as a Mechanism of Self-Discovery</b>
• Power of Possibility
• Power of Belonging
• Power of Nurturing
<b>Peer Tutoring and Mastery Learning</b>
• Reflection
• Social Construction of Knowledge
• Mutual Sharing
<b>Peer Tutoring as Preparation for Independant Practice: Professional Growth</b>
• Communication Competence / Articulation
• Collaboration
• Assertiveness
• Confidence

## Thematic Analyses

### What is a peer tutor? : Role Perception

#### Teacher.

Although there was a diversity of terms used to define one's role as a peer tutor, there was consensus amongst most participants that their perception of the role was positive. Most participants generally expressed excitement when reflecting on their experience and indicated that it was indeed enriching. One participant stated (with such enthusiasm):

It was honestly an excellent experience, I can't believe I was able to be a teacher , a friend, a support person all at the same time. I felt so energized when I was peer tutoring. I couldn't believe that students were looking towards me for answers, for direction and stuff like that. (Participant 2)

Another participant recalled that at the end of one clinical day a student remarked as she was leaving:

I learned so much from you today about priority setting and collaboration, I just hope I can become as good a nurse as you are. That comment made me feel so good. I left there on cloud nine. (Participant 8)

Most participants described their role as multi-faceted. Participants described their primary role as that of a teacher involved in structuring and delivering information and skills to students as well as providing feedback. A characteristic participant statement was as follows:

It was basically one student with more knowledge teaching a junior student. Basically I saw peer tutoring as taking my learned experiences and teaching them

to others... However it wasn't like teaching in the traditional sense, it was like enhancing the students' learning, picking their brains as such to get them thinking. I didn't just give them all the information. I knew what they knew- it wasn't so long ago I was at their level. I tried to get them to build on the knowledge they had by asking them questions. (Participant 1)

Another participant elaborated:

You're not really teaching the student, you're really helping them along, for example, in a lab if they have any questions, any problems, you're there to help them and guide them through and not to just stand up and riddle off all the information as if you were giving a lecture. (Participant 5)

This assumed role was credited with creating a validity check of the legitimacy of the participant's knowledge base and substantiating the need for enhanced learning. An example of the value placed on the teacher role in relation to learning was provided as follows:

I felt compelled to have a good understanding of the content, to make sure there were no gaps. I just wanted to make sure I was correct in what I was telling them and that I was guiding them properly. For example in the lab I found the students asked a lot of specific questions about specific clinical situations. I had to really know my stuff to help them apply the textbook information to the situation. (Participant 10)

Another participant reflected on how her teacher role influenced her learning:

In the past, I would learn how to do things as step 1-2-3 with no concern as to the 'hows' or 'whys'. In this teacher role, I had to understand all the details that made up the bigger picture. I looked at everything, I looked at all perspectives. I was always fearful that a student would ask me something that I didn't know. I tried to safeguard against this by doing lots of preparation. (Participant 2)

Many participants, though positive of their teacher role as a whole, were perplexed with the lack of autonomy or power offered them whilst engaged in this role in the clinical setting. Although past performance had deemed skill acquisition at an independent level of functioning, some participants were not permitted to supervise students in the initial performance of a skill nor deem them independent. It was evident among participants that such a guideline created role ambiguity. Participants generally reported feelings of inadequacy, distrust and uncertainty when confronted with this in the clinical area. As one participant describes:

If I can't supervise even the first dressing change then what am I doing here... It made me feel incompetent wondering you know what is my purpose? Does she even believe that I can supervise this ? (Participant 3)

Other participants refused to align themselves with such feelings of incompetence and doubt but rather interpreted the situation as merely resistance on the part of instructors to veto power. As one participant recalls:

Such a simple task as bed making, she knew at our level we were more than competent in this skill, but yet she had to have the last word. If we were there to peer tutor, then let us do it. (Participant 6)

Participants expressed surprise at the diversity of their role. Although they perceived their role as multifaceted, what seemed focal to them was their role as teacher. Hand in hand with this role perception was the quest for the level of knowledge and expertise that they equated with the teacher role.

Although positive of their intended role, some participants felt that they were inhibited by the performance of their role whilst in the clinical area due to the controlling attitude of their instructor. Such control left these students feeling insecure and uncertain. What is important here is that people act according to their perceptions and if conditions are created to promote perceptions of inadequacy such feelings can be internalized. In order for students to grow and assume higher level activities they must be allowed an appropriate level of independence.

### **Role Model.**

Many participants identified that being a role model was integral to their role as a peer tutor. Participants reported they were in awe as to how much the junior students looked up to them not only in a cognitive sense but non- cognitively as well. Because some degree of scrutiny was anticipated in relation to their knowledge base, participants reported they felt compelled to prepare well for the experience. The need to feel credible seemed uppermost in the mind of the peer tutors. One participant recounted:

I felt responsible to those students. I felt nervous as I stood in front of the students in the lab. I was afraid I was going to say something a little bit off, that somebody would try to trip me up, that I would be asked a question to which I didn't know the answer. It would look as though I didn't know my stuff.....It was important for me to feel good about what I told them. After all what I said and did could influence how well or how poorly they performed in the clinical area. If I did something grossly wrong in the lab and they modeled it in the clinical area, it could result in unsafe practice. I would never forgive myself if that happened. Things like that made me want to work harder. I was a senior and I know they looked up to me. It was as though I had to live up to their expectations. (Participant 4)

Another participant talked about being a role model in a less cognitive sense:

How I act on the floor is pretty professional. I think professionalism is really important to nursing. A lot of the times, particularly in the media, nurses are portrayed as somewhat mindless but yet you know full-bodied. I think that has to change and so I am always mindful of how I act. I was particularly conscious of my interactions with the clients and the staff during this experience as the students tended to watch your every move. Even though I knew I was acting professional, it gave me reason to carefully scrutinize my behavior. (Participant 10)

The participants expressed surprise as to the degree of impact their behavior had on the students. Such an example of this is as follows:

I had a couple of students who were a little bit shy and when they went into the client's room first thing in the morning they didn't know what to say. When I detected this I would start the conversation... I was amazed at how intently the students would listen. After I sensed they were more comfortable, I would back off and they would take over. Over the next few days I had the opportunity to accompany the same students to their clients' rooms and I was surprised as at how much they had modeled their introduction, preliminary conversation and even body language after mine. It certainly made me aware of the degree of influence I could have. (Participant 7)

Participants were in awe of the degree of influence they had over the junior students. The awareness of such influence called for a critique of one's own behaviors and attitudes. As well it evoked a need to assimilate one's own image of 'the professional nurse'. Participants' fond reflection and the high acclaim they held of the peer tutors to which they had been exposed the year previously gave credence to their perception of the influence of role models.

Before I started the peer tutor experience this term, I have to admit I was very nervous. My mind kept flashing back to the two peer tutors I had had myself last year. They were so good. They acted so professionally (brief silence as participant thought back). It was a hard act to follow. (Participant 5)

What seemed clearly communicated here is that because participants now perceived themselves as role models to junior students, they had a personal image of how they wanted themselves portrayed as professional nurses. With these images in sharp focus, their aim was to live up to the expectations these images conjured.

### **Mentor / Friend.**

Participants overwhelmingly perceived themselves as being a mentor to the junior students. Some participants combined the role of mentor with that of friend. The majority of participants used such qualifiers as “buddy”, “peer”, “helper”, “support person”, “problem-solver”, “direction-giver” to describe their role. Some of these qualifiers are exemplified in the following self descriptions.

A younger participant who was similar in age to the junior students recalls:

I felt close to them. I was in the same position two years ago as they were in now. I can still remember how much my knees knocked when I was assigned to my first patient with an N/G (nasogastric) tube. I was afraid to ask my instructor for assistance because I knew we had learned all about it in lab and she would probably think I hadn't reviewed the skill and that wouldn't look good for me. So when Elizabeth came out of her patient's room looking rather pale, I knew what she needed - my support. Her patient had an N/G tube, foley catheter and a CVP line in place. When I reviewed the care of these treatments with her, I knew that she knew what she was about. So I went into her patient's room with her for initial assessment, merely to be there, to give her support. I merely gave her a few tips. She was so appreciative of my presence and thanked me several times for my guidance and support. (Participant 3)

There were those who saw their mentor role enhanced by their student status.

I felt the junior students had no problem asking for assistance. I felt kind of like a buddy to them, you know equivalents, no better than them, no higher than them. It

was like a student helping a student rather than someone of great authority and power who is you know looking in or down on them.

I can remember I had this student who was having a lot of trouble checking blood pressures. It was relatively a new skill for her. The instructor told me that she was having trouble. She was nervous when I was with her the first time. The following day she told me that she felt so stupid because it was taking her longer to catch on than the rest of her classmates and the instructor was making such a big issue out of it. Her biggest fear was she felt she was going to flunk out because of it.

You know she really wasn't having so much trouble. She was just so uncertain of herself. When I gave her lots of support she did fine. I was surprised at how far a little support went. She seemed to really appreciate my help. It felt great to be appreciated. (Participant 9)

Others saw their impartiality as an asset to their mentor role.

I used to almost feel nervous myself for them. I used to say God, I know what it feels like to be like that and I'd always say don't be nervous, I know what it feels like to be in your shoes and I know it's nerve-wracking when someone is watching over you but I'd always say I'm only here in case you need me, I'm not here to judge you and I found that made a big difference. I found they appreciated this approach as they often said you made me feel relaxed, I don't be nervous when I'm with you doing skills and stuff. (Participant 1)

Some participants saw the mutuality fostered by student status enhanced a friendship role.

We had a lot in common. Although both groups of students I had were from different programs, I really didn't feel any different toward them. They were still students. We spent a lot of time together, particularly my clinical group. When we weren't doing patient care, we were just communicating. We went on breaks together and there the conversation would turn from professional to social. I liked that. It really helped me to get to know them . . . . . I think it really fostered learning because it helped them to see me more as a peer, as someone they could approach with any problem.

That brings to mind this student who was having trouble with her medication calculations. When I was leaving the cafeteria this day, this student caught up with me and asked if I was good at calculations and if I could help her.

It made me feel like I was doing something right. She confided in me and had no qualms in asking for help. That made me feel good. (Participant 6)

Conversely, another participant from the upper- age category related that the age disparity hampered the development of such a friendship relationship. This participant stated:

I gave them a lot of guidance and support but I don't think they really considered me a friend. At lunch breaks, they chatted amongst themselves but I was excluded from much of the social chit-chat. I really didn't have a lot in common with them socially but I don't think this influenced our relationship in the clinical setting. Students always remarked on their evaluation of me that I was very approachable and helpful. (Participant 10)

This was further supplemented by another participant belonging to the same age category who felt that the difference in age did indeed create a gap at the social level but related that the student-student status promoted a certain chemistry that drove the relationship and made it work.

Participants closely linked their roles as mentor and friend. Their ease of transition into this role was attributed to the nature of their relationship, that being student-student. Although age was also a facilitator, it was not considered essential. The student-student status enabled participants to anticipate and identify with the anxieties and stresses exhibited by junior students. Such recent passage through this level afforded one more realistic expectations of the junior students.

What was clearly evident was the participants' perception that their role as friend fostered a learning culture that was quite different from the culture to which participants had been accustomed. Participants made frequent reference to the authoritarian approach of the instructor in the traditional setting and its impact on learning.

The idea of support and its role in learning was paramount in all participants' descriptions of their role as mentor/ friend. They clearly articulated the value of support. Although participants did not openly acknowledge their role as rewarding, they made subtle reference to this with such comments as ' being appreciated', ' being seen as approachable', and 'being needed'.

### **Peer Tutoring as a Mechanism of Self- Discovery**

#### **Power of possibility.**

Self-doubt was at the core of participants' descriptions of their feelings prior to the start of their peer tutor experience. Negative feelings were evident as the participants related without hesitancy their fear and inadequacy about becoming a peer tutor. Some of these feelings derived from personal factors such as inadequacy in communication skills, whereas others were cognitively based and driven by perceptions of one's knowledge base. The typicality of such feelings is represented by this participant's response:

It was such a tense, stressful time for me knowing that I had to go out and pass on some of the knowledge and experiences that I had gained over the past couple of years. I kind of had the feeling that I didn't know if I was ready to be in , you know the teacher role as such. We're going through school as the learner and not the teacher, as the receiver and not the giver of information so to speak. It was like uncertainty I guess or feeling unsure of myself and my abilities.... I can remember lying in bed the night before my first lab thinking I can't do this, I'm still only a student. This is so unfair making us do this. (Participant 2)

Participants tended to compare themselves to peer tutors they had been exposed to the previous year and felt without any doubt that they could not be as good as the former peer tutors. As one participant recounted:

I thought the peer tutors who had taught us in second year were excellent. They were so knowledgeable. I really didn't think I could go near matching them. I just knew I wasn't at their level yet. (Participant 8)

Contrary to their pre-experience feelings of fear, trepidation and inadequacy, positive feelings were communicated in their stories of self discovery intra-experience. As one participant describes:

Even though I didn't want to take part in this experience, I'm glad I did. It gave me the opportunity to see what I'm made of. I'm so naturally quiet. I couldn't believe it was me discussing things with the students, suggesting other ways of doing things. After the first clinical day I no longer wanted to just get through the experience, I was actually enjoying this new side of me. It was like a discovery. I felt kind of driven, there was lots I wanted to do. (Participant 8)

Other participants expressed surprise as to how they were treated by the junior students. They described positive experiences that fostered feelings of self-esteem and self-worth. Mostly, the focus was on the respect attributed to them by the junior student. One participant recounted:

They looked at me as someone credible, they valued my opinion and respected what I had to say. I was pleasantly surprised They gave me a thank-you card when finished. How they treated me made me feel good about myself. (Participant 9)

Unleashed potential is probably the best synopsis of this segment. Participants entered into this experience with feelings of inadequacy and uncertainty. These feelings of

insecurity were echoed throughout all interviews. Participants compared themselves to the peer tutors to which they had been exposed the previous year and quickly came to the self-realization they did not measure up and were thus ill -prepared to assume the role of peer tutor.

What became evident in the interviews, however, was that peer tutoring unleashed participants' potential and made them realize that they had talents and abilities about to be discovered. Through both their verbal and non-verbal communication, a certain energy exuded from them as they talked about how their views of themselves changed as a result of their experience.

### **Power of belonging.**

Participants' desire to belong or fit in was paramount in their accounts of their experience. Participants verbalized initial uncertainty when dealing with students from different programs and insecurity around collaborating with faculty with whom they had no prior relationship. One participant elaborated on her feelings prior to the experience :

I am uncomfortable with meeting new people. I had such fear of really screwing up. I felt I needed someone familiar or be somewhere that I knew in order to just get through this experience. I dreaded going over to the other school. It was bad enough having students you didn't know but I didn't know many of the instructors either. I felt that the other students were going to treat me like an outsider.  
(Participant 1)

For other participants the initial apprehension was attributed to an historic view of nursing as a hierarchy whereby status paralleled educational preparation.

An example of such an initial perception is as follows:

**I thought perhaps as B.N. students they might think they're better or might not trust our knowledge where we are only diploma students. It kind of intimidated me going over to teach higher level students or should I say they will be when they graduate. (Participant 8)**

Likewise there was concern among other participants:

**I was afraid that the P.N. students might think we're on a power trip. I knew it was important for me not to appear standoffish. (Participant 3)**

It was evident among participants that such perceptions proved to be a fallacy.

Participants described experiences that brought forth the notion of inclusion. They associated their student status as instrumental to their success in fitting in and building meaningful relationships. One participant stated :

**As students we had a lot of the same stressors. I helped to put things in perspective for them. They knew it wasn't too long ago that I was at their level. I knew where they were coming from when they asked a question. (Participant 7)**

Likewise, another participant stated:

**I found it so much easier than I thought to feel comfortable with people I didn't know. It blew me away when a junior student commented that I explained things better than the instructor. I can remember so plainly what she said.....it's like you talk in terms I understand. (Participant 2)**

A perception emerged from most participants that students felt freer with them to express their opinions, ask questions and risk verbalizing uncertainties . The absence of a formal evaluative component on the part of the peer tutor was reported as being the critical component of success in relationship-building and developing a sense of belonging.

As one participant stated:

I wasn't grading them as such. I was still a student too. They knew I wouldn't come down hard on them if they are wrong or if they asked a question that they should have known the answer to before. They knew that I was still a learner as well as them. (Participant 3)

Another participant commented:

With an instructor it's like you're constantly being evaluated. I wanted to make sure the students felt they could ask questions of me without fear of it negatively impacting on them, that we could discuss issues openly and respect each others' differences. After all we were in this together . It was a learning process for me as well..... There was a certain closeness between us and it worked. (Participant 9)

Participants reported that peer tutoring precipitated some degree of change in the nature of their relationship with instructors. As one participant recounted :

When working with an instructor as a peer tutor, the old instructor-student relationship seemed to change somewhat, the instructor didn't seem to exert the same power over you. I seemed to look at them as a peer almost. (Participant 1)

Other participants reported:

It seemed to decrease the gap between us and the instructors. They tended to speak to you more at their level rather than down to you. (Participant 2)

Although a new sense of inclusion and respect emanated from both the peer-student and the peer- instructor relationships, some participants perceived a dichotomy when reflecting on the restrictions placed on them in relation to supervising skills and deeming students fully competent in these skills as discussed in a previous section of this

report. However, as a result of this coalition-building with others, a sense of inner strength and well-being emerged from most participants.

As one participant stated :

When I was peer tutoring particularly during the second week I felt so good about what I was doing. I really felt that the students made me feel welcomed. I had BN students in the lab and PN students in the clinical area and I found both experiences equally rewarding. I can't describe what it was, I think it was just the respect and acknowledgment they showed towards me. I felt that in some small way I was having an impact on them. It made me say to myself ...yah, you chose the right career, I really do fit in and have something to offer. The fact that the instructors I was assigned to gave me the freedom to do such things as organize the lab,... asked my opinion about appropriate patient assignments for students,... permitted me to supervise students all skills that I was independent in. It was like they truly believed in me. It was like they were no longer looking down on me as the little student. I always hated that feeling. It made me feel so small. (Participant 2)

The sense of community is what rebounds in these participants' excerpts. The ability to walk through the glass walls of status heralded the beginning of this sense of community. If one was to view nursing as a hierarchy, participants in this study would be positioned in the middle of a linear scale, with one partner to the left and the other to the right. However, what was sensed in the participants' accounts was that this linear scale dissolved and was replaced by a circular model in which all partners equally belonged. Participants also attempted to expand this sense of community to instructors. Although there was some reservation, participants acknowledged that the experience did serve to decrease the gap between instructors and students, although there were inconsistencies as to the degree.

Participants reported that the student-student status was fundamental to the building of this sense of community. This facilitated reciprocity amongst participants and students which contributed to participants' sense of belonging.

### **Power of nurturing.**

All participants identified the desire to nurture as having a profound influence on their relationship with junior students. Several participants described nurturing as “caring”, “guiding”, “feeling responsible for”, or “desiring to bring out the best in others”.

Time was a variable amongst the participants in the development of this desire to nurture. For some participants the desire to nurture reflected an innate quality; for others the process was developmental. For example, some participants indicated that the peer tutor experience merely afforded them another opportunity to do what they came into nursing for and “that was to care”. Older participants described their nurturing instincts as a “mother- hen and chick type of relationship”. A third group of participants related that they went into the experience without any desire to nurture anyone and merely saw it as another curriculum commitment. For these participants nurturing was perceived as developmental. As one participant related:

**It grew on me. I got to know the group members ( particularly my clinical group) as individuals. Sometimes they got caught up on such little things and became so frustrated. I remember one student who was so nervous about having to do a Hickman catheter dressing. When I reviewed the skill with her she became so upset because she could not remember the sequence of steps. All I needed to do was to encourage her to discuss the principles and then all the steps fell in place. That incident served as an awakening for me. It made me realize that I had the power to help these students achieve. (Participant 2)**

Another participant related:

When I individually reviewed client's plans of care with students, I came to see them in a different light. Some of the care plans were good and others not so good. Students had varying reasons for the quality of their work. But it made me stop, think and re-examine my role. I was not there to judge them but rather to help them be the best that they could be. This caused me to focus more and put more energies into what I was doing. (Participant 8)

For some participants their perception of themselves as 'senior' evoked in them a mothering instinct. They felt a certain responsibility to nurture those junior to them.

I felt as though they were placed in my care. I wanted them to succeed. I can remember this one student whose patient had just found out she was terminal. The student had a hard time dealing with this. She was so upset... I can remember her saying I'm not cut out to be a nurse. I spent a lot of time with her. I encouraged her to talk about her feelings. I was surprised at how much I cared about this student. I helped her get through the hurdle. ...She came up to me the other day ( 4 weeks after the experience) and apologized for how she had reacted and thanked me for being there for her. ...And she said it was because of me she was going to stick with nursing. That made me feel really good.... It was an eye opener for me because I hadn't thought of myself as a 'warm' or a good support person so to speak. (Participant 3)

Participants also reported that there were students who exploited them. As one participant recounted:

I had a student in my clinical group who tried to take advantage of me. She was only half prepared for her clinical assignment. She related that she was out to a party the night previous and as a result didn't have time to do her preparation. She related that she wasn't worried because she knew I wouldn't report her to the instructor. (Participant 5)

Another participant related a similar experience:

I had a student in my group who deliberately tried to trip me up when I was explaining things to others. She would go to the extremes in asking questions even

though she was well aware of the answers. She was a very bright student but she was always trying to challenge me. Now I like a challenge but her motives seemed to be all wrong. I truly enjoyed guiding these students but I think how I treat them needs to be reciprocated and I think it was so for the most part.(Participant 10)

These participants related that they were ill- prepared to deal with these students. As one participant related in relation to tutor training:

We had one short session for approximately one hour prior to peer tutoring. The main focus of that session was discussion of the structure of the program, like where we needed to go, who we needed to see and stuff like that. We talked a little about how to give supportive feedback to students and told to read a few articles about peer tutoring that were on reserve in the library but that was it. I really didn't know how to handle these students. I found that frustrating. (Participant 5)

Another participant concurred with this:

Tutor training.....well there wasn't much to it. What I can remember mainly is being told to make sure you prepare or you'll fall flat on your face. Other than that we talked about scheduling. I wish we had been given some tips on how to handle students who were out to intimidate you. Fortunately though that only happened on one occasion - and that was enough. (Participant 2)

Participants generally reported satisfaction with their capacity to nurture. This was evident by all participants as they recounted their experiences. However, this emotion extended beyond the simple satisfaction of successfully completing the experience. These participants described deeper emotions with words and phrases such as "self growth", "assuming more responsibility", "deeper respect", "enhanced motivation", "commitment", "positive attitude" and "more sharing of values".

As one participant stated:

The respect shown to me made a real impact on me. It made me feel good about myself. It made me more open to the views of others and gave me more of a sense of commitment to others. (Participant 1)

Another participant related that:

.....the experience made me more aware of the insecurities of beginning students and the need to demonstrate supportive behaviors towards them. This is something I will remember long after graduation. A little support goes a long way- that's something I definitely learned. (Participant 7)

The very essence of nursing is about caring for and about others. This was what got translated by participants in relation to their peer tutoring experience. For some participants this sense of caring was spontaneous, whereas for others it was developmental.

Nursing education offers little opportunity beyond the clinical area where students can practice caring behaviors and consequently caring for peers is not seen in the same context as caring for clients. What was evident from participants' accounts was their broader understanding of what it meant to nurture or care for others. However, what was also evident was that participants were limited in their ability to care for others who exhibited behaviors out of the norm because of lack of training in this area.

### **Peer tutoring and Mastery Learning**

All participants related that peer tutoring in one way or another had provided an opportunity for enhanced learning. Some participants attributed preparation as a key

factor, others focused more on the learning that occurred from actually teaching, yet others saw all aspects as an enriching experience.

### **Reflection.**

Reflection was a key element in all of the participants' experiences with peer tutoring. Participants identified a strong need to identify with the junior students.

As one participant stated:

I needed to put myself in their shoes, to think as they were thinking.

(Participant 2)

Another participant related:

I had to turn myself back in time in order to be able to present things from their perspective. It forced me to look at myself at a beginning level, to examine how I learned, how I acted and performed, what was important and what was not back then. I felt by looking at myself I could better address their needs. (Participant 10)

The end result of this self reflection was a revelation by all participants that indeed progress had been made. Participants expressed surprise and delight with realizing the degree of progress. A typical participant response was:

I discovered I knew a lot more than I thought I did. When I peeled back the time, I came to realize that I had indeed started from scratch. When I did simple dressings in the lab in year one, I had practically no clinical experience. Everything was so abstract back then. By now I have seen so many wounds.... when reviewing for the lab I was able to apply so much personal experience to this skill. All the principles made such perfect sense now. I have come a long way! This helped me realize how far. (Participant 8)

What became evident in all of the participants' stories was that reflection served as a vehicle for self-awareness development. Participants reported that preparation for the role forced them to examine how they learned and caused them to ponder if it was the right way or the only way. As one participant reflected, she related that initial learning for her meant rote memorization.

In year one, learning how to do vital signs was like learning French, everything was coming at you the one time and you learned the basic parts of it but the broader things you put off and say well I'll learn that later. I just had to get all the steps right. I didn't care why I performed the steps in that order but I felt I had to put them in that order to pass inspection by my instructor. I was so afraid of failing back then. (Participant 7)

For most participants the initial focus was on performing rather than understanding.

As one participant recounts:

I read and read the material. However, I only took to the forefront what was absolutely necessary. I didn't have time to look at the bigger picture and really the bigger picture didn't matter to me back then. I remember I often had questions I wanted to ask but I wouldn't ask them because I thought they'd sound stupid and the instructor might then think I hadn't prepared. Sometimes it was such a basic thing I needed to know in order to put things in perspective. However my main focus back then was on getting by. (Participant 4)

Anxiety and fear of reprisal seemed to be key factors influencing the initial learning process of participants. However what participants attributed most to their learning was clinical exposure. The habitual use of psychomotor skills brought forth a general feeling of efficiency and being more knowledgeable. Participants reported that clinical practice assisted them in focusing more deliberately on what they believed to be the best way of

performing certain skills. It was during such situations that participants reported a feeling of making sense of their knowledge and gaining control in the work environment.

As one participant describes:

I've come to realize that the specified way, for example, of doing a skill is not the only way. Through adaptation of the skill to many clients you learn from the experience the best way of doing it. (Participant 8)

One participant likened her learning process to putting together a jigsaw puzzle:

Initially, I got all the pieces and a set of explicit instructions. I then followed the instructions precisely and fitted the many puzzle pieces together. Later I skimmed the instructions and played with the pieces to get them together. Finally, I threw away the instructions as I could more clearly see how the pieces interlocked. (Participant 2)

What was communicated by participants was that reflection was critical to the development of self-awareness. Reflection forced participants to look at themselves as to where they are, where they came from and where they are going in relation to the learning process. It called for critical analyses of how one learned.

Most participants related that initially they learned through rote memorization and their focus was on survival rather than understanding. Asking questions was perceived as detrimental to one's image as it connotated a lack of study. Participants credited experiential learning as instrumental to enhancing understanding. All participants acknowledged that through reflection they came to realize that they knew more than they thought they knew.

**Social construction of knowledge.**

All participants identified the social interaction associated with peer tutoring as having a positive influence on their learning. In describing their experiences, participants made frequent reference to the active nature of their role. Such descriptors as “feeling always hyped”, “constantly connected”, “always on the go”, and “energized” were typical of participants’ perceptions of self while engaged in this role.

As one participant stated:

I was so upbeat when I was doing the labs. I don’t normally like repeating things but when I did the same lab for the third time, I still had lots of enthusiasm.  
(Participant 9)

Participants tended to contrast the active nature of peer tutoring to their traditional classroom setting.

It was a different type of learning with peer tutoring. It was as though I was more tuned in. In the classroom I stayed focused for awhile but I found it so easy to drift off. I really didn’t need to think a lot in a regular class, I just wrote and wrote lots of notes. However with peer tutoring it was different. I always had to stay mentally alert. (Participant 4)

Another participant related:

... it was refreshing to do something different. I was so busy preparing for the lab, meeting new people and teaching that I forgot that I was learning. (Participant 8)

Participants attributed the degree of learning to the interplay of two factors: (1) fear of questions, (2) the desire to look good.

**(1) Fear of Questions.**

Preparedness was seen as the key variable to success in all of the participants' experiences with peer tutoring. However, what was evident in all of the participants' stories was the fear of questions as a common motivator for preparedness. Participants expressed such emotions as "anxiety", "feeling vulnerable", and "insecurity" when recalling the preparation phase of their experience.

As one participant recounted:

I was so nervous when thinking about the experience. It wasn't so much the actual speaking, I was okay with that. It was the anticipation of the questions. I know what we were like when we were in first and second year- we asked so many questions. Now it was me that was going to be asked the questions. I kept thinking to myself I'm still only a student. However, it was the thinking about the questions that made me delve into the books. It made me look at the information every which angle. It made me look at my clinical experiences and forced me to question myself about a lot of things I did routinely... like how I performed dressings, how I documented. It was like opening myself up for scrutiny. (Participant 1)

Likewise, another participant related that his depth of preparation hinged upon his personal desire to be able to answer questions.

When I was preparing for the lab I took the material apart and put it together. I felt there was nothing I didn't know. I was determined that I was not going to be stumped by questions .....and you know I wasn't. (Participant 3)

A similar story was told by another participant:

I felt I knew the skill administration of TPN well enough to talk about and to demonstrate. But I felt I had to be prepared for the 'what ifs' and 'why' questions. You know I was only at their level a year or two ago, I know how they think. As I was doing all the reading I can remember saying to myself..... hey perhaps I don't know as much about TPN as I thought I did. That realization made me study a lot more, to dig a little deeper. (Participant 5)

## **(2) Looking Good.**

Role acquisition was one of the key factors underlying participants' desire to 'look good'. Participants used such descriptors as "teacher" and "higher level student" to define their role. Along with this came the desire to look good and meet the expectations inherent in this assumed role.

As one participant related:

In the beginning, it was kind of awkward because we were both students and yet I was expected to act almost as an instructor but not quite an instructor. I was also from a different program and it was important for me to leave them with a positive image. Looking back at it, it was almost like a circle. I needed to appear confident (and I can't bluff). Therefore, I had to have the knowledge base to feel confident, to make sure what we were discussing was accurate, that I was guiding them properly adhering to all the policies and procedures.... Thus I had to revisit what I had learned, to examine it more closely, expand on it and reassure myself that I could fit within this role. (Participant 8)

Other participants acknowledged that 'being in the know' was integral to looking good.

As one participant related in anticipation of the experience:

Whew, hope I can do this, hope I can do that and then as much as I could prepare that way I could decrease the chance of anything happening. You know if you don't know what you're doing they're going to lose respect for you and if you sort of tell them different things like tell them one thing one day and another thing another day, they're not going to have any faith in you so I felt that I had to really know my stuff. (Participant 4)

For other participants the uncertainties they had about their assumed role was what motivated them to look good.

Prior to the experience I felt uncomfortable because I didn't know them (the students) and you wondered what kind of questions they were going to ask and

how they feel about you and how they feel about someone coming in and teaching them instead of their instructor who they're comfortable with and they know knows the material. You know it just kind of made me uneasy but it was this uneasiness that made me say to myself- you're not going to fall on your face, you're going to do whatever it takes to look good and do a great job.  
(Participant 2)

Many participants aspired to role model peer tutors they had been exposed to in a previous year of their program. For them this was what was meant by 'looking good'.

I remember thinking back to what it was like when I had a peer tutor and looking at them and thinking they knew so much you know and I really thought that and I didn't know if I reached that point but that was what I wanted to portray to these students. (Participant 3)

Similarly another participant related:

When I was preparing for this experience I kept thinking back to the peer tutors we had the previous year. They did a great job teaching us, they were so patient, they knew so much.... I wanted so bad to be as good as they were.  
(Participant 10)

The active as well as the social nature of their role was deemed as a key facilitator of learning for participants. For them peer tutoring called for engagement in learning from preparation through to implementation and evaluation. Participants viewed peer tutoring as refreshing and at times an unconscious form of learning.

Participants seemed consumed by their desire to create a positive image. They felt that their ability to answer questions competently was a crucial component of looking good. They felt committed to their role and their depth of learning was motivated by their

desire to perform well within this role. For them this meant paralleling the level of performance they had observed in peer tutors the year previous.

### **Mutual Sharing.**

What was evident in the participants' experiences with peer tutoring was the mutual sharing that participants and tutees had during their relationships. The main impetus for such sharing was attributed to the linear nature of the relationship. To describe their relationship, which occurred between participants, they used such terms as "friends", "camaraderie", "fellow students", and "partners". Other participants attempted to describe the nature of their relationship by sharply contrasting it to the traditional instructor-student relationship to which they had grown accustomed. Such statements as "fear of someone coming down on you wasn't there" and "it was nice for students to be able to ask a question and not getting a dog beat so to speak" were typical of remarks among participants.

The notion of sharing brought forth the need to integrate one's knowledge base and experiences into some sort of holistic framework for presentation. For all participants this involved firstly a careful analysis of what constituted one's knowledge base, and secondly, reflection on one's experiences to determine whether they have been assimilated and integrated as meaningful learning. As one participant related:

For peer tutoring I didn't look and study the material the same way as I did in year one. In first and second year I had to study it for exams and stuff but as a peer tutor I looked at it and studied it, how do I put it, it was something that I wanted

to pass on to somebody else. I looked at it as how can I best pass this on to the other students, how did I learn it, did it work? I found when I was teaching I brought in ways that I seen on the floors and how I learned it, how I seen it work in the hospital, it was that way. (Participant 1)

Similarly another participant recalls:

I question myself in a sense. How much did I really know? As I read the material I questioned as to how I would apply it to real life setting, whether it would work for me like how to do a Hickman catheter dressing on a child. I had done it several times on an adult. It was stuff like why would I do it this way and I didn't accept that this is the only way to do it. The thought of sharing my experiences with others made me look back more carefully at the principles of why it needed to be done a certain way. As I thought back to the three times I had done this skill, I realized asepsis was the bottom line. (Participant 10)

Just as self-awareness of one's learning is important for meaningful sharing so too is the nature of the relationship. Participants attested to the openness of their relationship with students. Many participants attributed this to the absence of any formal evaluation of the students on their part. A typical participant response was:

I think they felt more comfortable with me because I'm a student and you know the final mark doesn't depend on me. I can remember when I was doing my peer tutoring with the P.N. students in the home. They'd come and ask questions about this client and getting them up and am I allowed to do this and things like that before they'd go to their instructor. (Participant 3)

Another participant related:

The students told me they felt more free to ask questions and didn't feel so stupid to ask questions because they knew I wouldn't come down hard on them because they know we're still learning as well as them. (Participant 2 )

Students' questions not only provided an opportunity for participants to share their knowledge but also served as a forum for inquiry and mutual learning. As one participant recounted:

There were times when me and the junior students got textbooks out and sat down and came up with answers and there were some questions that they asked that we couldn't find answers for so I'd say let's go ask one of the other nurses or your instructor. I'd keep digging with them until we found the answer. (Participant 5)

Similarly, sharing of personal experiences served to foster learning. Participants described with awe the students' attentiveness as they related their personal experiences either in the lab or clinical setting.

I couldn't believe how intrigued the students were when I told them about my experiences with caring for a client with a latex allergy. I vividly described the signs and symptoms that were evident when the patient returned from the O.R. and related how quickly they progressed. It was like opening up the floodgates. Several of the members of the group had their own stories and filled us in on some of the experiences they've had and I learned a few things from them, one of the things in particular was the relationship between latex allergy and kiwi allergy as well as learning about some of the products that contain latex. (Participant 1)

Other participants related similar experiences whereby their learning was greatly augmented by junior students recounting personal stories.

We were discussing ulcerative colitis. There was this student in the group who was very knowledgeable on the topic. She relayed her own personal story of early diagnosis and treatment. Her story really brought home for me the real psychological impact of the disease. You know you only learn so much from book learning. Just sitting around discussing made it so much more real for me. (Participant 3)

Participants felt that they had to confirm to themselves the status of their cognitive structures if they were to feel equipped to share their knowledge with others. Reflection was considered a key prerequisite to sharing.

The reciprocal nature of learning that occurred was attributed to the student-student status. The freedom to ask questions without fear of being negatively evaluated was seen as a major contributor to open communication. The sharing of personal experiences served as a springboard for discussion and enhanced learning.

### **Peer Tutoring as Preparation for Independent Practice: Professional Growth**

All participants tended to reflect on peer tutoring as a mechanism for growth. For some it was seen as a stressor that served to challenge personal convictions about self and one's abilities. For others it was welcomed as an opportunity to prove that one was on the threshold of 'becoming' and being a 'qualified nurse'. Without exception participants recounted their 'before and after' experience as a mechanism of growth.

### **Communication Competence / Articulation.**

Nine of the ten participants recounted their insecurities of speaking in front of others. Such terms as "fear" and "nervousness" were common amongst the participants' descriptions of their anticipation of and initial experience with peer tutoring. As one participant describes:

The night before the experience I got such little sleep. I can remember saying God, how am I going to get up in front of those people tomorrow in the lab. I like me. When I had to give a presentation in the past I memorized everything and somehow I let it all spill out. I knew that was no good now because the students would be asking questions. The next day my knees were knocking and the topic-application of a female condom certainly didn't help any. I knew if I didn't present the information logically I would look like an idiot. A lot of students asked questions and did seem to follow what I was explaining. This made me relaxed because it just wasn't me doing all the speaking. When I did the repeat lab I could hardly believe it was me. I actually felt that I had some control of my thoughts and knew they were coming out clearly. (Participant 8)

An older participant recalls that he looked towards the experience with anticipation as a "test so to speak".

I was always a quiet person. I sacrificed a lot to come into nursing-my family, a job. I missed many important things in my daughter's life because of nursing school as it was too expensive for them to move into St. John's. As the time for graduation is drawing near I was starting to wonder if I had made the right career choice.

I always get so nervous when I talk to others particularly in a group setting. I can remember in the communications course in first year how tongue-tied I became when it was my turn to speak for about a minute on any topic I chose. I tried to relate a brief story about an embarrassing experience but by the time I was finished blabbering I'm sure no one knew what I was talking about and I was totally humiliated and believe me I had a new most embarrassing experience. In year two it became a tiny bit easier but I relied on the instructors a lot for support. I can remember looking in awe at a peer tutor I had when I was a student in year two. She did a lab with us on trach. care, she explained things so clearly and concisely and seemed so confident in what she was saying. That was where I wanted to be. I needed to prove to myself that I was capable of that. Communication is so important to nursing. (Participant 10)

The participant goes on to describe with delight a peer tutor experience that fostered such self satisfaction.

I was doing a conference with the P.N. students in prevention of decubitus ulcers. I was well prepared. I read lots of reference material before the lab. I wanted

to know everything there was to know so I could answer their questions. I had lots of clinical experience with assessing for and treating decubitus ulcers.

I was really nervous when I went in for the conference. However, after about five minutes I relaxed and it went as smooth as anything. After I shared a personal story about caring for a client with a decubitus ulcer, I discovered they all had their own little stories. I was surprised at how I was able to use their stories to help bring out the main point of the conference that being the importance of early and ongoing assessment. Everything just flowed.

The students were really receptive and they gave me lots of excellent feedback like you helped to make clear what I read in the textbook, you were easy to talk to, the information you gave was easy to follow. I felt really good about the experience.

Well actually I felt on top of the world, it helped me realize that the past three years were not a waste and that I could make it. It really helped me get over the fear of talking to a group of people. (Participant 10)

Contrary to the other participants who verbalized fear and anxiety about speaking

in front of others, one lone participant related that she felt quite confident in initiating

discussion with others either on a one- to- one basis or in groups. However she related

that often she became frustrated in her ability to articulate clearly.

I don't know if I'm all that great as a teacher . I always felt that I'm not all that confident in my ability to say something clearly the first time. I know what I'm trying to say but to actually have to say it.

I put a lot of time into preparation for the labs, especially going over the stuff in my head. I had to do it logically, sequentially or I would just get it all jumbled. I knew what I was trying to say but I was afraid that I would not be able to say it as clearly as they would need it said.

However, I taught three different labs and I was pleasantly surprised with the job I done. I don't know whether I should credit it to the amount of preparation I done or whether the preparation made me stop and think how important it is to think about something before I attempt to say it. I remember in one lab on N/G insertion, students asked a lot of 'what if' questions. For example, what if the patient was N.P.O. and couldn't sip when you were trying to pass the N/G tube. Rather than blurting out the first thing that came to my mind, I took a second to think and incorporated the physiology of swallowing into my answer. Similar questions sprung up throughout my three labs. The students gave me very positive feedback on my performance. I left the experience feeling good about myself and my communication ability. (Participant 1)

The ability to communicate clearly and articulately was deemed by participants to be an essential predictor of success in the 'real world' of nursing. Recognition that past habits of memorization were not going to suffice, made participants more consciously aware of the content and more cognizantly aware of the need for rational thought.

Participants related that the interactive nature of the experience greatly reduced their stress and enhanced open communication. Repetition of sessions served as a measure of growth for participants. What was clearly articulated was that the tutor experience through internal (self satisfaction) and external (tutees') reinforcement served to enhance communication competence of participants.

### **Collaboration.**

Two types of collaborative relationships were noted by the participants namely (1) tutor- tutee and (2) tutor-faculty.

#### **(1) Tutor- tutee**

The ease with which collaboration occurred between the varied levels of nursing students in the tutor-tutee relationship was evident. However, participants reported that they embarked on the experience with some trepidation because of how they felt they would be perceived by the tutees. Other participants expressed initial intimidation with tutoring across levels. One participant recalled:

As I was driving over to do the lab with the B.N. students I kept thinking, are they going to be teaching me or me teaching them? (Participant 9)

Participants expressed delight as to how quickly they were able to form relationships. Such comments as “I was surprised how we jelled”, “there was none of that power thing”, “we were comfortable with each other right off the bat particularly in the clinical area”, which served to validate the ease of relationship-building experienced by participants.

Participants related that being perceived as approachable was paramount to effective collaboration. As one participant related:

I went in and said I’m here for you. I don’t claim to know it all. If you got a question and I can’t answer it, maybe both of us can go and look it up and both of us will learn from it; if its something I can help you with don’t be afraid to ask. I’ll do my best. It worked out great. (Participant 7)

Another participant recounted that her nervousness initially inhibited collaboration.

In the lab setting, during my first session I knew myself I was nervous. The students just sat there and watched me demonstrate. I think they were afraid to ask me questions or interact because they were afraid I might cry. The lab session was just about over because I got a grip and realized how stilted I had been. I acknowledged to the students that I had been nervous and the whole setting changed...they started asking me questions and we started discussing. The experience really made me see that your approach is about as important as what you have to say. (Participant 10)

Respect and caring were two qualities identified as being very important for collaboration. The following statements typify how these qualities were expressed by participants.

I always took time to meet their clients and to talk with them. I think it was important for these students to see I cared about their client and that for me peer tutoring was not just an academic thing. They needed to see we were in this together for the common good of the client. (Participant 6)

Another participant stated:

I was so careful when I was giving feedback. I didn't want to hurt their feelings. I didn't want them to feel like I was above them and ready to pounce when they did anything wrong. I learned a lot about what it's like to help others. I was surprised at how open students became following such interactions. (Participant 2)

Another group of participants expressed feelings centered around connection with the profession as a result of their peer tutor experience. Participants related that "they felt good about the nursing profession", and " that there were lots of room for everyone".

It was apparent that participants felt the use of peer tutoring had an impact beyond stimulating individual growth, and additionally offered an opportunity for evoking change into how students are sometimes treated at the professional level. One participant recalled:

I've had over the past three years some negative experiences with nurses who don't want to see students and if you asked them a question they'd brush you off. I've found it's important to remember your roots when you get out in the profession, it's important to pass on the information you've learned and to learn from each other. There's only so much you learn from books. There's a lot to be learned from other nurses and students alike. I had a lot of good nurses but I had a few who I had gone home and was ready to quit nursing school over and I don't want to be like that and this experience has reinforced that I'm not going to be like that. (Participant 3)

Similarly another participant recalls such experiences :

I can remember being in a unit with some nurses. You could be in the same room with them and they'd talk around you. To them you were some little student, somewhat insignificant. You were expected to do the work but yet you didn't seem valued. It was as though you were invisible. This experience has helped me realize how much students have to offer and has taught me how to collaborate with them. (Participant 2)

Rapport-building was perceived to be the crucial element in developing collaborative relationships. True, the student-student status of the relationship provided a certain mutuality, however, certain qualities were identified by participants as being instrumental to rapport-building and hence collaboration.

Being perceived as approachable and demonstrating attitudes and behaviors that reflect respect, caring and honesty were communicated as being necessary for collaboration to occur. It was evident from participants' accounts that such qualities need to be developed at the student level if they are to be reflected in professional practice. Hence, as a result of this experience, participants saw themselves as change agents, equipped with the skills to change the current graduate-student relationship from one of subservience to one of collaboration.

## **(2) Tutor-Faculty**

Participants' perception of the degree of collaboration with faculty varied. What was consistent was the perception that collaboration was an influencing factor into how participants envisioned their readiness to embark on their professional careers. Several participants positively described their collaboration as "great", "beneficial", "made me feel that I had really grown and was being recognized".

As one participant stated :

It was nice. It did decrease the gap between us and the instructors. It was just some feeling that I got at the time. It was just that you didn't see them as much as an instructor anymore. When they were doing the peer tutoring you were looking at them as a peer almost and that was different. (Participant 7)

Other participants related similar stories:

I used to go in and pick out client assignments for the students and then meet with the instructor to discuss their appropriateness. How the instructor talked to me was different. You weren't just this little student anymore, you were working with them. What you had to say was significant. It made me feel like I was doing something right, they approved of me. It made me feel more confident about stepping out into the real world of nursing on my own. (Participant 2)

Conversely, for other participants, insufficient collaboration with faculty left one with insecurities as to one's abilities and sense of worth. Several participants related that minimal or no time was made available by faculty to meet with the peer tutor prior to the lab.

A typical description of such an experience was:

I made several attempts to meet with the Mrs. X (faculty member) prior to the lab to discuss my teaching plan and essential content for the lab. However, time was not made available. Therefore, when I peer-tutored in the lab, the instructor kept adding little things throughout the lab. All the things like pinning an N/G tube to the patient's gown and positioning of the drainage container etc. were included in my teaching plan. If she had discussed the plan with me she would have known how I was going to structure the lab. It wasn't as though I was too good to be told...I just thought it was so unfair for her to keep interjecting stuff before I got to it. It really threw me off and caused me to doubt my ability to do this. (Participant 3)

Similarly another participant related:

She used to talk and all that but it was like she was always rushed. She only had time to meet with me for a few minutes prior to the lab or clinical and that was usually to tell me what needed to be done. She was nice and all that but she didn't seem to be really interested in what I had to say..... The instructor I had in clinical wasn't a lot different. Perhaps it was the time factor... I don't know. I sort of did my own thing. I was left wondering if I was doing okay. (Participant 6)

Willingness by faculty to collaborate with participants denoted acknowledgment of participants' knowledge, skills and abilities. Such acknowledgment enhanced participants' self-esteem and self-confidence. It helped create a more parallel relationship between instructor and student. Removal of the traditional instructor-student barriers enhanced one's reliance on self and gave one the confidence to forge ahead.

Conversely when true collaboration did not occur, participants were left with feelings of apprehension and self-doubt, feelings that if internalized could propagate the dependency culture in which nursing has historically been socialized.

### **Assertiveness.**

Clearly and repeatedly assertiveness was described as being an area of growth for participants. Expressions that participants used to describe assertiveness included "finding my voice", "standing on my own two feet", reinforcing what I knew was right", "speaking up for what I believed in", "expressing my opinion even when it was not the same as others".

A common need to become assertive prevailed amongst participants. As one participant described :

For me, peer tutoring was a time to prove to myself that I could speak up when things weren't going right. (Participant 2)

Several of the participants equated assertiveness to the development of interpersonal skills to manage dominating and demanding individuals. As one participant recalls:

There was one student in particular like she was a competent student but there was certain things she hadn't done before like for example flushing a heplock. She'd never been supervised to do it and she'd say she didn't want to be supervised. That kind of intimidated me but I had to say look you need to be supervised before you can do this skill and after the first time if you're fine maybe you can do it yourself. It took every ounce of strength in me but I was proud of how I responded.  
(Participant 10)

Similarly another participant describes an experience in which she felt threatened by students' stance of aloofness and "know it all" attitude.

I was teaching in a trach. lab and this student was non-stop asking questions. It was as though she was trying to stump me in front of the rest of the group. She was really monopolizing the time. She really made me feel uncomfortable..... I just told her in as subtle as way as possible that I didn't want her to quiz me any further. I can remember saying I'm here to teach you and to assist you and not merely to answer questions. You need to get up and try to do the skill and you'll discover some of the answers. I can remember thinking after the lab I'll never let someone intimidate me that way again. I handled it the best way I could, I think it worked. (Participant 5)

Yet other participants related incidents in which they had to juggle their emotions between being liked and doing what was right. As one participant relates:

In my clinical group there were three students who always seemed to be loafing around. Now I realize it is not necessary to be with the patient 100 % of the time, but you need to get your priorities straight. I was faced with the dilemma - do I risk hampering my relationship with them or do I just speak up? Even though I knew what I had to do, I didn't know if I was able to do it. After much thought, I can remember saying here goes.... I talked to them about the goals they had set and the interventions they had planned on paper. Each of them agreed that they hadn't done a lot that day and they should get to work... It made me realize I had to stand up for what I believed in even if that meant going out on the edge.... I guess that's what leadership is all about. (Participant 1)

Likewise another participant recalls:

I had a student in my clinical group who had not done her preparation prior to coming to the clinical area. On the first day this happened, she had all kinds of excuses. However, she said to me..I know you are a student too, you know what it's like so I knew you wouldn't tell the instructor on me. Well I figured I'd give her a break. However, the next week she was again unprepared. I realized she was taking advantage of me. I explained to her that even though we were both students, we each had responsibilities and thus her lack of preparation needed to be brought to the attention of the instructor. I wished this sort of thing had been discussed with us in orientation as I wasn't sure at the time how to handle it. (Participant 7)

Assertiveness and integrity seemed to go hand in hand in participants' accounts of their experience. Being able to speak up for what one believed in was perceived as important to participants. Participants expressed some frustration as to how to manage students' attempts at manipulation. The lack of preparation in this regard was alluded to by participants. What was clearly evident in participants' experiences was that development of assertiveness required a concerted effort and did not evolve naturally. Participants saw such skill development as a necessary quality in nursing and one that needed support and training.

### **Confidence.**

Self-doubt was a common thread communicated by all participants when recalling their feelings immediately prior to the experience. Such descriptors as "I'm not ready for this", "I'm going to look like a fool", "I don't know the stuff well enough to teach it". "I'm more used to people helping me rather than me helping someone else".

One of the youngest participants reported with obvious delight, a personal change in her confidence level and describes how peer tutoring had stimulated a redirection in her thinking and in her approach to doing things. She stated:

I was always the type of person who was I guess somewhat timid. I always kind of doubted myself and felt that other people could do things better than me.

Now I no longer feel that way. I remember in my first lab session I did T.P.N. feedings. I felt I knew the material fairly well but I'll never forget that first lab. All eyes were on me, little old me. I waited for a moment for someone to speak up, like they did in class or in group discussion, but no one did. The momentary silence was like an eternity.

I knew what my role was and I forced myself to perform. I introduced the topic and nervously demonstrated the skill. All of a sudden, students started asking me questions and I without much thought answered them. I can remember thinking, hey maybe I do know more than I thought I did!

I re-demonstrated parts of the skill spontaneously. It was as though I didn't have time to second guess myself. When I went to the lab the following day I changed my whole approach. I don't know how to describe the feeling, it was as though I felt bigger and more equipped. I guess it was self confidence. The students gave me lots of positive feedback as well and that really helped. I came to realize how important it was to present yourself confidently. (Participant 5)

This type of growth was also reported by other participants. The participants' perceptions of their abilities and how their perceptions had changed was evident throughout their description of their experiences.

In their experiences with peer tutoring, participants reported the development of confidence in terms of self recognition of one's abilities.

One participant stated:

Along the way, I was always getting evaluations from my instructors and I had to do self evaluations as well but this experience was like doing my own BIG report card. It was like have I passed and am I ready to go on ? (Participant 8)

It was apparent that participants felt peer tutoring served a dual purpose, as a period of reflection and a preparation for independent practice. As one participant recounted:

A couple of times in clinical conferences, students said to me how do you remember that from somebody's chart. I didn't realize I would be doing it, they'd be talking about one of the patients and I'd say oh yah this is what brought her to the hospital, or this is one of the symptoms she had and they'd just look at me and didn't realize I was doing it but I guess over the past couple of years I learned to quickly go through patients' charts and pick out what was pertinent. I was always amazed at how well informed the nurses in the hospital were about a group of patients. I guess I was learning to do the same. (Participant 2)

Other participants reported that their ability to 'put it all together' gave them confidence.

In the clinical area, I would always review the clients' care plans with the student. It would always blow me away as to how well I could bring it all together, the diagnosis, the lab values, the care, the prognosis, etc. For the student this was such a painstaking process. I was just like them a year or so ago. To be able to see how far I come gave me such confidence. (Participant 6)

For others mastery of the skill was attributed to a heightened level of confidence.

One participant recalled:

I felt I knew everything there was to know about respiratory assessment. At the end of the lab the students would look at you and say....wow you know so much, will I ever know this and all that sort of thing. It meant so much to have the students respect you for your knowledge, skills and abilities. I felt so much more comfortable with myself and confident at the end of the day. If I had to express in dollars what the feeling was worth, I'd have to say it was worth millions. (Participant 1)

Being able to perform competently is meaningless if one does not have the confidence or belief in oneself that he/ she has the ability to do something well. This was a clear message from participants. The participants reported that the experience served as a snapshot in that it helped them picture where they were. It caused them to change their image of themselves as “ a little nurse”. It provided a mechanism for self recognition of their abilities and worth. Consequently, self-doubt evolved into perceptions of personal credibility and self confidence.

## V

**DISCUSSION AND CONCLUSIONS**

In the preceding chapter, analyzed data were presented by examining the responses to interviews held with a select number of peer tutors and reviewing journal entries made by the researcher subsequent to each interview. In chapter five, highlights and summaries of the participants' main thoughts and viewpoints are provided, which were evident in the study and emerged from the various data sources. The findings will be discussed in relation to Loving's (1993) model of competency validation which formed the conceptual framework for this study. Also contained in this chapter are suggestions for future research.

**Theoretical Framework**

Loving (1993) indicated that cognitive flexibility and intrinsic motivation are essential precursors to one's validation of competence. This discussion will be organized around these constructs.

**Cognitive Flexibility.**

Loving (1993) defined cognitive flexibility as the ability to find and apply information that is appropriate to problem solving. Interviews revealed that peer tutoring evoked a need to think about one's thinking. It called for a period of reflection on one's

mental processes, a call to examine what one really knew, how well one knew it and how well one knew the composite parts that made up the whole. This finding is in keeping with the research of several authors. Hendleman and Boss (1986) found that preparing to teach evoked a personal need in participants for a deeper understanding of material to be taught; Cust (1995) discussed metacognition as a precursor to cognitive flexibility as defined by Loving (1993); Bos (1998) reported enhanced critical thinking skills for the tutor as one outcome of a peer tutoring experience in nursing education.

Reflection prompted participants to think critically about their experience. This supports Benner's (1984) view that reflection provides the fuel to learn from practice. Study findings indicated that the outcome of the process was deeper learning and the interviews revealed that such deeper learning did not occur in and of itself. Nor was it totally a mental process. The social environment was indicated as being critical to the development of deeper learning. The social context of the clinical and lab setting, and the interactions that occurred there, were the basis for the meanings the participants assigned to the learning process and to the roles they played.

Although participants perceived their roles as multifaceted, the role of teacher seemed paramount. Results indicated that participants felt constrained by the expectations they saw as inherent in this role. For them, such expectations defined their duties which seemed to be to impart knowledge and expertise both in the area of theory development as well as psychomotor performance. Participants aspired to prove to their junior peers that they knew what they were about. It was quite evident that the identification with the role

of teacher developed in the tutor more of a desire for learning. Although the tutors were clearly able to identify their role as a teacher, they were quick to point out their orientation or cultural world was different from that of the traditional teacher. The student-student status of the peer relationship allowed both tutor and tutee to exist in the same cultural world. This sense of cultural belonging enhanced the social context of the learning environment and contributed to the ease of interaction between tutor and tutee. Results indicated that through such interactions junior students served as mechanisms for testing participants' own understanding by problematizing both context and content for participants, provided opportunity for participants to examine the understanding of others and hence enabled participants to interweave, expand and enrich their own understanding. These findings were in agreement with many authors (Bos, 1998; McNeill, 1995; Hill & Topping, 1995; Goodlad & Hirst, 1989) and reflect the views of such constructivist learning theorists as Dewey and Piaget in the sense that peer tutoring provided an opportunity for learning to be active, interactive, thought provoking, and highly cumulative.

### **Intrinsic Motivation.**

Loving (1993) indicated that intrinsic motivation was paramount to meaningful learning. Study findings showed that, for these participants, the drive to succeed came from within. Results of the analyses indicated that internal motivation hinged upon two factors: participants' beliefs about self and their sense of commitment to others. Interviews

revealed that both of these factors evoked a need for honest introspection. The study results also showed that prior to the experience, participants perceived themselves as caring and somewhat competent but lacking in confidence. Such a finding was in keeping with that of Kelly (1992), who found that senior nursing undergraduates reported a lack of self confidence in clinical practice. Participants reported that their stress was quite high in anticipation of the experience which attributed to uncertainties about self and one's abilities.

Participants were highly influenced by role models and for them peer tutoring was developmental. The need to prove to themselves that they were capable of achieving the level of performance they observed by others in the years previous, sparked their motivation. The qualities to which they aspired were reflective of what they admired most in the peer tutors to whom they had been previously exposed. It is worthy to note that such high acclaim was not extended as generally to faculty. Participants desired to 'look good' and their remarks indicated that fear of questions and uncertainty as to their ability to answer questions was perceived initially as a major inhibitor of such an image creation, and subsequently became realized as a facilitator of the desired image.

This is in keeping with Chally's (1992) finding that self-confidence comes from perceived success in problem solving. The overt accomplishment of 'looking good' as characterized by being able to answer questions and perform skills competently was mirrored by the intrinsic reward of 'feeling good'. Participant responses indicated that self-confidence, assertiveness, skill development in articulation and collaboration were all

qualities realized in this notion of 'feeling good'. The imminence of graduation gave impetus to this need to affirm one's beliefs about self and may have accentuated the intrinsic motivation of participants. This is supported by Knowles' (1980) assumption that with adult learners their time perspective changes from one of postponed application of knowledge to immediacy of application with orientation towards learning shifting from subject to performance centredness.

From the findings, it appeared that participants assumed ownership of the experience and were cognizant of the goals of the experience both for the tutor and tutee. According to Savery and Duffy (1995), it is important for learners to understand and buy into the relevance and value of the program if true learning is to be realized. Inherent in this sense of ownership was a perceived responsibility not only for the learning of others but more broadly to the community at large for whom nursing care would be directed both for now and in the future. This regulated the degree of study undertaken by the participants, which in turn strengthened feelings of self-efficacy amongst them. These findings were consistent with several authors, Cust (1995), Bandura (1977), Goodlad & Hirst (1989), Topping (1994) in relation to the degree intrinsic motivation, extrinsic motivation and reinforcement impact on learning outcomes.

### **Competency Validation.**

Loving (1993) defined competency validation as the process by which the student's identity as a competent beginning nurse is established. Loving (1993) further

postulated that this outcome is highly dependent upon the nature of the learning environment. The results of the analyses clearly indicated that peer tutoring occurred within a learning rather than in an evaluative milieu. Interviews revealed that learning within this context was governed not by fear of reprisal and evaluation but rather by the quest for learning that participants envisioned as necessary to authenticate their position as senior students. From the analysis of data, it was evident that participants saw their ability to succeed as a peer tutor pivotal to being able to make the transition to independent practice as a graduate nurse equipped with the cognitive and psychomotor skills deemed necessary to succeed in this role.

The study findings are also reflective of peer tutoring supporting learner maturity. Knowles' (1980) theory of andragogy has been influential. This theory purports that adults must be provided with a learning environment that fosters intellectual freedom and encourages experimentation and creativity. Peer tutoring evoked a change in focus from dependency on instructor to dependency on self. It is interesting to note that some faculty resisted this change in focus and were hesitant to relinquish control of the learning environment, particularly in the area of supervision of tutees in the performance of psychomotor skills. This result is well documented in the literature and reflects the banking concept of traditional education (Diekelmann, 1990; Bevis & Watson, 1989; Friere, 1986). For these participants there was an inconsistency in what was proposed and what was done, which resulted in role confusion for some participants. However, because of the dual nature of the experience, no participants encountered such resistance more than once.

Participants reported a gradual growth in their confidence level from onset to completion of the experience. Their sense of commitment to this project seemed to promote a purposeful and higher level of cognitive engagement in learning. What was clearly evident through the data analyses was that the process of peer tutoring promoted students to examine their cognitive processes through: checking for understanding, self questioning, organizing, generating examples, linking ideas and assimilating experience in order to develop a plan for their tutor experience based on rational thought. Exercising such personal control in studying and learning strengthened participants' beliefs about their capabilities and helped them gain a sense of mastery over their lives.

Further analyses of the data indicated that participants considered the experience as active learning and sharply contrasted it to the passive learning to which they had been accustomed. Participants reported that they were no longer the 'listeners' but now the 'doers'. For them, this constituted a challenge to be the best that they could be. The challenge of teaching others required self-regulation in preparation, planning, implementation and evaluation. Participants reported that all phases were energizing. What was also significant was that participants learned the value of observing others. Although such observation may indeed appear as a passive activity, participants reported that they found it invigorating as it provided an opportunity for them to critique their own nursing practice and analyze areas for improvement. Such active thinking is necessary as learners move away from being the repositories of educator's knowledge to adult learners having control over their own learning (Sedlak, 1997).

Nursing is by and large a team profession. However, there exists little opportunity in nursing education for students to develop the sense of collegueship that is so integral a part of team building. Respect, discourse, judgment, risk taking and caring are all composites of collegueship (Bevis & Watson, 1989). Analysis of participant responses showed that peer tutoring helped to foster this sense of collegueship. A particular sharing and mutual interchange of ideas occurred between participants and students during their peer tutor experience. This contrasted with the traditional learning environment in which competition for grades superseded collaboration. Assuming responsibility for the learning of the tutees, showing respect for what the tutee had to say, and accepting the challenge of discourse helped create a milieu of cooperation versus competition. A similar finding was found in studies by Krawczyk (1978) and Bos (1998).

Participants revealed that the experience enhanced the process of socialization. Bos (1998) found similar results in her study. Various levels of nurses coexist as part of a team to deliver the best possible care to clients. Nursing curricula generally offer little opportunity for relationship building amongst the various levels. Participants indicated that this experience helped them erode a traditional barrier to relationship- building imposed by status. Although there was some initial territorial trepidation, participants and tutees came to view each other as trusted learning resources and colleagues who have valuable ideas, experiences and insights to share and from which to learn. A more realistic understanding of the role of the practical nurse was acquired. Peer tutors came to be viewed not only as

a role model and teacher but as an equally important mentor and friend. Respect and a sense of community were engendered.

Participants in this study felt being a peer tutor helped them develop certain skills which they perceived as vital to survival in the real world of nursing. Huff (1997) described the nurse's role in the real world as that of a manager and coordinator of care for individual as well as for groups of clients. Analysis of the current data indicated that being a peer tutor increased accountability for one's own learning as well as that of the group and fostered a sense of commitment. Peer influence tipped the scale from superficial knowledge to a secure, mature, reliable and sometimes creative understanding. The analyses showed further that the peer tutor developed more of an awareness of the meaning of positive interdependence. According to Gartner and Riessman (1993), and Topping (1992) learning by tutors and tutees is interdependent, in that the behavior of one partner influences the performance of the others. Such an awareness further enhanced participants' commitment to their role.

One might assume that the role of tutor brought with it the responsibility of stimulating the desire for learning in one's group. Although most participants reported tutees were motivated, there were isolated incidents which challenged the tutors. However, what was evident in the data analyses was that tutors had received limited training in how to deal with this problem. As well, in one isolated event, a tutee evoked conflict in the group by overtly challenging everything being discussed. In her quest to be assertive, the tutor further fueled rather than resolved the conflict. It became evident that

tutors required training in conflict resolution strategies (Topping, 1994; Pierce, Stahlbrand & Armstrong, 1984).

Development of competency in articulation was reported as instrumental to enhancing self-confidence. Participants revealed that one of the major hurdles they encountered was organizing their cognitive schemata in a framework that would be easily assimilated by junior students. Cognitive processing was one aspect but actual delivery of content was reported as being equally monumental. By analyzing the data, the implication was that the degree of organization resulted not only in stronger representation of the subject matter but also in acquisition of new information to clarify the old. The mere act of verbally conveying the information resulted in bolstering self-confidence. The repeat sessions were approached with less anxiety and enhanced competency, thus providing a mechanism for self-administered reinforcement. Another influential factor in the tutor's perception of competence was the verbal, nonverbal and written reinforcement given by junior students. Bandura's (1977) social learning theory provides support for the impact that such vicarious and external reinforcement has on one's feeling of competence.

Further analysis of the data implied that participants saw themselves as having two roles while engaged in the peer tutor experience; that of learner and teacher. At times these roles were distinct, other times they ran parallel, and finally they merged to validate one's competence level as a soon-to-be-graduate nurse. Within this role structure, participants assumed the role of learner when preparing to teach. However, the relevance of their learning enhanced their sense of urgency, thoroughness, and responsibility to the

task at hand. While engaged in the role as a teacher, however, the role of learner was almost synonymous. The questioning and discussion precipitated by junior students forced participants to reexamine and sometimes redefine their cognitive structures. The management of a group of students, and likewise a group of clients, brought forth new learning in the form of skill development in management and delegation, yet requiring role modeling, support and direction for junior students. Through both internal and external reinforcement, all participants acclaimed belief in themselves and their abilities to perform as competent beginning nurses.

### **Conclusion and Recommendations**

Overwhelmingly, the peer tutors reported that the experience had been of benefit to them. All tutors reported that it provided an opportunity for self-improvement and that benefits extended to many areas, giving them a 'sense of satisfaction with helping others', 'appreciation for time and effort from faculty and tutees' and 'realization of own potential'. Additional comments included 'the experience deepened my learning', 'helped me gain confidence in myself'; 'heightened my sense of responsibility for others as well as for myself'; 'helped me be more assertive'; 'improved my organizational skills'; 'forced me to find my voice and organize my thoughts in a logical order so I could more effectively communicate'; 'instilled a sense of camaraderie and community'. One student remarked:

“It was like an awakening, being a tutor made me realize who I was and provided me with the confidence to forge ahead not as a little student but someone who had her wits about her and who had a lot to offer. It helped me believe in myself”.

There is a range of issues that could be improved regarding this experience.

**Support of tutors.** Tutors spoke of their initial uncertainties of the program and indicated that they would have benefited from meeting together as a group more regularly in addition to individual meetings with faculty and program coordinator. For example, one tutor related “ It was difficult in the beginning, it was hard to know what to do, it seemed like different faculty had different expectations”. Tutors suggested some additional structure would be beneficial.

**Tutor training.** Some tutors reported that they were ill-equipped to deal with such behaviors as conflict, monopolization and excess challenging exhibited by some group members. As one tutor commented “ I had my own personal meaning of what it means to tutor. I modeled my behavior after the tutor we had last year. The inservice [one hour] we had with the faculty member just before the start of the experience guided us in teaching techniques such as explaining, elaborating, questioning, demonstrating, and giving feedback, but for the rest of it I felt I was on my own”. Tutors felt more extensive tutor training would have been helpful.

**Faculty Synergism.** A crucial finding in this study was the inconsistencies amongst faculty in regard to their commitment to the philosophical underpinnings of this experience. Two tutors spoke of the resistance of some instructors to allow them the

independence that was rudimentary to this experience. As one tutor related “If I couldn’t supervise and make a student competent in even the simplest dressing change then why was I there. I thought it would be like last year- they did everything. It’s frustrating especially when I hear about what some of the things the other tutors did. The instructor I was with in the clinical wanted to keep all the power. It’s like I was always under scrutiny”. In contrast, eight tutors related that there was a striking difference in how the instructor related to them now as compared to past courses. As one tutor stated, “It was like we were peers almost. They treated you with more respect, they listened to your perspective on things. You could relax and be yourself”.

A powerful message is sent that the traditional instructor-student relationship based on oppression and power still permeated in nursing education. However, what was significant was this experience helped to transform this relationship for the majority of students. Tutors indicated that faculty needed to buy into this experience if they were to be facilitators.

### **Suggestion for Further Study**

Based on analyses of the data, peer tutoring does appear to be a viable teaching learning strategy in nursing education. While the study did achieve its stated goal, to identify the perceived benefits of a peer tutor experience from the tutor’s perspective, there are some important issues which have emerged as a result of exploration of the research questions which bear further consideration.

Firstly, an exploration of the faculty perception of their role in peer tutoring would be beneficial. An understanding of such perceptions could help guide the nature and extent of education sessions for faculty prior to their participation in peer tutoring. This would help provide an equitable learning opportunity for all tutors.

Secondly, since the essence of this study revealed that peer tutoring occurred within a learning rather than an evaluative milieu, it would be beneficial to look closely at the perceptions of these same participants of their traditional learning environment. Research of this nature may be of great benefit in effecting change in the context of the learning environment and the instructor- student relationship.

Finally, because this study was conducted with senior nursing students as peer tutors, research using more junior students as peer tutors would be of benefit. It is important that the depth of learning, rational thought and other benefits accrued in this experience not be perceived as hierarchical in nature.

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**Appendix A**  
**Interview Guide**

## **Interview Guide**

1. How would you define peer tutoring?
2. Can you describe your peer tutor experience?
3. How did you feel when engaged in peer tutoring?
4. How did you prepare to 'teach' junior students?
5. How do you think you were perceived by junior students? How did this make you feel?  
How did you feel towards junior students?
6. Did this experience impact on your personal or professional development in any way?  
If so, how?

**Appendix B**  
**Participant Consent Form**

## **Participant Consent Form**

In signing this form, I am giving consent to be interviewed by Gemma Langor, a graduate student enrolled in the Master of Education program at Memorial University. I understand that this interview will be audiotaped and subsequently transcribed to text. I understand that I will be part of a research study that will focus on the experience of being a peer tutor. This study will help determine whether peer tutoring is a useful teaching learning strategy in nursing education. This study has received the approval of the Faculty of Education's Ethics Review Committee.

I understand that I will be interviewed at a site convenient to me. The interview will take approximately one hour to complete. I also understand that the researcher may contact me for more information in the future.

I fully understand that neither my participation nor failure to participate will in any way affect my standing within my nursing program.

This interview was granted freely. I have been informed that the interview is entirely voluntary and I can decide to terminate the interview at any point. I have been informed that my answers to questions will be kept confidential and no reports of this study will ever identify me in any way. Any tapes and documentation will be stored in a locked cupboard when not being utilized by the researcher and will be destroyed following release of the final report.

I understand that the results of this research will be available to me upon request and that Gemma Langor is the person to contact at 737-3811 or 739-7910 if I have any questions about the study or about my rights as a study participant. Gemma Langor's thesis supervisor is Ms. Marilyn Thompson, Memorial University and she may be contacted at 737-4627 if you have any questions or concerns in relation to this study. If at any time, you wish to speak with a resource person not associated with this study, please contact Dr. Linda Phillips, Associate Dean, Graduate Programs and Research, Memorial University at 737-3402.

Date: \_\_\_\_\_

\_\_\_\_\_  
Participant's Signature

\_\_\_\_\_  
Researcher's Signature

**Appendix C**  
**Permission to Conduct Research**

**Permission Form to Conduct Research**

Dear (Directors,)

In fulfillment of the thesis component of the Master of Education program, Memorial University, I am requesting permission to conduct a study in relation to peer tutoring involving the Year Three students at the site. The purpose of this study is to examine the process of being a peer tutor to junior students and to increase the limited knowledge base about peer tutoring in nursing so that nurse educators can determine its value as a teaching learning strategy in nursing education. This study has received the approval of the Faculty of Education's Ethics Review Committee.

A random sample of ten students will be selected for this study. Data collection will be in the form of indepth interviews of approximately one hour duration. The interviews will be conducted at a time that will not interfere with participant's or researcher's curriculum commitments. All results will be confidential and anonymity will be protected. A summary report will be available upon completion of this study.

Please feel free to contact me at 739-7910 or my thesis supervisors, Ms. Marilyn Thompson at 737-4627 if you have any questions or concerns in relation to this study.

Thank-you for your interest and support.

Sincerely,

Gemma Langor

\*\*\*\*\*

I \_\_\_\_\_ ( director) hereby give permission to Gemma Langor to conduct the study " Peer Tutoring: What Are Its Benefits To The Tutor?" Interviews will be conducted at a time that will not interfere with participant's or researcher's curriculum commitments. All results will be confidential and anonymity of participants will be protected. A summary report will be made available upon completion of this study.

Date: \_\_\_\_\_

\_\_\_\_\_  
Director's Signature

\_\_\_\_\_  
Researcher's Signature





