CLINICAL TEACHING:

THE DEVELOPMENT OF EXPERTISE

by

Judith M. Scanlan

A Dissertation submitted to

the Faculty of Graduate Studies

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CLINICAL TEACHING:

THE DEVELOPMENT OF EXPERTISE

BY

JUDITH M. SCANLAN

A Thesis/Practicum submitted to the Faculty of Graduate Studies of the University of Manitoba in partial fulfillment of the requirements for the degree of

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ABSTRACT

Clinical teaching suffers from the lack of a coherent theoretical base necessary to inform its practitioners. Research to date focusses primarily on the perceptions of faculty and students with regard to the characteristics of effective clinical teaching. Moreover, the characteristics of effective clinical teaching used in the research are generated from the researchers' assumptions of what constitutes effective clinical teaching. The purpose of this qualitative study was to examine the thinking of novice and expert clinical teachers in order to understand how clinical teachers conceptualize effective clinical teaching.

The conceptual framework chosen for the study was symbolic interactionism. The advantage of symbolic interactionism was that it provided a means of how understanding of effective clinical teaching was developed through interactions with others and with the self through reflection. Furthermore, it acknowledged the importance of cognitive activity and enabled the researcher to probe the thoughts of clinical teachers in order to understand the meaning of effective clinical teaching and how it was developed in the thinking of the study participants.

Five novice and five expert clinical teachers were interviewed three times by the researcher. In addition, each of the participants recorded their thinking about effective clinical teaching in journals. Concept maps were developed for each of the participants delineating their thinking about effective clinical teaching and how that thinking had developed through their experiences.

Three themes emerged from the findings i) Learning Clinical Teaching, ii) Practices of Clinical Teaching, and iii) Knowing Students. The study uncovered similarities and differences in the conceptualization of effective clinical teaching by

novice and expert clinical teachers. The centrality of the role of experience in the development of expertise in effective clinical teaching was revealed. Clinical teaching was perceived as a complex process, not well understood by novice clinical teachers. Novices were uncertain about their clinical teaching practices and described the overwhelming responsibility they felt for students and patients. The rich descriptions of expert clinical teachers of clinical teaching reflected their broad experiential base.

The findings of this study provide a beginning understanding of how novice and expert clinical teachers think about effective clinical teaching. Through the voices of the participants, a description of clinical teaching emerged. While the findings support what is known in the literature about effective clinical teaching, they conceptually link the characteristics of effective clinical teaching in a different configuration. Attributes of clinical teaching expertise add clarity to the existing literature. Furthermore, the study reveals other aspects of effective clinical teaching heretofore not identified.

Dedication

In memory of my father

T. Arthur Parnell

December 8, 1908 - December 10, 1994

Who taught me to be what I could be

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CHAPTER ONE

INTRODUCTION

In professional nursing education programs clinical teachers are charged with the mandate of transmitting practice knowledge to neophyte practitioners. Nurse educators claim that clinical practice for nursing students is the heart of the nursing education program in which prior learning is shaped into professional practice (Farley, 1990; Infante, Forbes, Houldin, & Naylor, 1989). Although there is little disagreement with these statements, there is a paucity of research about clinical teaching, how clinical teachers learn to teach, or what thinking and/or knowledge drives clinical teaching practices. Research that has been carried out in clinical teaching in nursing has been aimed primarily at identifying effective clinical teaching behaviors as defined by either the clinical teacher or nursing students (e.g., Bergman & Gaitskill, 1990; Jacobson, 1966; Mogan & Knox, 1987; Sellick & Kanitsaki, 1991; Windsor, 1987). Recently there is a recognition that clinical teaching in nursing is a role distinct from nursing practice (Infante, 1986) and a practice in which skills can be learned and expertise developed over time (Diekelmann, 1990a). The scope of some current investigations in clinical teaching have been enlarged to include, for example, core competencies in role development of clinical teachers (Choudhry, 1992) and development of a model of clinical teaching (Paterson, 1991). Diekelmann (1990b; 1991; 1992; 1993a) has begun to explore the "lived" experiences of clinical teachers through narratives in order to understand the expertise of teaching. While Diekelmann's research is focussed on the explication of expertise of teaching in nursing education, it is on teaching in nursing in general, not

clinical teaching specifically. None of the research in clinical teaching in nursing addresses how nurse educators think about effective clinical teaching, the knowledge that underpins clinical teaching practices, explores novice clinical teaching, nor does it consider how a concept of effective clinical teaching is developed.

Traditionally clinical teachers have been selected on the assumption that past experience and/or education are essential qualities for clinical teaching. Unfortunately, there has been little recognition that clinical teaching requires a set of competencies and skills quite different from that of nursing practice. As Pretzel, Harris and Masler (1982) point out "the precepts for teaching recommended to clinical instruction tend to be based on common sense, opinion and faith" (p. 499). Nurse educators, particularly novice teachers, often feel inadequate, embarrassed, and guilty about their ability to meet the expectations and demands of clinical teaching (Werner, Brueggemeyer, & Kenner, 1986). Evans and Massler's (1977) comment that ". . . teaching suffers most in professional schools because most faculty members have no prior instruction in the teaching learning activity" (p. 613) is as relevant in 1996 as it was nineteen years ago. As a result, clinical teachers use their own experiences and the way that they have been taught to shape their teaching practices.

For the past 25 years research funding in nursing has been targeted primarily at clinical practice questions because it is viewed as more acceptable to the development of academic careers (Diekelmann, 1990b; Tanner & Lindeman, 1987). This under funding of nursing education research has contributed to the dearth of research programs and the underdevelopment of theory around clinical teaching issues. Nursing scholars are

questioning current approaches to clinical education of nursing students and the research base for these teaching practices (Allemang & Cahoon, 1984; Bevis & Murray, 1990; Diekelmann, 1990b, 1991, 1993a; Infante, 1985: Pugh, 1983; Sleightholm, 1985; Tanner, 1990; Tanner & Lindeman, 1987). The theoretical base for understanding teaching in nursing must be developed from a variety of perspectives, including that of the clinical teacher. Diekelmann (1988, 1990a, 1990b) asserts that scholars interested in nursing education must conduct research that enables the voice of teachers to be heard through uncovering the practical knowledge of teaching in nursing and making visible the nature of teachers' work. A fuller theoretical understanding of clinical teaching will be enhanced by examining how clinical teachers conceptualize and think about effective clinical teaching.

Problem Statement

This exploratory, descriptive study focused on how clinical teachers conceptualize effective clinical teaching and included an investigation of the meanings that are attached to clinical teaching, past experiences which shape and influence clinical teaching, and conceptual organization of clinical teaching knowledge. Using a qualitative method of inquiry, the perspectives of novice and expert clinical teachers were sought in order to understand how effective clinical teaching is conceptualized by those in practice. Novice and expert clinical teachers were studied so that the beginning and expert practices and understandings of clinical teachers were uncovered and the differences between the novice and the expert clearly delineated. The overall question guiding the study was "How do

novice and expert clinical teachers conceptualize effective clinical teaching?" Specific questions that arose out of this more general problem statement included:

1. What explicit and implicit meanings are associated with the development of a concept of effective clinical teaching?
2. What past experiences influence the development of a concept of effective clinical teaching?
3. What are the cultural and symbolic factors that influence the conceptualization of effective clinical teaching?
4. How do interactions with others influence the development of a concept of effective clinical teaching?
5. How is the knowledge of effective clinical teaching organized?

It is acknowledged that clinical teaching occurs in other practice disciplines such as medicine, education, and dental hygiene. However, for the purposes of this study, the exploration of the phenomenon was confined to clinical teaching in nursing education.

Definition of Terms

For the purposes of this study, the following definitions were used:

1. Clinical teacher A teacher in a basic nursing education program who assumes responsibility for teaching nursing students in a clinical area of professional nursing practice. Clinical teachers will be further defined as novice or expert (see Chapter 3 - Research Design for a discussion of the selection of novice and expert clinical teachers).

2. Clinical teaching A process through which one communicates understanding and knowledge of nursing practice to others. Clinical teaching occurs when the clinical teacher works either individually or in groups with nursing student(s) who are delivering care to clients. This teaching may occur either when the student is working directly or indirectly with the client or in seminars and small groups.
3. Clinical setting A unit in an institution, home, or community health agency in which a nursing student practices the art and science of nursing for the purpose of attaining professional competence in nursing practice.
4. Nursing student A student enrolled in a nursing program that provides basic educational preparation for entry to practice.

Assumptions

There were several assumptions that underlie this study. They included:

1. Conceptualization of clinical teaching is a complex part of the thought processes of clinical teachers. Clinical teaching practices are underpinned by this conceptualization of clinical teaching.
2. Conceptualization of effective clinical teaching arises out of one's experiences and interactions with self and others. Clinical teachers reflect upon and evaluate their encounters with others in the development of a concept of effective clinical teaching.
3. Experience shapes the development of expertise by refining ideas and theories of practice, adding the shades and nuances of the real life situation (Benner, 1982,

1983, 1984). These experiences give meaning (implicit and explicit) to the concept of effective clinical teaching.

4. Novice and expert clinical teachers will think about clinical teaching differently. The study of novice and expert practice is well supported in the literature as a means of understanding the development of the practitioner from novice to expert (Benner, 1984; Berliner, 1986, 1988; Chi, Glaser & Farr, 1988; Krabbe & Tullgreen, 1989; Leinhardt, 1990). These writers contend that exemplary performance as demonstrated by an expert can provide the benchmark against which practice can be measured or be used as a model of practice to which one can aspire.

Conceptual Framework

The conceptual framework chosen for this study is symbolic interactionism. Arising out of the tradition of social psychology, symbolic interactionism focusses on the dynamic interaction that occurs both between and within individuals and the meaning and interpretations that are attached to these interactions (Charon, 1989; Chenitz & Swanson, 1986; Musolf, 1992). Symbolic interactionism attempts to understand the meaning and value that an individual attaches to experiences and objects which he/she encounters (Schroeder, 1981) and how people make sense of their world (Fine, 1992). Shared meanings, behavioral expectations, and reflected appraisals contribute to the process by which meaning and interpretation are developed (Matsueda, 1992). Consequently, the behavior of the individual is a product of how he/she interprets the world around them.

The concept of self is central to symbolic interactionism (Blumer, 1969; Chenitz

& Swanson, 1986; Charon, 1989). From the perspective of symbolic interactionism, "the self is an object that the actor acts towards" (Charon, 1989, p. 65). The self is defined through social interaction and is important because the individual is able to see self in interaction with others through definition and redefinition (Blumer, 1969; Charon, 1989). Blumer posits that symbolic interactionism is embedded in three basic premises i) individuals act towards things on the basis of the meaning that an object has for them, ii) the meaning that the individual attaches to these things emanates from the social interaction that an individual has with others, and iii) the meanings that are developed are based upon interpretations by the individual in order to deal with the things which are encountered.

The labelling of the assertions or assumptions about symbolic interactionism are as varied as those who write about it. However, the themes that emerge are similar. For the purposes of this study, the underlying assumptions identified by Rose (1980) will be used to frame the research as they were found to be particularly helpful and relevant when conceptualizing the research questions. Each of these basic assumptions will be discussed with particular reference to the way in which they will guide the study.

Assumption 1: "Man [sic] lives in a symbolic environment as well as a physical environment" (Rose, 1980, p. 39). The concept of symbol is central to symbolic interactionism. Individuals respond to this symbolic environment, particularly in relation to the meaning that is attached to the symbols. Rather than the reality of their world, it is through definition and interpretation of symbols within their own lived experience that individuals act and react (Charon, 1989; Lofland & Lofland, 1995; Musolf, 1992).

Language is the primary mode through which meaning and interpretation of symbols are communicated. Through language the individual is able to internalize the meaning of the symbols (Meltzer, 1972). The process of symbolization is a cognitive activity which may or may not be at the conscious level (Fine, 1992; Lofland & Lofland, 1995; Meltzer, 1972). In fact, Lofland and Lofland assert that articulation of these latent meanings is one of the key tasks of the social scientist. The symbolic meanings (processed through cognition) that clinical teachers attach to their experiences in the formulation of their understanding of effective clinical teaching is central to this study.

Assumption 2: "Through symbols, man [sic] has the capacity to stimulate others in ways other than those in which he himself is stimulated" (Rose, 1980, p. 40). Taking the role of others is critical to the development of the self and is necessary for the acquisition and use of symbols (Charon, 1989). Through the use of symbols, the individual is able to assume the role of others symbolically. The individual is able to interpret the actions of others only because s/he possesses a self that has emerged through interactions with others. The individual is able to observe him/herself from the outside by taking on the view of the other in the interaction and acting towards him/herself on the basis of this perspective. Interaction occurs between individuals, primarily in response to each other. In this interaction individuals account for the action of each other, as well as what each individual is about to do (Blumer, 1969). In role taking the individual projects him/herself into the role of the other person(s) in the interaction, appraising the situation from one's own perspective as well as from the perspective of others in the situation, while considering the possible actions that may result from the interaction

(Matsueda, 1992). The importance of the interpretation of the actions of others and role taking in this study are the functions that they play in the development of significant symbols and patterns of thinking in the clinical teachers as they form their concepts of effective clinical teaching.

Assumption 3: "Through communication man [sic] can learn huge numbers of meanings and values - and hence ways of acting - from other men" (Rose, 1980, p. 42). Symbolic interactionists agree that symbols are learned and understood through interaction with others. Objects or symbols may be classified as physical, social, or abstract and in social interaction, the individual will respond only to those symbols that are either recognized or known. In other words, the individual through a process of definition and interpretation identifies those symbols that are meaningful (Blumer, 1969). Fine (1992) contends that individuals strive for "situated, contextual, grounded meaning" based upon the symbolization of past experiences (p. 102). This understanding of the culture in which the individual operates guides much of one's behavior. Through shared meaning, one is not only able to predict the response of others, but evaluate his/her own behavior in light of the response of others to that behavior (Rose, 1980). Exploration of the meaning of the context of clinical teaching and the significant symbols within that culture for clinical teachers are central to understanding the conceptualization of effective clinical teaching.

Assumption 4: "The symbols - and the meanings and values to which they refer - do not occur only in isolated bits, but often in clusters, sometimes large and complex" (Rose, 1980, p. 43). Symbolic clusters, such as roles and structures, guide and provide meaning for the individual within a particular situation or setting. Reference groups are

particularly important as these groups serve as a source of the individual's values, perspectives, and self-comparisons (Charon, 1989; Matsueda, 1992). These organized sets of values and attitudes are developed through repeated, ritualized actions within the individual's lived experience. The lived experiences have connected, contextualized meanings that give structure and provide a regularity and understanding of the behavior(s) of one's self and others in the situation (Fine, 1992; Musolf, 1992). Consequently, interpretation of rules and subsequent behavior within any given situation is contextual and based on past experience. Of particular note, is the fact that many of these meanings may not be shared explicitly by other individuals. However, tacit understandings allow interaction to occur (Charon, 1989; Musolf, 1992). In this study the understanding of the development of clinical teachers' conceptualization of effective clinical teaching will be facilitated by exploring the contextualized meanings of effective clinical teaching (both explicit and implicit) that are developed through practice.

Assumption 5: "Thinking is a process by which possible symbolic solutions and other future courses of action are examined, assessed for their relative advantages and disadvantages in terms of the values of the individual, and one of them chosen for action" (Rose, 1980, p. 45). The ability to think is a uniquely human characteristic which enables the individual to reflect upon one's own self, assume the perspective of others, and internalize meanings in the interaction through the symbols of language (Charon, 1989; Matsueda, 1992; Meltzer, 1972). Through symbolic thinking individuals are able to test out potential avenues for action, accepting or rejecting a particular mode of action based upon their own past experiences and those of others known to them. This reflective

thinking is efficient because it occurs rapidly with minimal risk, bringing an imagined or expected future into the present (Meltzer, 1972; Rose, 1980). Reflective thinking also enables the individual to redefine past situations where the immediate situation is discrepant with the present, reconstructing them for action in the present. Each new situation builds upon one's past experiences and provides the individual with another instance by which to judge the future (Fine, 1992). This aspect of symbolic interactionism is crucial to the present study because the role of thinking and reflection frame the exploration and analysis of past and present experiences in the development of meaning of effective clinical teaching for the study participants.

Clinical teaching is a process through which the clinical teacher communicates his/her understanding and knowledge through interaction. While symbolic interactionism does not account for all aspects of learning and understanding (Musolf, 1992), questions that may address other aspects of thinking in clinical teaching are outside the parameters of this study. The advantage of symbolic interactionism as a conceptual framework for this study is that it provides a means of understanding knowledge (symbolic meaning) of effective clinical teaching developed through interaction with others and with the self through reflection. Symbolic interactionism acknowledges the importance of cognitive activity and enables the researcher to probe the thoughts of clinical teachers in order to understand the meaning of effective clinical teaching and how it is developed in the thinking of the study participants. Tacit as well as overtly expressed understanding plays a critical role in the development of meaning. Moreover, symbolic interactionism

recognizes the importance of lived experiences in the development of meaning, a central tenet in the development of expertise.

Summary

The first chapter considers the issues related to the development of research regarding effective clinical teaching. A call for research which enables the voices of clinical teachers to be heard is essential for a fuller understanding of clinical teaching. The investigation is situated within the conceptual framework of symbolic interactionism. The purpose of the dissertation is to explore the conceptualization of effective clinical teaching by novice and expert clinical teachers. Chapter Two provides an overview of the research considered germane to the study, including the general research in education and teacher thinking, effective teaching in higher education, the concepts of novice and expert, clinical teaching, and clinical teaching in nursing. Chapter Three describes the research design including selection of the participants, approaches to data collection, procedures for data analysis, trustworthiness of the findings, ethical considerations, and limitations of the study. In Chapter Four the findings of the study are described. The concluding chapter, Chapter Five, discusses the findings in light of what is known about effective clinical teaching, the development of expertise in clinical teaching, implications of the study, and recommendations for further research.

CHAPTER TWO

REVIEW OF THE LITERATURE

The literature review identifies the scope, range, intent, and type of research that has been done in an area of interest and is used to establish the study's purpose, background, and significance (Chenitz, 1986). However, the advisability of conducting a literature review in qualitative research prior to the onset of the study is an issue of controversy in the literature. At one extreme of the debate is the position postulated by Glaser (1978) who advises against consulting the literature until after the data are gathered and analysis has begun on the premise that study results may be jeopardized with preconceived ideas and concepts. Pragmatists such as Chenitz (1986) advise that the reality of proposal writing for grants and academic purposes requires the researcher to demonstrate knowledge of the phenomenon to be studied. The issue then becomes not whether a literature review should be done, but how can it serve and support the study. For the purposes of this study the literature was reviewed initially to establish the parameters and significance of the study. An ongoing review of the literature was undertaken throughout the research process.

The literature consulted in this review begins with the education literature in order to situate the study of clinical teaching within the paradigm of research on teaching in general. The research paradigm of teacher thinking in education is reviewed as this approach is germane to the study. Within the broader context of teaching, the research in

higher education as it relates specifically to effective teaching is addressed. The perspective of teaching is narrowed further by reviewing the professional literature which addresses issues related to novice/expert practice. Finally, the medical education and nursing education literatures are considered in order to understand the traditions and state of the art in the study of clinical teaching.

Selected for inclusion in this review included classics in the literature, as well as a selection of studies that represent the lines of research that have been conducted in the areas described above. Computer searches of the literatures were conducted. In addition, a hand search of the major nursing and educational journals was done to ensure that important contributions to the literature were not missed inadvertently. Finally, citations that were found in reference lists that were considered fundamental to the study (and not previously identified) were located and included in the review.

Research in Education

In one of the first comprehensive reviews of the research in teaching, Dunkin and Biddle (1974) assert that the research to that point in time had suffered from lack of theoretical cohesiveness, a failure to observe teaching activities, lack of concern for the context of teaching, and inadequate criteria for teaching effectiveness. Moreover, the majority of the research had focussed on attempts to quantify the relationship between teaching and student outcomes. Consequently, the state of knowledge regarding teaching was assessed as poor and these authors called for development of research programs that focussed on teaching.

The research base of teaching made significant progress over the next decade. Walberg's (1986) synthesis of the research on teaching and Shulman's (1986a) perspective of the research programs in the study of teaching provide an excellent overview of the state of the art at the time of the last edition of the Handbook of research on teaching. The majority of the studies reviewed by Walberg were conducted using a quantitative approach and revealed reasonably consistent results in that five teaching constructs (cognitive simulation, motivational incentives, pupil engagement in learning, reinforcement, and management and classroom climate) were associated positively with student outcomes. Although Walberg acknowledges the insights and richness of the data of the few qualitative studies reviewed, he echoes the concerns of validity and reliability of the findings commonly made by quantitative researchers who are troubled about the generalizability of qualitative studies. A well founded criticism made by Walberg in this review is the lack of unifying theoretical paradigms and constructs in the literature which make replication of the research on teaching difficult.

Shulman's (1986a) article is particularly helpful in organizing one's thinking about the major research programs in teaching. He contends that research programs in teaching can be grouped into one of five categories: i) process-product which focusses on teaching effectiveness, that is, what are the relationships between what the teacher does (process of teaching) and what happens to the students' learning (product of teaching), ii) time and learning (a closely related area to process-product research) which attempts to "identify the key mediators of teacher behavior in the activities of pupils" (p. 14), iii) pupil cognition and the mediation of teaching which centres on the thought processes of the

students themselves in relation to teaching, iv) classroom ecology which describes the effect of the environment on the teaching/learning process, and v) teacher cognition and decision making which attempts to describe the thinking processes of teachers in the teaching enterprise. Shulman contends that the framework within which the research project is carried out will shape both the conceptualization of the problem and the methodological approach to the study.

Teacher Thinking

It is within the fifth category of research on teaching as identified by Shulman (1986a) that the present study is conceptualized. Research into the processes of teacher thinking is a relatively new approach to the study of teaching. Although some early work (Jackson, 1968) was done in the field, the real impetus for research on teacher thinking was sparked by the 1974 National Conference on Studies of Teaching under the auspices of the National Institute of Education (Clark & Peterson, 1986; Clark & Yinger, 1987; Kagan, 1988). The participants at this conference argued that teaching is mediated by the thinking processes of the practitioner and, therefore, an understanding of teacher thinking is necessary to a full understanding of teaching.

The approach to research on teacher thinking is predicated on the notion that a behavioral model of teaching is incomplete and that understanding teacher thinking (which attempts to link intentions to behavior) will provide a sound basis for educating teachers and introducing educational innovations (Shavelson & Stern, 1981). According to Clark and Yinger (1987) "teacher behavior is substantially influenced and even determined by teachers' thought processes" (p. 84). Shavelson and Stern are even more

direct. They assert that "... teachers' thoughts, judgments, and decisions guide their teaching behaviors" (p. 470). This assumption poses some difficult problems for the researcher because the link between cognition and behavior is a gap with which psychology is still struggling (Nisbet & Ross, 1980). Consequently, indirect methods of study and inferences about the link between teachers' thought processes and teaching must be drawn.

The second underlying assumption of the study of teacher thinking is based on the belief that ". . . teachers are rational professionals" (Shavelson & Stern, 1981) and refers to the teachers' intentions rather than actual behavior. These authors claim that at times teaching calls for responses that must be made immediately and, therefore, likely preclude any information processing activity. This may seem antithetical to the first assumption However, as Shavelson and Stern contend, in order to handle complex cognitive tasks, teachers (as do others) construct simplified models of the real situation which allow them to behave rationally or reasonably in a complex environment.

Teacher thinking has been used by researchers to describe various thinking processes, for example, reflection and problem solving, used by teachers to carry out teaching activities. Although much of the research comes from different conceptual perspectives and focusses on different issues, the common concern unique to this body of the literature is the way in which ". . . knowledge is actively acquired and used by teachers and the circumstances that affect its transmission and employment" (Calderhead, 1987, p. 5). In a comprehensive review of the literature, Clark and Peterson (1986) identify three main lines of research in teacher thinking: i) teacher planning which

examines the overall planning done by a teacher, how it is accomplished and for what purpose(s), and the impact of this planning on the classroom; ii) teachers' interactive thoughts and decisions which focus on the thinking of teachers as they teach; and iii) teachers' theories and beliefs which attempt to describe the knowledge base used by teachers to teach. The literature treats these three lines of research as distinct entities. However, this delineation seems to be artificial. It is easy to circumscribe teacher planning and interactive decision making because they occur at different times in the teaching activity. However, teacher knowledge is germane to the other two areas because teacher knowledge plays an integral function in teacher planning and decision making.

Gage (1978) posits that teachers have an implicit theory of teaching and describes differences between the knowledge of "that" (factual) and the knowledge of "how" (practical). Through exploration of these implicit theories about teaching, Gage believes that what teachers believe about teaching would be uncovered and the gap between the knowing that and the knowing how would be diminished. In addition, Gage calls for use of more qualitative approaches to the study of teaching, an approach that would enhance the detail and description of teaching and work in concert with the findings of quantitative researchers.

Many scholars have attempted to categorize and describe the types of knowledge used in teaching (Arnheim, 1985; Clandinin, 1986; Clark, 1988; Elbaz, 1981; Lampert, 1984; Leinhardt & Greeno, 1986, Schon, 1983, 1987). While they all describe the knowledge base of teaching differently, there seems to be some consensus about the general types of knowledge on which teachers base their teaching practices and reflect the

differentiation that Gage (1978) postulated, theoretical knowledge that is learned formally and practical knowledge that is learned as the result of experience. Of the two, practical knowledge is more difficult to understand and has been described as knowledge in-action (Schon, 1983, 1987), intuitive knowledge (Arnheim, 1985; Lampert, 1984), and implicit theories (Clark, 1988). Typically, practical knowledge is complex, not clearly understood, and must be inferred and reconstructed by the researcher. Furthermore, it is difficult to study because practical knowledge is held primarily at the unconscious level, even though it profoundly affects teaching.

Shulman (1986a, 1986b), as well as other scholars (e.g., Calderhead, 1987; Wilson, Shulman, & Richert, 1987), contends that the differences between subject matter knowledge and pedagogical skill knowledge must be acknowledged. However, in the research to date, this distinction seldom is made explicit. Many of the studies examine some aspect of teacher knowledge in pedagogical skills (e.g., Carter, Sabers, Cushing, Pinnegar, & Berliner, 1987; Carter, Cushing, Sabers, Stein, & Berliner, 1988; Leinhardt & Greeno, 1986; Leinhardt, Weidman, & Hammond, 1987; Sabers, Cushing, & Berliner, 1991), while a few examine subject matter knowledge (e.g., Leinhardt & Smith, 1985). Although the studies that explore pedagogical subject matter are more useful generally to the discipline, understanding of content knowledge may be helpful as it relates to teaching and, specifically, to knowledge of pedagogical skills in the transmission of particular content knowledge.

Research in teacher thinking in education is still in the developmental stages. As with any new research endeavour there are some limitations to the research. One of the

major difficulties with the research is the lack of theoretical conceptualizations or frameworks within which teacher thinking can develop. The research has focussed primarily on discrete, isolated aspects of teacher thinking. Concepts in teacher thinking either have not been defined or have not progressed past the descriptive level, indicative of a theory in the very early stages of development (Walker & Avant, 1988). Moreover, the theoretical development of teacher thinking has not begun to delineate the theoretical propositions necessary for theory development. This difficulty is recognized by Walberg (1986) who identifies this as an evolutionary process as a discipline carries out scientific research and the logical next step in the development of teacher thinking. Nonetheless, Kagan (1988) reiterates the need for studies that qualitatively describe the development of teachers' thinking in order to understand teaching more fully and to facilitate the professional evolution of teachers. Most of the research in teacher thinking has occurred in elementary schools (Clark & Peterson, 1986). Teacher thinking in clinical teaching has not been addressed at all in this research. A study that focusses on teacher thinking in clinical teaching would be timely, not only for nursing, but also for education.

Effective Teaching in Higher Education

The large body of research in higher education has developed around the concerns of evaluation and identification of effective teaching behaviors (Perry, 1990). The underlying assumptions of this research has been predicated on the notions that teaching can be assessed by students and that teaching behaviors are significantly related to outcomes (McKeachie, 1990). In an overview of the history of research in higher education, McKeachie contends that the studies in higher education have yielded relatively

consistent findings in identifying teaching behaviors that are related to effective teaching in university classrooms. The teaching behaviors that have been identified include enthusiasm, clarity, interaction, task orientation, rapport, and organization (Murray, 1991).

The work that has led to this conclusion has been developed over the last 20 years through the efforts of groups of researchers interested in the dimensions of effective teaching. The studies have been conducted in a quantitative research framework both in the laboratory and the university classroom (e.g. Abrami, Leventhal, & Perry, 1982; Erdle & Murray, 1986; Frey, 1978; Marsh, 1984; Murray, 1983; Perry, Abrami, & Leventhal, 1979; Sullivan & Skanes, 1974). More recently the research agenda has been enlarged to include other factors related to effective teaching such as personality traits of the instructor (Erdle, Murray, & Rushton, 1986; Murray, Rushton, & Paunonen, 1990), students' perception of control (Perry & Magnusson, 1987), the effect of behavioral feedback to instructors (Murray & Smith, 1989), and enhancing student achievement through attributional retraining (Perry & Penner, 1990). The strength of these research studies has been the careful design of research programs that have consistently built from one study to the next yielding results that have linked specific teaching behaviors to effective teaching. In addition, the researchers have prudently considered the work of their colleagues so that the results of one research program has not been developed in isolation from other research studies in the domain.

The research to date primarily has concentrated on the lecture method of instruction (Murray, 1991). While an important teaching strategy, other approaches to teaching need to be understood in terms of effectiveness. In addition, there has been no

work done on teacher thinking as it relates to this body of research. Murray contends that this gap must be addressed before a fuller understanding of teaching is achieved. Until recently, the research on effective teaching in higher education has focussed on the teacher only. However, efforts such as those by Perry (1991) and his colleagues have begun to address the impact of teaching on student learning.

There have been initiatives made by these researchers to implement their findings into the practice of teachers in higher education. However, this research is a complex body of knowledge, often difficult for the educator in other practice domains to understand. Consequently, much of this research has not been disseminated beyond the arena of higher education. This is unfortunate because the work in effective teaching in higher education may inform the practice and research of those working in related areas, such as elementary and secondary schools or professional education. The usefulness of this research in higher education to the present study is the identification of effective teaching behaviors which may be similar to those which clinical teachers use in their practice with nursing students.

Novice/Expert Practice

Practical knowledge is an elusive concept that has intrigued scholars in a variety of domains and has engendered much research in practice disciplines, such as nursing and education. It is acknowledged that skilled practitioners develop knowledge through experience and that their practices differ from that of the neophyte practitioner. In the literature these two ends of the practice continuum have been labelled expert and novice. The rationale for studying the expert has been made convincingly in the literature

(Benner, 1984; Berliner, 1986, 1988; Chi, Glaser, & Farr, 1988; Krabbe & Tullgren, 1989; Leinhardt, 1990). These writers contend that exemplary performance, as demonstrated by an expert, can provide the bench mark against which practice can be measured or be used as a model of practice to which one can aspire. As such, evidence resulting from the study of expertise can be used in the design and development of educational programs for the beginner practitioner. Moreover, the research literature has shown that novice and expert are robust concepts with differences that exist across disciplines (Benner, 1984; Berliner, 1988; Chi, Feltovich, & Glaser, 1981; Chi, Glaser, & Rees, 1982; Glaser & Chi, 1988; Peterson & Cormeaux, 1987).

The concept of expert/expertise has been pursued more vigorously than that of the novice, presumably on the assumption that if one can define an expert, then the novice is someone who does not have these characteristics or is the opposite. The results of these works have generated some consistent characteristics of expertise across studies. On the basis of an extensive review of the literature, Scanlan (1992a) identified characteristics of the expert which include: i) experts excel in their domain of knowledge, ii) experts see and represent problems in their domain at a deeper level than novices, iii) knowledge of the expert is well organized and held in patterns or schemata which can be easily and quickly retrieved for use, iv) the procedural knowledge of the expert is developed through many hours of practice in the expert's domain of knowledge, v) as the result of the way in which knowledge is stored and held by experts, some of the data emanating from a particular situation or problem are more salient, vi) although the expert may spend more

time initially examining a problem qualitatively, overall the expert is faster than the novice, and vii) experts have strong self-monitoring skills.

Typically the concepts of novice and expert have been used in one of two ways in the research - the concepts have been studied for their own interest or they have been used to define the study population in an attempt to understand practice. The impetus to study the concepts of novice/expert originated in the cognitive psychology literature. Conducted within a quantitative, information processing framework, this research has focussed on describing knowledge organization and structure in the resolution of well structured problems, for example physics (Chi et al., 1981; Chi et al., 1982) or bridge (Charness, 1979; Engle & Bukstel, 1978). In the applied literature, novices and experts have been studied in such professional groups as nursing and education. Using a qualitative approach to the study of novice and expert teachers' thinking, Berliner (Berliner, 1986; Carter et al., 1987; Carter et al., 1988; Sabers et al., 1991) and his associates' results closely parallel the findings of the cognitive psychologists. In nursing, Benner (1982, 1984; Benner & Wrubel, 1982) first used the novice/expert concepts to examine qualitatively the acquisition of nursing skills and attempted to uncover the knowledge embedded in clinical nursing practice. This landmark work has made a significant impact upon nursing, primarily because it was able to articulate a part of nursing practice that has remained hidden from view and, therefore, was not acknowledged nor recognized as being part of nursing expertise. In spite of methodological difficulties and different perspectives for study, there has been surprisingly consistent results across these studies (Scanlan, 1992a).

A more difficult issue in describing and defining the expert is disentangling the concept of expertise from experience and effectiveness. It is generally acknowledged that the development of expertise takes many years, but the fact that one practices in a particular domain for a certain amount of time does not guarantee expertise (Benner, 1984; Berliner, 1986; Seidentop & Eldar, 1989). Numerous authors (Benner, 1982, 1984; Berliner, 1987; Carter, Cushing, Sabers, Stein, & Berliner, 1988; Lampert & Clark, 1990, Seidentop & Eldar, 1989) contend that experience is a prerequisite for expertise, a necessary but not a sufficient condition. However, experience in the acquisition of expertise is not the mere passage of time. Rather experience shapes expertise be refining ideas and theories of practice, adding the shades and the nuances of the real life situation (Benner, 1982, 1983, 1984). In this experience the practitioner is self-reflective (Berliner, 1987; Prawat, 1989; Schon, 1983). As Seidentop and Eldar (1989) posit, the function of experience in the development of expertise is not so much related to what is accomplished, but in how it is accomplished.

Effectiveness is not discussed to any extent in the novice/expert literature, except as a qualifier for the selection of a novice or expert. More recently, however, some researchers have considered the potential relationships of effectiveness and expertise. Carter (1988) and her colleagues postulated that effectiveness probably is closely aligned with expertise. However, Carter (1990) cautions that the temptation to treat the characteristics of expert teacher thinking as criteria for judging teaching effectiveness is potentially hazardous. Siedentop and Eldar (1989) speculate that effectiveness like experience is a prerequisite for expertise and that effectiveness is more likely knowing

how to do, whereas expertise is knowing about. Kagan (1988) calls for a research agenda that addresses the issue of what is effective teaching and how can it be linked to student outcomes.

The quality of the novice/expert research has been well served by programmatic research in cognitive psychology, education, and nursing. The major strength of the research using the concepts of novice and expert has been the surprisingly consistent results across studies in both cognitive psychology and the applied disciplines. There are some characteristics of the expert which seem to be well substantiated in the research. However, it would be a mistake to assume that these characteristics are necessarily related to effectiveness. It would be helpful to the development of the understanding of the concepts to begin systematically testing some of these characteristics to determine their relationship, if any, to effectiveness. The literature in higher education that has focussed on effectiveness would be helpful in developing a research agenda and the approaches to study in determining the causal links between expertise and effectiveness.

Novice and expert concepts are a useful framework for the beginning work that has been done in examining the thinking of teachers and the path to expertise (Carter, 1990). Research in understanding the knowledge of nursing practice has also benefitted from use of the novice/expert concepts. The novice/expert research has helped to establish that expertise is based upon domain specific knowledge which is the result of highly specialized practice. Moreover, much of this knowledge is procedural or tacit knowledge which is difficult to explicate and articulate. Unfortunately, this makes the task of understanding the knowledge of the expert that much harder.

A continuing concern in the literature is the way in which the samples of novice and expert are defined. In the absence of well grounded criteria, Scanlan (1992a) concluded that there are no observable criteria that can be used at this time to identify novice and experts and that researchers have been forced to use highly inferential strategies to define the samples of their studies. Nonetheless, there is evidence to support the efficacy of using novice and expert participants in studies which attempt to understand practice and it is incumbent upon the researcher is to stipulate the means by which novices and experts will be selected for participation in the study.

One of the greatest difficulties in studying the novice and the expert is that the knowledge upon which practice is based is not observable and cannot be directly assessed. Therefore, indirect measures are needed in which study participants are asked to think aloud, either in the act of thinking and deciding or retrospectively (Clark, 1988). However, there are some inherent difficulties in using these approaches and they must be addressed in the research design. Even though there are methodological issues to be considered in the selection of novices and experts, the novice/expert literature supports the use of these concepts in identifying participants in the present study.

Clinical Teaching

In a comprehensive review of the research on professional educational practices, Dinham and Stritter (1986) claim that educators in the health professions have dominated the research in professional education (exclusive of Education). Although the early research tended to focus on student prerequisites and admissions, curriculum, and post graduate education, efforts over the past twenty years have expanded to include sites for

clinical practice, characteristics and teaching behaviors of clinical teachers, evaluation of student performance, instructional evaluation, and supplementary teaching strategies. The remainder of this review will focus on the literature related to clinical teaching.

The purpose of the research to date in clinical teaching has focussed on the pragmatic issue of improving teaching practices (Dinham & Stritter, 1986), with a secondary use of the findings in tenure and promotion decisions (McLeod, James, & Abrahamowicz, 1993). As a result of these foci, there has been little attention paid to the development of theory. The literature has attempted to define effective teaching practices in many of the health professions such as nursing (e.g. Jacobson, 1966; Marson, 1982; Mogan & Knox, 1983; Nehring, 1990; O'Shea & Parsons, 1979; Wong & Wong, 1978), medicine (e.g., Irby, 1978; Irby & Rakestraw, 1981; Irby, Ramsey, Gillmore, & Schaad, 1991; McLeod et al., 1993; Price & Mitchell, 1993; Stritter & Baker, 1982; Stritter, Hain, & Grimes, 1975), and others health care disciplines (e.g., Daggett, Cassie, & Collins, 1979; Evans & Massler, 1977; Myers, 1977). The findings of these studies reveal that there is consistency in those behaviors considered to be effective, for example, clarity, enthusiam, knowledge of content (practice) area. Recently, a few investigators have moved beyond the description of effective teaching behaviors in an attempt to understand clinical teaching in a more holistic way (e.g., Diekelmann, 1991, 1993a; Hedin, 1989; Irby, 1992; Paterson, 1991).

Clinical Teaching in Medicine

Perhaps the most prolific investigator in clinical teaching practices in medical schools is David Irby whose research (until 1992) is representative of the clinical teaching

research in many of the professional disciplines. Over the past fifteen years, Irby's (e.g., 1978; 1981; 1991) work has identified characteristics of effective clinical teachers in a variety of medical settings. Carried out from a positivist stance, Irby has identified characteristics of effective clinical teaching rapport (e.g., enthusiasm, interpersonal relationships with students, respecting learner autonomy) and pedagogical skills (e.g., demonstrated clinical competence, clarity, organization) as characteristics of effective clinical teaching. In these studies students were asked to rate clinical teachers using a questionnaire designed by the investigator on the basis of characteristics (found in previous investigations) deemed to be essential to effective clinical teaching as a result of previous investigations. Of note is the fact that many of these dimensions of effective teaching closely parallel the work done in higher education.

Irby's (1992, 1994) later efforts have been expanded to include a qualitative approach in an attempt to understand the instructional decision making of expert clinical teachers. Of interest to Irby (1992) were the decisions clinical teachers make with respect to what and how much to teach during a case presentation of a patient during teaching rounds to students in the clinical setting. Participants were six expert clinical teachers chosen on the basis of excellent student ratings and nomination from their immediate supervisors. Using a case study design, data were derived from semi-structured interviews, completion of a structured task, transcripts of teaching rounds, and observations of participants for one week in the clinical setting. Irby hypothesized a model of clinical teaching reasoning. The model proposes three phases i) planning (before the teaching rounds), ii) thinking interactively (monitoring their teaching through listening, and

diagnosing the patient and learner), and iii) reflecting (post-hoc thinking and evaluation of the teaching episode). Each of the clinical teachers had a unique style which permeated their teaching approaches and interactions with students. For example, one clinical teacher was directive, relying heavily on questioning and answering. As well, each of the participants in the study used preplanned scripts as a basis for their clinical teaching, altering and improvising as necessary. All of the clinical teachers shared characteristics of effective clinical teaching, for example, enthusiasm, ability to establish a climate of mutual respect, and knowledge of medicine. Of particular importance to the present study is the fact that Irby situated his conceptualization of the problem within the paradigm of teacher thinking and used expert clinical teachers as participants in his study.

Irby (1994) has extended the work from his larger study (1992) by trying to delineate the components of knowledge that effective clinical teachers of medicine need. Based on Shulman's (1987) theoretical model of teacher pedagogical content knowledge and Schmidt's et al. (1990) model of physician's knowledge, Irby developed a model of clinical teachers' knowledge. Centred at the core of this model is case based teaching surrounded by knowledge in four domains i) medicine, ii) patients, iii) learners, and iv) general principles of teaching. The model as a whole is grounded in the context in which clinical teaching occurs. Knowledge of medicine refers to the essential knowledge of medical practice and is an important determinant of what is taught. Knowledge of patients is integral to knowing when to check on the learner, verify clinical diagnosis, stimulate teaching about a particular aspect of care, and motivate the learner. Knowledge of the learner develops from clinical teaching experiences and includes understanding specific

learners, knowledge of the learners as a group, and general assumptions about the learners depending upon their level of education. Knowledge of general principles of teaching includes actively involving the learner, capturing the learner's attention and having fun, connecting the case to broader concepts, using the patient to illustrate a theoretical concept, meeting individual student needs, being practical and relevant, being selective and realistic, providing feedback and evaluation, and other principles of teaching, for example, repetition and role modelling. Finally, the context in which clinical teaching occurs impacts upon the teaching enterprise. Factors within the context include the patient population, social context of the patient, historical context of therapeutic practices, and the context for encountering the patient's story. This study is helpful as it begins to disentangle and explicate the knowledge necessary for effective clinical teaching, an area of research that has not been addressed in clinical teaching.

Dunn and Taylor (1995) also have tried to determine physician pedagogical content knowledge. Six expert physician clinical teachers were videotaped interviewing and examining a standardized patient situation (Phase I). During the viewing of the videotape, the tape was stopped every two minutes and the participants were asked what they were thinking at that moment. At the end of the viewing participants were asked to identify any aspects of the case that would have teaching/learning significance. Several weeks later they viewed a third year medical student examining the same patient (Phase II). During the viewing, participants were asked to stop the tape if they noticed a "teachable moment". Following the viewing, the participants were asked to summarize what s/he thought were the important teaching/learning issues. During Phase I participants

did not raise many teaching/learning issues. However, what emerged from the data was the identification of knowledge learned from experience and hierarchical organization of knowledge using a chunking strategy to keep track of information. In Phase II, participants were often unaware of the automatic application of their experiential knowledge. The ability to use knowledge in this manner was related to their ability to recognize patterns in the situation or invoke routines which expedited the process. Although this work is preliminary, it holds promise as a research strategy for assisting clinical teachers to access their tacit knowledge regarding clinical teaching.

While the preponderance of research in clinical teaching in medicine follows the predominant process-product tradition of research in teaching, a few recent efforts have begun to explore the practical knowledge of clinical teaching. The research in medical clinical teaching explores meaningful aspects of clinical teaching and provides thought for other avenues to pursue in nursing.

Clinical Teaching in Nursing

The literature in clinical teaching in nursing has developed primarily around several issues: i) effective clinical teaching behaviors, ii) the process and nature of clinical teaching, iii) models of clinical teaching, and iv) evaluation of clinical teaching effectiveness. The majority of the literature in clinical teaching in nursing is grounded in the process-product approach to research in teaching in higher education. Qualitative research studies (Carr, 1983; Diekelmann, 1989, 1990a, 1991, 1992, 1993a; Glass, 1971; Pugh, 1980; Rosenthal, 1987) have examined the process of clinical teaching, primarily from the perspective of clinical teachers, as well as the development of models of

effective clinical teaching (e.g., Infante, et al., Paterson, 1991). The early studies (until 1988) were helpful in beginning to understand the process of clinical teaching. For example, Glass (1971) described the unique position of clinical teachers as "guests in the house" and its impact on teaching practices, Pugh (1980) described the context of clinical teaching from the perspective of the clinical teacher, and Carr (1983) described how clinical teachers structure learning experiences for nursing students. Hedin (1989) has attempted to describe the characteristics of expert clinical teachers and in another study Paterson (1994) has tried to understand the beliefs of clinical teachers as they relate to theoretical knowledge and value claims. As the research related to evaluation of effective clinical teaching is tangential to the present study, this work will not be included in the review of the literature.

Effective Clinical Teaching Behaviors. These studies address the question of effective clinical teaching, from the perspective of the student (Jacobson, 1966; Kiker, 1973; Mogan & Knox, 1983; Pugh, 1988; Rauen, 1974; Wong, 1978) or the clinical teacher and the student (Barham, 1965; Bergman & Gaitskill, 1990; Brown, 1981; Knox & Mogan, 1985; Marson, 1982; Mogan & Warbinek, 1994; Mogan & Knox, 1987; Nehring, 1990; Pugh, 1980; Sieh & Bell, 1994; Sellick & Kanitsaki, 1991; Stuebbe, 1980; Wang & Blumberg, 1983). With the exception of two studies which used an observational approach (Mogan & Warbinek, 1994; Wang and Blumberg, 1983), the studies of effective clinical teaching behaviors asked participants to respond to items on a questionnaire which listed effective clinical teaching behaviors as identified in the literature. Despite variations in methodology, there are some consistent findings which could be grouped

around the concepts of rapport (availability to students, interpersonal relations, personal characteristics) and pedagogical skills (teaching/evaluation practices and clinical competence) and are similar to findings in other areas of research in effective clinical teaching (e.g., higher education, other health disciplines). With few exceptions the majority of these studies are isolated efforts and there has been little systematic building of knowledge. Moreover, the results cannot be generalized due to methodological issues such as sample size and sampling procedures.

Barham (1965) published the first study of clinical teaching. Using the critical incident technique, she identified nineteen effective teaching behaviors as reported by faculty and students. Jacobson (1966) also used the critical incident technique to identify effective and ineffective teaching behaviors. She was able to group her findings into six broad categories i) availability to students, ii) apparent general knowledge and professional competence, iii) interpersonal relations with students, iv) teaching practices in the classroom and clinical areas, v) personal characteristics, and vi) evaluation practices. The work of these two researchers has been the basis for the majority of the subsequent work in identifying the characteristics of effective clinical teaching in nursing.

The work by Mogan and her colleagues (Knox & Mogan, 1985; Mogan & Knox, 1983, 1987; Mogan & Warbinek, 1994) represents one of the few sustained research efforts in the development of an understanding of effective clinical teaching. A 48-item survey instrument (Nursing Clinical Teacher Effectiveness Inventory - NCTEI) was developed by Knox and Mogan (1985) based on the data from their 1983 study. The authors found the instrument was reliable (r=0.76-0.93), internally consistent (alpha=0.79-

0.92), and was considered to have content and face validity. The investigators compared the importance of five categories of clinical teaching behaviors as perceived by nursing faculty (n-49), students (n-393), and practicing baccaluareate graduates (n-45). The five categories included i) teaching ability, ii) nursing competence, ii) personality, iv) evaluation, and v) interpersonal relationships. Results indicated that faculty and students had similar understanding with respect to specific characteristics of the most effective clinical teaching behaviors and less congruence when considering characteristics of the least effective clinical teachers. Behaviors related to evaluation skills were ranked highest followed by interpersonal relationships. The authors speculated that the results may have been related to the high levels of anxiety experienced by students in the clinical area.

In a follow up study (Mogan & Knox, 1987), 28 clinical teachers and 173 undergraduate students from seven schools of nursing volunteered to participate in the research. Participants were asked to think about their "best" and "worst" clinical teachers and rate them using the NCTEI. Both faculty and students perceived the best clinical teachers as those who were good role models and enjoyed nursing and clinical teaching. In addition, the best clinical teachers were well prepared for clinical teaching and self-confident, skilled clinicians who took responsibility for their own actions. Differences occurred in that faculty believed good clinical teachers demonstrated a breadth of nursing knowledge who could explain clearly and stimulate students' interest, whereas, students believed demonstrating enthusiasm, promoting student independence, and correcting students without belittling them were essential characteristics of good clinical teachers. Two of the most discriminating characteristics were from the nursing competence

category (pedagogical skills) followed by two items from the interpersonal skills category (rapport). The highest ranking of clinical teachers differed from Mogan and Knox's 1985 study. Possible reasons for this may be related to the different sample which was recruited from a broader population base.

More recently, Mogan and Warbinek (1994) constructed an observation instrument consisting of low inference clinical teaching behaviors (Observations of Nursing Teachers in Clinical Settings - ONTICS). Prior to pilot testing the instrument, refinement of the tool was carried out on the basis of input from expert judges (nursing education experts and a research associate). Reliability and validity were within acceptable limits for a new instrument. In a pilot study, 36 clinical teachers were observed twice in the clinical area for approximately 30 minutes. To test the criterion validity of ONTICS, the clinical teachers and their students completed the NCTEI. Teaching behaviors considered essential to effective clinical teaching were grouped into nine "conceptually derived categories" i) questioning method, ii) responding style, iii) method of giving feedback, iv) teaching skill, v) method of demonstration, vi) interaction with patient/family, vii) interactions with health team, viii) undesirable teaching behavior, and ix) undesirable questioning/ responding. There was a low correlation between ONTICS and NCTEI. The authors speculate that these results may be related to the fact that each tool examines different dimensions of effective clinical teaching or that different methodologies were used in data gathering. Although the behaviors for each category are listed, there are no descriptions of what a particular behavior might be like when carried out by the clinical teacher, for example, prompts student. Therefore, it is difficult to know exactly what the clinical

teacher does when s/he is prompting the student. Moreover, there is no description of the thinking or knowledge which the clinical teacher uses to prompt the students.

Nehring (1990) extended the work of Mogan and Knox by replicating their 1987 study. Sixty-three undergraduate nursing faculty and 121 undergraduate students completed the NCTEI. Results suggested that the highest rated characteristics of effective clinical teachers were similar amongst both groups. The four highest ranked behaviors of the best clinical teachers were those clinical teachers who were good role models, enjoyed nursing, enjoyed teaching, and took responsibility for their own actions. Three of the four characteristics were related to nursing competence. Faculty and students agreed that the characteristics which distinguished the "best" clinical teachers from the "worst" clinical teachers were those who were good role models, encouraged mutual respect, and provided the student with support and encouragement. While the four highest ranked clinical teaching behaviors relate to the pedagogical skills domain, two of the three distinguishing characteristics relate to the interpersonal relationship category.

In a study of American students in associate degree programs (two year community college nursing programs), Sieh and Bell (1994) used the NCTEI to ascertain the perceptions of 199 students and 22 faculty. All items were rated highly by both groups of respondents with no statistical difference in students' and faculty's perceptions of important attributes of effective clinical teachers. Results of the study were similar to the earlier work using the NCTEI, although there were some minor differences in the relative rank of a particular item. For example, role modelling was a critical characteristic in Mogan and Knox's (1987) study, whereas, students gave less importance to it in this

study. However, similarities between the findings of this study and those conducted in baccalaureate programs suggest that there are behaviors across both groups which are perceived as important to effective clinical teaching.

Benor and Leviyof (1995) studied students' perceptions of effective clinical teachers. One hundred and twenty-three students from three different nursing programs in Israel completed a modified version of the NCTEI questionnaire (only 27 positive questions were included). Respondents were asked to identify and rank order the five characteristics of clinical teaching which they believed imperative to effective clinical teaching. In addition, the participants also had to grade the most ineffective clinical teacher whom they had experienced on the same characteristics which they had ranked as most important to effective clinical teaching. A profile of the ideal clinical teacher was developed by weighting the five highest rank ordered behaviors using the five categories suggested by Mogan and Knox (1985). Finally, profiles of the best and worst clinical teachers were developed. Results from this study revealed that nursing competency behaviors were deemed the most important attributes of effective clinical teachers succeeded by evaluation procedures; instructional skills, interpersonal characteristics, and personality traits followed respectively. Although these results are similar to those of Nehring (1990), they are different from those of Mogan and Knox (1985, 1987). Lack of clarity in the results may be related to the differences in the study populations (i.e., varying levels of students have been used) and differences in the instrument.

While there seems to be some consensus forming around the behaviors which indicate effective clinical teaching, the relative importance of each category is

questionable and there are limited accompanying descriptions regarding what the clinical teacher does or thinks as s/he enacts these effective clinical teaching behaviors. Although both NCTEI and ONTICS may tap some dimensions of effective clinical teaching, because of the episodic nature of the research and lack of systematic instrument development (such as that in higher education), the research remains at the exploratory descriptive level. Moreover, the research is based on the assumption that all the relevant effective clinical teaching behaviors have been identified and are incorporated within the instruments.

In addition to the more general question of effective clinical teaching, Wiseman (1994) investigated the role modelling behaviors (a subset of the nursing competence category) of clinical teachers in the clinical setting which were perceived to be important by undergraduate nursing students in Years II and III of their nursing program. A questionnaire was developed using a list of 39 role modelling behaviors as identified in the literature and through personal experience. An expert panel (undergraduate clinical teachers from nationally recognized nursing programs) determined the relevance of the behaviors generated with an interrater reliability of alpha=.91. The final questionnaire contained 28 role modelling behaviors. Two hundred and eight students responded to the questionnaire indicating their perception of the importance and frequency of practice of the role modelling behaviors. In Section 1 (role modelling behaviors attended to in the clinical setting), items were rated above 4.0 (important); in Section 2 (role modelling behaviors practiced in the clinical setting), ratings ranged from 3.5 (sometimes practiced) to 4.85 (frequently practiced); and in Section 3 (role modelling behaviors rewarded for

practicing), ratings were in the 3.00 (sometimes rewarded) range. The author concludes that students view faculty as role models in the clinical setting and that faculty should be aware of their role modelling behaviors. While the identification of role modelling behaviors is an important contribution to the literature, it would be helpful to the theoretical development of effective clinical teaching to conceptually review the role modelling behaviors described in order to ascertain how they might fit with the existing literature related to effective clinical teaching. For example, "interacts with physicians in a confident manner" likely could be subsumed under the category of interpersonal relationships as identified in the NCTEI. A qualitative study of the role modelling behaviors of clinical teachers may reveal a category not yet identified in the literature. Furthermore, the thinking and knowledge that underpins the role modelling behavior of the clinical teacher is not considered as an essential component in the overall understanding of how role modelling relates to effective clinical teaching.

The only study which attempts to link clinical teaching effectiveness with student outcomes was conducted by Krichbaum (1994). Using research from higher education, as well as other health disciplines, Krichbaum adapted a model that had been empirically tested to describe factors influencing effective clinical teaching. Presage variables (e.g., clinical teacher's personal experiences), process variables (e.g., activation of established routines), and product variables (e.g., nursing students' responses) were included in the model. Only the process variables (which reflected the planned routines and actions of the clinical teachers) were included in this study. The instructional activities included i) organization, preparation, and setting of expectations, ii) asking questions, iii) answering

questions, iv) facilitating discussion, v) explaining, vi) feedback, vii) role modelling, and viii) attitudes of clinical teacher.

Thirty-six pairs of preceptors (clinical teachers) and students in a critical care practicum rated the effectiveness of the clinical teacher on the basis of descriptions of the eight clinical teaching behaviors. Two parallel instruments were used (coefficient alpha ranged from .9214 to .9341 on the instruments). Student gains were correlated to scores of both students' and clinical teachers' ratings of each measure of effective clinical teaching behaviors. Significant relationships were found between student learning and specific clinical teaching behaviors including i) use of objectives, ii) providing opportunities to practice, iii) asking effective questions, iv) providing effective and timely feedback, v) providing students with evidence as a basis for feedback, and vi) displaying enthusiasm for teaching and the students' progress. Moreover, specific performance and knowledge outcomes correlated with different clinical teaching behaviors, that is, some clinical teaching behaviors were more important to cognitive gains, whereas, others were more important to changes in clinical practice.

Although Krichbaum did not test all aspects of the model, it included variables associated with clinical teaching in nursing that heretofore had not been considered in this body of research, namely the personal and professional experiences of the clinical teacher, characteristics of the class (learners), external factors, such as policies and instructional materials, development of clinical teacher routines, clinical teacher's planning, knowledge and beliefs of clinical teachers regarding clinical teaching, reflection by the clinical teacher, and clinical teachers' perceptions of effects of their actions. In addition to the

description of the instructional activities and their relationship to effective clinical teaching, the variables that Krichbaum did not test are of interest to the present study.

The Process and Nature of Clinical Teaching. Diekelmann's research (1989, 1990a, 1991, 1992, 1993a, 1994) has been particularly beneficial as she has engaged in a sustained program of research with an emphasis on teaching in nursing. In her research, Diekelmann has used hermeneutic interpretive inquiry to understand the "lived experiences" of teachers in nursing. In this way, Diekelmann has begun to uncover the invisible practices of nurse teachers in much the same way as Benner (1984) uncovered the work of nurse practitioners. For example, Diekelmann (1991) describes a part of teaching practice as "knowing the student". As an accepted part of practice, one which is seldom acknowledged or thought about, Diekelmann contends that teachers do not see the importance of this aspect of their practice, nor know how to "get at it" in order that they may use it in a conscious way with students. On the basis of her research, Diekelmann (1990b) contends that teachers in nursing do not teach as teachers teach. Rather teaching practices in nursing are embedded in their practice as nurses.

Diekelmann (1991, 1993b) calls for nurse educators to recognize the "invisible" practices of teaching expertise in order to come to a shared understanding of what teaching in nursing is all about. She asserts that nurse educators must move from a behavioral model of nursing education which focusses on outcomes and evaluation to a model that is centred on the experiences of the teacher and learners. In a study with 21 teachers and 21 students, Diekelmann (1993a) identifies a constituitive pattern (one which expresses the relationship between themes in heurmeneutical analysis), "Learning-as-

Cognitive-Gain". The study participants discussed the emphasis in their nursing education experiences on ensuring that the content of the nursing curriculum was learned "efficiently and effectively". As a result, teachers felt compelled to continually add content to their courses and learning was merely the acquisition of knowledge. Clinical practice for students was focussed on finding experiences for students in which they could apply their classroom knowledge. The pivotal role of experience in the development of nursing expertise was ignored. Diekelmann contends that these experiences of nurse teachers can be revealed by sharing the stories of one's experiences with students and in that way the thinking of nursing practice will be revealed.

In her ongoing study of the practice of teaching in nursing, Diekelmann (1994) has identified six "Concernful Practices of Teaching and Learning", including i) Gathering: Welcoming and Calling Forth (how teachers and students learn about one another), ii) Staying: Knowing and Connecting (what teachers know about students), iii) Presencing: Attending and Being Open (understanding the students' perspective), iv) Creating Places: Keeping Open a Future of Possibilities (making it safe to learn), v) Safeguarding: Reading, Thinking, Writing, and Dialogue (sharing stories), and vi) Caring: Engendering Community (caring for one another). Diekelmann acknowledges that these practices are not discrete categories, rather they overlap and occur together. While this work is preliminary, Diekelmann has described teaching in nursing in a way that is markedly different from the rest of the nursing education literature.

Morgan (1991) investigated the clinical teaching activities of nine clinical teachers. Using a qualitative design, Morgan used a semi-structured interview format to ascertain

the participant's beliefs about clinical teaching with respect to the teaching activities they used while working with students in the clinical setting. Clinical teaching was described in terms of their intentions, expectations of students, students' outcomes, the learning environment in the clinical setting, and "usual" activities. These usual activities were those which at least 33% of the participants identified and were role modelling and demonstration/return demonstration. This study is helpful as it supports the study of clinical teaching from the qualitative paradigm. However, the description of clinical teaching activities is sparse and does not include the knowledge which underlies its efficacy for the clinical teachers.

Models of Clinical Teaching. Two studies have attempted to develop a model of clinical teaching. Infante and her colleagues (1989) tested a clinical teaching model in which faculty acted in a consultative capacity using agency personnel as resource persons and preceptors in an attempt to maximize student independence in practice. The efficacy of the model was tested by linking student outcomes to teaching practices. Infante also describe this model as an alternative approach to clinical teaching. This is a more accurate delineation of what has been developed as what Infante reports does not meet criteria for model description.

In a comprehensive ethnographic study of six clinical teachers, Paterson (1991) developed a descriptive model of clinical teaching. The Crystallization Model of Clinical Teaching purports that clinical teaching is a dynamic process influenced by mediating variables (past experiences, history, and setting) in which the essence of clinical teaching is the transmission of practice. Fundamental to this model is the assumption that each

clinical teacher has his/her own unique perspective of clinical teaching. According to Paterson, this perspective is based on the sum of the clinical teacher's beliefs and values concerning clinical teaching and represents what the clinical teacher intends to do in working with students in the clinical setting. However, the clinical teacher's ability to behave consistent with his/her beliefs is mediated by the context in which s/he practices with students. In the transmission of practice the clinical teacher enacts a number of rituals (clinical teaching practices) based on his/her experiences. When the situation does not achieve the usual result, the clinical teacher searches for explanations in order to understand the situation. This reflection often results in development of new and different strategies for working with students in the clinical area.

The Crystallized Model of Clinical Teaching suggests that clinical teachers develop a plan to assist students in nursing practice. As part of that plan, they form "crystallized" assessments of nursing students which they use to construct a developmental plan on which they base their clinical teaching approaches. In this assessment, the clinical teachers make a decision whether the student will or will not be successful in the clinical area. As a consequence, the plans for the students are either to assist him/her to be successful or to "extinguish" the student in the clinical area. Although Paterson explicates clinical teaching in a way that has not been described before in the literature, there has been no further testing of the model to determine its efficacy and applicability in other nursing education settings.

Characteristics of Expert Clinical Teachers. In an effort directed at explaining the practices of expert clinical teachers in nursing, Hedin (1989) conducted a pilot study

which explored expert practice in clinical teaching. She interviewed "several" expert clinical teachers (experts as identified by chairs and deans of nursing education programs). She identified six general categories which emerged from the interview data: i) knowledge of self, ii) shares self as a human being, iii) reflective of clinical and teaching practices, iv) characteristics of faculty (e.g., humour, empathy, honesty, openness), v) attitudes towards students, and vi) clinical expertise. With the exception of the last category, the categories identified would be part of the dimension of rapport as reported in the literature on effective teaching. Clinical expertise in the professions seems to be consistently identified as contributing to effective clinical teaching and could be viewed as analogous to content knowledge, a part of the pedagogical skills dimension of effective clinical teaching. While the results of Hedin's study are preliminary and her methodology as reported is unclear, her work is important because, like Diekelmann's research, it begins to describe clinical teaching from the experiences of clinical teachers.

Perspective of Clinical Teaching. Only Paterson (1994) has attempted to examine an aspect of the thinking of clinical teachers. As part of a larger study, Paterson used observation, interviews, and concept mapping to determine the theoretical knowledge and value claims of six clinical teachers. She ascertained that all participants in the study shared some central beliefs about clinical teaching, that is, clinical teaching is an integral part of nursing education and clinical teachers positively affect student outcomes. However, clinical teachers differed in their predominant perspective of clinical teaching. Clinical teachers were described as ascribing predominantly to one of the following perspectives i) ability-evaluative, ii) moral responsibility, iii) task mastery, and iv)

professional-identity mentoring. Paterson postulates that new clinical teachers are largely ability-evaluative, while the other three perspectives evolve depending upon the knowledge and value claims which are most salient to the individual clinical teacher. Paterson concludes that varying perspectives of clinical teachers will result in different teaching behaviors which, in turn, will influence how students learn in the clinical area. She also acknowledges that whether a particular perspective of the clinical teacher is more appropriate in one situation than another or with different types of students needs further investigation. Although Paterson comments on the importance of the relationship of each perspective to the development of clinical teaching expertise, on the basis of the participants in her study she is unable to deduce the relevance of these perspectives to the development of clinical teaching expertise.

Learning Clinical Teaching

There is only one study in the nursing education literature which addresses the issue of the transition from a practicing nurse to a nurse educator (Davis, Dearman, Schwab, & Kitchen, 1992). Davis and her colleagues surveyed 427 novice nurse educators to ascertain their perceptions of the preparation of nurses for the role of a faculty member, the extent to which they could demonstrate those competencies, and the mechanisms through which the competencies were learned. Respondents agreed with global competencies statements of the nurse faculty job expectations. Of these competencies only two were perceived by participants as an activity which they could preform well. The investigators found that 63% of the study participants reported having some formal preparation for the faculty role. Novice faculty ordered the following activities in order

of importance i) informal learning activities, ii) experiential learning, iii) mentorship relationships, iv) continuing education, and v) formal academic preparation. What is not clear is how informal learning and experiential learning are different, how the experiences or what experiences were important to the development of their abilities as a faculty member, or specifically the development of clinical teaching practices.

Summary of Research in Clinical Teaching in Nursing

Scholars in nursing education (e.g., Lindeman, 1989; Pugh, 1983; Tanner & Lindeman, 1987) have recognized for some time the need for research in clinical teaching. However, the body of knowledge is limited due to several factors. Generally studies in clinical teaching in nursing are descriptive and have used a survey or interview method of data collection. There is little consistency in the use of a standard instrument by which effective clinical teaching is examined. While these studies have identified reasonably consistent behaviors in clinical teaching, there has been only one attempt to link effective teaching to student outcomes. There has been little systematic building of knowledge and few identifiable sustained efforts by any one investigator or groups of investigators. As a result there has been little theory building which could inform clinical teaching practices in nursing. Moreover, Hedin (1989) cautions against the reliance on "manufacturing lists of behaviors to be imitated in an instrumental means/end rationale" (p. 80). She contends that critical aspects of expert clinical teaching such as self-knowledge and reflection on one's practice are not discovered through research methodologies which focus only in student-teacher interactions. Although the expert clinical teacher has been studied recently (e.g,, Diekelmann 1990b, Hedin, 1989), there have been no studies which specifically

identify and include the novice clinical teacher. In addition, the question of the conceptualization and thinking of clinical teachers as a basis for understanding effective clinical teaching practices has not been raised at all. A study that attempts to explicate the thinking of clinical teachers is timely and will add to and illuminate the understanding of effective clinical teaching.

Summary

This review has highlighted the general research in education and teacher thinking to provide a broad conceptualization of teaching research in which to situate the present study. Effective teaching as it has been studied in higher education is considered in terms of the identification of effective teaching behaviors as they might relate to the study of effective clinical teaching. The concepts of novice and expert have been explored as they are germane to the selection of the participants. Finally, the literature in clinical teaching has been considered as it has been studied in other professional disciplines and specifically in nursing. It is evident from this review that clinical teaching has been studied primarily in the quantitative paradigm from the perspective of effective teaching behaviors as identified by students and/or teachers. Although there has been some recent work in trying to uncover the lived experiences of clinical teaching from a qualitative perspective, there has been no work that considers the question that was the focus of this study.

CHAPTER THREE

THE RESEARCH DESIGN

Based on the social psychological framework of social interactionism, this exploratory, descriptive, study examined the thinking of novice and expert clinical teachers. A qualitative approach to the investigation was selected because the phenomenon of interest, conceptualization of effective clinical teaching, is grounded in the narrative descriptions of those best able to describe it, clinical teachers (Dreher, 1994). Participants' meanings and values arising out of their experiences were explored in order to understand how they conceptualized effective clinical teaching. This chapter describes the sample, data collection procedures, data analysis, ethical considerations, and limitations of the study.

Sample

A purposive sample of five novice and five expert clinical teachers was used. Selection of a purposive sample was in keeping with the goals of the study in that the thinking and knowledge of clinical teaching of these particular participants were integral to the research. The underlying assumption for this sampling strategy was that the group would provide the most comprehensive understanding of the phenomenon of clinical teaching (Babbie, 1979; Skodal Wilson, 1989). The participants were selected on the basis of their knowledge of and experience in clinical teaching.

Five novice and five expert clinical teachers were recruited for the study. The literature did not give clear indications for the selection of either novices or experts. Following an in-depth review of the literature, Scanlan (1992a) determined that there are

no observable criteria that can be used to identify novices and experts. On the basis of this review, she concluded that it is difficult to identify a "true" novice. The studies reviewed used novices who had at least a familiarity with the practice domain, extending from an introductory level course to up to two years of practice following graduation from a professional program. Therefore, for the purposes of this study, novices were clinical teachers who had taught students in nursing practice for two years or less. It may be argued that some clinical teachers with up to two years of clinical teaching may be beyond the level of the novice and at the level of an advanced beginner (using the levels of expertise, i.e., novice, advanced beginner, competent, proficient, and expert developed by Dreyfus & Dreyfus, 1986). However, the advanced beginner is still in the early stages of the development of expertise and the differences between the advanced beginner and the expert are great enough to justify using the advanced beginner.

Identification of the expert was fraught with difficulty. Other than nomination by supervisors and sometimes peers, there are no clear directions in the literature for the selection of experts. Participants who were known to "be the best" and thought to be experts in their own culture were referred to researchers in both the education and nursing literature. Although there is agreement that expertise develops over a long period of time, there is no evidence to suggest the length of time that is required, even as a minimum (Scanlan, 1992a). Experts included in this study were those clinical teachers who were nominated by their Directors of Nursing as those clinical teachers with at least five years of experience and who were known to "be the best". Given the difficulty in defining and

describing expertise and in the absence of clear criteria to identify such expertise, inferential strategies can justifiably be employed to identify expert clinical teachers.

The Directors of the Schools of Nursing and the Dean, Faculty of Nursing in the city of Winnipeg, an urban city in western Canada, were contacted by letter to request access to the study participants (see Appendix A). Clinical teachers in both diploma and baccalaureate programs were included on the assumption that the focus of the study was on the thinking of novice and expert clinical teachers, rather than the differences between different types of educational programs. These nursing education administrators were asked to nominate clinical teachers whom they believed fit the criteria of novice and expert clinical teachers. A description of the criteria for the selection of study participants accompanied the letter requesting access (see Appendix B). One administrator commented on how helpful the directions for selecting the experts were. In particular, the question which asked the administrator to consider the potential participants in light of a desire to have him/her teach one's own child made the decision of which clinical teachers to designate as expert easier. Nominations were returned directly to the researcher. Potential participants who fulfilled the criteria for the novice and expert categories were contacted by the researcher. A written description of the study (see Appendix C) was sent to potential participants outlining the purpose of the study, the identification of study participants, methods of data collection, anticipated length of time required for participants, and ethical considerations. The researcher followed the letter with a telephone call. A date and time for the first interview was be set with participants who

agreed to participate. Study participants signed a consent form (see Appendix D) at the time of the first interview.

Approaches to Data Collection

According to Clark and Peterson (1986), the researcher who is interested in studying teacher thinking must deal with significant technical, methodological, and epistemological challenges. Because teachers' thought processes are not observable, the researcher must rely on various self-report measures. The researcher must attend to issues of elicitation and interpretation of valid and reliable self-report measures of cognitive processes. A pilot study with two participants was conducted to ascertain the efficacy of the research protocol. In the pilot, participant observation, interviewing, participants' journalling, and concept maps were tested. On the basis of the data from the pilot, it was concluded that participant observation was not particularly helpful in eliciting the thinking of clinical teachers.

The primary method of data collection was interviewing supplemented by journals and concept mapping. In order to ensure that the dimensions of symbolic interactionism were attended to in the process of data collection, the researcher constructed a grid (see Appendix E) to demonstrate the relationship between the assumptions of symbolic interactionism, the research questions, and the interview guide (see Appendix F).

Interviews. Interviewing as a research tool is a powerful way to gain insight into a phenomenon through understanding the experience of the participants (Seidman, 1991). All participants were interviewed three times. The first two interviews used the questionnaire as a basis for discussion, while the third interview validated the concept

map developed on the basis of the data analysis. Each interview lasted approximately one to one and a half hours. Consideration of the length of the interview was important in terms of respecting the energy level of both the researcher and the participant and allowing time for the participant to reconstruct the experiences and reflect on their meaning (Seidman, 1991). The initial two interviews were conducted over a two and one half month period. The average time between interviews was about two weeks, although some interviews were one week or less apart, while others were up to four weeks apart. Differences in time between interviews were related to the time constraints of the participants. All interviews were audio recorded and transcribed following the interviews.

An open ended questionnaire (see Appendix F) was used to facilitate discussion during the first two interviews. The questions for the interview guide were developed on the basis of the conceptual framework and the research questions (see Appendix E). However, in keeping with the tenets of qualitative research, these questions served as a guide only, allowing the researcher to pursue the data as they emerged from the interviews. In order to obtain perceptions, thoughts, values, and beliefs of the study participants, an open-ended approach to the interview process was necessary as the researcher elicited data through the eyes of the participant.

A challenge in the interview process is maintaining a balance between ensuring consistency in the data collected and flexibility in pursuing the data as the participants' stories unfold (May, 1989). Following the first interview with each participant, the researcher recorded the issues discussed and consulted the interview guide to ascertain the general areas for discussion for the second interview. This ensured that the issues

identified as important to effective clinical teaching were discussed by each participant. Nonetheless, the researcher was flexible in how and when the questions were asked, following the participants' thinking as they discussed clinical teaching.

The initial interview began with an elicitation of general demographic information about the participants. The researcher commenced the first interview with a broad, open ended question such as, "Tell me what you do as a clinical teacher" or "Can you tell me about how you learned about clinical teaching?" As the participants discussed their experiences, probes were used to focus on the description of events or ask for further clarification and explanation, for example, "Can you tell me a little more about . . . ?" or "I'm curious because you used the word caring quite a bit. I was wondering how you see that as part of your clinical teaching?" In the second interview the researcher began by talking about one of the areas discussed in the previous interview that had stimulated some questions about the participants' clinical teaching practices.

Interviews were scheduled at a time and place convenient to both the participant and the researcher. Participants were given a choice of settings for the interviews i) their workplace, ii) the researcher's workplace, iii) the researcher's home, or iv) the participant's home. The majority of the participants chose to be interviewed in the home of the researcher. Three participants were interviewed at their place of work and one participant in her home. One interview was conducted in the researcher's work office. Interviewing in the home was advantageous because the setting for the interview could control for privacy and interruptions due to students or telephone calls.

Participant Journals. Participants were asked to keep a reflective journal in which they recorded their thoughts, feelings, values, and beliefs about their clinical teaching practices. Specific instructions included:

1. Write your thoughts and feelings following clinical teaching. Is there something that happened that stands out in your mind? Describe it. What did you do as a teacher? What do you think now reflecting on it?
2. What do you think effective clinical teaching is?
3. Write anything that comes to mind after an interview with me.
4. Include anything else that you think about clinical teaching.

Each participants kept a journal for a two week period of time. The literature did not provide any clear direction regarding the amount of time that a participant should record in a journal in order to capture their thinking. On the basis of the pilot conducted by the researcher, it was believed that two weeks was adequate for the participants to capture the essence of their thinking about clinical teaching without them tiring of the task.

Participants were diligent about completing their journals for the researcher. While some journals were more descriptive than others, all journals revealed participants' thinking regarding effective clinical teaching. The journals were particularly useful in validating a perspective that had emerged from the interview transcripts. For some novices, the journalling was helpful in clarifying their thinking about effective clinical teaching.

Concept Mapping. Concept mapping has been used recently in the literature on teacher thinking as a strategy to tap knowledge stored in long term memory and is a valuable technique for explicating, in a concrete manner, the organization of concepts around a central idea. The concept maps provided a visual means by which the researcher and the study participants could reflect on abstract memory structures (Scanlan, 1992b). Typically, studies using concept mapping use it as a data collection tool (e.g., Beyerbach, 1988; Powell, 1991). However, the concept maps were developed on the basis of the data analysis. Therefore, concept mapping was considered as both a data collection strategy, as well as a strategy for data analysis.

Following coding of the data, the researcher constructed a concept map for each of the study participants and validated it with the participant to ensure that the map reflected the participant's conceptualization of effective clinical teaching. Tochon (personal communication, January 7, 1991) advised that the researcher, rather than the study participant, construct the concept map and then validate it with the participant. In the development of the concept maps, the researcher reviewed each transcript for the participants, identifying data which related to each of the study themes and categories. Once the data were organized, the concept maps were constructed using the specific data from each participant (see Appendix H). The formulation of the concept maps was a helpful exercise in clarifying and refining the thinking of the researcher with respect to the emerging categories.

Subsequent to the construction of the concept map, the researcher interviewed each participant a third time to validate the concept map. The researcher offered to give the

concept map to the participants so that they could have some time to think about the validity of what was presented. However, no participant felt that was necessary. During the validation interview, the researcher sought clarification regarding concepts which were unclear. She was able to explain the categories to the participants, clarifying for them how she had developed the concept map, grounding it in the data from their interviews. In the validation interview, with minor exceptions, the participants stated that the concept map reflected their thinking about clinical teaching.

There was a lapse of eight to twelve months from the time of the primary data collection to the interview to validate the concept map. The transcriptions of the interviews, the initial data analysis, and the construction of the concept maps required a longer time than was originally anticipated. Experts were confident about the contents of the concept map, believing that the researcher had captured the "crux" of their clinical teaching. Novices, however, were surprised about the contents of the concept map. In the interval between the initial interviews and the concept map interview, some of their thinking had changed. Nonetheless, novices reiterated that the concept map reflected their thinking at the time of the original interviews.

> *You know I was sort of wondering if I would be able to remember it. Yeh I think that most of it, I'm trying to think if there's anything else. I'm kind of almost surprised that you got this much off that (interviews) because you know you forget what you say. You know when you go to read it afterwards and it starts to make sense. (Novice 01)*

Procedures for Data Analysis

Once the data were transcribed, they were reviewed by the researcher in conjunction with the audio tapes. Weber (1986) claims that transcripts of interviews may

rob the data of their power, clarity, and depth. The researcher listened to the tapes while reading the transcripts enabling her to fill in important gaps in the transcripts, correct errors, and pick up on nuances in the participants' responses which were not transcribed, for example, pauses and voice inflection. Furthermore, listening to the tapes allowed the researcher to examine her interviewing style, ensuring that she was focussing on the participant's construction of clinical teaching, and guarding against leading the participant in the interviews.

Content analysis was the strategy employed to analyze the data. As the researcher read the transcripts, she used open coding to identify categories as they evolved from the data. In addition the process of the development and validation of the concept maps enabled the researcher to clarify, develop, and add depth to the categories. Initially, these categories were broad, for example, effective clinical teaching. However, as the analysis progressed, the subtleties of the categories became more apparent and the specific categories and sub-categories emerged. Data were examined by the researcher who coded them by giving them names indicating the types of behavior or situations which they represented. For example, Effective Clinical Teaching initially represented everything that clinical teachers described related to what they did with students. Upon further reading, categories related to, for example, evaluating practices and developing students' assignments emerged. In turn, as these categories became clearer, discrete sub-categories were identified, such as how clinical teachers gather data on students.

After the interview transcripts had been read several times and the emerging categories were becoming more evident, the transcripts from the first two interviews were

loaded into a qualitative software program called NUD.IST (Non-numerical Unstructured Data. Indexing Searching Theorizing). The texts from the journals and the validation interviews were used to verify and validate the findings from the primary interviews with the participants. A relatively new qualitative data analysis program, NUD.IST is user friendly, working in a windows environment. NUD.IST required the researcher to design an index system in which categories and sub-categories of clinical teaching were organized. Each category or sub-category was given a name, definition, and number as well as a location (node) in a tree structured index system. The nodes enabled the researcher to store ideas, explore the transcripts, and retrieve data related to specific categories and sub-categories. This computer program facilitated the management of massive amounts of unstructured data and allowed the researcher to explore the text and link ideas amongst participants. Coding the data into the computer was an iterative process in conjunction with the data analysis and refined further the thinking of the researcher with respect to the categories and how they related to one another. Although the major categories were identified prior to entering the data into the NUD.IST program, finer aspects of the analysis became evident during the process of data entry. For example, data related to nursing practice and staff relationships were distinguished in a separate category. However, as the analysis progressed with the data entry, it became clear that the category related to nursing staff relationships was a part of the Practices of Clinical Teaching.

Constas (1992) recommends that the researcher consider identifying the source of words used to develop the categories in the analysis. He suggests a procedure that

examines the categories along two dimensions: i) components of the categorization and ii) temporal designation. The first category identifies the components or actions that are used to generate the name of a category, whereas the second category identifies the point in the research process at which the category is identified. Such an approach enabled the researcher to identify how the categories were developed and named. The researcher examined whether she was using the participants' words and meaning in the creation of the categories or whether she was imposing a structure from without.

While some imposition of words from either the theoretical or practice domain or the researcher are acceptable, it was incumbent upon the researcher to ensure that the participants' meaning were embedded within these other words or categories. For example, the theme "Practices of Clinical Teaching" was initially labelled "Strategies of Clinical Teaching". In the first concept map validation interview (with Expert 05), the researcher proposed this name to the participant. The expert mused about the appropriateness of the word, suggesting that it was not quite right. She could not clearly identify what she thought was correct. Although "Approaches to Clinical Teaching" was better than "Strategies of Clinical Teaching", Expert 05 was not convinced it was the best either. Following this interview, the researcher tested the label, "Approaches to Clinical Teaching". This was more acceptable to other study participants during the validation interviews. Again some participants suggested that it was not quite right, but could offer no other suggestion. As the analysis progressed, "Approaches to Clinical Teaching" seemed to be somewhat limiting. In the final analysis, "Practices of Clinical Teaching" was deemed the most suitable title for the theme.

Some categories were labelled on the basis of the words of the study participants. "Knowing Students" was a term used frequently by participants and fit the overall categories related to students and what clinical teachers knew of them. Some categories were grounded in the nursing education literature, for example, "Staying" (Diekelmann, 1994). Finally, some categories were labelled by the researcher because neither the words of the participants nor the literature were helpful. For example, the category identified in the study as "Setting the Stage" is similar in content to "Creating Places" (Diekelmann, 1994). The latter terminology did not correspond with the stories of the participants and, therefore, was given a label by the researcher that more accurately fit the data.

The use of memos facilitated the understanding of the analysis process enabling the researcher to capture ideas and document recurring themes as they emerged from the data. Memos enable the researcher to theorize about the codes and their relationships while the researcher is coding (Glaser, 1978) and are primarily conceptual in nature, tying together different pieces of data into a recognizable cluster (Miles & Huberman, 1994). Memo writing begins at the inception of the research process and continues throughout the research process (Glaser, 1978; Strauss & Corbin, 1990). The researcher began to use written memos during the conceptualization of the study, the mini-pilot, and writing of the research proposal. She continued to write memos throughout the process, assisting her in the task of being reflexive as the data were gathered and analyzed. Issues that were unclear were identified in memos, as well, possible explanations for the data were hypothesized.

The transcripts were examined for incongruent evidence of incidents, events, or ideas that did not support the emerging analysis. While pursuit of cases that do not fit does not necessarily refute the emerging relationships and understandings, it was essential because it added variation and depth to the understanding of the phenomenon of effective clinical teaching (Lincoln & Guba, 1985; Strauss & Corbin, 1990). Through this process of refining through hindsight, all the known aspects of the emerging concepts will accounted for (Lincoln & Guba, 1985). For example, in the Directing sub-category of Making Content Understandable, Expert 02 did not use this strategy, except in the most dire of circumstances. Her beliefs about how she should work with students were antithetical to Directing. In this instance, the specific conditions under which Directing was used when inconsistent with the clinical teacher's personal beliefs were revealed.

The insider status of the researcher was an issue that was addressed throughout the research process. The insider status of the researcher in the world of nursing education enhanced her ability to gain access to the study participants and understand the nuances of the data collected (Meerabeau, 1992; Stephenson & Greer, 1981). However, there were some disadvantages to her insider status and it was essential that she employ specific strategies to offset the impact of the insider on the research process. The role of the insider impacts upon all aspects of the research process and the fact that one is an insider cannot be changed. The challenge was for the researcher to identify the issues and make plans to manage these as they arose throughout the study. Specific strategies to identify the impact on the study of the role of the insider included recording in a reflective journal

by the researcher, employing the assistance of others, and checking the understanding of the data with the study participants.

Researcher Journal. The researcher kept a reflective journal throughout the research process. In this journal, she recorded her thoughts and reactions as the research unfolded. Recordings were made throughout all aspects of the research process and, in particular, before and after each interview in order to heighten awareness of her role as a researcher and facilitate thoughtful reflection of the data immediately before and after collection. Self knowledge is critical to research in the qualitative paradigm (Lipson, 1991; Peskin, 1985, 1988). The reflective journal was a strategy used to heighten the researcher's ability to understand herself, the impact of her values, culture, and past experiences on the research process and to examine critically the reactions of the study participants and herself to the research process. For example, one of the participants had a different orientation to nursing practice than the researcher. The journal facilitated the identification of this issue and signalled to her that she would have to think and probe differently in the second interview to ensure that she was able to tap into this participant's thinking. Furthermore, the recording of her own thinking enabled the researcher to bracket her own personal values and preconceptions and hold them in abeyance so that the phenomenon of effective clinical teaching was seen from the perspective of the study participants (Drew, 1989; Hutchinson, 1988; Lipson, 1991). In addition, the researcher also set out her own particular views, assumptions, and biases about clinical teaching prior to any data collection (see Appendix G).

The problem of over identification is a recurring theme in the literature (Adler & Adler, 1987; Ellen, 1984; Paterson, 1994; Robinson & Thorne, 1988; Rosenthal, 1989; Sandelowski, 1986) and is particularly a concern for the researcher in this study who is a member of the group being investigated. Although immersion and development of a reciprocal relationship with the participants were essential, there was the danger that the researcher might take on the thinking of the participants which produces role confusion and difficulty in being able to critically analyze the data (Robinson & Thorne, 1988). Use of the reflective journal assisted the researcher to identify situations in which she was over identifying with the study participants. For example, the researcher found herself drawn to the particular approach of one participant and opposed to the clinical teaching practices of another participant. Recording in the journal assisted her to identify these feelings so that she was aware of them during the data collection phase and prior to beginning the data analysis. Consequently, she was able to take a more detached viewpoint, approaching the research tasks with knowledge of her own perspective of the data. One of the most important considerations was that the researcher was honest with herself so that she confronted issues as they arose in the overall study.

Assistance of Others. Several authors recommend that other individuals review the data and interpretations of the researcher to mitigate the issues of the insider perspective (Aquilar, 1981; Guba & Lincoln, 1989; Lipson, 1991; Ramos, 1989). These individuals can be peers, members of a thesis committee, or individuals who have no understanding of the study. They can ask questions which will force the researcher to approach the data from a different stance and articulate her thinking in the analysis. In this study, the

researcher used her committee members to assist in this task. In particular, the methodologist on the dissertation committee independently reviewed and coded two novice and two expert transcripts. In addition, the researcher enlisted the aid of peers familiar with clinical teaching to review transcripts and analysis to ensure that she was accurately reflecting the data.

Checks to Validate Understanding of Participants' Meaning. "The process of member checks is the single most important action inquirers can take, for it goes to the heart of the credibility criterion" (Guba, 1981, p. 85). It is essential in qualitative research to remain faithful to the participant's meaning in the data analysis. Lincoln and Guba (1985) contend that member checks can be either formal or informal. During the data collection process, the researcher reflected back to the participants the interpretation of what was being said, providing the participant with the opportunity to correct errors, challenge interpretations, and volunteer additional information. A further check which fostered greater confidence that the findings reflected the participants' meaning was the validation of the concept maps with each participant.

In a study such as this project, there is always the concern whether the participants are telling the truth. Should the researcher believe what the participants are saying? In a provocative book, Douglas (1976) claims that the researcher cannot rely upon the informant to cooperate and tell the truth. He contends that the researcher must approach the research setting from a perspective of conflict and suspicion on the assumption that most people have something to hide. Lofland and Lofland (1995) contend that this is an extreme position and compare Douglas's position to the position commonly held by the

majority of qualitative researchers. Their stance maintains that most people act in good faith and that a trusting relationship between the researcher and the participants facilitates the research process. In fact, Lofland and Lofland claim that most researchers adopt a position somewhere in the middle ". . . trust combined with a heady dose of scepticism; suspicion mixed in with large portions of good faith" (p. 55). These authors also contend that when the participants are interested in the topic and have no obvious motive to lie, that the researcher would have no reason to treat his/her participants as unfriendly and unlikely to be telling the truth.

There was no basis for the participants to intentionally mislead the researcher in this study. The researcher is not in a position to influence their work. Moreover, the information that was shared with the researcher was not potentially threatening. The reciprocity of the relationship with the study participants enhanced the development of a trusting relationship between the study participants and the researcher in which the participants felt comfortable in sharing their thinking about effective clinical teaching. Finally, the measures described add confidence to the veracity of the data gathered and the findings of the study.

Trustworthiness of the Findings

There is debate amongst qualitative researchers regarding the necessity of holding the findings of a qualitative study up to the scrutiny of any criteria (Miles & Huberman, 1994). Some researchers posit that it is not really possible to specify the qualities of good qualitative work, whereas, others contend that in order to be accepted in the scientific community, standards should be shared and attended to. Lincoln and Guba (1985) offer

four criteria against which qualitative studies may be measured i) confirmability (objectivity), ii) dependability (reliability), iii) credibility (internal validity), and iv) transferability (external validity). In addition to the measures described above, other strategies were employed and considerations taken into account to enhance the scholarly merit of the study.

Confirmability. The underlying issue to be considered here is whether the findings are relatively free from researcher bias (Miles & Huberman, 1994). The detailing of the study's methods and procedures as outlined in this chapter allow other researchers and readers to follow the actual sequence of how data were gathered and transformed through the analysis process. Rationale for the delineation and naming of the categories are described. Data are linked conceptually and displayed in tabular form in Chapter Four and the discussion of the findings in Chapter Five is linked to these data. The researcher carefully described the impact of her role as an insider in the world of clinical teaching and the risks inherent in over identification with the participants. Strategies to offset these issues are outlined (see discussion in preceding section, Procedures for Data Analysis). Finally, data have been stored electronically and are available for reanalysis by others.

Dependability. The questions to be addressed here are whether the process of the study is consistent and stable over time (Miles & Huberman, 1994). Choice of a qualitative approach to the study was grounded in the narratives of the study participants. The research questions which drove the study are clear, concise, and relate to the conceptual framework, symbolic interactionism. Moreover, care was taken to relate the questions and the conceptual framework to the interview guide used (see Appendix F).

The conceptual framework was described and related to the study (see Chapter One). In the final chapter, the discussion of the findings are integrated with and linked to symbolic interactionism. Peers and a committee member reviewed the transcripts and the emerging analysis (see Assistance of Others).

Credibility. The fundamental question with regards to credibility is whether or not the findings make sense to those who are studied, as well as those who read the study (Miles & Huberman, 1994). While reading the study, the reader should feel a "vicarious presence" with the study participants. As one colleague remarked after reading the findings, "I found myself thinking of examples and situations similar to the participants". Triangulation of data was employed. Triangulation is a strategy that is used to increase the validity of a study (Mathison, 1988). The underlying assumption of triangulation is that in using more than one approach, the flaws of one source will be offset by the strengths of another and that the strategies will produce convergent findings (Denzin 1978). Triangulation of data sources was used. In addition to the initial two interviews with the participants, the data gathered at the validation interview and the participants' journals provided the researcher with an opportunity to "double check" her findings, comparing the data gathered to ensure that the interpretations were consistent with the participants' meanings across time (see discussion, Checks to Validate Understanding of Participants' Meaning). The account of the data is comprehensive and supported by the narratives of the participants (see Chapter Four). Evidence of incongruent incidents, events, or ideas which did not support the emerging analysis were pursued (see discussion

in preceding section, Procedures for Data Analysis). Furthermore, areas of uncertainty in the findings were identified, for example, Making Connections (Chapter Four).

Transferability. The basic issue here is the relevance of the findings in other settings (Miles & Huberman, 1994). Characteristics of the sample are delineated so that subsequent researchers could employ a similar method for recruiting participants to a comparable study. The limitations of the study and threats to generalizability are described (see Limitations of the Study). While the researcher is cautious about generalizing the findings, clinical teachers in other settings (i.e., Zimbabwe, South Africa, Canada) and a teacher in another discipline (i.e., Engineering) claim that the findings are consistent with their own experiences. Although the findings support the literature on clinical teaching, the results are linked conceptually in a different configuration (see Chapter Five). As well, potential avenues for further exploration are presented in the final chapter.

Ethical Considerations

The research proposal was reviewed and approved by the Ethical Review Committee of the Faculty of Nursing, University of Manitoba. Ramos (1989) contends that ethical problems in qualitative research are the result of the reciprocal relationship between the researcher and the participant, the researcher's subjective interpretation of the data, and the inherent unpredictability of the emergent design. In particular, the reciprocal relationship makes the participants more vulnerable to sharing information that they would not normally share with another person (Wax, 1982). The researcher as an insider in the world of clinical teaching understood the participants' experiences and may have inadvertently encouraged the participant to divulge information that, in other

circumstances, they would not share. She managed the dilemma of participant vulnerability by being alert to the participants' cues and sharing with the participants the focus and direction of the interviews (Lipson, 1984).

Wax (1982) argues that reciprocity changes the nature of informed consent and advocates ongoing negotiations between the researcher and the participants. Although the researcher developed a protocol that attended to the essential elements of ethical concerns, she adhered to the principle of ongoing consent as postulated by Wax. In using this approach, she shared the findings with the participants so that they were able to clarify, question, add to, or challenge the researcher's analysis of the data. This process was facilitated by reference to the researcher's journal.

The nursing literature discusses the difficulty in role conflict that nurse researchers experience, particularly when there is an overt need identified by the study participants (Field, 1991; Lipson, 1984, 1991; Paterson, 1991; Pearsall, 1965; Rosenthal, 1989; Stanko, 1981). Clearly, the researcher must engage in a delicate balancing act. In this study there was the danger that the participants might ask for the researcher's advice about clinical teaching, a problem encountered by Paterson in her research on clinical teaching. For example, one novice waited until an interview was over before she asked the researcher her opinion about how she handled a student situation recounted in the interview. The researcher was careful to support what the novice had done and reinforce the novice's decisions, while ensuring that she did not offer the novice false reassurance.

Confidentiality may be more of a problem when the researcher is an insider because the information may be traced back to the participant(s) or be so sensitive that

there is a question whether it should be used at all (Stephenson & Greer, 1981). Strategies to protect the confidentiality of the participants included sharing of data with the research participants to ensure that they agreed with the interpretation of the researcher, aggregation of the data so that individual responses were not identifiable, use of pseudonyms, and distortion of non-relevant material to mask the identity of the participants (Archbold, 1986; Ellen, 1984). One of the study participants was male. As the nursing education community is small with few male nurse educators, all the participants were referred to as female to protect the anonymity of this participant. Although one loses the unique aspect of the male perspective by referring to all participants as female, gender differences were not a focus of this study. Confidentiality was facilitated by negotiating times for data collection and not succumbing to opportunities for data collection that might arise because of the researcher's insider status. Scrupulous care was taken to adhere to this. Moreover, collection of data in the homes of the researcher and one participant decreased the possibility that the researcher would be seen in places where others might question her presence.

Access to tapes and transcripts was limited to the researcher, one member of her thesis committee, and the secretary who transcribed the tapes. Participants will be recognized as a group for their contribution to the generation of information that may prove to be of benefit to clinical teachers, in particular, and nursing education, in general. Since the researcher is not in a position to influence the work of the clinical teachers, the participants should not be adversely affected by participating in the study. Participants were advised of their right to withdraw from the study at any point, without penalty of

any kind. Participants signed a consent form (see Appendix D) which described the purpose of the research and the expectations of the participants.

Limitations of the Study

The voluntary nature of the participation of the novice and expert clinical teachers in this study has to be taken into account. Their willingness to participate may have been related to their interest in clinical teaching and may not be reflective of other clinical teachers. In addition, they may have responded to the researcher on the basis of what they perceived to be a socially acceptable response. However, the research was not intrusive into the lives of the participants nor did they have anything to gain by not replying honestly to the researcher. In addition, the small numbers of the participants confine the generalizability of the findings to the participants in this study.

Symbolic interactionism, the conceptual framework for the study, does not account for all aspects of learning and understanding (Musolf, 1992). However, questions that may address other aspects of clinical teaching are outside the parameters of this study. The significance of the findings of this study, therefore, are limited to those experiences that were developed through the participants' interaction with others and the self.

Qualitative research is based on the interpretations of the data by the researcher. In the research process, the researcher is the major instrument. Consequently, data gathered emanate from the experiences of the researcher herself (Eisner, 1981). While measures were taken to account for this difficulty (e.g., researcher journal, member checks), others interpretations of the data must be acknowledged. Nonetheless, the potential for other interpretations does not negate the significance of the study findings.

The data were based solely on the narratives of the study participants. While the emic perspective of the participants is a valid pursuit, it behooves the researcher to acknowledge that only the conscious thinking of the participants was revealed (Dreher, 1994). Examination through other means may help the participants to reveal the unconscious aspects of their thinking, for example, video recording the participant as s/he teaches in the clinical area and then reviewing the tape to ascertain the thinking behind the behavior exhibited.

Summary

This chapter has detailed the research process used by the researcher to examine how novice and expert clinical teachers conceptualize effective clinical teaching. Issues related to the qualitative research design used in this study were addressed. Although there are limitations to the study and further research is necessary to ascertain the applicability of these findings to other groups of clinical teachers, the findings presented in the subsequent chapter reveal the thinking of five novice and five expert clinical teachers with respect to effective clinical teaching.

CHAPTER FOUR

FINDINGS OF THE STUDY

The purpose of this study was to describe how novice and expert clinical teachers conceptualized effective clinical teaching. In uncovering clinical teachers' thinking, the influence of past experiences and how they shaped clinical teaching practices were revealed. Three major themes were developed from the data i) Learning Clinical Teaching, ii) Practices of Clinical Teaching, and iii) Knowing Students. Each theme had numerous categories and, in some instances, sub-categories. In the latter two themes, differences in the thinking of novice and expert clinical teachers emerged. Although the themes are presented as separate entities, in reality they interact and impact upon with one another as the clinical teachers work with students (Practices of Clinical Teaching). What clinical teachers know about students (Knowing Students) influences how they choose to work with students in the clinical setting. Moreover, the development of their thinking (Learning Clinical Teaching) shapes how they use their experiences to understand effective clinical teaching. In addition to describing the major themes of the study, the chapter begins with a synthesis of the clinical teaching styles of the participants, as well as their description of clinical teaching. The words and stories of the clinical teachers illuminate the themes and provide implicit and explicit characterizations of effective clinical teaching.

Description of Study Participants

The ten study participants were from four diploma and one baccalaureate nursing programs. All of the experts taught in diploma nursing programs. Novice 04 and 05

taught in diploma nursing programs, Novice 01 and 02 taught in a baccalaureate nursing program, and Novice 03 had taught in a diploma nursing program and currently is teaching in a baccalaureate nursing program. With the exception of two novices, study participants practiced clinical teaching in hospitals. Novice 01 had students exclusively in the community. While Novice 04 had some students in the hospital, her students were primarily in the community.

Clinical teachers had a wide variety of educational backgrounds, nursing experiences, and clinical teaching experiences (see Table 1). One of the experts (Expert 01) had only four and one half years as a clinical teacher. However, based on the recommendation of her supervisor and the data in the transcripts of her interviews, it was clear that her thinking was congruent with expertise. Consequently, she was included in the study. With the exception of Expert 05, the experts had at least 7 years experience in nursing practice. As a group, the educational preparation of experts was not as high as the novices, all of whom were educated at the master's level. This probably reflects the change in nursing education in which higher educational qualifications are demanded of entering level practitioners. All of the novices had less than one year of clinical teaching experience with the exception of Novice 03. As the data analysis unfolded, this difference in novices was helpful as, in some instances, Novice 03 was different from the other novices and provided a glimpse at what likely transpires with the development of clinical teaching expertise.

Table 1: Novice & Expert Clinical Teachers

	Basic Nursing Preparation	Other Education	Years in Nursing Practice	Years as Clinical Teacher
E01	RN Diploma	BN MN (student)	21 years	4.5 years
E02	BN	MN	7 years	12 years
E03	RN Diploma	BN	14 years	14 years
E04	RN Diploma	BN MN (C)	7 years	7 years
E05	BN		2 years	12 years
N01	BN	MN	9 Years	3 months*
N02	RN Diploma	BN, MN	16 years	8 months
N03	BN	MN	14 years	18 months
N04	RN Diploma	BN, MN (C)	10 years	9 months
N05	BN	MEd (C)	18 years	4 months

* Novices calculated on the basis of full time clinical teaching

Styles of Clinical Teachers. All the expert clinical teachers had specific characteristics which created a particular, unique style which permeated their clinical teaching practices. These styles evolved from who they were as people and were rooted in their experiences as nurses, clinical teachers, and individuals. The novices were still trying to develop and discover what being a clinical teacher meant to them. Consequently, their individual approaches to clinical teaching were more related to who they were as people and nurses, rather than their experiences as clinical teachers. Development of concept maps for each of the study participants enabled the researcher to understand with greater clarity the particular approach that the individual clinical teachers had to clinical

teaching. Goals for students in clinical practice were based upon the clinical teacher's individual style and level of the student in the nursing program. These goals provided focus regarding what the clinical teacher emphasized with students in clinical practice.

Experts. With the exception of Expert 03, all the experts' styles could be identified with a word or phrase. In spite of the individual differences, there were some similarities that transcended all of the experts in the study. Use of humour was a dimension of expert clinical teaching, often employed to transform difficult situations. The experts saw themselves as fair, approachable, and open to the students. Within standards of care, the experts were flexible in their approaches to and expectations of students. Moreover, experts were confident in their decisions as clinical teachers, even when their judgments were different than other clinical teachers.

Expert 01 was "nice, but not easy". Her style was characterized by intuition and caring. She saw herself as a facilitator through which she enabled students to learn nursing practice. Her goal was to enable students to learn to care which she believed was the essence of nursing. Expert 02 was an "option giver". Within the parameters of safe nursing care, she allowed students to choose from a number of options, rather than dictating what and how the students should deliver nursing care. As she taught students in the final year of their nursing program, her intent was to set the stage for graduate practice, to ensure that the students were "safe, good" nurses. It was difficult to identify a word or phrase for Expert 03, perhaps because her interviews were more rambling and less focussed than the others. Nonetheless, she was clear in her goal for her students - to move them to the next level of practice. She described her clinical teaching as identifying

where the students were at and then putting them in a situation that would enable them to grow. Her clinical teaching was typified by caring and mutual respect. Expert 04 was distinguished as "questioning and pushing". Although she acknowledged that these were intimidating behaviors, student feedback reinforced the efficacy of this style. Her purpose was to prepare competent, efficient practitioners who could deliver safe nursing care. Expert 05 was a "helper". Her transcripts were replete with "we" and doing things together with the students. She believed it was essential to decrease students' anxiety so they could learn. Never confrontive, she strove to "know" students (much as nurses know patients) so that she could facilitate their learning.

Novices. Unlike experts, there were no one style which typified each of the novice clinical teachers in this study. The tone of their interviews was characterized by uncertainty about how they should go about the business of clinical teaching. They were constantly qualifying what they had done or thought they should do with "I don't know". However, they had developed some expectations for what their students should accomplish when they were with them in clinical practice. Like the experts they endeavoured to be open and available to students. In contrast to the experts, novices were less flexible with students, expecting students to practice according to the specific guidelines learned in the classroom and the nursing skills laboratory.

Novice 01 conveyed respect in her relations with the students. She viewed herself as adaptable, often changing her expectations in mid-stream. When this happened, she was unable to understand the students' concerns and frustration with this approach. Her goal was to teach the students to think. Novice 02 could not articulate what she did as a

clinical teacher. However, she hoped that she was supportive and facilitated student learning. Her purpose was to assist students in making the links between theory and practice. Novice 03 challenged students to explain their thinking, support their nursing care with rationale, and think logically. She facilitated learning and was the only novice who explicitly stated that she used humour. She was also the most experienced novice which may have accounted for her ability to use humour in a constructive way. Novice 04 saw herself as a helper to her students. The purpose of her clinical teaching was to foster independent student practice and stimulate students to think critically about their nursing care. Novice 05 helped students with their care, encouraging them through positive feedback. She focussed on assisting the students to look at the total patient, rather that just the skills which they had to perform.

Description of Clinical Teaching

The rewards of clinical teaching permeated the responses of the clinical teachers in this study. Words such as "love", "enjoy", "wonderful", and "perfect" were common expressions used by the participants when asked to relate what they liked about clinical teaching. Clinical teaching was seen as an opportunity to combine nursing practice with the education of novice professionals. Nursing students were a source of constant challenge to the clinical teachers. At times, the students forced clinical teachers to look at nursing in a different way, often presenting a perspective which they had not considered. Furthermore, students' questions and comments stimulated the clinical teachers to search the literature for solutions to problems which the students posed. As a result, clinical teachers continued to learn and grow professionally themselves.

> *I love it, I just love it. I just think it's fun. I think because it's the perfect mix of client contact because you still get to be at the bedside. You still have client contact and at the same time you can attend to the theory stuff. Whereas, when I was a staff nurse, sometimes you got caught up in the list of things to do and you didn't attend to the theory piece. So it's a wonderful blend. The students are a real joy. I mean they are, I don't know, they're a challenge. They ask interesting questions and they see things in ways that you yourself hadn't thought about or hadn't considered, or they frame a question that I've posed and it makes more sense when it's reframed that way. You know there's sort of a learning. I might be an instructor, but I'm learning too. It's just fun. You know it gets you out of your office. You get out into the sort of real world of nursing and it's a lot of fun. (Novice 02)*

Clinical teachers believed that through clinical teaching they had an opportunity to impact students' learning and nursing practice. They described how they could literally watch the students change as they learned.

> *I really like watching them learn. You can actually see them learning and I get a real good feeling over that. You can actually see them gain confidence, improve their skills, especially these IM's when they go at it and their little hands are just shaking . . . just neat to see them get that, build up that confidence and knowledge that they know that they can handle the situation. So I think that's probably the best, greatest lift a person can get is knowing that you are contributing to this learning, even in a small part and to watch them take off and go. (Novice 05)*

Clinical teachers believed that they could make a difference to patient care both in the present and the future. Through their daily interactions with students, clinical teachers took pride in their ability to enhance the quality of nursing care. Moreover, their influence on patient care extended to the future as their students graduated into the ranks of professional nursing.

> *I'm able to ensure that for a short period of time my students can give the kind of care to the patients that they deserve and get everything done that we're taught as nurses . . . Maybe I've got to make some kind of mark in my life. You know even after I'm gone there's going to be a generation of nurses out there who can do something because I showed them. (Expert 04)*

Transmission of nursing practice was seen as central to clinical teaching. In order to transmit nursing practice, the participants in this study believed that they needed to be more than observers at the scene. Where clinical teachers worked directly with students in practice, the clinical teachers were involved actively in helping the students to deliver care in a safe and competent manner. One expert described the difference as she compared clinical teachers who did not become involved in patient care with those who did.

> *I mean I've seen these teachers do that. It's kind of an observational experience. You get to try out all these new things on these guinea pigs and then leave the clinical area. It's kind of like . . . I don't know. I've seen it happen and it's very odd. It's like a big bee with a bunch of drones and they kind of go through the ward like a plague of locusts. So to me, that doesn't really, that is not clinical teaching when you do that. I mean clinical teaching is getting these people (nursing students) into the role of being a practicing nurse, whether it's in the community, in a hospital, whatever it is. But you need to do more than just be an observer. You've got to get in there and do the work. (Expert 02)*

Much like the coach of a sports team, the clinical teachers in the study saw themselves as coaching students in learning nursing practice. Coaching was viewed in a broad sense as helping the students and facilitating their learning. Through coaching the student, clinical teachers conveyed their belief to the student that s/he could accomplish something that was perceived by the student as difficult and/or beyond his/her capabilities. Coaching encouraged students to continue in the face of difficulty and bolstered their self confidence.

> *I do find myself doing that (coaching). I can hear myself saying, and I know I've said this before, "Look, I believe you can do this" . . . so coaching the student involves going over it (nursing care) beforehand and trying to give them helpful hints and then kind of letting the student go ahead, but being there if they look to you . . . the team has to do the playing, but the coach is there to start them off. (Expert 01)*

Interactions with the students were central to the ability of the clinical teachers to transmit practice. Through these relationships with students, the clinical teachers tried to develop mutual respect and understanding with the students.

> *It's a matter that they have to be treated like adults and if they decide, for whatever reason, that they're not going to be (able to come to clinical), they come and say to me, "Do you mind if I, I have to be away next week, so can I miss Thursday?" "Well, you're an adult and you prioritize and whatever you think is more important." So I don't treat them like that, I treat them with respect the way I would want to be treated and I think I get the same in return, I think because of that they learn better. (Expert 04)*

Clinical teachers viewed themselves as the gatekeepers to the profession. Much of what they did supported this belief. Of paramount importance was ensuring patient safety. Through monitoring the students, they were able to ensure that the patients, whom the students were nursing, received care that was, at a minimum, safe.

> *But the reality of the world is that we also have to ensure that students we graduate from our program are prepared to "survive" as a nurse, to be a safe practitioner. (Expert 03)*

Experts were able to be more discriminating with respect to what they needed to observe in order to maintain patient safety.

> *I worry a lot about sort of technological stuff, such as IV meds for children, and I supervise them very carefully for that . . . I realized that maybe I can't trust this one with IV meds, but I don't have to worry about her being there and knowing how to be with a toddler. (Expert 01)*

Although novices discussed the importance of patient safety, they were unable to discuss the subtleties of when they needed to be with the student in order to ensure patient safety. Moreover, they viewed patient safety as their responsibility which often prompted them to intervene when patient care potentially was compromised.

Sometimes you get really frustrated and you just say, "You can't do that", especially if safety is involved . . . I feel that what happens to those patients from the students is a safety factor and, therefore, it is very important to me. (Novice 05)

The ability to be fair and just in evaluating students so that they would develop into safe, competent practitioners was also a dimension of the gatekeeping behavior of the clinical teachers in this study. This was particularly difficult in situations in which there was an affective component such as an ethical issue or personal integrity.

So I think maybe it would have been better if we had been a bit harsher (in evaluating a student's practice) . . . If you want professionals out there, you'd better make sure that they're . . . , you know the students are really of very high standards, probably higher than we would get out of the community simply because this is their testing ground. This is where they are, their values are shaped. If you don't test them in that situation (one in which there is an ethical dimension), there are no tests out there, they are out on their own. So we really have an obligation to make sure that they know what the standards are and that this (unethical practice) is not tolerated. (Expert 02)

A difficult experience with a student often led experts to the conclusion that they needed to be more particular about challenging students to meet the standards of ethical nursing practice. Novices could identify situations in which there was an ethical dilemma which challenged the personal integrity of the student. However, they were at a loss with respect to how they should handle the situation.

I don't know, but I can't help but be concerned at what is this person, what would he be like when you're dealing with vulnerable people, like little old native women who don't speak English. What if they say one thing and he says the other or what if mentally ill people or more vulnerable groups, if he were out and out, sounds like a lie, be dishonest with someone in a position of authority, what's he going to be like with a very vulnerable group of people? So I don't know. I have a feeling that student is going to be the headache of my life. (Novice 01)

One expert explicitly discussed her concerns about maintaining the integrity of the profession of nursing. While she was the only expert who discussed this dimension of

gatekeeping, protecting the discipline of nursing was implicit in many of the comments of other experts.

> *I saw that (explaining to a student why a medical model was inappropriate for nursing care) as a caring about nursing. I think we had here a young man who was prepared to practice nursing as a miniature doctor and I think it was not positive for nursing as a profession to have this lad graduate from our program with that concept of nursing . . . I am very demanding about what I call, see professional appearance and professional behavior. And I do that on behalf of the profession. The students tell me that I am demanding about professionalism, they've heard that I am very demanding about professionalism. And yes, I do that for the profession. (Expert 01)*

This latter dimension of gatekeeping was reflected only in the thinking of expert clinical teachers. For novices, gatekeeping focussed solely on ensuring the safety of the patients for whom the students were caring and they were unable to consider the broader aspects of the profession.

> *Effective clinical teachers care about students as human beings, as valued colleagues. (Expert 02)*

The clinical teachers in the study cared for their students. They believed that caring is the crux of nursing. In order for their students to learn caring, the clinical teachers demonstrated caring practices towards their students, even when it meant insisting that the student do something s/he did not want to do initially.

> *I had a student last week who's probably fully my age and had just come from psychiatry and loves psychiatry. She's never had children and doesn't know anything about children. I assigned her to a small baby and she said to me, "Oh, I really don't want to have a small baby. I don't like babies and I'm not comfortable with babies. I want to have that teenager that I heard in report because I can help her. I want to counsel her". I said to her, and it seemed like an outrageous thing to say, I said, "You know, the fact that you've told me that is what you want to do suggests to me that is probably what you're good at. One of the reasons you're here is that I want to help you with the things that you're not so good at, so I want you to have a baby today. When you're through with looking after babies, maybe I will let you have the teenager". And I realized,*

actually, in many ways, it sounds like a cruel, uncaring kind of thing to say. But I know that wasn't how it was delivered or received. We both laughed about it and she went off to care for her baby. And she'll have a baby again this week until such time that I sense that she's overcome what seems to be a bit of a phobia about that. So that doesn't sound like a caring way to do something, but I think it was. (Expert 01)

The participants in this study believed clinical teaching was a rewarding practice. Through clinical teaching they had an opportunity to impact nursing practice. Ensuring patient safety through the development of safe practitioners was a focus of clinical teaching practices. The transmission of nursing practice was integral to clinical teaching and the caring relationship developed with students facilitated this process.

Learning Clinical Teaching

The dynamic interaction that occurs both between and within individuals and the meanings and interpretations that they attach to these interactions (symbolic interactionism) shaped the way in which clinical teachers developed and learned the art of clinical teaching. In this theme, the categories identified were i) processes through which clinical teaching is learned, ii) experiences as a student, iii) experiences as a nurse, iv) experiences as a clinical teacher, v) experiences with others, vi) experiences with other clinical teachers, and vii) feedback about clinical teaching. The processes through which clinical teachers learned clinical teaching were predicated on these interactive activities. Paradigm experiences which shaped clinical teaching often reached back to the childhood of the individual. Clinical teachers' experiences as a nursing student, both positive and negative, impacted on how they approached students. Their experiences as a practicing nurse were critical to how they carried out clinical teaching, particularly in the development of clinical teaching expertise. Other individuals in the clinical teachers' lives

also played a role in assisting them to develop their concept of clinical teaching and enact their role as a clinical teacher. Particularly for the novice clinical teachers, other clinical teachers served as mentors and sources of information to solve perplexing problems with nursing students. Clinical teachers received feedback both formally and informally from others about their clinical teaching. In addition, clinical teachers engaged in self learning activities such as reading the literature and attending conferences to understand and learn clinical teaching practices.

Processes Through Which Clinical Teaching is Learned

Clinical teaching was learned primarily while "on the job". Only one clinical teacher had any formal preparation (a 3 credit course) for the role of clinical teacher. All other study participants became clinical teachers with no advance study and little or no orientation to the responsibilities of clinical teaching. Through trial and error they floundered, learning what worked and what did not in any given clinical teaching situation. Mental processes such as reflection, intuition, problem solving, and hypothesizing were used to assist the clinical teachers in understanding their clinical teaching experiences. In an effort to make sense of clinical teaching, the study participants consulted the literature and attended conferences or workshops. Finally, clinical teachers described other more intangible processes they believed contributed to the development of their clinical teaching.

All of the participants in the study related the use of trial and error as a major factor in their learning about clinical teaching. Often there was no orientation to the nursing education program and novices were parachuted into clinical teaching. In some

instances novices had no more than a list of the students for whom they were responsible and the objectives for the nursing course.

> *I learned (clinical teaching) through trial and error. Most of it was just going into the clinical area and experimenting with different types of strategies with the students. It was very much you changed your mechanisms with each week with what worked and what didn't. So I could honestly say that most of my teaching has been sort of trial and error and just working through. I haven't done a great deal of studying or anything like that in terms of theories or learning specifically related to clinical instruction. So I would say it is much more informal. (Novice 04)*

Other clinical teachers supplemented trial and error by reading the literature and attending conferences. For the novices this reassured them that what they were trying was common practice and acceptable for clinical teaching.

> *So (another clinical teacher) was very helpful. She gave me a slew of things to read, articles and a book and I read them all at Christmas. You know a lot of literature about teaching students isn't a lot different than a lot of things we do in working with groups of adults in practice. But it's kind of nice to know that you're not sort of way off the wave length. So I didn't really find anything. I don't know if I was looking for support when I was reading the literature or just maybe reassuring myself that I wasn't way off base. I think I was more looking for that, making sure that there wasn't going to be somebody being able to say, "Well nobody ever does that or that's dead wrong". I really didn't feel that I had a lot of an experience base to say, "Well in my experience that works". (Novice 01)*

Problem solving and hypothesizing were closely linked to trial and error for some of the novices. Confronted by a student problem, they would try and understand what they should do. Lacking experiences as clinical teachers, they hypothesized about what might work using other familiar experiences as a frame of reference.

> *So that process was very, very interesting in that I had to work through being used to looking at a patient or being used to looking at patients' responses and logically going through the pattern. Now I had to try to figure out what was in this student's head and why it wasn't, why the synapsis were gapped and the neurons were firing or what was wrong to help the student fill in the gap and move along. And that was extremely challenging to figure out what was missing*

because, unfortunately, by that time the student had a history of failure. (Novice 03)

What is also interesting about this description is the novice's metaphor. As a nurse with a strong pathophysiological basis to her practice, she uses an analogy which strongly reflects her understanding of practice. In the development of expertise, connections of new situations to ones which are known and familiar facilitated the integration of the new learning for the beginner.

The process of reflection is a mental process which facilitates understanding of the self and, hence, the development of professional expertise (Scanlan & Chernomas, 1996). Reflection was a process that all clinical teachers used in the development of their thinking about clinical teaching. Reflection was an activity which promoted thinking about their experiences, both personally and professionally, and how these experiences related to their practices as a clinical teacher. Often in reviewing their present interactions with students, clinical teachers would question themselves. Frequently, a specific experience triggered this active reflection.

I thought about that (yelling at a student when he was making an error) you know and I probably would still holler out "No" or I would certainly go through the thing again with him before he even went into the room. (Novice 05)

For the novices in particular, reflection focussed on how they had managed the situation and how they might change their clinical teaching in a similar circumstance. Novices did not make a direct link between reflection and clinical teaching. They were still preoccupied with the specifics of clinical teaching and unable to get any distance from it in order to develop a perspective on the meaning of their thinking and its potential relationship to their overall approach to clinical teaching.

Experts especially discussed how their reflection had facilitated their learning. They seemed to be able to make a more direct connection between reflection and their learning to be a clinical teacher.

> *I've learned a lot by reflecting on things and thinking about them . . . Just to reiterate how important it is to reflect on your performance. (Expert 02)*

At other times, attendance at conferences, reading the literature, or, in the case of the study participants, participating in the research stimulated reflection on their clinical teaching. These activities prompted thinking about clinical teaching, often in a new and different way.

> *You go to a conference and you sit there and if you take away nothing or do nothing to change, what's the point in going there? And some conferences I haven't necessarily agreed with the philosophy, but it challenged me to rethink what I do. (Expert 02)*

> *Reading the journal that I did for you I thought, well it helped, you know. It got you thinking about what it was you were puzzling about, keep track of trial and error, a little bit - you'd know you know you tried that before and it didn't work so it wouldn't be just a vague sort of memory. (Novice 02)*

All the clinical teachers in the study described more implicit, intangible ways of learning clinical teaching. They were unable to articulate some of the means by which they had learned clinical teaching. Some mused about whether clinical teaching was learned through osmosis, while another declared that the process of becoming a clinical teacher was magic. Intuition was described by all the clinical teachers as a process which they used in acquiring the skills of clinical teaching. Intuition was described as a "gut feeling" which directed what they should do in a particular circumstance. The experts in the study had learned to rely on their intuitive hunches and to act on them. In contrast, the novices were reluctant to act on their intuition. They acknowledged that they used

their intuition in nursing practice. However, as a clinical teacher, they did not think that they had enough experience to act on intuition.

> *I think as you start teaching, and especially with student evaluation, you want to have everything justified and maybe we're very concerned sometimes about getting examples for everything. Sometimes we figure, "Well maybe it's just a feeling you have, but you don't have anything to back it up". So you won't do anything about it. Then you find over time talking to another teacher that somebody else had the same feeling (about the student). So I think sometimes you learn to act or maybe you've just had other experiences. You can see that just the way the student acted or said something, that gives you . . . a red signal goes up to say, "Maybe I should follow that or touch base more". (Expert 03)*

Experiences as a Student

Clinical teachers remembered experiences as a student that made a difference to their thinking and practice both as nurses and clinical teachers. These paradigm experiences were either positive or negative. When the experience as a student was positive, the clinical teacher used the experience as an exemplar or model of clinical teaching which they tried to emulate.

> *R: Certainly the instructors in the clinical area that I valued the most were able to function very well clinically. They seemed to have a really good concept of what being a nurse was all about. They seemed to really have an understanding of what it was to be a nurse. The instructor that I remember as being outstanding was X and the instance was in a clinical setting. It was in the hospital and I just remember having a patient where their IV had become disconnected and it had filled up with air and I didn't know what to do. So I just clamped off the IV and ran for my instructor (who was X). She just sauntered into the room in a very relaxed fashion and dealt with it without even alarming the patient. And that kind of calmness, the kind of being able to think very rationally. Also there was absolutely no "What did you do? How stupid can you be? How did this happen?" It was just "Let's deal with the problem and then talk about how it happened out of earshot of the patient". The situation was dealt with in a very calm fashion and there was no disciplinary action taken in front of the patient that would embarrass or humiliate me as a student nurse. That's probably one of the most remarkable situations that would jump out of my mind and I think it was her calm disposition that made it a very positive experience.*

I: Sometimes those particular experiences really stick in our minds and influence us for many, many years.

R: I think the calmness has definitely influenced me. I think one of the things that as a young instructor, as a new instructor, when students would tell me they did something my first reaction was to say "No!" And I just remember to maybe count to five and then sit down and direct it in a much more, and I sure that's from X because I appreciated her calmness. (Novice 04)

This novice's experiences with this particular clinical teacher also influenced her feelings of competence as a clinical teacher. She perceived that her clinical experiences in any one particular area as a practicing nurse were limited. Her nursing practice history revealed several different clinical practice areas in her 10 years in nursing practice. Consequently, she did not feel she was clinically expert in any one clinical area. This lack of opportunity to become clinically expert was seen as a handicap to her ability to be a clinical teacher.

I still feel very inexperienced. One of the problems perhaps, I don't know that it is unique to instructors, but because I haven't worked a great deal in clinical areas myself as a nurse, sometimes I feel at a disadvantage in teaching. I really feel as if I need to work more in areas so that I can understand more what the roles of the student should be in those areas. So that's one of my goals is hopefully to get an area of clinical expertise and start to work in it and develop it. (Novice 04)

Clinical teachers evaluated their own experiences as a student with clinical teachers in light of how they liked to learn. Clinical teachers who matched the way participants learned were viewed as positive role models. In reflecting on how she learned to be a clinical teacher, one of the novices commented:

I suppose it's modelling. Positive role models is probably the most significant thing. . . I think it was largely with role models who would push me for why I said what I said, to explain what I was thinking, to support my stand or my treatment modality or diagnosis or just plan of care. And really challenging me

to why, to think it through in a logical step and then helped turn on lights for myself and continues to, I think, when I do that. (Novice 03)

Negative experiences as a student were equally as important in shaping clinical teaching practices. In contrast to the positive experiences, clinical teachers resolved that they would not do to their students what they perceived as devastating to them as students.

Some of them terrified me and didn't care that they terrified me. Some of them, you could tell that they knew what they were doing, but they couldn't explain it, they couldn't facilitate the learning because they knew it theoretically, but they didn't know it practically. There were others that . . . oh goodness . . . they took you and if you started to do it and you weren't doing it their way, then they kind of like rapped you on the fingers. Or else if you weren't doing it fast enough or properly enough, they would take over. And that's one of the things that I've tried to stay away from. I tell my students that they can do anything at all that they want to do as long as they can give a rationale as to why they're doing it. (Expert 04)

Inherent in this view of clinical teachers who were seen as negative role models was the lack of respect that they felt as students for their teachers.

My value for her as a clinical instructor was a lot to do with the respect that I had for her as a clinical nurse. I'm sure that in the second incident that I described, part of the reason why it was a negative experience was I didn't respect that particular teacher in that particular area. So I probably didn't respect the fact that she was slapping my wrist for something. I probably thought she didn't really know what she was doing. So yes there was a definite relationship between clinical practice and clinical experience. (Novice 04)

In some instances experiences as a student were mixed, that is, learning took place, however, the clinical teacher was rejected as a model for clinical teaching. A mitigating circumstance that influenced the impact of these experiences was related to their own preferences as a learner and their personal beliefs and values. In thinking about their experiences as students, clinical teachers reflected on the fit that a clinical teacher's

style had to her own beliefs and values as a person. Even when they recognized that a particular approach may have been effective, if it was something that did not fit with who they were as a person, they rejected that approach to clinical teaching.

> *That's really interesting because the one teacher that I remember very well was a pure authoritarian. Oh she was cruel and really strict. Really just the antithesis probably of what I am now, the exact opposite. I always think about her and think maybe I should be more like her. Maybe I should be really strict and make people fearful because to be honest, I learned more about neurological nursing from her than . . . I learned more from that particular teacher than any other teacher that I've ever been with simply because she was really . . . Oh she was scary. You know, I always think "Oh maybe I should be more scary, should be more like her because I learned the most from her". But I've never decided to do that because I just can't. I can't be that miserable. It is just too difficult for me. I guess that is probably the prime example. I always think about her a lot actually. But I just can't do it. So I'm sort of left thinking I am kind of inadequate because I do not like her. Yet you know, I've sort of accepted that, that I'm just going to be a different kind of teacher and hopefully the students will learn something. (Expert 02)*

Experiences as a Nurse

Clinical teachers used strategies in clinical teaching that were effective for them as practicing nurses. Often when questioned about where they had learned a particular approach in clinical teaching, they referred to their nursing practice.

> *I think I took that from my practice. I did the same thing when I was in practice. (Expert 01)*

> *I think it depends on what's appropriate. I might talk out loud what I'm thinking about. "Let's do . . . like this is where I think we should be going". Then afterwards kind of a Monday morning quarterbacking. "Okay, let's look at . . . " And I feel fairly comfortable with that because it's been the nature of my experience (nursing). (Novice 03)*

The real world of nursing practice was in sharp contrast at times to the more idealistic vision of nursing perpetuated in nursing education. Consequently, the clinical teachers had to make an adjustment to what was realistic when teaching the students.

Well I think it was when I first started out teaching it was more difficult because I wasn't quite sure. Because coming from just the real world I knew how much modifications you make in your practice to get the work done. So then being catapulted into this ideal ivory tower where you must always wash your hands 25,000 times a day. That's all valid you know, but you really have to bring it down to what the realities were. (Expert 02)

In nursing practice the clinical teachers related how they often watched others teach nursing students. They would make a judgement about the appropriateness of the clinical teacher's approach to the students and think about whether that was an approach that they would use should they ever become a clinical teacher.

Students talk to other nurses about their experiences with other nurses. There were certain people that I worked with that were incredibly good at letting go, letting students do procedures and standing back and just letting them learn from it. There were other people who wouldn't let the students have that autonomy, who wanted to hover, who wanted to, you know, they would do one part of the procedure and they would be interrupted by the instructor. I greatly valued or I thought that I would most like to be like is perhaps a better way of putting it, those instructors that were able to sort of stand back and allow the students to learn and allow them to have that experience of doing it independently. That was something I definitely watched my co-workers and chose particular people who I thought were more in keeping with the style I would like to adopt and watched them in their relationships with students or talked to the students about a particular person and what kinds of things worked. (Novice 04)

Occasionally, an interaction with a student while they were a staff nurse was influential in shaping what the clinical teacher believed was important in clinical teaching.

Something really significant happened to me before I began to teach. Actually before I began to study. I was working with a young baccalaureate student who informed me that one of the things she had to do for one of her classes was to write a paper about her philosophy of nursing. And I remember, "Good God, I don't have (a philosophy of nursing)". I couldn't do that and it really bothered me. So a couple of times I asked her, "What do you mean? What would they have wanted?" . . . I couldn't articulate it. I guess she teased me a little and within a few days I was telling her if I ever needed to tell someone how I operated as a nurse and how I thought other people should operate as a nurse was the importance of the holistic approach, not treating just the physical person, but considering the psychosocial areas, spiritual needs, and needs of the family, that

> *the patient was not just the person who is ill. I remember at the end of it, this young girl said to me, "That's it! That's your philosophy of nursing isn't it?" In retrospect I thought that was really significant because that is the first and foremost thing that I try to communicate to my students - the patient that they are called to look after is not just the illness in the bed and that nursing is not just the procedures that they will do to that person in the bed. And I think one of the ways that I try to communicate that is how I try to treat my students - as not just a student who is passing through my rotation and is here today and gone tomorrow and I'll check off the procedures and she'll be gone. I try to see that person as an individual with many facets and a life outside of nursing that impinges upon it. (Expert 01)*

This ability of the expert to understand the impact of nursing experiences, particularly the less visible aspects of nursing practice, such as a philosophy of nursing, on her current clinical teaching practices was in contrast to the novice who could not identify the experience or understand how she had learned nursing practice or how to convey that practice to the students. The novice recognized the importance of the practice, but did not know how to "figure it out" or how it related to her present clinical teaching.

> *I am not even sure how I learned the skill or the process of critical analysis - probably by watching other nurses and noting their various perspectives and just experiencing the differences amongst individual nurses and families. Anyways, I hope that now I have a clearer idea of what I think is the purpose of me being there, I hope that I can be more effective with students. The "right" answers may be less important than figuring out how the students got there and the student recognizing the thinking process. (Novice 01)*

Experiences as a Clinical Teacher

Significant experiences with students made a difference to how the clinical teachers in this study functioned. These experiences caused the clinical teacher to stop and reflect about her beliefs regarding clinical teaching. For novices these experiences with students revealed their lack of understanding of the situation, as well as students' behavior. Confronted by a dichotomy regarding her beliefs about students and the

student's actual behavior, the novice was bewildered and uncertain how she should manage a problem student.

> *I guess a lot of what I was thinking about was teaching students how to think. I looked back and I wrote this quote at the beginning of the journal (kept for the researcher) and it said, "You can teach a smart nurse who can learn anything when she gets out there. But if they're not too bright to begin with, you're in deep trouble". So I thought really that should be the focus of clinical teaching is teaching the students critical analysis and how to solve problems cause when they get out there they may not always know everything, but they'll know where to go and find out and solve the problem themselves . . . Then the past couple of weeks I've had a couple of experiences with students who were really smart cookies. One student turned out was skipping out of clinical, not going, arriving 45 minutes to two hours late, not showing up one day and never phoning . . . I didn't really have the concept that you had to spoon feed professional values to students because nobody ever actually told me "You have to show up for your job on time". I just, I'd always seen people do that and that's what I did . . . And then I had an instance with another student, really bright student . . . anyhow this student phoned and argued with me on the phone for 45 minutes on a Friday about why he didn't get an A+ and it just went on and on. But I kind of rethought this idea that the smart nurses are really vital because you almost have to, they have to be smart and they have to have something else deep in there. I don't know if it comes deep in your heart or if you learn it from being acculturated. I don't know which. But if you're going to be effective you have to teach, either teach or show the students what that's like so they know it this isn't for me, then they can figure that out . . . Like I don't know that part, if you teach it or if it's sort of there and you expose students to it . . . So now I'm back to utter confusion. (Novice 01)*

These incidents happened just before an interview with the researcher and the novice was preoccupied with them. She kept going back to reviewing the events, trying to understand why they had occurred and what she should be doing as a result of them. Her last comment about the incidents revealed the total chaos these situations had brought to her thinking about clinical teaching. Continually, throughout the interviews with the novices, they expressed this lack of understanding of clinical teaching situations with students and stated "I don't know". Although the novice understood that these experiences with the two students had challenged her beliefs about clinical teaching and students, she was unable

to decide what they meant and how she could use the experiences in her clinical teaching. As she commented in her journal,

> *I guess that's the "negative" of being an inexperienced teacher - I have far fewer solutions and ideas for how to convey the importance of professional behavior. (Novice 01)*

When the experts' personal beliefs and values were challenged they were able to examine the situation in a more pragmatic fashion, using their evaluation of the circumstances in evaluating their clinical teaching approaches.

> *Maybe it's the students who are different though because students have changed. They're older, they bring more life skills. But the other thing is, which you can't take for granted, is that they're not going to be these obedient little students that they were ten years ago. And maybe that's made a change. Maybe they've challenged me and you know they've called me into question about a lot of things I took for granted, which probably has made me change too in treating them like adults. And probably that would be the key. I can't treat them as students anymore. They are not students, they are just nurses, novice nurses who are learning how to practice. They are adults, they are not children. Yes that's probably been the key that's really made me look at things differently . . . so they've made me be a different teacher than I was 5 or 6 years ago. (Expert 02)*

In contrast to the novices, experts used their experiences with the students to inform their clinical teaching practices in a more immediate way. In talking about a student with whom she was having difficulty, an expert was able to recognize the impact of her thinking about the student on her behaviour and what she should do with this information in the future.

> *On Friday just at the end of the day I was helping her get her patient back to bed and I saw this dressing that obviously needed changing. I just said, "Well I hope you're going to do this before you leave or you're planning to do this". And then she came back to me and said, "I hope you didn't think I hadn't changed the dressing all day". And that's actually what I was thinking of. I hadn't looked at her charting and in fact she had, this (dirty dressing) had happened since. "Well thanks for sharing this. I think maybe because I was feeling some negative things about her, that I probably assumed more. (Expert 03)*

When she was caught up in the hectic environment of the clinical unit, this expert did not think about the ramifications of her interactions with the student. However, when she had an opportunity to think about what had happened, she was able to reflect on the meaning of the experience. Expert 03's journal revealed her ability to use the experience with the student in a more immediate way than the novice was able to use her experiences with the students. She was able to clarify the meaning of the situation for herself through reflecting back on it.

> *Reflection: The main thing was not to assume nursing care responsibilities weren't done by my observation alone. It's important to share my observations with the student, to clarify, and ask questions and to review the charting as well. (Expert 03)*

This same expert had an experience as a new clinical teacher that made a significant impact upon her clinical teaching practices. Soon after she began clinical teaching, she was evaluated by a nursing education administrator who observed her in clinical practice for a few days. As she recounted this negative experience which occurred over eight years ago, it was still vividly in her mind.

> *I think she learned a lot, but I think we learned a lot of what not to do with students. One of the things that I found that was really difficult and I try not to do with students, is I like to be upfront with them and let them know whether, when I'm in the room or make my presence known. For example, I would be in doing something with the student inside the curtain and she (nursing education administrator) didn't want to come. And yet, she would almost pretend that she wasn't there, but I knew she was up against the curtain. You know she was being sort of devious. I think the fact that that was very difficult too because it was one on one, like she followed me very closely. I suddenly realized for a student you had to give them space. You can't be with them for a long extended period of time, you have to give them a little bit of space. It was to the point that even when I went to wash my hands, she was there. When I went to answer a phone call, she didn't excuse herself, she stayed. When she made some of her comments to tell me about what she liked or didn't like - the positives she gave me at the end, the negatives she did right at the moment and it wasn't done in privacy. I think that's*

> *what I've really found after that experience is that I've tried with students if I'm going to give them comments, I tell them at the very beginning. I tell them my expectations and I tell them that I will try not to criticize them in front of the patient . . . I think from what she had given me as her guidelines were very different from what she did. So I've tried very hard to be very upfront with students in terms of my expectations. (Expert 03)*

This expert experienced the pain of supervision which was too close, as well as lacking clarity of expectations. The experience as a new clinical teacher made such an impression on her that it shaped some of the central tenets with respect to what she believed about clinical teaching.

Experiences with Others

Occasionally life experiences had a significant impact upon how clinical teachers worked with students. Some of these paradigm experiences dated back to their childhood. In these instances the experience was so profound that even one of the most novice clinical teachers was able to identify the impact of these experiences on her practice.

> *I had one student who was very negative. I grew up in a negative environment and I think it is really horrible. So what I try to do - you can't stop a 26 year old, you can't change their way of life - but if you can bring out a focus. And that's what I try to do. We would sit down and talk about how, rather than looking at everything as negative and looking at "You can't do this and you will never be able to accomplish that, look at something you have accomplished and focus on that". I think it worked to a certain degree. (Novice 05)*

One clinical teacher had repeated hospitalizations as a child. These experiences as a patient had a tremendous impact upon her beliefs about nursing and how nurses should practice. As a result of these experiences, she ensured that her students understood the patient perspective and incorporated that into their nursing care.

> *I mean one thing that I remember vividly in my mind as a youngster when I had a big surgery. Postoperatively I had some, they had some problems with me and they had to take me back for an emergency tracheotomy. And I remember vividly*

> *waking up and, because it was unexpected to have it there to begin with, I tried to talk. And of course you can't speak because the air's coming out through the trach. It was the most horrendous, terrifying thing that I've ever experienced in my life until somebody was able to calm me down and explain what it was. So again it was the need for knowledge. So I guess something that I find extremely important to tell and teach patients to prepare them for things. (Expert 04).*

Until the interviews with the researcher, this clinical teacher had not thought consciously about the impact of her childhood experiences, both on her nursing practice and how she conveyed these beliefs about nursing practice to students. However, the interview process provided her with a forum in which to explore and discuss these experiences, turning them around in her mind and reflecting upon their impact upon her current teaching practices.

In another situation an expert described how she cared for the students by focussing on the current interaction with the student and being "present" by not planning the next step, thinking about the other students, or worrying about what they were doing. Her total focus was on the student with whom she was interacting at the time. This belief about how to care was based on her experiences with others in which she felt cared for herself.

> *Sometimes in my life I've known individuals like that (who made her feel cared for) and when that was so I felt particularly comfortable and cared for when that individual responded that way. (Expert 01)*

Clinical teachers used their family members, usually their husband, to reflect upon their clinical teaching practices. These conversations were often prompted when the clinical teacher had a particularly trying day or there was a situation that was bothering them. These discussions with their husbands brought a different perspective to their thinking and often enabled them to view the experience more objectively.

> *I went through a difficult period you know, a conflict in my own philosophy with my boss's. My husband finally said to me, "What are you fussing about? You have a choice. You don't have to work there. It is your problem, it's not her problem. You're not going to change her". And he was right on. And so I sort of look at my whole life now as being a series of choices. It's wonderful. I have a tremendous freedom now. I can choose to do anything, but then it's my responsibility . . . I am sure that philosophy the students know because I say to them, "You have these choices. You have a choice to be cruel to a patient or to give safe care, so you better choose the right thing that you know a practicing nurse would do". (Expert 02)*

This was a particularly pivotal revelation for this clinical teacher. Until that time, she had been in control of the students' learning and felt responsible for the patients for whom the students cared. By giving the students responsibility for their own learning and nursing practice, she described it as a "weight" being lifted. The focus of her clinical teaching shifted from the details of student practice to higher level issues such as decision making and problem solving. Now she empowered students to think critically for themselves and make their own decisions. In doing so, she empowered herself as a clinical teacher.

Experiences with Other Clinical Teachers

Experiences with other clinical teachers were particularly significant in learning how to be a clinical teacher. These experiences were especially important for the novice clinical teacher. Without exception all the clinical teachers in this study discussed how they used their peers as a beginning clinical teacher. Peers were used in a number of ways - as a confidant, role model, and sounding board. Sometimes the novice would seek out a particular peer, while at other times, opportunities for discussion or observation arose on the wards, at coffee and lunch breaks, and at meetings. In all these interactions the

clinical teacher would make a decision about what fit with her particular beliefs and philosophy, accepting some and rejecting others.

As a novice many of the interactions with colleagues focussed on questioning the more experienced clinical teacher about the kinds of things that puzzled them. Moreover, in these discussions novice clinical teachers discovered that much of what they were thinking and feeling about students and clinical teaching were similar to the experiences of others.

> *I spent a lot of time talking to my colleagues about "What do you think about this? Has this ever happened to you?" in the first year a lot. (Expert 01)*

> *Well we would sort of sit down and talk and do stories you know, "Well this happened to me today, what do you think?" So she was always good to reaffirm that what I was doing was either crazy or right or just to talk about the feelings because teaching isn't just a job. You have a lot of feelings and emotions there. You know she was always a good sounding board because she helped me to diffuse things or helped me to sort out what I was feeling in relation to what the students were feeling and that it was okay to be angry at a student or it was okay to praise the student for doing something . . . So it was a good way of getting at that other angle of teaching when you're dealing with the feelings of the learner as well as the feelings of the teacher. (Expert 02)*

Novices often sought clarification from other clinical teachers that what they were doing was "right". For them, there was a right way and a wrong way to do clinical teaching, perhaps related to the fact that there was little formal orientation and/or preparation for their roles as clinical teachers.

> *There is a tremendous need at this point for me to have what I'm doing validated and to make sure that I am sort of doing what's in keeping with what other people are doing. (Novice 04).*

Identification of a clinical teacher who could be helpful in understanding and learning clinical teaching was difficult, especially when the novice was unfamiliar with

the staff and did not know who was an expert. Positive student comments about a clinical teacher were helpful in at least knowing who the students identified as good clinical teachers. Watching how other more experienced teachers interacted at faculty meetings was also useful. Novices sought out clinical teachers with whom they felt comfortable and who had more experience than they. Furthermore, they would listen to the advice and then take from it that which fit their individual style and beliefs about teaching.

> *I wouldn't necessarily go to someone just because they had been here for years and years and years. It must be something about them that draws me - their approachability and that I have to agree to a degree with what they are saying if they are helping me in a way that I think is going to be beneficial to me. If they are suggesting things to me that I don't think are going to be of help to me then I have the right to file away and not use them, thinking that maybe something might come up at a later time where that might be beneficial. (Novice 05)*

Furthermore, in selecting someone to approach for advice, the clinical teachers knew their peers' strengths and weaknesses and who might be most helpful in a particular situation.

> *People get to know which ones, like their expertise area or an area that somebody is much better in doing. Then you know who to go to sometimes to ask for advice. So I think once you work in an area you get to know peoples' weaknesses and positives. Sometimes in terms of networking then it helps because you know who to go to. (Expert 03)*

In some instances novices were buddied with more experienced clinical teachers as part of their orientation. This individual provided a role model for the novice. However, they would reflect on the efficacy of what they saw and its relevancy for their own clinical teaching practices.

> *I did learn something through buddying with other teachers as part of orientation and occasionally I would be sent to help somewhere. So I would pick up what I saw as desirable or what seemed to fit for me. And I picked up a fair number of things of what I really didn't want to do, which was mostly just to emphasize whether we did the procedures correctly. (Expert 01)*

For the clinical teachers who did not have a "buddy", they described how and why a buddy could be helpful to a beginning clinical teacher.

> *I would like to make sure that I had a connection point so that, for instance, when I have a student hiding, I could phone this person up and say, "Now what did you do when you had a student like this, what kind of things did you do?" and then be able to benefit from their trial and error instead of reinventing the wheel, trying to see if it works right off. (Novice 02)*

Some clinical teachers were fortunate to have someone either tell them what was expected of them or give them helpful hints, whereas others had no assistance at all. A novice described what she did in the absence of clear directions and assistance as a beginner. The uncertainty about what she should be doing as a clinical teacher was evident in the tone of this passage.

> *I base it (clinical teaching) largely on the goals of the curriculum in terms of the objectives the students have to meet and in terms of the theoretical knowledge for the areas . . . Probably what I would gear the experiences towards is for them to get experiences with different types of delivery, different types of patients. But probably the primary thing would be the goals of the curriculum and the objectives laid out. The instructor has the ability to rewrite all the objectives. Certainly as a first year instructor here I have not rewritten any of the objectives. I have just gone with them as they were and tried to have those so the students could meet them. (Novice 04)*

Clinical teachers also compared their clinical teaching practices to other clinical teachers. These comparisons often arose when there was a difference in opinion regarding a student's competency. The experts were confident in their judgments about students and could give a student a negative or failing evaluation in spite of previous clinical teachers' assessments. However, this difference in values with respect to acceptable student practice did cause one expert some consternation.

> *I felt kind of badly because I think someone should have been doing this (failing the student clinically) to her a long time ago. I think that was a part of my*

> *distress over the last few weeks is that I get so frustrated when I see people that should have been taken to task way, way back and I'm doing it (failing the student) now. I don't think, sometimes I feel very disappointed that I have to do that kind of thing . . . And I think that the other part of my agony over the last couple of weeks with this student was knowing that if she was with somebody else, she might have passed. (Expert 05)*

This confidence in her judgement of the student's capabilities was in sharp contrast to the novice who had not developed a repertoire of clinical teaching skills nor had sufficient experiences to feel comfortable with her assessment.

> *And she (another clinical teacher) questioned me on how I could possibly have given her (student) a satisfactory. And I stewed about that all weekend. I kept thinking over the patients that this particular student had and she was fine. In fact, some of her psychomotor skills were really good. But now she's on a medical floor and, I don't know what she's doing, but she's not doing something well, not even satisfactorily. So I was questioning myself all weekend, so I don't know . . . I've learned that perhaps I've got to be more critical with my students and ask even more questions than I have previously been asking them. . . . So I guess I have to self monitor but I have to get input from other people so that I can enhance what I've already been doing. (Novice 05)*

It never occurred to this novice to question the assessment of the other clinical teacher. She assumed that something was faulty with what she had done and that she needed to be more critical in her judgment of students. Her solution to the problem was a reaction to the criticism from her peer, rather than being able to trust her experience with the student. Nonetheless, she saw this input from her peer as a means of "enhancing" her clinical teaching.

At times the help that novices received from more experienced clinical teachers was more pragmatic and direct. Usually the novices sought assistance when they had to grade students' written work based on clinical practice or when they had to evaluate student practice.

There were three of us teaching and we had regular, every other week meetings so those people I got a chance to talk to. Those meetings weren't necessarily this specific student, this specific situation or this, this sort of challenge. It was sort of "How in heaven's name do we assign a grade to this journal? . . . What's an A journal look like and what's a C journal look like because we really had a lot of trouble with that, a lot of trouble with that". (Novice 02)

Feedback About Clinical Teaching

Clinical teachers received feedback from a number of sources about their abilities as clinical teachers. At times this feedback was a revelation to the clinical teacher, the feedback uncovered something about themselves as a teacher that they had not considered before. At other times, the feedback confirmed their beliefs about their teaching practices. Feedback came from a variety of sources (students, former students, supervisors, other clinical teachers, staff nurses) and was either verbal or written.

The most common source of feedback about their teaching came from students and was more valued than feedback from other sources. Although clinical teachers received written evaluations on a regular basis, they commented most frequently about the verbal feedback from students. Often these comments stimulated the clinical teacher to reflect on her practice of clinical teaching, illuminating an approach which she had not consciously considered.

I complimented a student, who had done a complicated dressing, on her interaction (with the patient) while she was doing a dressing. It was an evaluative situation where I stood and watched and wasn't a participant at all. And she responded "I learned that from you". "You did?" But I realized that there were other situations where the students had probably been very nervously doing a dressing and I had been doing the interacting with the patients because the student had only one thing to focus on. So a light bulb went on for me and I thought, "Oh gosh I am still role modelling". (Expert 01)

Written feedback also prompted reflection. The information from these evaluations provided an opportunity for the clinical teachers to think about how they were perceived by students and how they might improve their clinical teaching.

> *I think looking at the evaluations. I always try to ask the students, "Don't tell me you didn't like something without telling me what you think would work better. If you don't think it was a particularly good learning experience, what do you think would help you to do it better?" So as it classically goes you get ten evaluations and one isn't as good. You focus on that one which may or may not be generalizable to the group. So you can be over harsh on yourself. But I think looking at the evaluations in both what the students had to say and also their performance to say, "Okay, if as a group they did not perform as well, then maybe the variable is myself or something I didn't do". (Novice 03)*

Not surprisingly, self doubt and excessive criticism were seen in the novices. The experts were more able to take negative criticism from the students and keep it in perspective. They recognized what the student was saying, but put it within the context of their expectations for the student.

> *I'm just thinking a couple of weeks ago I had a student when I said something to her, she said, "You're crankier today than you usually are". Like they almost expect . . . I was getting really maybe frustrated with what she was doing and I obviously showed it more than maybe I try to. And she picked up on it. I guess they learn over time though I certainly am approachable. I certainly do have expectations and they can't get away with it if they don't perform. (Expert 03)*

Occasionally clinical teachers had supervisors who provided them with feedback when the clinical teacher was a novice. Unless the supervisor was with the novice as she worked with her students, this feedback was not seen as valuable. However, when the supervisor was in the clinical area, working with the novice clinical teacher, the feedback was very effective in facilitating understanding of their clinical teaching practices. This was especially so when the clinical teaching approach focussed on a value or attitude towards patient care which was not easily visible to the clinical teacher.

I remember one in particular. I remember saying to the evaluator, "One thing I really encourage the students not to do is to identify the patient by the room number and not by their name" . . . and she pointed out to me at the time of the evaluation that, although I had said that this was something I really didn't like, that I would say to the student when they said, "Mrs. Jones has whatever", I would say, "Is that the lady in 48?" So in fact although I wasn't actually referring to the patient by the room number, I was in fact encouraging that by using it and that was helpful. (Expert 01)

Experts identified experiences as staff nurses in which feedback about their teaching abilities stimulated both their interest in and their development of teaching competencies. As a result, they began to develop teaching expertise long before they became clinical teachers.

I remember that very often I would end up orienting other nurses to the unit and essentially there was a lot of teaching involved in helping them to adjust. And so I sort of began that way in working with other nurses, helping them to understand the goings on of the unit. I began to get feedback from people about certain things I was doing that were very helpful to them and certain approaches that I would use that they found really helpful . . . So the feedback from people helped to shape the way that I approached new learners or people who needed teaching and so that is the earliest remembrance I have of teaching and how it shaped how I approach people. Because that's kind of what I see teaching being is just a way of approaching people and working with people. (Expert 05)

The clinical teachers in this study described how they learned to be clinical teachers. In the absence of formal preparation, they relied on their own experiences to inform themselves about clinical teaching. In keeping with symbolic interactionism, the reality of clinical teaching was developed as a result of the meanings the study participants attached to the symbolic environment as perceived by them in their interactions with others as students, nurses, and clinical teachers. The explicit and implicit meanings they attached to clinical teaching were developed through their own lived experiences. Their clinical teaching was a consequence of how they interpreted their

relationships with others, both past and present, and were filtered through mental processes such as reflection, intuition, and problem solving.

Practices of Clinical Teaching

Practices of Clinical Teaching was the main theme of the study. The four categories were i) making content understandable, ii) developing students' assignments, iii) monitoring and evaluating, and iv) developing relationships with nursing staff. It was through these practices that clinical teachers enacted their beliefs about clinical teaching. The participants described how they assisted students in understanding and applying the theoretical content of nursing to the practice of nursing. The importance of the students' clinical assignments to the development of students' nursing practice was portrayed. Monitoring and evaluation students emerged as a perplexing practice for clinical teachers, in part, related to lack of conceptual clarity. Finally, the characteristics of relationships with nursing staff, with whom both the clinical teachers and students interacted, arose as a part of clinical teaching. Similarities and differences in novice and expert clinical teachers' thinking appeared throughout the categories and sub-categories of the theme. The descriptions of these highlight the participants' conceptualization of effective clinical teaching.

Making Content Understandable

> *Effective clinical teaching facilitates the students' application of prior knowledge. (Expert 02)*

It was evident in this study that clinical teachers used their own beliefs about effective clinical teaching practices to promote student learning. Although on the surface the teaching strategy to make content understandable appeared to be the same from

clinical teacher to clinical teacher, the underlying thrust and reasoning for the strategy were often different. For example, one clinical teacher's approach was diametrically opposite to another clinical teacher's stance with respect to how one should answer students' questions. When expert clinical teachers used different clinical teaching practice(s), the strategy chosen was based on their belief that their approach was most effective for student learning. The literature does not provide much guidance in understanding the problem. What is problematic is the confusion that nursing students must encounter as they try to determine what expectations a particular clinical teacher might have. Perhaps the most positive thing that can be said of these differences is that students encounter a variety of clinical teaching approaches in their clinical practice. In working with these differences, they begin to adapt more easily to the clinical teacher who best suits their particular approach to learning.

Six specific practices of clinical teaching which facilitated student understanding of content in nursing practice emerged from the data in this study (see Table 2). Furthermore, sub-concepts were identified in the Questioning and Answering Students' Questions and Cuing and Prompting categories. While there were some similarities in novice and expert clinical teaching practices, there were obvious, as well as subtle differences in how novice and expert clinical teachers thought about these practices. This section will delineate how the study participants described their thinking about how they assisted students in understanding the theoretical content of nursing and its application to nursing practice.

Table 2: Making content understandable

	Novices	Experts	Practices in Common
1. Questioning/ Answering Students' Questions	• no particular questioning style	• own style of questioning	• ask low/high level questions
1.1 Cuing & Prompting			• assist students with nursing care
1.2 Determining Students'Needs/ Perspectives		• assess students' ability to manage care	
1.3 Differing between Real/Ideal		• assist students to confront discrepancies	
1.4 Promoting Student Reflection			• stimulate students' thinking
2. Cuing & Prompting	• use with only general acknowledgement of process	• use own experiences as nurses to cue/prompt	• ensure student has necessary knowledge for nursing care • use think aloud strategies
2.1 Setting the Stage	• focus on patient	• focus on learner	• prepare students for practice
3. Making Connections	• from theory to patient situation	• from patient situation to theory	
4. Modelling Nursing Care	• not common • does not label process • focus on nursing practice	• common • label process-focus on clinical teaching • focus on student & patient • makes thinking re nursing care explicit while modelling	
5. Explaining	• describe explicit • difficulty describing implicit	• describe implicit & explicit • connect explanations to students' nursing care	
6. Directing	• more common, especially in response to over-estimating students' abilities	• common only with less experienced, weaker students	• specifically tell students what to do • walking the student through

Questioning and Answering Students' Questions

All clinical teachers used questioning and answering strategies with students to help them understand nursing knowledge as it is related to nursing practice. In contrast to novices, for the most part experts were able to identify the underlying belief(s) for their questioning/answering behaviors, particularly in relation to answering students' questions. Although they identified what they did, in many instances their responses to students' questions were different and were based on their assumptions of what was best for students' learning. For example, one expert never answered a student's question. Rather, she would respond to the student by asking questions in return. This questioning behavior was based on the fundamental tenet that students who explored and "worked" for information remembered it better and, as a consequence, the information was more meaningful to them. This belief persisted in spite of the fact that she recognized how her behavior affected students and in view of other educational experts and the literature which challenged her approach to questioning activities. This suggests that experts are confident in spite of contrary information and use their own experiences when they are in conflict with the literature.

> *Some teachers give all the information that a student asks. I don't answer questions, I ask them a question right back. I can be very frustrating for a student, but I have a gut belief and I've heard it too often to know that it's not right, that when they finish with me, they learn because they've been forced to and it hasn't been spoonfed to them. They've had to find the information themselves, they've had to look for it and when you do that you learn it better. (Expert 04)*

This expert also questioned students until they could no longer answer a question. The underlying assumption to this behavior was that students needed to learn that there was always more to learn and that nurses should continue to pursue knowledge.

I will be aiming to ask them questions that they don't know to try and get them to realize that you know even if you think you know as much as you can about your patient, there is always more to learn. (Expert 04)

In direct contrast to the expert who never answered questions, another expert believed that not answering students' questions was not in the students' best interests. She answered questions as they arose based on the belief that it was a poor use of the students' time for them to explore and look for information.

I do tend to give them lots, like I don't wait for them to, discovery is a method that's too inefficient. We don't have time for it. I think that there are things that they discover, but I don't, I do not do that kind of thing very much. I try to share with them things that are, that I see as being useful for them or important for them to be able to function well. (Expert 05)

Other experts were more flexible in their approach. At times students needed information immediately, while at others there was time to send them to find out the answer themselves.

Sometimes I'll give them an article and say, "If you read this, I think this will help you". But sometimes that takes time and sometimes it's quicker for us to say, "Here's the answer". Sometimes you need to do that, but at other times you can get them to do it. (Expert 03)

Experts used students' questions as an opportunity to model professional values. At times she would not know the answer and admit this lack to the student. Together or separately they would explore the literature to ascertain the answer to the student's question.

If I don't know the answer I try to be fairly honest in terms of the things I don't know. I usually know the resources that they can look at or sometimes I can find out as well and then share what they've learned and I've learned. I think it's very positive anyways to, not to try to say something if you don't know the answer, but to be very honest with them and, in turn, I think that they've been fairly, tried to be honest. If they haven't looked something up or didn't have time, I can give them a few minutes time for preparation. (Expert 03)

It was more difficult to discern a particular questioning style for the novice clinical teachers in this study. They used the whole range of questioning techniques as described by the experts (with the exception of Expert 04). However, they did not purport to favour one particular style of questioning over another. One might hypothesize that development and thinking about how one questions students develops with expertise. Novice clinical teachers are preoccupied with surviving in a complex environment and do not have the time to think about what they are doing. Rather they just do it.

Experts were clearer than novices with regards to when and why they answered students questions. The nature of the students' question prompted the type of response that the expert gave. At times experts would use student questions as an opportunity to help the student reflect beyond the question to a greater understanding of the meaning of the situation in which they were involved with a patient. Often these questions modelled the types of questions the student should consider in order to move forward with the patient's care.

> *They come to me with a concern, "What should I do about this?" "Well, what do you think's happening here? What would you like to do? This is what you could do, you choose what you want to do." (Expert 02)*

Novices seldom discussed their practices related to answering students' questions. Although they all discussed asking students questions, only one novice commented on her strategy for dealing with students' questions. She felt a need to answer students' questions, perhaps due to her uncertainty about her own abilities to preform as a clinical teacher and her belief that clinical teachers should know all the answers to students' questions. She described her initial response to students' questions as a compelling need

to answer the student. With some experience she was able to assist students to rely more on their own resources for learning.

> *One thing that took me a while, but in the last little while I've been able to do it a bit more, is to not answer students' questions or to have other students answer questions or to have to have the students try and answer their own questions. When I first started I felt a real burning desire to know the answer to everything that I had been asked. Now I'm much more likely to say, "What do your classmates have to say about that?" or "Does anybody have any suggestions for so-and-so about that?". . . I got much better at that. I just accept the fact that there's going to be a lot that I don't know the answer. But the first few months I was a clinical instructor I felt a burning desire to be able to answer all their questions. I really felt uptight. (Novice 04)*

Although the lack of discussion by novices related to answering students' questions may have been related to the interview process, it is also possible that considering the ramifications of answering students' questions and how a clinical teacher consciously decides to handle this situation is a clinical teaching practice that develops with expertise.

The level of questioning by clinical teachers is critical to the development of student thinking. In a recent review of the literature, Oermann (1996) discovered that low level questions predominated clinical teachers interactions with students. Low level questions were those which determined factual and procedural information relying on students' memory and recall. In contrast, higher level questions asked the students to apply knowledge in new and unique circumstances in a way that stimulated synthesis and analysis of the students' approach to care based on problem solving and decision making. Both novice and expert clinical teachers in this study used lower and higher level questions. What is not known is the extent to which a particular clinical teacher relied on one or the other in her questioning of students.

I wonder what's going on here? I wonder what, I wonder if we'd known this what we would have done with it?" (Expert 05)

You seem to be developing a theme, like right of patients to self-determination. What are your values? What do you think about that? Do you have any personal or clinical experience with this? How does the nurse manage it? How does the patient manage it? (Novice 01)

Cuing and Prompting. The most frequent use of questioning was to cue and prompt students either to assist the student to achieve a greater understanding of nursing care or to prompt the student to consider what s/he should be doing next for the patient.

We talked about her assessment interview that had happened the day before and I asked her questions like "What do you suppose is the biggest concern for this person right now?" . . . "What do you think this person wants to get out of their admission to X hospital?" (Novice 02)

I try to also go over her assessment and ask her if she understands the plan or what she would do if the patient complained of chest pain or if she would know if the patient complained of chest pain . . . and when she did her assessment, when taking vital signs, what might be different that she should report. (Expert 03)

These prompts were either general when the clinical teacher was questioning the student about the direction of care for the day or specific when the student was involved in an actual activity (usually a procedure) with the patient.

"What do you think, what do you think is going on?" I sort of probably act more like a team leader than I do as a teacher where I sort, am kind of the other figure there that gets them to think about, "Is there another way of doing this or have you missed something?" So that's how I feel they learn. I am not a good quizzer. I don't like quizzing students about stuff. But what I do like to do is talk to them about their plan, what they are doing, and then suggest things that are, well you know, "Have you thought about this?" or "What do you think is going on?" (Expert 02)

If they contaminate (a dressing change), it's okay. (I ask) "Well, how do you fix it? What do you stay away from? How do you work with a contaminated field so it's safe for the patient?" (Expert 04)

Determining Students' Needs/Perspective. Experts were skillful at using questions to discover how the students were managing in a particular situation and whether they understood what was required for the patient. In questioning the student, the expert clinical teacher also was able to convey to the student that she could assist the student if s/he was feeling overwhelmed and/or unable to cope with the patient care situation. In this way they were able to augment and assist the student so that s/he could proceed.

> *I just sort of sit back and say "What would you like to do now? What can I help you with here?" and let them take the lead. And if they . . . you know, "Well have you thought maybe we could do this, what do you think? Have you thought, maybe we could do this, what do you think?" (Expert 02)*

Differing Between Real and Ideal. One of the difficulties that both students and clinical teachers experience in clinical practice is how to adapt the ideal of what was taught in the classroom to the reality of day-to-day nursing practice. In this study only experts attempted to assist students in confronting these discrepancies. Often when the student was in a dilemma, through questioning, the expert would raise issues which the student should consider in order to maintain safe practice. In this excerpt the expert described how she had modified her clinical teaching with experience.

> *Well I think it was when I first started out teaching it was more difficult because I wasn't quite sure. Because coming from the real world, I knew how much modifications you make in your practices to get the work done. So then being catapulted into this ideal ivory tower world where you must always wash your hands 25,000 times a day. That's all valid you know, but you really have to bring it down to the realities. That was more of a struggle. Now I am really up front and say to the students, "You need to start to think about how you are going to do these things when you're out practicing as a real nurse. I always try to say to them (which I only started doing probably the last couple of years), "Okay, fine, this is how, for example, you were taught to do a complete bed bath. However, how are you going to modify that when you have six patients? How are you going to modify that in a different work environment?" I try not to say, "Oh well, that's the ideal, that's not important". I try to say, "Okay, that's how you were taught*

and that's correct. So what are the principles that you are going to take away from that to the real world and make them work for you?" (Expert 02)

Promoting Student Reflection. Clinical teachers facilitated student reflection on their nursing practice by asking questions that encouraged them to think about what they were doing. In this way students were stimulated to think about what they had done, the underlying theory and rationale, and their implication for practice.

"What did you think about how that interaction went? What do you think about what you saw or what you did or how the family responded?" It's not enough just to do it. You have to think about, "What does it mean for the patient? What does it mean for you? How did you deal with the family? How does the nurse deal with it? How does the system deal with these people or with patients in general?" (Novice 01)

Cuing and Prompting

In addition to using questions to cue and prompt students, both novice and expert clinical teachers used other cuing and prompting strategies to facilitate student learning and make content understandable. Experts used their own experiences as nurses to understand the patients for whom their students were caring. When discussing patient care with a student, the clinical teacher often had to restrain herself from explicitly telling the student what to do, especially when the student had asked their advice regarding how to proceed with their patient.

I would always have to stop myself because I would love to tell them what to do, but I don't. (Expert 02)

Instead the clinical teacher would use cuing and prompting to encourage the student to use his/her own resources and knowledge to problem solve a situation or investigate further to gather data crucial to the nursing care.

I'm trying to give them cues about the doing things that they have to do and their organizational things and what kind of issues are important to the surgical patient from a physiological perspective. (Expert 05)

Cuing and prompting were used to ensure that the student had the necessary knowledge s/he would need in order to give safe care to the patients. Often during the initial meeting with the student at the beginning of a clinical day, the clinical teacher would review with the student the pertinent issues to consider. When students were not forthcoming with a piece of datum that the clinical teacher knew was essential to the patient's care, she would hint at what the student should do or where they needed to go for further information.

I had a student in the last one of my sessions and I knew this patient had a liver biopsy. I said to her, without me actually wanting to tell her that I knew that, I said. "Now how often are her vital signs and what's happening to her?" And I said to her, "You know I really want you to go back and look at that chart again, because I have a feeling that there's something there you've missed". (Expert 05)

Thinking aloud was another common cuing and prompting strategy. In this way the clinical teacher was able to assist the student to access her thinking and promoted students' decision making and critical thinking. Often the thinking aloud was in the form of a question about the patient's situation.

R: "I wonder why that patient has that thing happening to them" . . . I'm not really confrontative with my students. I do tend to say those kind of things and I do that a lot. It's more in the rhetorical sense and then I may hypothesize with them about what could be going on with that person.

I: One of the things that seems to me that you are doing with students then is you're thinking aloud to let them understand the kinds of questions that nurses might have about patients?

R: Yes . . . I would say that I'm asking those questions and that's the purpose of it. (Expert 05)

Novices used cuing and prompting with less understanding of what they were doing.

> *It was a real rush deal (intervening quickly with a patient in difficulty) and so I did try and explain what I was doing and what happened. (Novice 05)*

When questioned by the researcher about what she learned about clinical teaching from this situation, Novice 05's reply was very general, that is, a learning situation for the students. She did not identify any particular clinical teaching practices which she used in the situation, rather the focus was on how she was perceived by others in the situation.

> *So you have to remember that they (students) are observing you as well. So where before (as a staff nurse) you just go ahead and do stuff, now you have to remember that you've got people around you and if you're a little anxious, they are going to pick up on it as well as explaining that anxiousness to them later. (Novice 05)*

In some instances, both novice and expert clinical teachers explicitly identified thinking aloud as a strategy which they used with students. However, with most of the clinical teachers in the study, the activity of thinking aloud was labelled by the researcher after the participant had described what she did. If much of clinical teaching is held as tacit/practical knowledge, clinical teachers may be able to describe what they do, but not link it consciously to a particular clinical teaching practice.

Setting the Stage. Clinical teachers prepared students for learning on the clinical units by cuing and prompting regarding what they might expect in a particular situation. Helping the students prepare for clinical practice occurred at different times: i) before going on the unit, ii) during preconference and before going to the ward, iii) on the ward and before a nursing skill, and iv) at the patient's bedside.

Clinical teachers alerted the students with regards to the type of care that would be necessary for their patients. This road map enabled the student to come more prepared for their time in the clinical practice area.

> *I'll often give them that, that clue as well so they can think about it when their doing their initial assessment or "Mr. S. is going for surgery on Friday, you're going to be having him tomorrow before surgery. You need to plan for teaching preoperatively". In that case too, they need time to do it (prepare) so that they're not running around. I will sometimes give them that, let them know. (Expert 03)*

> *"What we want you to be able to do is when you look at a situation to recognize and see that there are multiple ways of looking at it and it's good. It's important that you consider all the different perspectives that people come from." (Novice 01)*

Preconferences provided a structured opportunity for clinical teachers to help the students think about their immediate nursing care for the day. This forward thinking assisted students in anticipating the patient's needs and the demands that might be required of them during clinical practice.

> *I try to help them understand what information is useful to them when they are researching a patient and I do that in preconference by . . . I run them in a very work like way, "What kind of IV has your patient got running? What's the rate? Is there anything in it". I give them cues and I say, "Well, do you know when the patient voided?" I mean this is all very, like they have to come out with a certain amount of understanding about surgery, what the important things are in all the very work-a-day task related things. So I do give them cues in our pre-conference. I tell them it's like a planning session and that they should come to pre-conference knowing concrete things about what they're going to do and when they're going to do it and that they need to know about their patients so that we can figure out what they need to be doing. (Expert 05)*

Expert clinical teachers had the students verbally describe what they intended to do with a particular procedure prior to actually delivering nursing care. Describing nursing care not only allowed students to articulate out loud their nursing care, it also provided the opportunity for the clinical teacher to assess the student's competency and areas in

which s/he might need assistance. If there were any difficulties in the student's plans, the expert would advise him/her regarding any necessary corrections. Only one novice used this technique and then only prior to nursing skills. Moreover, the motive for doing so appeared to be more focussed on the patient than the student.

> *I often ask them what they are up to and what they are looking at and what they see and what they might be looking for. Again, depending on the patient, I will beforehand ask them what they are doing and how they are going to go about it before they even go into the patient so the patient doesn't get tense and upset. (Novice 05)*

Making Connections

Experts made explicit connections in order to help students understand the theoretical basis of nursing care. Connections were drawn from the patient situation(s) to the theory learned in the classroom. Post conferences, seminars in which students discussed their day's practice, were commonly used as a forum for making these connections. Particularly in the following excerpt, the importance of timing and identification of the teachable moment in drawing the connection to the students' attention was seen.

> *I rarely talk about something that hasn't been real in their day, almost never. I try to wait for the right moment. So if two or three of my students, as an example, have patients who have had major surgery and are having problems with their fluid balance and we're talking about intake and output, etc., that's the day, that's the moment that we talk about that whole topic. And I have had feedback from the students that say, "You make it, and yet I really do care when you talk about it like this" or "I really . . . this is important, I can see now because it wasn't important before". So that's my style of teaching content related, bringing the theoretical aspect to what they're doing at the bedside. (Expert 05)*

Only two of the novices attempted to connect classroom theory with patient care. However, they made the connections between theory and practice in the opposite direction

to that of the experts. In contrast to the experts, they would start from the theory and get the students to generate examples. Timing was not an issue for the novices.

> *My post conference time would be spent choosing or picking out one piece of the theory that they had been discussing either in the course I had been lecturing in or one of the other two courses that they were in and asking them to identify client examples of that theory. (Novice 02)*

In considering why other novice clinical teachers did not use this strategy, there are two possible explanations. In the instance of the novice cited above, she found the relationship of theory to practice exciting. It was a part of her practice that was relatively new to her, acquired when she returned to university for a nursing degree. The second novice who used this strategy was the most experienced of all the novices who participated in the study. One might speculate that the use of this strategy is something that a clinical teacher develops with experience and is associated with expertise.

The novice clinical teachers, who used connections as a strategy to facilitate student learning, linked a new concept to something which was familiar and known to the student.

> *But thinking about it, what you need to do with that patient, whether it's positioning or the rapidity in which you need to respond or what response is appropriate can be based on what's going on or in the most basic sense - if there's a leak in the system then fluid is going to be an issue. (Novice 03)*

Modelling Nursing Care

Clinical teachers modelled nursing care when students were uncertain and needed assistance to carry out the necessary care for the patient. In these instances the clinical teacher made a judgment (see Letting Go) that the student was unable to proceed and they intervened to demonstrate the care for the student. Modelling nursing care was seen most

frequently with the expert clinical teachers. Although the novices modelled nursing care, with one exception, they did so less frequently.

> *If I found that the student needed that much guidance, more than anticipated, what I often do is say, "Well, watch" or I'll show her initially, "This is how", without giving as much verbal because sometimes the verbal (is difficult) and it can really sometimes upset the patient if they think the student has no idea. (Expert 03)*

The ability to move beyond concerns for the self is clearly evident here. The expert considers how she can support the student and the patient in this situation. With the development of expertise, the clinical teacher was able to see the concerns of the patient and student equally in her thinking.

The expert either talked about the nursing care as she was delivering it, or discussed with the student immediately following the modelling incident to make explicit her thinking while she was giving care. In contrast, the one novice who used modelling most frequently was not explicit with the student in what she was doing. This particular novice had only been teaching for a few months after many years in nursing practice. In situations that required more immediate action than the student was capable of, she reverted to the actions with which she was most familiar.

> *No, I don't use the term (modelling) at all. I just said that I went into my mode which you know, I mean I've been doing it for x number of years. It's kind of hard to stick out of it, especially when a person is suffering. You know I don't use the term role model or anything. If they (students) pick up on it then that's what they pick up on. (Novice 05)*

She also would talk aloud as she delivered care. However, there was no conscious linking of the thinking aloud to the student's learning. In fact, the talking aloud was more related to her nursing practice than clinical teaching.

Whenever I'm doing a treatment to a patient, I'm always talking to the patient and I always talk the patient through. I guess I just continue to do it and I just included the student so that it was a demonstration more for her actually than the patient. But in essence, I was talking to the patient too which I do a lot. (Novice 05)

Explaining

All the clinical teachers used explaining to facilitate students' understanding of a particular issue or theoretical concept in nursing practice. However, the explanations of the experts were more connected to nursing care as the students were giving it. Caring, an elusive concept to describe to nursing students, was clearly described by this expert.

Even though with my teaching, we've often been in situations where there's much more technological equipment around which really, in some ways I found, interferes with caring. I have tried to pass on to students that despite that "technology", the more important thing is the patient. I've even said when they first learn IV's, when they go into the room in the morning, the first thing they want to do is to look at the IV to see if it's running. That is really the most important thing (to the student). They'll even stop and count the drops before ever averting their eyes from the IV to the patient's face. And I said to them, "People in there in the morning and you want to know about their IV. I don't mind if you flash your eye up to see that it is dripping, but I do mind if you don't stop then and greet your patient and spend some time with them. When you've done that, then it is okay to turn your eyes away and even to say, I'm going to take a few minutes now and just check your IV and make sure it is running". They don't need to say to count the drops when that is in fact what they're doing. So I would actually say to them when we were teaching basic skills, "This is important, but not as important as the person in the bed. (Expert 01)

Novices had little difficulty explaining the explicit aspects of nursing care.

You don't just show somebody how to do a bandage, you show them why and what's going on underneath. (Novice 05)

However, tacit elements of nursing care were more perplexing. Even when novices recognized that they should be explaining a process, the manner in which they could do so was elusive.

What was even more evident to me though, was the role of the clinical teacher to make the implicit explicit. This is an area which I think I failed the last group of students as I was unable to clearly articulate what I wanted from them, and even more confusing was even when I saw students doing the right thing, I still had a difficult time describing the process. (Novice 01)

Directing

In this category clinical teachers told students what to do with respect to their nursing care. Directing was different from cuing and prompting in that the clinical teacher told the students what they should do in a particular situation, whereas, in cuing and prompting the clinical teacher only gave hints about what should be done. Therefore, when the clinical teacher used cuing and prompting, the students had to discover through problem solving the most appropriate approach to patient care. Directing was found to occur in two different types of situations, directing students regarding what to do in clinical practice and what they should learn in a particular clinical situation.

Directing students regarding what to do in the clinical situation revolved around the specifics of patient care and nursing skills. Directing with experts was commonly found with less experienced or weaker students.

This is the last rotation and if you have, and I said to her if this had been the first rotation, I would have taken her hand and I would have given the steps and I would have made her do certain things, as much as I can. I mean that word (made) isn't really accurate. But I would have carried her along and given her every direction. (Expert 05)

Novices tended to be more directive with students when they discovered that they had overestimated the students' abilities and, as a consequence, the students had been in situations in which patient care had been compromised. When this occurred, novices directed the students.

I wasn't as eager to let them sink or swim on their own, I was more like, "Don't get this person up, I'll be along in, I'm going to go and do this and then I'll be back and together we'll do this." (Novice 02)

One theme that emerged was the concept of "walking the student through". In these instances directing was used in circumstances in which the students were doing procedures which they either did not understand or had no experience. In these circumstances, the clinical teacher would specifically tell the student what to do during each step of the nursing care.

I had a student last week and I thought I was very clear going over what she was supposed to do. We got in there and I knew that she wasn't comprehending. So I basically had to walk her through it, like I told her step by step. (Expert 03)

Anyway he and I talked about what his next patient assignment was going to be and we selected a patient who was really quite sick. He had chest tubes in and he was on oxygen and was really sick. We had planned this experience together and he and I walked through about what this assignment was going to mean and all the rest of it. (Novice 02)

Usually the student only needed one experience in which they received such specific direction from the clinical teacher. A second time the student cared for the same patient, s/he was able usually to manage the nursing care on his/her own.

She went back the second day and she did fine. I think she only needed one prompting . . . the second time I basically had to say very little. (Expert 03)

Often students did not understand how a particular clinical area related to their nursing studies or what they could do on a nursing unit when their concrete nursing care tasks had been completed. In addition, sometimes the clinical practice area did not appeal to a particular student and s/he was reluctant to become involved in the nursing care required of the nursing practice domain. In these instances clinical teachers directed the students to the possibilities that were available to them and how they could expand their

knowledge base about nursing practice. This type of directing behavior was found with the expert clinical teacher who was working with beginning students and novice clinical teachers. Other expert clinical teachers were all working with more experienced students and this may account for the fact that they did not have to direct the students to avenues which they could pursue in order to expand their learning in the clinical area.

> *"X, do you have anything at all that you want me to do?" I say, Well, you can always talk to your patient, did you ever think of that? If you want to do something then, go and find some information, go read the nursing textbooks that are in the back room there". (Expert 04)*

> *Basically, what my approach with him is, "There are things you can learn here. It may not be what you want to know, but that doesn't mean you don't need to learn it". (Novice 01)*

The only clinical teacher for whom directing was uncommon in any situation was Expert 02. Perhaps her non-use of the strategy was related to her beliefs about giving the students autonomy over their own practice and encouraging them to make their own decisions. After careful scrutiny of Expert 02's transcripts, only one instance of directing was found. In this instance, a marginal student was going to make a potentially fatal error in working with a patient. Only in this grave circumstance did Expert 02 intervene by directing the student what to do.

> *Well she tried to give a med down the trach tube. I got her to the point, I thought, "How can I do this?" Anyway, she had the medication in the syringe, she was this far away (demonstrates with fingers) from squeezing that med down his trach tube and I thought, "How long can I let this go on?" But I thought, "I've got to let her go on long enough until I know that she would have killed him". So that was fine, but I said, "No, I don't think we should do this" and at that point I was angry. (Expert 02)*

Another strategy that was used by an individual clinical teacher, verbally challenging the student, fit conceptually with Making Content Understandable. Its

occurrence was so infrequent and not used by others that it was not included. However, intuitively, this strategy makes sense. In further research, it would be an area to follow up to ascertain its relevance to the category.

Although there were individual idiosyncratic approaches to Making Content Understandable, the stories of the novice and expert clinical teachers revealed the similarities amongst the two groups of participants. In describing these practices, the differences in novice and expert clinical teachers' conceptualization of the category was discussed.

Developing Students' Assignments

Developing students' assignments revolved around picking suitable patients for whom the students would care. In discussing how they developed students' assignments, the study participants described what they believed to be the purpose of these assignments, as well as the factors which they took into consideration during this process (see Table 3). The process of selecting patients for the students' assignments took considerable time. However, the relevance of the assignment to the students' needs was considered crucial to the students' learning.

Table 3: Developing Students' Assignment

	Novices	Experts	Practices in Common
1. Purpose	• essential to students' growth → vague description	• essential to students' growth to → increase confidence → confirm/refute students' ability	
2. Considerations	• factors in students and patients → limited detail	• factors in students, patients, and nursing staff → detailed → use intuition • gather concrete data about students • use intuition	• review student requests • patient factors → consider complexity → type of experience
	• limited detail of factors	• consider multiple factors in students, patients, and clinical setting • take into account staff nurse caring for students' patient • use intuition	
	• student factors → general information → uncertain re problem situations, e.g., student discomfort	• student factors → detailed information → level of students' performance → acknowledge students' feelings → challenge students to develop professionally	
	• patient factors → ensure variety of patients	• patient factors → important to stay with patient to develop nursing care competencies	

Purpose

Developing students' assignments was considered essential to the growth of students' clinical expertise. Through clinical practice students revealed their abilities to handle a variety of nursing clinical situations, connected their classroom learning to clinical practice, and increased confidence in their competencies as a practicing nurse.

> *You try to find situations in which they can reveal what they can do . . . I was just putting them into what I felt was the right opportunity for them to help them grow. (Expert 05)*

> *They were very mastery kinds of situations where you know, you do need to always think about the student's level of confidence and how they're affectively feeling. (Expert 02)*

While novices and experts agreed generally on the purpose of student assignments, novices descriptions of why they selected particular assignments for students were more vague in nature.

> *Well to be sure that they get at least exposure and opportunities to learn what I think this course is supposed to teach them. So that's my responsibility, give them the exposure. (Novice 02)*

The development of students' confidence was a theme expressed by expert clinical teachers. Structuring the assignment so the student could be successful was integral to the students' success. Putting a student in the right type of assignment could "turn the student on" or, conversely, destroy the students' confidence. Expert clinical teachers were concerned with maintaining students' self-esteem, understanding that it was essential to student learning. They discussed the importance of the balance between in considering what the student could or could not manage. The first week of practice in a new clinical

unit was viewed as particularly important by one expert. Her responsibility in the selection of assignments the first week was seen as crucial to the students.

> *I just contort over what kind of assignment I'm going to give my student for that day (first day in new area) because you can have one assignment that could completely finish a student off Week 1 and I mean emotionally, psychologically, you can just devastate them, Week 1 . . . I usually tell them, "I want you to walk out of this week feeling good, not bad but good, like oh I can do this". That's how I want them to walk out of here the first week. (Expert 05)*

Novice clinical teachers were unable to so this kind of processing, focussing instead on the details of the situation.

Selecting challenging assignments were used also to confirm or refute the expert clinical teachers' hunches about a student's ability in the clinical area. An assignment was viewed as challenging for the student if it was one in which the student had little or no experience and/or had not developed any skills or ability with respect to a specific area of nursing care demanded by the situation. Inherent in the description was the understanding that it was student specific, that is, what was challenging for one student may not be for other students.

> *Sometimes I've had a feeling that the student was negligent and I haven't been able to put my finger on it. There's just a feeling they can't be trusted . . . in one case in particular, I can remember challenging the student week after week and to my surprise she would rise to the challenge and still I would say (to myself), "There's something wrong here. I know there's something wrong". And eventually finding her in a very serious situation where she was about to give the patient double medication . . . and knowing my intuition was right . . . A couple of times I believed in the students and kept them going and challenged them when the feedback that I've had from other teachers is, "Don't do this, and usually been surprised and delighted to find out they did rise to that challenge. (Expert 01)*

Although novice clinical teachers recognized that students needed more challenging assignments, they did not have the comprehension to describe the factors that

were important in the circumstances. When considering what she might do in a situation in which she had insufficient information about a student's difficulties, a novice described how she would handle the situation.

> *I might give the student a more challenging assignment. I might set them up, not set them up to fail, but I might set them up for something really challenging to test it out. (Novice 03)*

Upon further questioning by the researcher, this novice talked generally about creating an environment in which she could behaviorally measure the students' practice. The emphasis was on how she could assess the outcome, rather than the specific factors she would need to take into account in structuring a challenging assignment for the student.

Considerations

Expert clinical teachers considered a multiplicity of factors in the students, the patients, and the clinical setting when selecting patients for whom the student would care. For example, in the following excerpt, an expert clinical teacher describes her thinking about student's characteristics and how those would affect the type of patient assignment that s/he should have.

> *I sort of have an idea what students are going to need a bit more TLC just to get them into the rooms. Then in terms of making their assignments, I'm not going to give them an assignment that they can't handle, like a patient that's very negative, complaining . . . or maybe one that unexpected things are happening . . . hopefully by the end of the day they'll feel good about themselves that they've been able to do it. (Expert 03)*

Although novices considered these factors as well, their descriptions were less detailed. In addition, novices assessed the demands on the clinical teacher's time for supervision when developing the students' patient assignment.

It's (clinical unit) very task oriented so you are trying to maintain the total picture as well as focus in on the tasks, because they were all there. It was difficult and perhaps I should have only had them with one patient. But then the patients weren't that compromised that they required (much of the student's time). You know I felt that it would be a waste of the student's time just having one patient, so I kind of weighed the pros and cons and even though I knew, I sometimes feel that I came out on the short end of the stick. (Novice 05)

Clinical teachers used a variety of strategies in the development of the students' clinical assignments. In the hospital settings, the clinical teacher reviewed the Kardex to ascertain the patients on the clinical unit. Sometimes they would consult with the head nurses who offered valuable input regarding the suitability of the patients for student practice. Depending on the patient turnover on the unit, the clinical teachers knew all or some of the patients. Knowing the patients facilitated their selection of the students' assignment. Both novice and expert clinical teachers collaborated with the students in the selection process.

I might give the assignment to some students and say, "Now I had a little difficulty with your assignment. Here is what I was playing with, what do you think?" (Expert 05)

In selecting assignments for the students, clinical teachers struck a balance between considering factors inherent in the students and those related to the patients for whom they would care. The ability to consider multiple facets of the students and patients was a hallmark of the expert. One expert described a student who underestimated her capabilities. She assigned the student to a very sick patient, one who would be in hospital the next week when the student returned.

So I gave her this patient and she did have, she did struggle. But I gave him to her the next week because I knew he'd be there, he was too sick to be gone. I gave him to her the next week and she did such a beautiful job. It was so exciting, So that is pretty critical you know. (Expert 05)

Novices, on the other hand, were unable to describe in much detail their thinking while making students' assignments.

> *I schedule placements based on a number of factors - student requests, students' strengths, matching based on previous clinical experience. (Novice 01)*

In addition, expert clinical teachers took into account the staff members who were responsible for patients whom they were considering assigning to students. Some staff nurses were known to be more approachable and amenable to students, whereas others could be quite nasty and short with the students. Only the more experienced novice (Novice 03) considered how supportive staff were to students. One might hypothesize that this ability to consider the staff on the unit as part of the mix in matching students and patients develops with expertise.

> *I've been in the area now for 5 years and I know a lot of the, well I know some of the staff. If I have a staff nurse that's not very approachable or doesn't help (the student), if I have a student, talking about the one that's very tentative, very hesitant, I certainly would not try to buddy her with a staff nurse that I know that can be very outspoken or not give them any time or not have any patience. (Expert 03)*

Student Factors. The overall ability of the student in clinical practice was assessed by clinical teachers in their selection of patient assignments. Expert clinical teachers gathered concrete information about the students including their past experiences, perceptions of the students' insight into their nursing practice, and how the student had adjusted to the new clinical unit. In addition to these specific data, they also used their intuition to guide their judgements about a particular student.

> *I confess to relying on intuition a lot. And because I've taken the time to try to get a feel for these students before we go into the clinical areas, I will begin the first couple of weeks by assigning heavier, more difficult situations to students that I have picked up from what I've known from the classroom and perhaps little chats*

that we had what I perceive to be the most capable students, to put them in more difficult situations. After a couple of weeks, I will begin to juggle that and I will say to a student sometimes whom I have perceived that they are having some difficulties adjusting to the situation or who is not clinically strong, I'll say, "Now I've been a little bit easy with you, you'll notice that you haven't had two patients with IV pumps at the same time and I need to push you a little more now so that you can expect next week that you're going to have a more challenging assignment". (Expert 01)

In contrast, novices did not describe specifically what they identified in students, even when they recognized that some students were more capable than others.

Some students are much more capable of handling complex situations than others and certainly that has to play a part in assigning. (Novice 04)

Identified weaknesses of the students were seen as areas of practice in which the students needed more experience. Experts viewed opportunities to have a similar assignment over time important to the development of the students' self confidence.

If they're having problems in particular areas I will try to give them experiences on those areas specifically. I mean, now on the other side of the coin, if they're doing one thing then you also want to be able to really feel confident with some things and not to always throw them into situation where they can't do it, because that just reinforces all the negative feelings that they have. (Expert 04)

Experts realized that they could not continually leave weak students in situations with no degree of ambiguity or change. Weak students, after a period of time on the unit, had to have more complex patients so that the clinical teachers could assess their ability to handle anything out of the ordinary.

When you have a student you feel is weak and you decide to keep everything safe and you give them a very low level patient for the whole time because they can do it, but in the end, like what have you accomplished? I don't know if you've accomplished anything except to keep everything safe and then you know what happens with those students, they're passed and it's a scary thing. (Expert 05)

Novices did not discuss differences in the students' level of performance when considering the development of the students' patient assignment.

Clinical teachers took students' requests into consideration when they were selecting patients for the students.

> *I'm saying (to students), "If you are not getting what you need then let me know" or "If you want something else I'll bend over backward to make sure you get that opportunity". (Novice 03)*

At times expert clinical teachers assessed the student's needs differently than the student's expressed request. In these instances, the expert clinical teacher would use her judgement of the student in the selection of an alternative assignment to the student's request.

> *And I'll say to the student, "Now I need you to be in a different kind of situation. I know you function well in that situation, but I need to know how you're going (to be) with the depressed teenager who really doesn't need that much nursing care, much technological nursing care. But how are you going to spend the day in that situation. (Expert 01)*

Novices were uncertain how to handle students who were obviously uncomfortable either on a particular unit or with a patient, One novice described her dilemma with a male student who did not like his clinical assignment. In contrast to Expert 01, Novice 01 was unable to identify specifically what the student could learn in the slower paced environment. Instead the novice resorted to "calming him down" by trying to convince him of her point through persuasion, rather than acknowledging his feelings and perceived learning needs. She was unable to help him see the type of learning that was inherent in the assigned patient. Moreover, she framed the problem in terms of a confrontation with the student.

I had a very, I would say probably one of the A+ type, triple A students who was very hyper or wants to work critical care/ICU and I think he'll probably do a darn good job there. He was put in a placement where it was very slower paced, different kind of environment, less structured, not what he wanted. Basically the student was placed in a placement where he didn't want anything to do with (it). Basically what my approach was with him was, "There are things you can learn here and it may not all be what you want to know, but that doesn't mean you don't need to learn it" . . . I don't know what the best approach was with him. I tried to, if anything, sort of calm him down and try to reinforce to him that maybe you don't know everything that you need to know in this setting, even though you think you do . . . I don't know if I've really figured out in my head what is the best way to deal with the very confrontative student. (Novice 01)

Sometimes clinical teachers had the students select their own assignment from the patients available on the clinical units. One novice worked in collaboration with the students in order to find the most appropriate patient for whom the student would care. Although she gave the students indicators to consider, she left the final patient selection up to the student.

So in order to find her a feeding experience, I had to find a client that wasn't sort of up. So we talked about, for instance, the fact that she wanted to feed someone, that she was pretty sure that she could cope with that. We together walked through the corridor and sort of went in and out of the rooms and said hello . . . We selected the client that way without sort of going through the Kardex and saying, "Oh yes this person has to be fed". We did sort of a walking around and she picked the client. I took her back to the desk and said, "Now you realize that this is going to be a little more complicated that it needs to be because there's more to just feeding than you know. Wouldn't you rather like to try feeding someone else and then factor in the communication difficulties?" Anyway, no she wanted to do this. (Novice 02)

One of the expert clinical teachers explicitly discussed how she had the students select their own assignments. However, her approach to the situation was quite different than the novice clinical teacher. As a student, she had been required to select her own patient assignments. From her perspective, she realized that she had not had the knowledge as a student to effectively select patients which would be right for her.

> *I can remember being given, I could go in and I could choose my patient. Now here I am, I don't know anything right, nothing, And I go to a new unit and I am supposed to pick and I'm anxious, I was 18 . . . so I look at this patient list and am I going to, do I know enough to know how to pick a patient? Well, no, I did not know enough to know. (Expert 05)*

She went on to describe that the most essential component to making good choices in assigning students was knowledge, both of the patients and the students, and that as a clinical teacher her role was important in assisting the students to make the right choices. She selected a list of patients whom she believed were within the students' capabilities and then had the students select from that list.

> *I will give them an overview of what patients I've selected that I think would offer some good opportunity and what that opportunity would be like. Then they with me select their patient situation. (Expert 05)*

Who the students selected and how they managed their patients were revealing to this expert with respect to the student's abilities in the clinical area.

> *I had another student who, when I had one patient who was extremely . . . I presented her that she was young, she had a diagnosis of cancer, was having tremendous difficulty coping with that, and she was not progressing well after surgery, as well as a high need for emotional support. I had a student who picked that patient the very first day. And she did very well. And so it helped me to have an understanding of what her capabilities were and what her insight was into her own ability to handle things. So that was quite revealing. (Expert 05)*

Experts also recognized that through selection of particular patient assignments that they could challenge students to grow professionally. What was critical in the selection process was ensuring that the situation, while presenting the student with a challenge, was one in which the student could successfully deliver nursing care to his/her patients. An understanding of the student was important to the clinical teacher's ability to move the student to a more challenging assignment.

> *That makes me feels really good at the end of the day you know that they got in there and they were okay, they learned something. Of course when a student thanks you, "Oh thank you for giving me that difficult assignment. I did okay and I'm going to go home now and die" . . . You had that confidence in that they were able to do it. (Expert 02)*

Patient Factors. Both novice and expert clinical teachers considered the complexity of the patients and the abilities of the students to handle either a stable or rapidly changing clinical situation. Making the match between the students' needs and those of the patients was fundamental to developing the students' patient assignment. Matching the students to either the patient or, in the case of community practice, the agency was more problematic for novices because they were not sure what factors, beyond the obvious, they should consider. Although they tried to balance factors inherent in the student and the patient, their consideration of the issues was more general than the experts.

> *One of the things that I do is I try to link students and clients to sort of make a match between the two so that the students get the experiences that they need and the clients get the care that they need. So that's probably the first thing. And that's probably the toughest, trying to find a match. (Novice 02)*

In addition to matching the patients and the students, two experts also discussed the importance of matching students with staff nurses. At times the complexity of the patient may have been beyond that of the student. However, if the situation was assessed as being a good learning experience for the student, these experts considered assigning the student to work with a staff nurse. In making this decision, the experts took into account the staff nurse's abilities to work with students, particularly her relationships with students. Some staff nurses were seen as willing to help students, whereas others were not.

> *Well I know some of the staff and if I have a staff nurse that's not very approachable or doesn't help, if I have a student, talking about one that's very tentative, very hesitant, I certainly would not buddy her with a staff nurse that I know can be very outspoken or not give them any time or not have any patience. So sometimes I've changed, even though it would have been a good assignment for her, if I know who the staff nurse is. I sometimes steer her away initially anyways and try to, if the student is very hesitant and very unsure, and tentative, I'll try to give them maybe a staff nurse that I know is a little bit more caring, won't ream them out in front of the patient. (Expert 03)*

Clinical teachers considered the types of experiences that a patient had to offer. Particularly in the early part of the students' experience, the clinical teachers would ensure that the students had opportunities to practice their nursing skills.

> *I go up to the ward and I check over all the patients. Then I try and find patients that have a number of - whether they have an IV, a Foley (catheter), treatments that are going to be done to them - whether it's removing staples or even just a dressing change, I try and get them in so that they have a patient that has a colostomy or ileal conduit or something different that they haven't had. (Novice 05)*

Novices were more concerned with ensuring that the students had a variety of different patients than the experts. Different patients were considered by novices to be essential to a well rounded student experience.

> *So the patient assignment for the student in the community would be to try and provide the students with a variety of experiences to try, if they're working with Manitoba Health, to try and make sure that they have someone on long term continuing care program, to try and make sure that they have a family in public health. So to try and provide as well rounded an experience as you can . . . a variety of experiences or a reflection of the cross-section of clients the area has to offer. Try not to just have the student follow one particular experience that they may develop the idea that that is the only type of clients that a particular area services. (Novice 04)*

Although experts also tried to ensure that students received a variety of patient experiences, at times they would leave a student in a particular patient situation so that the s/he could develop their nursing practice competencies.

Like I can see the progress, how they're doing. If the student's having difficulty, I won't really change her assignment. I'll try to work with the group or the two of whatever I've given her as an assignment. (Expert 03)

It was evident from the descriptions of the novice and expert clinical teachers in this study that both groups agreed on the purpose of student clinical assignments. However, the depth and breadth of understanding of the issue found in the experts was absent in the thinking of the novice clinical teachers. The novice clinical teachers' understanding was limited to vague descriptions and confined by their lack of experience as clinical teachers.

Monitoring and Evaluating

Evaluation is one of the most difficult and emotionally charged practices of clinical teaching. In this study clinical teachers discussed evaluation as the process through which they gave feedback to students about their nursing practice on an ongoing basis, as well as the final evaluation report that they wrote for the student's file following the completion of the clinical experience. None of the clinical teachers discussed evaluation from the perspective of formative and summative evaluation. As a result of a lack of conceptual clarity, evaluation was a clinical teaching practice which presented difficulties to its practitioners. Monitoring was not specifically identified. Rather clinical teachers described how they supervised students and gathered data on students' nursing practice. However, monitoring is an integral part of the evaluation process. Seven sub-categories were identified (see Table 4). Evaluation was viewed as an imprecise activity with varying degrees of grey.

I mean we have a very concrete format for evaluation and sometimes you can't even as concrete as it is, it's still behavioral and there's still elements of degrees of success. (Expert 05)

Table 4: Monitoring and evaluating

	Novices	Experts	Practices in Common
1. Process	• responsible for evaluation • focus on particulars of situation	• collaborative • confidence to fail students • open to alternative view of assessment of student	
2. Purpose	• ensure safe patient care → focus on patients • documentation of students' progress → use concrete guidelines • confusion between teaching & evaluation	• ensure safe patient care → focus on students • documentation of students' progress → comfortable with ambiguity • clarity between teaching & evaluation	
3. Letting Go	• vascillates between letting go & staying • jumps in at first sign of difficulty • desire to give nursing care → no insight into own needs	• use cues in student, patient, & nursing care to make decision when to let go/ intervene • use intuition to assess situation • takes risks with students • desire to give nursing care → recognizes meeting own needs	
4. Data Gathering	• no routines • unable to priorize students' need for supervision • recognize intuition engaged, reluctant to act	• make rounds • keep notes on students • look for patterns of student practice • rely on intuition	

5. Sources of Information	• observation → direct • other clinical teachers	• observation → direct & indirect → interactions with staff • patients	• questioning → student's knowledge → evaluate students' progress • staff nurse • other clinical teachers
6. Student Cues	• uncertain • general • inferential → judgement of the parts	• comprehensive • specific • inferential → judgement of the whole • assess growth over time	
7. Feedback	• general data	• specific data → enabled students to accept negative evaluation	• interactive, 2-way process

The consequences for the students in terms of their ability to advance through the nursing program and ultimately graduate as a professional nurse weighed heavily on the clinical teachers as they made their decisions about students' practice. Many of the final statements that were written about the students' abilities to deliver nursing care relied on data that were highly inferential. Understanding how to develop sound judgements on the basis of inferential data may have accounted for the novices avoidance of evaluation.

> *I think I was avoiding it (evaluation). I didn't quite know how to do it so when the pressure was on I had to sit down and produce something, then I sat down and did it. (Novice 02)*

Expert clinical teachers viewed evaluation as a collaborative process. In this partnership, information that the student could bring to the evaluation was accepted. However, they were reluctant to include negative statements that were based on data that they had not seen or experienced directly with the student. Only positive data that the

students raised in the evaluation interview were included in the final evaluation. This was viewed by the experts as being "fair" to the students.

> *I tell them that they can write things that they have done for their patients and if there is anything that they've done well or done good that I haven't seen that I would put that into their evaluation tool, but I'll never take a negative thing. They can use the negative, they can write it down but I will never put a negative thing in that they did that I wouldn't have seen. Because it's not fair. (Expert 04)*

In contrast, novices saw evaluation as their responsibility.

> *It depended on how it went. You know if they were really nervous and had a lot of difficulty, then I would ask to do the next one with them as well. If they did it right the first time, then I encouraged them to just go ahead, which I never did decide whether that was okay. (Novice 02)*

In this study only the experts had the confidence to give students a failing grade in clinical practice. The inability of other clinical teachers to give failing evaluations was a source of frustration to the experts. In part they viewed the ability to give a failure as integral to the integrity of their practice as a clinical teacher. In one instance an expert wondered aloud about the ability of her colleagues to give a failing grade to a student in clinical practice. In this excerpt she captured both the essence and the difficulty of evaluating students.

> *(In talking to a student) "I know that you performed very well (in other settings) and there were many circumstances that affected these parts of your performance, but to be, it wouldn't be fair not to be honest about what I saw" . . . I hate to criticize other people (clinical teachers), it's not right, I'm sure there are things they're doing that are really great, but sometimes I wonder about the ability to take information and analyze it and really look for patterns of behaviors because that's what it is, is taking a large amount of information and trying to pull out of it what has meaning and what relates and trying to make something of it. (Expert 05)*

Expert clinical teachers were willing to admit that they may had made a mistake in their assessment of a student. Even though experts saw evaluation as a collaborative

process between themselves and the students, they tended to assume responsibility for their inability to accurately assess a student.

> *Sometimes I have more problems with a student that looks like they were doing really well and then their last week on clinical they have just a terrible time and then you wonder, "Have I missed things? Has this been going on all along and I've misjudged this student?" You're just sort of left with this awful feeling. (Expert 03)*

When experts made inaccurate assessments of the students, they would either clarify their assumptions with the student or gather additional information to substantiate or refute their earlier assessment. However, their ability to do that was predicated on their understanding of the student's behavior and they were able to offer the student a possible explanation for it.

> *There is a kind of anxiety that avoids the teacher and they're the easiest ones for me to miss because they're okay and that they don't need me. They're the ones I don't pick up on as fast. That is the surprise I find out in week 4, "Hey, this student really, it isn't that they know what they're doing, it is that they've kept themselves scarce and they haven't come to ask because they don't want me around". And I will confront these students. I'll say, "I haven't really seen you very much, is it possible that you're feeling very uncomfortable with the idea of my being around?" And usually they say, "Yes". (Expert 01)*

When experts suspected that a student was in difficulty, they structured the situation so that the success or failure of the student was a direct result of his/her practice. This is contrast to Paterson's (1991) findings which suggested that when the clinical teacher made a decision about the ability of the student, she would structure the situation so that the student would either pass or fail, depending on the assessment of the clinical teacher with respect to the student's ability to practice nursing. A possible reason for this difference may be that Paterson did not identify her participants according to their level

of clinical teaching expertise. The ability to let the student influence the outcome may be associated with expertise and a distinguishing feature of the expert clinical teacher.

> *In terms of my thinking, I guess that's changed because now I can sort of articulate to others, "Well I did this with the students because . . . You know, I had a student last year who was very unsafe, but then I had a plan of action, what I would do to either figure out if she had a chance or say, "Hey, let's just call it quits. Why don't you do something different?" Whereas, before I would just kind of be floundering, having a prejudged thing, OK, I* ***will*** *make the student unsuccessful or I* ***will*** *enable the student to graduate. Now it was kind of like, well this is what I'll do, what she does is her problem. (Expert 02)*

When novices discussed difficulties in assessing students, they were more focussed on what were the particulars regarding what had happened, rather than understanding the underlying meaning to the student's behavior. Their responses to students reflected this lack of understanding.

> *I guess I tried to give this student the benefit of the doubt and I was trying to be objective. But when he questioned the other clinical advisor and he said, "I never said that" and then kind of appealed to me, like "I have no idea what she's talking about". I just thought like, "You have another X beside your name". (Novice 01)*

Purpose

Both novices and experts monitored and evaluated students delivering patient care to ensure patient safety. However, their underlying aim for this process was different. Experts were focussed on the students. Safeguarding their nursing practice ultimately ensured that patients received safe nursing care. Novices, however, were focussed more on protecting the patients.

> *I don't get started with a particular student in the morning until I've seen them all in the situation they are going to be in. I visit each room where the student is to be assigned. Sometimes I go in and spend time so that I'll know what the situation is. Sometimes I look in to see that the student had begun and that this is a safe situation. (Expert 01)*

I think one of the major reasons was the tremendous fear that they would do something wrong and that I was responsible and that if I wasn't there and they did something wrong that it was my fault as a clinical instructor. I think we all have the fear or a need to protect the patients and if we feel that they are under our supervision, I felt the only way I could protect the patient was to actually be there. (Novice 04)

A paramount reason for monitoring and evaluating students was the documentation of students' progress through the nursing program. Initially this responsibility was intimidating to the novices and they often did not know how to do it. As a result they procrastinated and left the writing of the students' evaluations until the evaluation had to be done.

Well I really didn't do any evaluation until right at the end. (Novice 02)

On the other hand, experts had "figured" out how and when to do this task. However, they also expressed concerns they had encountered as novice clinical teachers in learning how to write students' evaluations. An expert described how she accomplished evaluations as a beginning clinical teacher.

When I first began, someone actually offered me a vocabulary list that they'd gotten from someone. They actually had gone to Student Records and looked at evaluations and taken what they thought were useful phrases from there and I've actually found a couple of books from the library that were about evaluating professionals and I did take some phrases from there. (Expert 01)

This reliance on concrete guidelines is typical of novice behavior in which the parameters of the exercise provide some structure for the beginner in a world that is perceived as unstructured and arbitrary.

Sorting out the differences between when to teach and when to evaluate was a dilemma faced by all clinical teachers. There were no clear parameters between teaching and evaluation that were common to all the clinical teachers in either the novice or the

expert categories. Understanding when to evaluate and when to teach were idiosyncratic decisions made by the experts relying on what worked for them as they sorted out the problem and decided what the two concepts meant to them. Moreover, they also described their difficulties as novices in understanding when it was appropriate to teach and when a clinical teacher should evaluate a student's nursing care performance.

Some of the experts saw evaluation as a part of learning and, therefore, something that the clinical teacher did all the time.

> *Evaluation is a form of learning, it's just a different kind of teaching where you really are focusing on giving them a lot of feedback about "Maybe you could do this differently". (Expert 02)*

Another expert, who saw teaching and evaluation as something clinical teachers did all the time, differentiated the two concepts by emphasizing the importance of what actually was written on the students' final clinical evaluation as the critical piece in thinking about teaching and evaluation.

> *You know you can't teach if you don't evaluate all the time to help assess where they're (students) at so you can help them. The bigger question is what counts in their evaluation. (Expert 05)*

Two experts differentiated between teaching and evaluation on a temporal basis. Students were given time to learn to do a particular aspect of nursing care and then they were evaluated on their abilities. This temporal aspect to differentiating between teaching and evaluation was either after the student had spent several days with a patient or in the latter weeks of a clinical rotation.

> *Sometimes I'll tell a student who has done something before and with my, with lots of assistance, "Today I am going to come with you and I am not going to say anything, I am not going to help you, I will just watch and this is your evaluation". (Expert 01)*

The issue of when to teach and when to evaluate was complicated further by the regulations of some of the nursing programs in which the clinical teachers worked. Some of these programs required that the clinical teacher give the students weekly written feedback on their nursing practice. This requirement may have contributed to some of the experts' decisions to evaluate as they taught. Furthermore, evaluation as a process involves feedback to the student in order that s/he can improve their practice. Conceptually separating feedback from evaluation may be difficult. The literature on formative and summative evaluation may also have assisted the clinical teachers in sorting out the conceptual difficulties that they encountered in deciding when they should teach and when they should evaluate.

The confusion about the distinction between teaching and evaluation was something that the four of the five novices were not able to resolve. Novice 02 described particularly well the dilemma of beginning clinical teachers.

> *It (evaluation) just makes me feel really uncomfortable because I don't think, it (teaching and evaluation) doesn't blend well. I understand the concept of evaluation is essential, you have to be given feedback, but what happens is, the nuts and bolts of it is almost, it comes down to "You're good, you're bad" kind of message. Even though it doesn't matter which way you frame it. If I give this student an A and I give this one a B, then the student who gets the B doesn't look at the fact that they've got some very good qualities and some strengths. They look at the fact that that I'm not as good as the person who got the A. And there's this sort of, I don't know, it just doesn't feel right. It's almost incongruent with the teaching part of it and the evaluating part of it. They don't fit together very well and yet we do it all the time. (Novice 02)*

Much like two of the experts, the one novice who had separated out when she would teach and when she would evaluate used a temporal distinction between teaching and evaluation.

> *Any time that it's the student's first exposure to something then the opportunity should be to teach the student by the time they have been exposed to something two or three times in the case of the community visits. By the time they have made their third or fourth visit, my expectation was that they would know how to handle a lot of what they were dealing with as opposed to the first time when I would, I would be expecting them to be learning from their mistakes and asking a lot of questions. So part of it is simply the number of times they haver been exposed to it, part of it is the time in the rotation. At the beginning of the rotation you're going to be much more likely to do teaching, you're not expecting them to have mastered the skills of that area. By the end of the rotation you're starting to contemplate what you are going to be writing in their evaluation forms. (Novice 04)*

Perhaps the novice was able to distinguish between teaching and evaluation as a consequence of her clinical teaching practices. At the time of the study, senior students with whom she worked were in a variety of clinical settings and supervised directly by a preceptor (staff nurse on the clinical unit who assumes responsibility for the student). As a result, the novice was able to gain more distance from the students as she was not directly supervising their nursing practice. Therefore, she could focus more on what and when to evaluate.

Letting Go

Letting go was the activity whereby clinical teachers made decisions about how closely they needed to monitor and supervise students when they were giving nursing care and can be conceptualized along a continuum (see Figure 1). The clinical teacher ascertained whether she should accompany the student to the patient's bedside or let him/her practice independently. Furthermore, when the clinical teacher decided to go with the student, she needed to determine whether the student could deliver the nursing care as she observed or whether she must actually help the student with the patient's care or deliver the care herself.

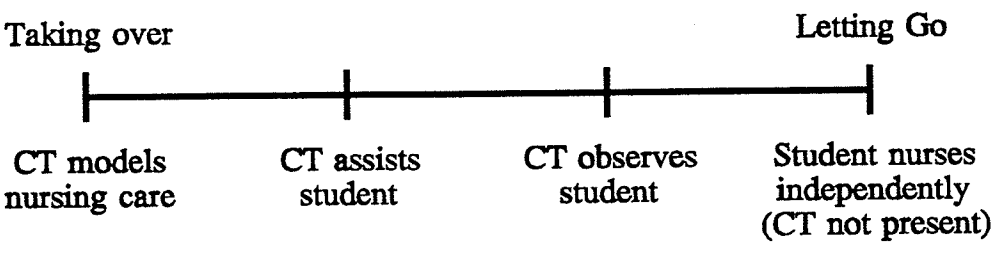


Figure 1. Letting Go

The decision whether to stay with the student or let him/her carry out nursing care alone was an either/or choice. Although both the novices and the experts identified the need to stay with students, only the experts qualitatively differentiated cues within the clinical situations that would indicate to them that they should stay with the student or let him/her practice independently. Specific cues in either the student or the patient situation facilitated the clinical teacher's judgment. Expert clinical teachers had a repertoire of clinical teaching experiences on which to base their decisions. Novices, on the other hand, did not understand the students' abilities to manage patient care situations. Consequently, they often erred in their judgments regarding the degree to which they needed to stay or directly assist the student in the delivery of nursing care.

Staying with the student had benefits that were germane to clinical teaching. Initially the clinical teacher stayed with the student in order to determine whether the student was competent to deliver safe nursing care. Without exception, all the clinical teachers in this study commented on the necessity to ensure patient safety by observing the students in practice. While the clinical teacher was with the student, she gathered data

that were necessary for clinical evaluations and provided students with valuable feedback about how they could enhance and improve their nursing care.

Letting go was viewed by expert clinical teachers as a strategy through which they could foster student learning on the premise that students learned when they were actively involved in delivering nursing care. In the actual clinical setting, the student had an opportunity to assess the situation and ascertain what was appropriate in the particular circumstances. Should the student encounter difficulties, s/he had an opportunity to problem solve and think through the situation.

> *I'll let them contaminate. I'll let them make the actual mistake and then I'll point out, "Well you just contaminated that". I won't stop them from contaminating because by stopping them they won't get the principle of how it happened. So I'll let them make the mistake and then I'll say, "Okay, well now that that's contaminated, now what do you do?" (Expert 04)*

Nonetheless the decision about how much supervision and/or direct intervention was necessary created a dilemma for the clinical teacher. When making the decision about how involved they should be with the student's nursing care, the experts talked about "putting their hands in their pockets".

> *There's times when I would just love to jump in there and do it and it is very difficult sometimes to put my hands in my pockets, to put my hands behind my back and just let this student go fuddle around and make mistakes and screw up this and contaminate that and then decide how they're going to fix that so it doesn't hurt the patient". (Expert 04)*

The conflict arose out of their decision about what was a better learning situation for the student. Was it more desirable to see good nursing care modelled (which the student could then attempt to emulate) or should the student have the opportunity to actually deliver the nursing care?

> *I struggle with it (role modelling) because sometimes if I use that, I cut the student out of their client-student interaction . . . And I really struggle with the difference between the importance of showing them how and staying out of their way. (Expert 01)*

Other issues such as the impact of interfering with the student-client relationship (as illustrated above), the belief that too much supervision might intimidate the student, and the teachers' own needs to deliver nursing care contributed to the clinical teachers' struggles. The need to give nursing care personally was particularly interesting and was seen in both the novice and expert clinical teachers. The qualitative difference between the accounts of novices and experts rested in their insight into their behavior. In the following situations, the expert was able to recognize that she was meeting her own needs instead of those of the student.

> *Sometimes my own needs get in the way because I long for the bedside and sometimes I'll notice my fingers are itching to get in there and I'll say to the student, "I'll come and help you". And afterwards I think, "I wonder whose needs I was meeting?" (Expert 01)*

However, the novice lacked this insight and gave nursing care to bolster her self esteem after a particularly distressing day with the students.

> *I went into my mode (giving nursing care). I don't normally do that but I was having such a rotten day in the back of my mind I figured I needed to do something that was positive and I knew that I was going to be okay". (Novice 05)*

Letting go had some emotional qualities which contributed to the learning environment for the student. Clinical teachers recognized that their behavior could be intimidating to some students, thereby making it difficult to learn. By letting students deliver nursing care on their own, they removed the intimidating presence of the clinical teacher, freeing the student to focus on the patient, rather than worrying about what the

clinical teacher was thinking about the nursing care they were rendering. Moreover, letting the students practice on their own conveyed confidence in the students' nursing abilities and contributed both to the students' self esteem and the relationship between the clinical teacher and the student.

> *"I trust what you're doing and you need to know that I trust you and therefore, do what you need to do. But I'll be there for you if you want me to be there all the time, during the dressing changes or whatever." I think they quickly know that, you know. It's a confidence builder too which I feel is part of clinical teaching. (Expert 02)*

Cues to Let Go. Cues in the student's behavior often informed the expert clinical teacher that a particular student could not be left alone. It was important to create an environment in which the student felt safe to learn. Some students were clearly overwhelmed, blinking back tears and/or appearing anxious and scattered during orientation to the clinical unit. Knowing the student and their past experiences often provided information to the expert that she must stay with the student.

> *Somehow there is a sense when the student is so overwhelmed that they are really not going to be able to pull this (nursing care) off. Blinking back tears for sure is an indication that the student is in (trouble) and is not going to be able to come out of this situation without some intervention or help from someone. (Expert 01)*

One expert managed the dilemma of how much supervision to give by establishing criteria which the students could use to decide whether they needed to ask her to accompany them when they gave nursing care. She was able to make these distinctions because her expertise in practice enabled her to anticipate the difficulties that the students were likely to encounter.

> *If a student made a wrong decision about mixing up an IV med, I will have assessed the situation well enough to know that I am not laissez-faire, letting them do their own thing. That I as a teacher should know my practice well enough to*

know where the unsafe things may happen and then I intervene to prevent that. So that is just me as a nurse knowing what the situation is all about. (Expert 02)

Occasionally the complexity of the skill was the signal for the expert clinical teacher to be with the student, particularly if it was a skill that had increased risk for the patient. At times it was difficult for the clinical teacher to explain the nuances of a nursing situation. In these instances, the clinical teacher took over in order to demonstrate the subtlety of the situation.

They do every single thing themselves. The only time I take over is if there's one part of the procedure where I haven't been able to . . . I can't teach touch, the feel you have. So sometimes what I'll do is I'll take, I'll do a part of the procedure, feel what I'm feeling and then I let them have a go and do it again. Then I'll tell them, "Okay, what you're feeling is this, this, or this". That way I have been able to figure out how to teach it. But I can't (figure out how to teach touch) and that's the only time I take over. (Expert 04)

Characteristics within the student's practice (related to Knowing Students) signalled the expert that she could trust the student to give nursing care safely without her presence. Often she had seen the student with the patient or in another similar situation and knew that the student could safely manage the nursing care. Student characteristics that cued the expert clinical teacher to let the student practice independently included how well the student picked up on patient cues, whether the student was observant, how s/he handled new situations, his/her nursing knowledge about the patient situation, and whether s/he could engage and interact actively with the patient.

Knowing the student, knowing past experiences and having observed when the student is able to pick up on cues gives me confidence to leave the vent closed in the IV and let the student discover that for themselves. Because I know this is an observant student who will eventually make that check and find that out. (Expert 01)

Some experts tested the students to ensure that they understood the nursing care and what they were to do with their patients.

> *Or else I give them the wrong idea and see what they say. Some will say, "Let's do it that way". "Oh no, it's not quite right, but you know." So you do sort of test them in some way, I guess, just to see how they'll process the information. (Expert 02)*

On the other hand, at times experts stayed with the student and judged the situation as it progressed. Letting go was more subtle in that they were physically with the student.

> *In the rooms it's such an artificial situation in this whole idea of having the teacher there and then standing back and having the students try this situation themselves. So I tend not to. I tend to have a very active role when I'm with the students and the patients. If I see they're comfortable enough and that they're able to talk to the patient, then I kind of step back a bit. I kind of feel out the situation and where they're at. (Expert 05)*

Frequently when the clinical teacher was with the student she framed her presence in terms of "helping" her give care to the patient.

> *So I say, "can I help you with turning that patient?" Well, yeah, 300 pounds, I guess they're going to need some help. And then I just sit back and say, "what would you like to do now? What can I help you with here?" And let them take the lead. (Expert 02)*

The critical aspect in circumstances in which the clinical teacher was with the student was that she allowed the student to take control of the nursing care, engaging in direct care with the patient at the student's direction or request.

The amount of control that the clinical teacher gave to the student was a differentiating factor between the novice and the expert. In reflecting on the differences between her practice as a novice as compared to her present expertise, one of the experts commented:

I guess the other thing about teaching is this aspect of control, like how much control do you have. When I initially started out, I had to have all the control because I was mostly preoccupied with myself. I thought that I was the bottom line. But in doing reading about education, it has always been that the student is judged on her/his own behavior and that you're responsible really for making assignments, not necessarily for all the behaviors that the student is doing. So let them be accountable for their own practice. That is just an understanding you know. Part of being a professional is to be accountable for yourself and they (students) know that. I say that loud and clear . . . "You're going to be called up to account for yourself and you'd better be aware of that and I'm here to tell you or give you feedback about what have been different or could have worked". So I guess it's the control thing that's changed over time for me. (Expert 02)

Although novice clinical teachers believed that it was important for the students to practice independently, finding a balance between the amount of control that they should assume with the student in the clinical setting was a source of ambivalence. They vacillated between giving the student control and taking it back, often reacting to a particular situation in which the student was not successful. In describing a student situation in which she gave a student more freedom than she thought she should have, a novice states:

To a certain point I've given up a little bit of that autonomy that I gave the students. Maybe I was giving them too much. Now I've pulled back a little bit. I'm checking more closely what the students are doing so I'm probably allowing them less freedom than I did. (Novice 04)

Intuition played an important role with the experts in determining whether the student was capable of functioning on his/her own. They had learned to trust and use their intuition to know and understand students. Expert clinical teachers described this intuition as "feeling out" the situation or getting a "sense" of the student.

Sometimes you'll get a sense from the student that they are capable. You'll notice that they haven't become unduly excited or anxious in introduction to the clinical area and even though you may not have seen them very much working with patients, you have a sense that they seem at ease there, that they've picked up

quickly on classroom, textbook, that kind of information. They've picked up quickly on assessment in your . . . have some expectations that will also come through in clinical practice. (Expert 01)

At times when the experts knew the nursing staff on the unit who were working with the students, they decreased their close vigilance of the students. Knowledge of particular nurses who maintained a high standard of nursing care in their own practice and demanded the same kind of care from the students was sufficient to let the student function independently.

She is a wonderful role model. I know that when we're there, I can kind of back off and then it will just happen no matter what. And if it doesn't, she won't miss a thing. She is very tough on students but the students know from her that these are her standards and they shall not veer from these. She takes on my authoritarian side and I can just do my rounds and have my, you know, kind of fun. (Expert 02)

Risk Taking. Risk taking was exclusively an expert clinical teaching behavior. The experts in this study consciously selected clinical assignments in which there was a certain element of risk, that is, the situation held some factors that were unknown and new to the student or the patient situation was complex and demanded a high degree of skill. Otherwise, if students were not put in these types of situation, the experts believed that the student did not progress in his/her practice.

Well I think most of the time you are taking chances with students. I mean if you're not taking chances with them, then they just don't move anywhere . . . And every time you put them in a new situation, you're taking a chance. (Expert 05)

As long as it was not harmful to the patient, experts let the student carry out a nursing practice that they did not think was particularly the best in the circumstances. They discussed the range of possibilities with the student and then allowed the student to proceed with the one s/he believed was correct.

> *The student made what I wouldn't have considered a good decision. I mean no harm came to the patient but I would've for sure decided to do something different. But that was okay I thought because I gave her the freedom. She chose the wrong thing, but there was nothing really that was unsafe. And I checked back the next day and it was alright so I left it at that. (Expert 02)*

In reflecting on this situation, the expert discussed the fact that she had given the student control of her nursing practice. To not support the student's decision would undermine the control over her practice which the clinical teacher had given her. When the opportunity arose in conference to discuss the pros and cons of this patient's nursing care with all the students, the expert pointed out the difficulties with the product that the student chose, rather than focussing the discussion on the student's decision. In this way the teacher was able to reinforce a better approach to care without undermining the student's confidence in her practice.

Experts took calculated risks with students when they were trying to ascertain the competence of the student, particularly when working with a marginal student.

> *So with this student, you know, I gradually eased her into the clinical setting. We had a lot of meetings to talk about what she was doing. But then the crunch hit and I said to her, "You know you have got to be able to take care of this patient with a tracheostomy. You know that I'll be there for you, but you know you have go to do this. This is the test" . . . In this situation with this student I set up these things. The crunch came when she did something that was so unsafe it was scary. I was really scared that we would've killed this patient. She tried to put a med down the trach tube. I got her to this point and I thought, "How can I do this?" Anyway she had the medication in a syringe. She was this far away from squeezing that med down his trach tube. I thought, "How long can I let this go on?" But I thought, "I've got to let her go on long enough until I know that she would've killed him". So that was fine, but I said, "No, I don't think we should do this". At that point I was angry. (Expert 02)*

This anecdote clearly illustrated the deliberate way in which the expert set up the clinical situation to ascertain the level of the student's ability to give nursing care in a

situation in which she should be competent. The clinical teacher used her nursing expertise as a basis for thinking ahead about what were the potential dangers in the nursing care and at what point she needed to intervene to protect the patient. This was in sharp contrast to novice clinical teachers who jumped in and yelled "No" or "Stop" when they thought a student might be jeopardizing the patient's comfort or safety.

> *I did yell at Tom, not yell at him, but I went "No!" You shouldn't do that and I did apologize to him. But at the same time, I would probably do it again because he did hurt this particular fellow and I was so worried about them pushing that thing (penrose drain) right down through the incision. (Novice 05)*

In reflecting back on this experience in her journal, Novice 05 felt badly about having to interfere and speak harshly to the student. However, she was not able to determine how she might alter her behaviour in another similar circumstance.

> *I regret that I had to stop one of my students from making a mistake by saying the word "No" quite sharply when he went to cut the penrose without securing the pin. Then again he went to cut the penrose beneath the pin. I did apologize to him after the procedure. This is new to me too - I must have patient safety. (Novice 05)*

Part of the novices' concern about students making mistakes with the patients was their belief that they were responsible for everything that the student did. If the student made an error or did not act appropriately, the novices felt that it was their fault.

> *I think one of the major reasons was the tremendous fear that they would so something wrong and that I was responsible and that if I wasn't there and they did something wrong that it was my fault as a clinical instructor. I think we all have a fear or a need to protect patients. (Novice 04)*

In instances in which novices found the student in compromising situations, they related how they had overestimated the student's abilities.

> *I didn't check him immediately. I went off and checked and got a couple of the other students started and then came back to see how he was doing and he was*

in such a mess. Absolutely such a mess. He had, he was actually, when I walked into the room he was in the process of transferring this person from the bed to the chair which was okay except he hadn't factored into his planning the tubing, etc. for the chest tubes, right and he was practically pulling the chest tube out. Well of course I was having a conniption and panicked. So we talked about what was the matter with him today and really what had happened was he had, he didn't have the confidence to look after a patient that sick. But he didn't have the courage to say that to me. And so I had overloaded him thinking he was ready. (Novice 02)

The expert's understanding of the student gave her the confidence to put him/her into a situation that confirmed her assessment of the student when the expert must rely only on her intuition about the student's competence.

I can remember challenging the student week after week and to my surprise she would rise to the challenge, and still say, "There's something wrong here. I know there is something wrong" and eventually finding her in a very, very serious situation where she was about to give the patient double medication because she had misread an order and intervening there and asking her about it. And knowing that my intuition was right. It surprised me that I would keep after that student, that I wouldn't just accept after the second time that ... it seems everything's alright, so let it go. A couple of times I believed in students and kept them going and challenged them when the feedback I had from other teachers is, "Don't do this", and been usually surprised and delighted that they did rise to the challenge. (Expert 01)

On the other hand, some students did not appreciate their limitations. One expert handled this type of student by assigning a challenging patient. By extending the students to his/her limits, the expert clinical teacher was able to have the students recognize their weaknesses.

A student who is overly confident I will challenge. They don't resist a demanding assignment because they are confident they can do it. I will give them a more challenging assignment and then I will watch them very closely. If I see something that seems problematic, then I will point it out to them. (Expert 01)

How Data are Gathered

Expert clinical teachers had routines around which they structured their monitoring and supervision of student practice. Following patient report, experts visited all the students to see how they were doing with their patient assignment. Rounds, as they called them, enabled the experts to know when they would need to be available to the student and as one expert commented, what she needed to be concerned and worried about.

> *Then you know we meet briefly to talk in the morning, we listen to reports, and then I'll make rounds and check with them about stuff they're doing and you know every so often, just see what they're up to. So I spend a lot of time walking around I guess and talking to them on what's going on and talking to the patients. (Expert 02)*

Although novices who supervised students in the hospitals made rounds soon after the students came to the clinical unit, their rounds were more haphazard and not as purposeful. Seeing all the students at the beginning of a clinical day was often interrupted when the novices stopped to work with a student. Consequently, novices sometimes did not see all students until they had been on the unit for some time. Unlike the experts who referred to this practice as making rounds, novices did not have a name for this routine.

> *Well I just had a need to speak one on one with each of them to make sure that they knew what they were going to do first, what they were going to do next and was there anything that they were going to be doing in the next half hour that they needed me for because I would do that before I went to the other side. (Novice 02)*

This inability to priorize students' needs for supervision could precipitate a predicament in which students encountered a situation in which neither they nor the patient were safe.

> *I met the students - we have report and then they go on. I didn't check him (student with complex patient) immediately. I went off and got a couple of the other students started and then I came back to see how he was doing and he was in such a mess, absolutely such a mess. (Novice 02)*

Experts had developed a method for recording the information that they gathered on the students. Usually this was in the form of written notes. Reviewing the notes after a day in clinical practice, the expert could identify potential issues to which she needed to attend or identify a student whom she had not seen.

> *So I'll write a note to say whether I felt that she had a fairly thorough plan of care, whether she had identified her priorities, what her priorities were for the day if she could. If she couldn't tell me, I make a note . . . Then once I've had them one day, I'll sit down the next day on Wednesday, Wednesday evening, and go through. "Oh, I didn't . . . from sort of what she's giving me about her assessment or other things. I didn't ask her about this" or "I wonder, this patient has KCl in his IV". I'll make a note, maybe just put the task in question mark so I know that I'll want to ask her the next day what she's found out . . . When I finish a clinical day, I'll often go home and I write myself notes and if I suddenly realize I have a student that didn't make contact with me or she didn't see me very often, then I make a point the next day saying "I want to discuss this" or "who did you approach?" or I'll ask her questions. (Expert 03)*

With the exception of one, novices did not keep notes on the students. However, the content and the purpose of the novice's notes were different from the experts. Rather than keep notes on how the students were progressing, the novice kept notes on the types of experiences the students were encountering so that she could ensure a variety of experiences in the students' practice.

> *I didn't have actually anecdotals about what they had done in clinical. But I had a tracking of what kinds of clinical experiences they had had. Like if they had a head and neck assessment and if they'd done bedmaking, TPR's, that kind of thing. And I was really keeping track of what they had an opportunity to do so that I could make sure they got a chance to do something they hadn't done before. (Novice 02)*

One expert was able to keep track of the information about students in her head. She talked about filing data about the students in her "computer".

> *You know I'll have a student that will miss, maybe miss things, but I file it in my computer system (her head) and if that never happens again, then it's laid to rest,*

> *But if one more time I see anything that remotely resembles that other piece of information that's filed way back there, then all of a sudden I have a gut feeling. Maybe that's what it is . . . I think at that point I have an obligation to pursue that and to gather more information because that's not always an accurate perception. So there is, I think that there are very small things that can go on in a student's performance that you sort of click into that. You don't immediately write them off for it. All of a sudden you're starting to see a pattern. (Expert 05)*

What is particularly important about this passage was the development in the expert's mind about a pattern of behavior that she was starting to see develop. Only experts discussed the emergence of patterns in the assessment of students, while novices tended to focus on aspects of the student's performance in isolation. Experts also listened to their intuition. As illustrated above, a second similar incident raised a flag in the expert's mind, there was something out of the ordinary that she needed to pursue. She was willing to accept that her hunch may not be correct, but she needed to ascertain the relevance of the behaviors that she had seen in understanding the overall picture of the student's practice.

Intuition was difficult for both novices and experts to define, although experts tended to have a better understanding of what it meant to their understanding of students' practice.

> *The trouble with intuition is that you can't really define it. It's like have an inner knowing or a sense of how things are going to be. It's almost like being able to know what's going to happen before it happens. Not because you have foresight or foreward knowledge, but because . . . I guess you recognize the patterns or perhaps because the communication . . . you pick up the communication that's not necessarily verbal, it may be unconscious or subconscious. (Expert 02)*

Although novices recognized that their intuition had been engaged, they were reluctant to act upon it until they had more objective data to substantiate their initial assessment

about the student. The ambivalence of whether she should use her intuition more is evident in the following.

> *I certainly did (rely on intuition) when I practiced nursing, more so. I think I trusted it more because I think I had more experiences to sort of say, "You're right". And I have up until this point, I haven't had a lot of opportunities to find out I was right. Like I almost like to sort of, I think this is the case, I think this is the case and with this student it was really bad because I kept saying, "I don't believe this". And then once I had my interaction with him, it was like, "Everything I thought was true". But I almost, I felt initially when I do something, I try to be very, I try to look at it objectively and I know my intuition is there but I almost try not to, not to act on it right away. But I know having this experience with this student that I'll, I think I will. I mean I don't know. (Novice 01)*

Experts also realized that they only saw a sample of a student's practice and that they had to assume that the information that they gathered was representative of the students' actual practice. Particularly in situations in which the student's practice was sub-par, one expert mused about how much inadequate nursing care she was missing.

> *Because you know sometimes I think all you see is the tip of the iceberg. Sometimes, maybe it's a fluke, but when you think about how often you see a student and let's say you get three situations (student makes an error) in 8 weeks that you know kind of have some correlation there, it's hard for me not to think that there's been more, Maybe there hasn't, but it's very hard for me not to believe that there's something more that you don't know that has been happening. (Expert 05)*

Conversely, when experts identified positive patterns of students' nursing practice, they assumed that these practices were representative of the student's nursing care.

Sources of Information

Clinical teachers gathered information about the students' practices from a variety of sources. In addition to information that they gathered on their own when they were with or in close proximity to the students, clinical teachers collected data from patients,

nursing staff, and other clinical teachers. Data that they gathered themselves were developed in a number of ways.

Observation. Observation, either directly or indirectly, provided the clinical teachers with much of their information about a particular student. When the clinical teacher was with the student supervising some aspect of nursing care, they gathered particular information.

> *I guess you observe what they've done in a situation and if they're taking care of a patient with a stroke and talking with them about that patient, you'll know what they learned. (Expert 02)*

At other times, expert clinical teachers observed students when they were not with them specifically. However, these surreptitious observations often yielded important data about the students' performance. Only experts discussed these indirect observations of students.

> *I went by the window by the closed door but with a window and saw her just having a delightful time with this toddler . . . Some of my best information I have obtained when the student didn't know I was there. I try not to spy on them, but I do go up and down the hall and I do stand in doorways and see what is happening or hear what's happening if I am not able to see. And some of the most positive feedback that I've been able to give to students is those times I have observed them when they hadn't known that I was observing. (Expert 01)*

The impact of their presence on the students' ability to perform nursing care was acknowledged by the experts.

> *I know the students don't perform well when they have someone watching them . . . I often joke and tell them that if you can ever expect a teacher to be there, it's when you're doing your worst! (Expert 05)*

Experts also observed how students interacted with the nursing staff. Listening in as the students received or gave report to the staff nurse was illuminating.

> *Sometimes it's interesting what you find out what the nurse asks the students or the student, how she responds or whether you find the student, maybe you think the student's doing well, but she's doing everything because the nurse has told her everything to do. She (staff nurse) hasn't helped her to develop any independence in her own thinking and problem solving. (Expert 03)*

Novices did not discuss the value of the students' interaction with the staff nurses nor distinguish between nursing care that may have been directed by the staff nurse rather than the student's initiative.

Questioning. Clinical teachers used questioning strategies when they with the students in order to ascertain their knowledge base, particularly as it related to the patient(s) for whom the student was caring. This questioning practice was seen across both levels of clinical teaching expertise.

> *I often ask them what they're up to and what they're looking at and what they see and what they might be looking for. (Novice 05)*

In addition to trying to understand the students' general theoretical knowledge, clinical teachers also pursued questions that more specifically focussed on the students' understanding of the rationale for the nursing care that they were delivering.

> *"Check bowel sounds post-op. Oh sure, okay, check bowel sounds. Okay, they're there, but why are we doing that?" (Expert 04)*

> *"You can expect me to ask you what this medication is and what it is for and why this patient is getting it, what is the dose appropriate to the child's weight and what are the major side effects." (Expert 01)*

> *I want to know how you got there. You know, "Tell me how you got there because I'm sure it's there and I just need you to verbalize it". (Novice 03)*

Closely related to questioning practices to determine students' knowledge, clinical teachers also used questioning to evaluate students' progress in their thinking about their nursing care.

So in talking about Mr. Jones, I'll talk about "What's you nursing diagnosis today and what goal have you set?" Friday I'll check and see if they've reached that goal. (Expert 02)

Expert clinical teacher asked patients questions to ascertain the efficacy of the student's care. These questions were asked in the student's presence. This was particularly helpful if the clinical teacher was concerned about the student's performance.

When I came to see her one day, I said to her, "How's it going?" It was going very well and she had done some writing in her notes and everything. So I said, "Well, let's go see your patient" and I said, "How's her deep breathing?" The patient sort of nodded her head and I said, "Well, why don't you show me how you're doing". So the patient did, I guess what was supposed to be deep breathing which was more like a throat inspiration. I mean it was pathetic. This patient, I mean, it was like (demonstrates to researcher and laughs), if I could have laughed I would have except I've never laugh in front of a student. It was just comical. So I went through the teaching with the student there and the patient and we did it. But I thought here's a student in the last rotation, something as incredibly basic as whether a patient can take a deep breath or not and do their deep breathing and coughing, who tells me that the patient is, and clearly the patient is not. (Expert 05)

Staff Nurses. Both novices and experts obtained information from the nursing staff about the progress of students in the clinical area. Sometimes the information was solicited specifically by the clinical teacher, while at other times the staff would approach the clinical teacher with information about a student.

So I left her, just let her go and do it. Later on the I went and talked to the nurse and said, "How did she do?" And she said, "Well, she did fine". And I said, "Well, how about drawing it up (medication into a syringe)?" . . . She said, "Well, she had a little trouble there, she contaminated, but otherwise she did okay". And I said, "Well, how about giving the med". And she said, "Fine, no problem at all". (Expert 04)

The head nurse would come to me and say, "Do you know that this student is doing this, I caught her doing whatever". (Novice 02)

Patients. Expert clinical teachers also obtained information from patients for whom the students were caring. Clinical teachers gave this information a lot of weight in making decisions about the quality of the students' care.

> *Occasionally, if there is a student who is difficult, I will go in when the student is not there and talk to the patient about how their day went. I don't often do that but sometimes I've had to if it is a particular attitude thing and I mean . . . patients are never going to say . . . but occasionally they do and then that to me says a lot. (Expert 02)*

There was no evidence in the transcripts that novices in this study used this strategy to gather information about student's clinical performance.

Other Clinical Teachers. Usually clinical teachers wanted to develop their own assessment with respect to the student's abilities, rather than learn about them from other clinical teachers. However, when data were considered essential to safe nursing care, this information on the basis of other clinical teachers' assessment, was taken into account in working with the students.

> *We all evaluate end of a rotation, a summary evaluation, and I never read them from previous teachers and I tell the students I don't. The reason for that is that I let the students know that as far as I'm concerned they're coming to me with a clean slate. It's not that I don't trust my colleagues because I know they're probably right bang on. But I believe in my mind that I can become biased to watch for something, so I will not read the evaluation . . . Now if, however, a teacher does come and say, "Well you know, watch this one" or "This one's having trouble with whatever", it depends again what it is. If it's something like dosage calculations, I'll, I mean when it comes down to calculations that I know could have serious consequences, like an IV medication, I will absolutely be there and give them as many opportunities as I can find for that. (Expert 04)*

Student Cues

Clinical teachers picked up on cues in the student's behavior that had meaning for them in terms of how the student was practicing nursing. These cues were either behaviors that directly represented a particular part of nursing practice, for example, organizational skills, or cues from which the clinical teachers made inferences about the student's behavior, for example, the student's facial expression.

Experts had learned a comprehensive set of cues which arose from their practice as clinical teachers, whereas novices often were not sure what they were looking for and wanted a set of measurable parameters with which they could evaluate the student's performance. Some of the difficulties encountered by novices may be related to the lack of clear criteria with respect to what they were evaluating.

> *I just everyday think about, "Well, what have I seen? What does this mean?". And then I compare. So because I've internalized those competencies very well, you know, I think it's a bit easier for me to just go and know what I've seen and compare that to what I should have seen. (Expert 01)*

> *I needed to verbally priorize that list that I keep saying I want the students to do. So what I did was I shared that with X (teacher in charge) as my mechanism to make sure that this is how. I mean I sought guidance, I didn't get any. I came up with my own. Then I went back to make sure I wasn't this loose cannon creating my own little dynasty or something in the corner . . . But I found that frustrating as a new instructor that there wasn't this level . . . I felt very insecure with just resting on what would be perceived as subjective hunches or subjective assessments without coming up with objective criteria for how I was evaluating . . . a list of your objectives that are measurable and in a clinical way they are going to be more performance oriented or the performance is going to reflect the intellectual goal. (Novice 03)*

Experts had developed a repertoire of student cues which focussed on specific student practices.

> *I'll often tell them to let me know when they're going to do discharge teaching, pre-op teaching . . . sometimes you can tell whether they're just reaming off a list of things or whether they're really . . . and listening to the patient, asking questions, like eye contact, or whether she's just sitting there with her piece of paper and not having any eye contact. (Expert 03)*

In contrast, novices were much more general in their assessment of students, although on occasion they could identify specific student practices for which they were looking.

> *Well the level of preparedness, certainly their ability to talk about the patient, the ability to talk about what they have to do, their ability to establish a work plan for the day, to develop nursing diagnoses, plan of care, the ability to involve other health disciplines, if they can think beyond the specific patient to look at other people, their relationship with the patient, are they feeling comfortable with their communication, is there some problems there, are they having any difficulty communicating. And again it sounds very vague, but just their affect, the way, do they look comfortable or are they very anxious, are they flustered . . . I really can't articulate to you what it is that I'm looking at so much as just their ability to come across as being comfortable. (Novice 04)*

Clinical teachers relied on inferential cues to understand how a student was practicing. For the experts, these inferential cues, along with the objective cues of the student's performance, formed an overall pattern of behavior on which the experts could make judgements about the student's performance. For example, experts talked about the "blank look" on a student's face. This was a signal to them that the student did not understand the situation in which s/he was engaged. Frequent absences from clinical practice or excuses for things not completed were also clues that the student was overwhelmed with clinical practice. Subtle cues such as the need for more or less direction and how students were able to use the data about their patient to deliver nursing care were also cues upon which experts relied.

> *I know she could do well and she doesn't have the confidence. I have seen her asking people on the ward questions and you could tell by the look on her face that she's just uncertain about what she's going to be doing . . . If I find that*

> *they're always giving lots of excuses about family commitments, other things, it usually gives me a clue that we need to sit down and talk about that if they're always giving that as a reason.* (Expert 03)

> *But . . . she wasn't, she was very, it took her a long time over that period of weeks to really, in most cases, gather information and use it to direct her care, as opposed to taking the information that was supplied and just doing it. (Expert 05)*

Although the novices used inferential cues they were not able to pull them together to formulate an overall assessment of the student's practice.

> *You know the ones that are sort of shaking and sort of standing back and you know not sort of getting in there. There was that kind of student and then there was the other student who was sort of like, you were dragging them from behind you, "Come on, let's go. Now where are you going to put this machine, come on here". That kind of student I might sense their fear, I guess it would be or discomfort anyway, But I hadn't really thought about it until right at this minute. That happened at some other level. I didn't pay any attention to it at the time. (Novice 02)*

While both novices and experts asked students questions, novices only assessed the answer for the quality of the information. However, experts were able to make inferential judgements about the students on the basis of how students answered their questions.

> *She comes and asks questions and is able to give the information appropriately. But sometimes she can't answer, she hasn't put it all together. Like the information is there. You can tell because of the information she can give, she just doesn't have it all together yet. (Expert 02)*

Novices were usually able to see only the issues that were most apparent in any given situation with students. Problems were dealt with as they appeared on the surface without consideration for some of the more implicit meanings about what might be occurring with the students.

I'm convinced she (staff nurse) had it right and I'm convinced that's what he asked. He said, "I don't know what you're talking about Mary, you know you've totally misconstrued my whole request. I just said I wanted to observe for a couple of hours". And Mary said, "No, that's not what you said, this is what I wrote down". It was like he openly said she wasn't being honest. He didn't say she lies, he just said, "I don't know what she's talking about, I never asked her that". And I'm thinking, "Oh my God, we've got a problem on our hands". (Novice 01)

In this situation, the novice was unable to move past the obvious to consider underlying issues. She did not confront the student with the meaning that the two different stories might have for his practice. Rather she dealt with the situation at the level of which participant (student or staff nurse) was more believable.

Experts also looked for growth over the time that the students were in the clinical area with them. This ability to learn and change were considered essential to the professional development of the student.

R: But a student who shows tremendous progress through the 6 weeks, who hadn't been sort of unsafe or anything, might do okay, might actually pass because I can see their growth. Whereas a student who has shown no growth for 6 weeks might not pass. So the behaviors at the end might be similar, so you see it's a lot more complicated than . . .

I: So you wouldn't pass a student who hadn't changed?

R: Well not if they weren't, if they were very, very close to the line and one student had, I felt, come a tremendous amount and the other student had gone nowhere. If I had to choose, I would choose the one that had shown the growth versus the one who had gone nowhere from the beginning. (Expert 05)

Nowhere in the transcripts did novices address the issue of student growth. The cues that they used to evaluate the students were seen more in terms of the incident at the time, rather than how they might come together to form a comprehensive whole or demonstrate students' development over time. One might postulate that the novices had not had enough experiences to know how the individual cues that they were identifying

in the students' practice formed patterns of behavior or what meaning those patterns of behavior had to the overall abilities of the students.

Feedback

Feedback to the students was seen as an integral part of evaluating students (see Figure 2). Moreover, as is depicted in Figure 2, feedback was viewed as an interactive two way process between the clinical teacher and the student.

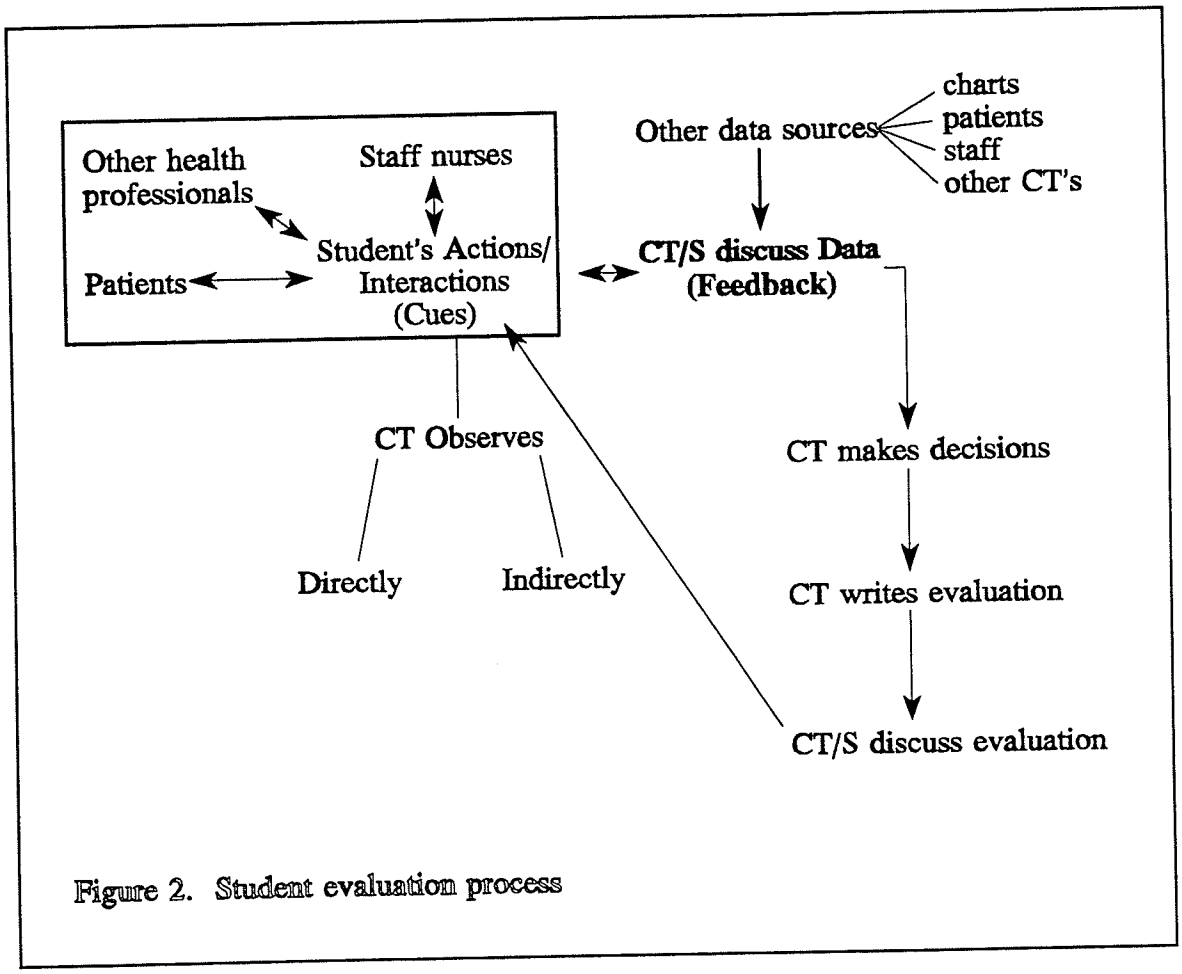


Figure 2. Student evaluation process

Verbal feedback to the students was typically the way in which both novice and expert clinical teachers conveyed to students their assessment of the students' nursing care

It was deemed appropriate to give the students positive feedback in front of others, generally the patient. However, clinical teachers did not give negative feedback to the students unless they were able to do so privately. For some, the issue of privacy was very strong and related to an incident that they had experienced, usually as a student, in which they were severely chastised in front of others. Only when the student was verging on making an error would the clinical teacher intervene in front of the patient and, even then, they would do so in a manner that was not detrimental to the student's relationship with the patient.

> *I have learned you never talk to students about their progress around other students or around other staff members, that you provide privacy, that you provide them with a particular. Even if it's just pulling them off to the side but that you make sure that there is that privacy for the students. (Novice 04)*

Only one clinical teacher discussed the fact that she gave negative feedback non-verbally. This clinical teacher also recognized that she was not good at giving "warm fuzzies". She told her students that "no news was good news". Although she claimed that this was an area that she was trying to improve, there was no indication in the data that she conscientiously worked at giving students more positive feedback on a regular basis. It seemed from the transcripts that she had identified a way of working with the students that was perceived as effective and, even though she cognitively admitted that more positive feedback would be helpful, this did not transmit to her practice.

> *She kind knew that. You could tell just by my voice and my manners that I wasn't too thrilled. Then afterwards I said, "You know you should have been able to do this, this, and this and you need some practice with that" . . . It's nice to have a positive stroke now and then. One thing I'm not good at and I'm well aware of it and for seven years I've been trying to work on it, but I don't give a lot of the warm fuzzies, "Oh you did such a good job, gee that was really great, continue on". I don't do that. I tell them at the beginning of the rotation that for me, no*

> *news is good news. If I walk out of the room and I haven't talked to you, you did fine. Unfortunately that's not enough for students and I know it isn't and that's my nemesis. (Expert 04)*

Her beliefs were rooted in what she found personally reinforcing. She relied on her own assessment of what was effective in her clinical teaching practices.

> *To me it's not as important (for someone to say to me) "Hey, you did a good job". Good, so what? I don't need to be stroked. (Expert 04)*

Experts reflected on the meaning of feedback and the importance of using words that were not destructive to the students. This was viewed as caring for the students.

> *My goal for doing that (giving immediate feedback), the students will feel cared for in that I have taken the time to give them feedback right away and that I've taken the trouble to acknowledge what is positive, when it would be easier to say, "You blew it. That was really terrible. Don't ever do that again". (Expert 01)*

Although novices recognized the importance of giving students negative feedback in privacy, they often did not reflect on the impact of that feedback on the students nor their choice of words. In one instance a novice told a student what she thought about the student, even though, after the fact, she recognized that her words may have been humiliating to the student. Moreover, it is possible that the interview process with the researcher stimulated reflection and in other circumstances she would not have reflected on the meaning of her words to the student.

> *I guess I sort of said to him and it wasn't very nice, I said, "I guess that's the difference between excellent and exceptional. Excellent students maybe do really good work when it doesn't count for marks. You know you did excellent work, but it wasn't like all your work was excellent". (Novice 01)*

In the excerpt above, the student's inability to understand the feedback regarding the grade from the novice clinical teacher was related to the novices' general inability to give specific feedback and, consequently, assist the student to see the gradient differences

in his/her performance. Learning how to give specific feedback to students about their clinical performance was a skill that developed with experience over time. Experts discussed how their earlier feedback to students was general and how they had learned to become more specific in the kind of detail that they gave students about how they were doing.

> *My evaluation of the student is more detailed now. I have more of an idea of the kinds of things I am watching for to evaluate them. I am able to give less general and more specific feedback than I was able to at the beginning. (Expert 01)*

In particular, specific feedback which included examples of the student's practice enabled experts to help the student accept a negative evaluation, even when they were accustomed to positive evaluations. Detailed evaluations enabled the student to see how the clinical teacher had arrived at the decisions made regarding his/her performance.

> *I had one student I really believed was going to tell me that she was so much better than what (I had assessed), because I'd heard this theme before and she looked at me and she said, "You know, I really, I really think this is a fair evaluation. I think you have taken everything that I did and it does reflect what I did in this rotation". And you know that made me feel good. And part of it I think is helping the student to see what it is you make your decision on and that's why, that's part of the reason why I am so detailed in giving examples of what they've done that I've seen to help them understand. (Expert 05)*

Part of having the student understand the evaluation was seen by this particular expert as crucial to clinical teaching and may be a distinguishing feature of effective clinical teaching between the experienced and the expert clinical teacher.

> *I think there are teachers who are very strong, but the students, there are students who hate them. Now maybe that's bad. Maybe I think too much about that. But students who can't accept what a teacher said, the bad students can't accept what you've said, then I think you're in trouble because to be a good teacher, I think people have to hear you. And if they reject everything that you have to say, then because they(students) can't, either, because of the way you're saying it, then you can't ever be a truly effective clinical teacher. (Expert 05)*

Monitoring and evaluation posed difficulties for both novice and expert clinical teachers in the study. However, the expert clinical teachers had developed their own understanding of monitoring and evaluating. Through experience a process evolved in which experts felt confident in their ability to monitor and provide evaluative comments which accurately reflected students' practice. Novices, on the other hand, were still hesitant about how to monitor and evaluate and their stories were replete with this uncertainty.

Developing Relationships with Nursing Staff

Although Developing Relationships with Nursing Staff was one of the smaller categories of the study, clinical teachers recognized the importance of these relationships to their clinical teaching practices. Two sub-categories were part of the overall category related to relationships with nursing staff (see Table 5).

Table 5: Developing Relationships with Nursing Staff

	Novices	Experts	Practices in Common
1. Creating Relationships	• guest in the house → unknown by staff → does not know staff • we/they	• credible practitioner → known by staff → know staff • partner with staff	
2. Interpreting Staff/Student Behavior	• difficulty resolving student/staff conflict • buffer/peace-maker	• support student without undermining staff • reciprocal relationship with staff	

Creating Relationships with Nursing Staff

Establishing and maintaining relationships with the staff on the clinical units were considered essential to clinical teaching by both novice and expert clinical teachers.

Experts discussed the need to establish their credibility as a nurse so that the staff would see them as a competent practitioner. Being a credible practitioner was seen as crucial to garnering respect from the nursing staff. Collegial relationships with staff were evident as the experts described working "with" the staff, often referring to the staff and themselves as "we". Their relationships with staff were predicated on mutual trust and respect.

> *I always believe that if you're a teacher, you need to be a good nurse, a competent nurse, but the staff also have to see you as competent nurse or else you've kind of lost it. So a lot of what I've done over the years is built that rapport with the staff so that they also feel that I am competent and they trust me so that the teacher, the students see my decisions as valid as well as they could stand up in the ideal . . . it's just comfort in the clinical area where the staff know me, they trust me and we can kind of work together and do what I think is a good clinical teaching environment, where the teacher is seen as, you know, as reputable, creditable, and the staff may not always agree, but at least open to "Why did you guys do it that way?" (Expert 02)*

Experts had developed a reciprocal relationship with the staff. In working with students in the clinical setting, their relationships could be diagrammed as seen in Figure 3.

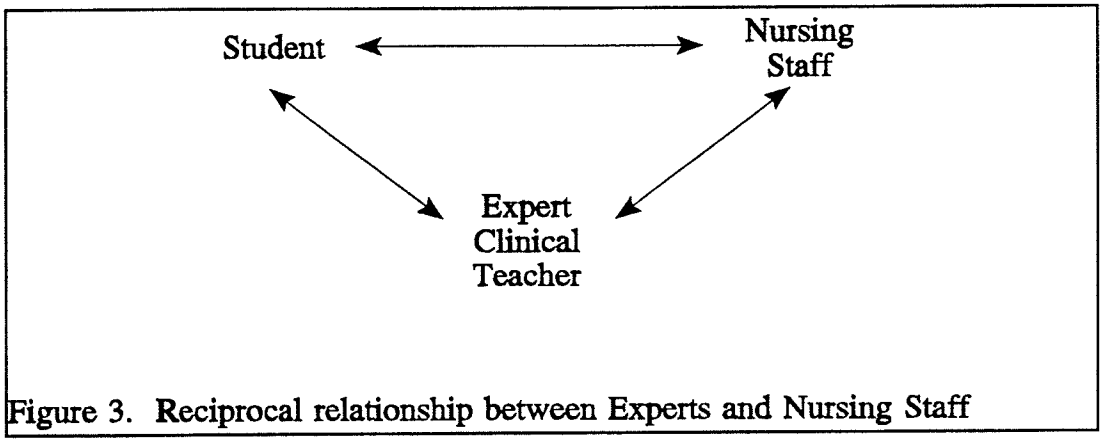


Figure 3. Reciprocal relationship between Experts and Nursing Staff

Obviously novices had not worked as a clinical teacher in the clinical areas with the staff for the same length of time as the experts. Consequently, they could not know

the staff nurses to the extent that the experts did. Only one novice talked about how she established her credibility with the staff prior to taking the students to the clinical area. Even then she acknowledged that she had insufficient time for the staff members to know her in any meaningful way. At the very least the staff would recognize her as someone whom they had met when she appeared on the unit with students.

> *I think that (going to the unit prior to taking the students there) helped more than anything because what it did was it broke the ice with the staff, they sort of knew me. Like they didn't know me well cause I'd only been on the unit two days, but at least they had seen my face before and I had sort of established some level of credibility with them - yes, I can do a bed bath, yes I can do a transfer, yes I can give meds safely - so they weren't that concerned. (Novice 02)*

One might speculate that novices did not discuss establishing credibility with staff because this was not a pressing issue for them. There were so many other aspects of clinical teaching which demanded their time, that factors that were not critical to their survival as a clinical teacher had not yet surfaced.

As a consequence of not knowing the staff and not establishing their credibility, novices spent a great deal of energy maintaining relationships with the staff. The "guest in the house" concept identified by Glass (1971) was most evident amongst the novices. Even when novices were working in the same hospital which offered the nursing education program in which they taught, there was a sense amongst the novices that they were guests in the clinical area. Therefore, they ensured that the students' nursing care was such that the staff would not complain and/or get mad at the students and the clinical teacher. For the novice clinical teachers, the time and energy that they had to spend on "PR stuff" was something which they had not envisioned as part on clinical teaching.

Sometimes I get annoyed with them (nursing staff) because I think they forget that they were once students too and they expect an awful lot from our students. At other times I think sometimes they just use the students as a work force that's doing their work and it annoys me. It really comes home when they start getting angry with my students when things go wrong . . . at the same time I don't want to tread on their toes and make it so that they are going to put their backs up right away, so it's a difficult call and you have to watch what you say and who you are saying it to and try to go with the flow . . . I always check (on the students' nursing care), perpetually going around and around and around and I'll, after a particular incident, I'll ask how things are going and ask for their input what do you think could have been done better here after clinical is done. I always make a round and ask their opinion on how things were and they appreciate that. Sometime I don't feel like it, but I do it anyways. (Novice 05)

Also significant in the above passage was the distinction between "they" and "we". The collegiality with the nursing staff found in the expert's descriptions was clearly absent in the novices' relationships with the staff. The relationship which the novice clinical teachers established with students and nursing staff were clearly different from that of the experts. They viewed themselves as more of a buffer or liaison between the students and the nursing staff (see Figure 4).

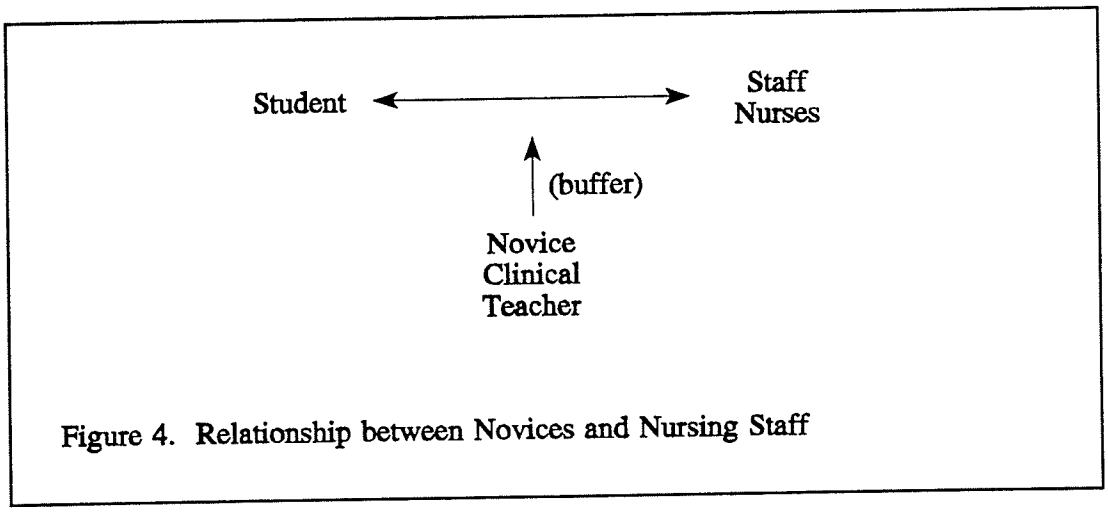


Figure 4. Relationship between Novices and Nursing Staff

Knowing the staff on the unit appeared to be essential to the development of a good working relationship between the clinical teacher and the nursing staff members.

Credibility of the clinical teacher was something that developed and evolved over time as the staff and clinical teachers worked out their mutual understanding of one another.

When there was a conflict between the students' approach and what the nurses on the unit did with respect to patient care, experts were more diplomatic in the way that they handled the discrepancies. They would challenge the students to consider whether any principles of nursing care had been breached or explain the reasons for the differences.

> *I insist that they (students) give IV medications the way I understand the protocol to be and with what I've learned in orientation. They see nurses give IV meds in the central line. That may be their patient that they are nursing, but the staff nurses have to give the medication and they will observe a different procedure. And when they (students) bring that up to me I say, "I guess at the time that the nurse was oriented, they were doing it in a different way. Perhaps they've changed the equipment since then". I try to point out the positive that is going on. (Expert 01)*

On the other hand, novices were not nearly as shrewd in the way that they acknowledged differences in approaches to nursing care. At times they "put their foot in their mouth", only realizing in retrospect that their actions did not support collegiality or the building of a working relationship. When novices encountered experiences such as these, they were pivotal in reframing how they thought about approaching nursing staff.

> *One of the nurses proclaimed to me that we (nurses) couldn't do that. And I in my probably arrogant way at that point in time said, "Well, actually that's not true, nurses can do that." I remember that statement well and I remember how offended the nurse was that I had said this to her. I didn't work in the agency, I didn't know, and how dare I tell her something. That was probably the most awakening experience for me when I realized exactly how careful you have to be with what you say to these people and how you can't just contradict or disagree with what they say. You have to rephrase it in a way that is sounding more like a discussion. (Novice 04)*

Interpreting Staff and Student Behavior

Part of the difficulty that novices faced in situations in which there were conflicts with the nursing staff was how they might resolve them satisfactorily. They were particularly problematic if the novice felt that the staff nurse was being unreasonable with a student. In one instance where a staff nurse had been particularly hard on a student, the novice thought that the best solution was to "swoop in" and chastise the nurse. Both the student involved and other clinical teachers encouraged this novice to consider other approaches to the situation.

> *My first response was I'm going to phone and sweep in there and give that nurse shit because I was angry, my initial response was swoop in. Then I kind of talked to this person and that person and they kind of said, "Well you know, this is a good learning experience for the student, even if it's painful." And I talked to the student and she didn't want, "Oh please don't say anything", she just begged me. I didn't know what was the right thing to do. So I just left it and you know, I still don't know what the right, if there was a good way to handle that. (Novice 01)*

Experts were more able to support the student. While they were reluctant to undermine the nurses on the unit (even when they agreed with the student's assessment), they were able to support the student's frustration with the nursing staff. They were adept at recognizing that the students often needed to get their feelings out in the open and be acknowledged for dealing with difficult circumstances.

> *Well I'd liked to say "Yeah, right on" (when a student complained about a staff nurse), I don't think that's professional in my way of thinking. I think talking about people behind their back to my way is not very appropriate. But sometimes it's just a vent and I'll say, "Yeah, you're right. You must have had a difficult time with that particular nurse". (Expert 02)*

Experts were able to explain the staff nurses' behavior to the students so that they could understand what was going on. On occasion the expert would assign a student to

a staff nurse whom she knew was "prickly". In these instances the expert would help the student understand the staff nurse's behavior so that the student could work with her more easily.

> *This one girl (staff nurse) I've known for quite a while. That's her reputation, she's very abrupt. I'll still use her too. I'll warn sometimes the student, "She can be really, but she's really . . . because underneath her abruptness . . . like she's still very caring". But that's her approach in a way and it really turns the students off initially. They get really scared and then they're afraid to tell her anything. (Expert 03)*

Both novices and experts interpreted students' behavior to the nursing staff. Particularly the novices acted in a peacemaker role, buffering the staff's reactions to the students by explaining what the students' objectives were and how the nursing care on the ward fit with the students' overall learning. Perhaps the experts did not feel as pressured to act as an intermediary because they had already established their *raison d'etre* on the nursing unit over time, as well as developed reciprocal relationships with the nursing staff. As a result, the staff were more familiar with the expectations of the clinical teacher and the students.

> *They (staff nurses) get angry with them. I had mentioned to the head nurse that we are off at 1:00. If my students are really busy they will not be doing the 2:00 vitals or emptying of these particular drainage systems. That was all fine and dandy but I am not sure whether it extended to the RNs. So there was a couple of times where there were very hard feelings, both with my students pertaining to these staff members, as well as the staff members coming to me and saying, "Your students basically are not doing their job" kind of thing. So I found as an instructor you kind of had to pave the way a little bit. (Novice 05)*

It was clear from the participants in the study that experts were more integrated with the ward staff. Novices remained strangers on the unit which made their clinical

teaching more difficult as they had to expend energy to buffer students' relationships with nursing staff.

The study revealed the Practices of Clinical Teaching as enacted by the novice and expert clinical teacher participants. The importance of the interpretation of their clinical teaching practices was significant in the discussion of novice and expert clinical teaching. It was evident from the study that those practices (symbols) that had meaning for the participants were integrated into their thinking about effective clinical teaching. Novice clinical teachers lacked the experiential base to think about clinical teaching to the same degree as the experts. In contrast, the rich experiences of the experts underpinned their clinical teaching practices.

Knowing Students

> *A few years ago I heard Christine Tanner talk about the expert nurse and the key concept is knowing the patient. I would take that a step further and say knowing the patient and then knowing what to do about it. I think it's the same thing for an expert clinical teacher, to be really fine at your job, you* ***must know*** *(emphasizes the words) the student. (Expert 05)*

Knowing Students was the third major theme of the study. Knowing students was considered essential to effective clinical teaching. The categories that emerged in the study related to this theme included i) students' knowledge, ii) how students' practiced nursing, iii) characteristics of students, iv) conditions which supported students' learning, and v) developing relationships with students (see Table 6).

Table 6: Knowing Students

	Novices	Experts	Practices in Common
1. Students' Knowledge	• use own experiences as student • do not know students cannot differentiate importance of data	• use experiences with students • know students cannot differentiate importance of data	
2. Students' Practice	• overestimates students' abilities → cannot anticipate	• know students' abilities → anticipates	• recognizes students → preoccupied with skills → rule driven • students capable of giving good nursing care • recognize students focussed on psychomotor skills • recognize → practice rule driven → need concrete descriptions of patient care → fear hurting patient
3. Students' Characteristics	• recognize students anxious → limited identification of characteristics → difficulty assisting student with anxiety • identifies weak/strong students generally	• recognize students anxious → identify characteristics of anxiety → assist students with anxiety • identifies specific characteristics weak & strong students	
4. Circumstances in which Students Learn			• learn through → repetition → observation

5. Developing Relationships	• focus on personal data to be obtained from students • convey expectations → tentative → preoccupied with themselves • acknowledges power as factor in relationships with students	• reveal self as a person • convey expectations → detailed → sensitive to students' anxieties • focus on professional aspects • accept clinical teacher has more power, but attempt to share power with students	

Experts used their experiences with the students to inform their understanding of students, whereas novice clinical teachers tried to understand students on the basis of their own student experiences. When this understanding of student behavior was insufficient to deal with the situation in which they found themselves, novice clinical teachers did not know how to proceed.

> *He wasn't worried. I think he was concerned a bit, don't get me wrong. He looked quite happy and relaxed about the whole thing. I mean I would have been brimming in tears . . . I haven't really had any past experience to sort of say what's the right thing to do in this situation . . . I didn't really have the concept that you had to spoon feed professional values to students because nobody ever actually told me, "You have to show up for your job on time". I'd always seen people do that and that's what I did . . . I don't know how students learn that, I mean I learned it . . . I don't know how you teach students or how they learn sort of rules. (Novice 01)*

Students' Knowledge

Clinical teachers were cognizant of the different levels of students with respect to their year in the nursing program. Their expectations of students' knowledge were reflective of what they thought the students should know at any particular stage in the program and they took this into consideration when working with students. Both novices

and experts recognized that students, even beginning students, had more knowledge about nursing practice than they thought. However, students often were overwhelmed with the amount of information they had and could not differentiate between what was significant or where and when they might use it. The clinical teacher's role was to assist the student to access and use their knowledge in the clinical practice arena with patients.

> *They are overwhelmed with the vast amounts of theoretical information and they can't be expected to come up with it, to go into their memory banks and go, "Ding, there it is". That's part of my job is to help them all of a sudden say, "Gee, that little piece of information that I thought was so useless, all of a sudden now I know why someone told me that". (Expert 05)*

The distinguishing feature between the novice and expert clinical teacher was the fact that novices did not understand that students were unable to sort out the importance of particular pieces of information about their patients and make sense of what they were seeing in their patient in relation to what they had learned in the classroom.

> *The students still have little pieces of information and that they haven't learned to integrate all that information together. I was expecting that and that was probably my single biggest error was expecting the students to be able to process all the information that they had been given. (Novice 04)*

Only through experience were the experts able to understand how they had to work with the students in order to help them understand the theoretical aspects of practice.

> *I teach stuff on heart attack so I know what they have learned in class, but I wrongly assumed that they understand, that they can apply the material. So for example, one student was caring for a patient with angina and didn't intervene properly when that patient had angina - didn't stay with them, didn't check the vital signs, didn't give them nitro. And so from that I've learned that, yes, you can trust them up to a point but you still have to be there for them because this is new material that they are learning. So I trust that at least they'd recognize it. But what they're supposed to do with all that knowledge that is supposedly in their brain, I've long learned to understand that you can't assume that they know*

anything, but that they should at least know something and to go from there. (Expert 02)

Students' Practice

Clinical teachers agreed that students delivered good nursing care to their patients. Students progressed in clinical practice at different rates, often related to issues such as knowledge, previous experiences, and confidence. Students were seen as capable of developing good relationships with their patients. At times students surprised clinical teachers with innovative approaches to practice. Clinical teachers felt a sense of pride and fulfilment when students were resourceful or thought about alternative approaches to patient care.

> *It's (a good day) when you least expect it really. It's where a student will have thought about a patient in a way that you didn't think they would. It's unexpected, like they'll actually have thought about that this person has a family and that maybe we should be making some discharge (plans). It can be something very subtle or when they do some innovative teaching . . . taking a chance or challenging the head nurse about, "Well do you think we could do this a bit differently?" (Expert 02)*

All the clinical teachers in this study realized that students were preoccupied with the psychomotor skills of nursing care. Even though novices did not realize initially that students were focussed on nursing skills, it was something which they learned very quickly.

> *My students were very focussed on psychomotor skills. I was bashing my head against the wall about that and then I read that that's what novice students are like. It is common until they do it, they never get over it so try not to be too harsh on them . . . They really like the VON thing cause they did some real nursing skilly kinds of things - like they did some dressings and stuff and subcutaneous injections and they really liked that. (Novice 01)*

This preoccupation with skills was accepted with resignation by the clinical teachers. However, they wished that they could encourage the students to see that nursing was more than skills.

> *It (medical nursing) doesn't have the glamour in it, not necessarily all the skills. And for students you see, they don't like it because they don't think that there is a lot of skills there. They don't see skills as being, you know, helping the person die with dignity, communicating with families, getting people home with home care. (Expert 02)*

As illustrated above, clinical teachers believed that students were preoccupied with skills because the skills represented to students the essence of nursing. However, one expert had an alternative explanation to the students' preoccupation with skills. Her understanding was based on an experience in which she had returned to clinical nursing after being absent for some years.

> *I always said to my students, "Don't worry about the needles, you can do it". But when I went back to the clinical area (I say to them - students), "Guess what I was most worried about (laughing), my technical proficiency", because it's concrete, it's so measurable, and it's so apparent. You know we can talk all we want about how those things (skills) will come, but I know how easy it is to become anxious about that because it's people, you know, it's the patients and people around us can measure us so easily by our technical skills and so we feel so exposed when we're doing that kind of thing. I think that's exactly the problem, we give lip service to this whole thing, but when they get in to do a skill, I think it's miraculous if they can chat with the patient. I think it's ridiculous actually, for the most part, to expect a student doing a new skill to be able to accomplish that. (Expert 05)*

This is a good example of how a significant experience can change the thinking of a clinical teacher. When these paradigm experiences were recognized, they were shared with students. Through sharing, the meaning was conveyed and it stimulated students to think about the implications of the clinical teacher's experience to their own learning.

Expert clinical teachers realized that students could only focus on one aspect of nursing care at one time. This understanding of student practice was evident only with clinical teaching expertise. Beginning clinical teachers expected students to be able to not only do the skill, but communicate with the patient as well.

> *I used to at one time be more negative when they didn't talk to the patient during the skill. But now I've learned that they need to be able to do the skill well first and then the communication. So I think over time I've learned that you can't expect them to do both at the same time initially. They have to be able to be, they're so intent on the skill that they forget about the patient sometimes. (Expert 03)*

Clinical teachers who had students in senior years of the program saw the students beginning to "put things together" as they went about their nursing practice.

> *They're getting towards the end, they've only got May June left, so they're almost finishing. They're also saying, instead of just focussing on one little thing, they're putting things together and they feel really good that they can do that. (Expert 03)*

Overestimating the students' abilities to give safe nursing care was a distinguishing characteristic of novice clinical teaching. The five novices in this study consistently discussed how they had overestimated students' abilities in nursing practice. In some instances inability to identify correctly the students' competencies resulted in students being in situations which they could not manage, at times putting the patient at risk.

> *Experiences that I want to talk to this student before they go in to do a treatment and sometimes not doing that and having the patient suffer from it because I thought the student was capable, so my own miscalculation . . . I made the assumption that he was able to do this and that was the wrong assumption to make which was a learning experience for me. (Novice 05)*

In contrast, experts understood the capabilities of students so they would gradually increase the complexity of the patient care situation. In circumstances in which the complexity of the nursing care was beyond the student's capacity, experts built in

supports for the student either assisting him/her directly or assigning the student to work with a staff nurse.

Student practice was rule driven in that students were initially unable to deviate from giving nursing care other than how they had been taught. Clinical teachers recognized this behavior as consistent with patterns of novice nursing practice.

> *Often what happened was the students weren't comfortable with the staff and they didn't want the staff to do that (supervise) with them, they wanted to do that with me and I think it had something to do with consistency and making sure when it came time to do the skills test, they'd actually done all the 12 points on the sheet of paper and it wouldn't be any problem then you know. Whereas if they did it with the staff nurses, the staff nurses have sort of long habits of doing things and they wouldn't necessarily do the 12 steps on the sheet of paper and then get them all muddled up. (Novice 02)*

A related aspect of students' clinical practice was the need for concrete descriptions of patient care as opposed to more abstract explanations. Some students actually needed to see a situation before they understood what the clinical teacher was trying to tell them about the patient.

> *I think talking with her, she needs things very concrete and she was having a hard time picturing what I was trying to say. Like this patient had a little hole that you had to put the packing through and had to use a forcep. And I was trying to, but she had no idea and I think when she saw it, she was really afraid that she was hurting him until he said, "No, it doesn't hurt". (Expert 03)*

Novices and experts recognized that fear of hurting the patient was a preoccupation of the student when delivering nursing care. This fear was particularly evident when students had to do a skill which they believed might hurt the patient. However, fear of hurting the patient was overcome only through actual practice, either on each other or on the patient.

The opportunity to overcome the fear that a student has of hurting a patient, like giving a needle bad, can only be overcome by poking somebody and by doing it to each other you develop empathy as well as the realization that, "Yeh, you can do it and look at that, it didn't really hurt". (Expert 04)

Student Characteristics

Overall experts were more cognizant of general student characteristics in nursing practice. Although novices recognized some of the more common student patterns of behavior, their ability to describe students in any detail was limited. The pervasive student characteristic described by all the clinical teachers in this study was anxiety. Characteristics of strong, weak, and challenging students also were identified.

Experts described different patterns of student anxiety. Student behaviors that indicated anxiety included talking too much, asking unnecessary questions, approaching nursing care hesitantly or tentatively, and being overly quiet and shy. Expert 01 was particularly astute at describing these patterns of student anxiety.

There are a few patterns of anxiety. One of those is the over talkative student, students who talk a lot in class, the student who asks what seems unnecessary questions, many questions, or the student who always offers the answer first to the sort of rhetorical questions that are asked in class. When I hear that over talkativeness, I'm usually suspicious that that is anxiety . . . There is anxiety that is passive, where the student waits to see if I go ahead and initiate the contact or make the first move. (Expert 01)

Students who avoided the clinical teacher, "hiders", were more difficult to identify. They were the easiest to miss because they eluded the clinical teacher. Experts often identified these students when they were reviewing their notes on the students and realized that they had no data on a particular student.

There is a kind of anxiety that avoids the teacher and they're the easiest to miss because sometimes when they avoid me, I will wrongly conclude it's because they're okay and that they don't need me. They're the ones that I don't pick up

> *on as fast. That is the surprise that I find out in Week 4, "Hey, this student really, it isn't that they know what they're doing, it is that they kept themselves scarce and they haven't come to ask because they don't want me around". (Expert 01)*

One novice clinical teacher described a student who was hiding on her. The difference between the description of the novice and that of the expert was the understanding of the hiding behavior. In addition, part of the reason why the novice seldom saw the student was related to her own disorganization.

> *I had one where one student in one of my clinical groups was hiding, she was never where I expected her to be, wasn't doing the things that I thought we had talked about that she was going to go and do, wasn't sort of around . . . I was kind of running back and forth and you know you do some things with these students and you get them going and then you go over to the other side. Well this one would kind of used this to her advantage and got lost somewhere in the middle. So when I'd come back she wouldn't have done any of the things that I had said. (Novice 02)*

In addition, this novice was at a loss with respect to how she could assist the student.

> *My question to them (more experienced clinical teachers) was, "Do I take this student by the hand and sort of walk her through a couple of times or do I respect her need for doing it on her own" or "How do you handle that type of student?" (Novice 02)*

In the end the novice called the student into her office and told her that she (student) would have to deal with the causes for her behavior.

> *I did have her come and see me in my office. When we sat down and we closed the door and I said, "You know I need to understand this hiding behavior and I want you to know I'm not the only one that's noticing it and you're going to have to deal with whatever it is that's causing you to hide, otherwise you're not going to pass clinical". And she agreed to try. In the end she failed some of her theory courses so she didn't go on to the second term. So it was maybe, she was maybe overwhelmed. (Novice 02)*

The manner in which the expert handled a student who was hiding was in sharp contrast to the novice clinical teacher. Although she confronted the student with the

hiding behavior, she was more perceptive of anxiety as the possible reason for the behavior. Moreover, she tried to help the student see the clinical teacher's role in assisting the student to be successful in clinical practice.

> *I will confront these students too. I'll say, "I haven't really seen you very much. Is it possible that you're feeling very uncomfortable with the idea of my being around?" Usually they say "yes" and I'll remind the student, "I'm here to help you to learn not as an evaluator and I want to see more of you". (Expert 01)*

Both groups of clinical teachers discussed the impact of anxiety on students' clinical practice. In addition to the presence of the clinical teacher, fear of hurting the patient frequently contributed to students' nervousness. Anxiety often interfered with the student's ability to focus on the actual nursing care that they were giving to the patient, perform a skill with manual dexterity if they were doing a procedure, explain the rationale for their nursing care, or answer a question related to their patient. At times students were so anxious that they were unable to come to clinical practice.

> *Sometimes they're really overwhelmed by even asking questions, that it's just too much . . . I think it's because of their anxiety level . . . they've even told me afterwards that maybe the doctor or somebody asks them a question and they think about it afterwards and they say, "Well how stupid. I could have answered it". (Expert 03)*

> *Students can be very anxious when they are feeling uncomfortable with a situation that they are in. Sick time is actually, students very often, if they're feeling very uncomfortable, they won't come to the clinical area quite as often . . . some student can get flustered very easily and I think very often that's a sign that they are in over their head or not comfortable with some part of the situation. (Novice 04)*

Helping the students deal with their anxiety in the clinical area was viewed as a critical part of clinical teaching by experts. They believed that only when students were

less anxious could they learn. Moreover, students who were anxious frequently had more difficulty with nursing care.

> *I see probably one of the biggest jobs that I have with students is trying to get rid of as much anxiety as I can get rid of because that's the only time that they get a little more open to learning, that things can, that the clouds can part for a second because I see them being so narrow and focussed, but not necessarily in a positive sense. So I do see that as being pretty important as part of what I do. (Expert 05)*

> *I know if they're uncomfortable or anxious, then probably they're not going to make great decisions or they might compromise when they shouldn't. (Expert 02)*

"Presencing" (Diekelmann, 1994) is the ability of the clinical teacher to understand and be open to the students' perspective. The clinical teachers let the students know that they understood that some situations might be difficult, especially having a clinical teacher observe their nursing practice. Often reflecting back to their own experiences as students enabled the clinical teachers to be "in the shoes of" the students.

> *Just working through doing tasks such as IM injections and that sort of thing, you know how scary that was and I can really reflect upon . . . I know it helped in that particular (situation) remembering what it was like to be there. I mean I could tell you the name of the first patient I gave a shot to and I can remember that. So using that empathy I think was very helpful in working with those students. (Novice 03)*

Experts' descriptions of weak and strong students were particularly illuminating. Although novices were able to describe student characteristics, they had not reached the point where they could differentiate clearly between the qualities of weak and strong students.

Strong students projected an image of confidence, that they were capable of doing what was expected of them.

They're assertive, they have confidence in themselves, they're interested in knowing more, they're there for the patient. It tells me that they aren't willing to just let it go by or just, or aren't going to let it be because that's how everybody thinks it's supposed to be. I guess they're not willing to be or act like or do the status quo. (Expert 04)

Strong students were viewed as those who could function in the clinical area and develop their skills as a practicing nurse. In the clinical area strong students were able to take the information that they were given about a patient and use it as a basis for their nursing care. Furthermore, they were able to go beyond the data that they were given, using this information efficaciously. These students picked up on patient cues, sought direction when they were in doubt, and asked questions which directed their care.

They'll almost look to you, the truly exceptional ones will come to you and say, "This is what I'm seeing you know, but I can't make, I can't quite make sense of this thing here". And they're able to isolate the thing they can't make sense of. (Expert 05)

In addition, strong students were aware of their personal strengths and weaknesses. They were able to use this information about themselves in order to grow and develop professionally. With supporting data, they accepted inadequacies in their performance. The ability of strong students to accept criticism and grow was described as it contrasted with a weak student.

I think the weak student is often a student who has a lot of trouble. If they have self awareness, they can't use the information in a way to grow. Some of them are devastated by what they see themselves doing and are not able to cope with that. You know the insecure student might have all sorts of beliefs about their incapacities, but they can't really work with it, whereas the better student can see it, but they can work with it. (Expert 05)

The preceding quote identified one of the major difficulties of weaker students, their inability to use information from the clinical teacher to develop professionally.

Moreover, weak students were disorganized in clinical practice, slow about completing their work, unable to assume increasingly complex patient assignments, and unable to understand the directions which the clinical teacher was giving them to enable them to deliver nursing care.

> *They (weak students) have a look. I can't describe it, but they look confused or look disoriented or they don't look, they look like a questioning look in their eyes. They don't know what it is you just said, they don't follow you train of thought, they don't follow or seem to understand why you're asking them that question. (Expert 04)*

Even when the clinical teacher had given the weak student specific information, s/he could not differentiate between information that was provided for them and information that s/he had gathered on his/her own.

> *What she would do is incorporate information that you had given to her into what she would later say she had done. So if you had given her feedback later on after she had done a certain thing and you had talked about a situation, she wouldn't know or she wouldn't seem to acknowledge that she hadn't known it in the first place. (Expert 05)*

Because of their uncertainty about nursing practice and their abilities to give safe nursing care, weak students were reluctant to move on to more challenging assignments.

> *Sometimes you have students that don't want to be pushed, they just want to do the minimum. (Expert 03)*

Weak students were unable to develop a collegial relationship with the clinical teacher. Their anxiety interfered with their ability to see the clinical teacher as someone who could facilitate their development as a nurse. Consequently, clinical teachers had to work more directly with weaker students to assist them to understand what they needed to do in order to be successful in nursing practice.

I don't feel comfortable that she is gonna want to have a collegial relationship with me, She's just not capable of it right now, she's too afraid. So I don't think I can necessarily depend on her to make a really good decision about what will help her to learn or what will reveal her capabilities . . . It's not unusual for a student who had come to you as very, has had difficulty performing, to have difficulty relating to an instructor in a completely open and honest way . . . I'm always working so hard to have them see me as a helpful person and so there's a tremendous amount more effort required on my part. (Expert 05)

Novices could identify students as weak. However, the four less experienced novices could only state that a student was weak without any details about what that behavior in the student might look like. Only the more experienced novice was able to describe some of the characteristics of weak students. Some of her descriptions of students approximated those of the experts and one might assume that the ability to describe the differences between weak and strong students develops with expertise.

They couldn't appropriately prioritize. Sometimes they hadn't been organized enough to come up with a list and once they were made to go through that task they could produce that and that was okay, like sometimes they really couldn't prioritize the list . . . sometimes the insecurity is so overshadowed that it impacted their judgement. (Novice 03)

Challenging students were viewed by both novices and experts as those students who were not afraid to speak their mind, challenged the status quo, and made demands on the clinical teacher. At times, these students were viewed as a "pain in the neck" because they could be quite argumentative if they were unable to convince the clinical teacher that their perspective was more valid (particularly when it came to grades). Alternatively, those students who challenged in a more socially responsible manner were seen as stimulating and rewarding students to have. These students were characterized as enthusiastic and high achievers.

I really enjoy working with students who are very aware of world events and how they impact health care and who are able to bring another dimension other then just patient nurse relationship . . . They're the ones that ask you questions that you never know the answers to and that's really nice and it's nice when you can say to students, "I haven't a clue, let's go look it up". Those are the kinds of students who really make you think about why you're doing what you're doing and enjoy what you're doing. (Novice 04)

Circumstances in Which Students Learn Best

Novices and experts agreed that repetition was necessary for student learning, particularly as it applied to psychomotor skills. Through multiple experiences students gained confidence in their ability to perform psychomotor skills. With experience students became less focussed on the skill and more able to focus on the patient.

The more often they have an opportunity to do an IV medication the more repetitive they do it, the better it is for them because then it becomes second nature, they can do it by rote. And that's my goal so they don't have to think about it. (Expert 04)

Related to repetition in practice, clinical teachers also believed that students needed opportunities to carry out nursing practice on their own. Particularly important were those nursing situations in which the nuances of care could only be learned through actual practice.

I: You've really emphasized in the last few minutes your belief in the value of real experience for the students and getting your students in and having them experience things and from that experience they will learn.

R: Absolutely . . . (describes student doing peri care). So it's those kinds of things that when they hear it and they have an opportunity to experience it then it helps them to learn. (Expert 04)

Observing other nurses or the clinical teacher give patient care was seen as another way in which students learned. Through these observations, students could observe how others managed a patient situation.

A journal came in today, a student commented on the thing that she had learned best in her first day at Children's was an interaction she had observed with a staff nurse, with a child who was hysterical about having some stitches removed and how watching the staff nurse interact with the child really brought home to her how different nursing children is than nursing adults and how they need to be approached according to the growth and development stages. (Expert 01)

Depending upon their personal styles as a clinical teacher, some of the study participants believed that different circumstances promoted student learning. For example, Expert 02 believed that students should have control over their learning experiences. In the past two years she had restructured her clinical teaching, giving the control for the learning to the students. By giving the students more control over their learning, she believed that students felt freer to take risks, to "try something", to be creative in their nursing care.

So I enjoy it (clinical teaching) more now because I'm not being this authoritarian, I'm being this co-worker and that's fun. I mean it takes the responsibility away from me. I still know I'm responsible because I know enough about my nursing. What I enjoy is I guess the responsibility for me is gone away. I'm not feeling like I alone control this . . . we can really each enjoy the situation and learn from it. (Expert 02)

Developing Relationships With Students

In developing relationships with students expert clinical teachers, without exception, revealed themselves as a person to their students. Diekelmann (1994) describes this process of sharing oneself with students as "Staying". The experts in this study had enough experience as clinical teachers to know their own strengths and weaknesses related to their relationships in working with students in the clinical area. By revealing themselves to students, the experts believed this would facilitate the development of their relationships with students. In particular, one's personal "pet peeves" were considered

important aspects about oneself to share with students. Through revelation of personal characteristics, experts posited that students would feel freer to reveal something about themselves to the clinical teacher. In this way the clinical teacher could learn about the student, use the information to plan for the students' clinical practice, and support the students' clinical development. Moreover, by being honest with students about oneself, experts thought they could ameliorate students' anxiety in the clinical area.

> *I try to be as open as I can be about who I am and what I think and what are my hang ups and all those things, to try and not have them second guessing all the time about what I'm thinking, what I'm seeing in their performances. Like for instance, you know I spend, I think that's mostly what orientation is, is them getting to know me, forget the rest of it (laughs). But just trying to spend a day with them or part of a day developing rapport . . . when I talk about revealing myself to them because I think that gives them some implicit permission, to a certain extent, to maybe be a bit freer about who they are and stuff. I spend my first conference as I said before just trying to get to know them and get them to relax and eliminate some of the anxiety that stops them from letting me know them. There are some very concrete things that I do to help them, like we talk in our first conference about what kinds of experiences we've had in our background. (Expert 05)*

Revealing oneself to students was not characteristic of novice clinical teachers. Only the most experienced novice commented on revealing personal information about herself to students. She believed that by revealing something about herself she would convey to students her willingness to be open to them. However, there was a qualitative difference in the type of information which she shared. Similar to the experts, she shared nursing experiences. However, she did not reveal any personal characteristics about herself.

> *I like to be a little bit personal or share a personal, to be willing to share those things professionally that you didn't maybe do as well as you should have, the client you took care of that you didn't make, those situations that have changed*

your career and your practice. That you be willing to share them and share them in a humble way. (Novice 03)

Rather than thinking about what information about themselves to convey to students, novices were focussed on what types of personal data they should elicit from students. They discussed what was important to know with respect to personal information about the student. Intuitively these novices believed that it was important for students to share information about themselves with the clinical teachers. However, they were unsure how much information was reasonable or how it would assist them in working with students. The only information that these novices gave students was their telephone numbers.

The students seem to be surprised like I gave them my work numbers and I gave them my home phone number because I didn't know how else they would get a hold of me if they were supposed to be in clinical and something happened or they had to go out of town or whatever. I was almost surprised when they did phone me at home and they were very apologetic about it and I mean, it's funny because we're both sort of surprised and I'm sort of trying to figure out like, "Who is this on the phone?" and then the light bulb came on. So I haven't really figured out how important, like how much do you really need to know about the students . . . So I haven't really figured out what is the right balance between what you really need to know about the students and their lives and what is wrong with them and what do you really not need to know or it's better if you don't because you may make judgements that aren't, you know, really appropriate. (Novice 01)

One could speculate that beginning clinical teachers do not share personal stories and information with students. It would seem from the results of this study that clinical teachers begin with trying to discern what is relevant personal information to elicit from students. As they become comfortable with how much personal information they should know about students, their focus shifts to sharing personal data about themselves. Sharing of oneself with students begins with telling students about significant personal

experiences. Only with the development of expertise does a clinical teacher feel comfortable enough to share her strengths and weaknesses with students.

Both novices and experts conveyed their expectations of students at the outset of the clinical rotation. Similar expectations communicated revolved around issues such as roles and responsibilities, preparation and knowledge required, evaluation procedures, and learning opportunities inherent in the clinical unit. However, there were some qualitative differences in the description and depth of the expectations conveyed. In addition to more details about what was necessary to tell students regarding their expectations, experts were more able to understand the uncertainties and anxieties of students in encountering a new clinical area. Using this sensitivity and understanding of students, they conveyed to students their confidence in the students' abilities to master the complexity of nursing practice in the new clinical area.

> *I am very forthright with them when I do my clinical orientation day that I have these expectations and I spell them out to them very clearly what my expectations are. For example, regarding medications, "You can expect me to ask you what this medication is and what is it for and why this patient is getting it, what is the dose appropriate to the child's weight and what are the major side effects. So there are no major surprises that hey, I really do want to know this stuff. I will expect you to have looked up the night before an unfamiliar procedure. I will expect you to maintain a professional appearance and that means no long red fingernails and no dangling earrings". Sometimes I'll use a little humour and say, "I am picky about this, you might as well know it now." I have found that being up front with them on orientation day releases their anxiety, sometimes it increases their anxiety because they realize I have high expectations. On the other hand, I think it relieves them because it doesn't come as any surprise to them to find this out when we get to the clinical practice area. (Expert 01)*

One expert recognized that her style intimidated students. However, she believed that letting students know what was expected of them, treating them with respect, and being fair mitigated the threat of her approach.

I mean there's a lot of trepidation in there because my style kind of precedes me and very often they don't know what to expect. They've just heard there's a lot of work and I expect a lot. But then they find out that actually I do expect a lot and there's a lot of work, but I'm fair with it and if they don't do well, that's okay, fix it. (Expert 04)

Novices were more tentative with regards to what and how they should convey their expectations to students. Their discussions reflected a greater preoccupation with themselves, rather than concern for the student. In retrospect they were able to understand students' confusion when expectations were not conveyed clearly at the outset. Recognition of students' bewilderment and uncertainty resulted in attempts to be more definitive with future groups of students.

I guess I'm going to have to take the "I'm going to be the heavy" initially and sort of say, "This is very serious and you need to concerned about how this is perceived by others and we're concerned about how it is perceived by others and this is exactly how it will be in the workplace . . . here are the ground rules and this is the way we're going to do it . . . like there's a couple of non-negotiables and one is confidentiality . . . I don't want to ever catch wind, like there are some things I can get quite angry about and you may not understand it at this point, but it's very important and that's one of them" . . . if you can kind of give those students ground rules, then at least they can't say they weren't told because they were. (Novice 01)

Expert clinical teachers were clear that information students shared with them was related to their work with the students as clinical teachers and not in any other capacity, such as counselling the student. In the event that students revealed information about themselves that indicated personal problems, experts referred students to the relevant resources. Key to their decision regarding the appropriateness of the information was its relationship and impact upon the student's ability to preform in the clinical area.

I'm there for the students, but they're, I'm not there to develop a real friendship. I still want to maintain the student-teacher (relationship). And one time I had to, when a student was trying to share a lot of things, I had to say, "I didn't think

> *that this was any of my (business)". Like it didn't really have any bearing on what we were doing. It was more intimate than I felt she should be. She wanted to share that she needed to go maybe see a student counsellor about things and maybe sometimes, by having a reputation that you can be open and sharing, sometimes, you have to still set limits as well in how much you want to get involved with her personal problems at that point in time. I felt it wasn't really reflecting on her performance. (Expert 03)*

Novice 03 (most experienced novice) commented on the importance of maintaining the "fine line" between a professional and personal relationship with students. Other novices recognized that there was a difference between the two types of relationships. However, they did not disclose any understanding of the nuances of the relationship. Their uncertainty about the dimensions of what a clinical teacher should know about students was clearly illustrated in the comments of Novice 01.

> *I try, what I've been doing is I've tried to, I'm still trying to figure out that fine line between how involved do you get with students and how detached to remain. I see different teachers; some of them are very, very personal with students, very, their students spill their guts to them. Now I have students do that a little bit, but not a lot. They're not really gut spilling people. But either that I've come across with or maybe I'm just not sensitive and I don't pick up on their cues and I sort of really haven't picked that up. (Novice 01)*

The concept of power in teacher-student interactions is an underlying theme in the literature (Halstead, 1996). Two of the experts discussed the issue of power in their relationships with students. These experts believed that sharing themselves with students and attempting to be partners in their relationships encouraged a more balanced power structure in the teacher-student relationship. However, both these clinical teachers recognized that even when they made a concerted effort to share power in their relationships with students, ultimately the clinical teacher held more power, primarily related to their greater knowledge and responsibility for evaluation of students'

competencies in clinical practice. In addition, they recognized that students were acutely aware of the ultimate power of the clinical teacher in her relationships with students.

> *Well I don't know if we can ever be equal because, let's face it, the way the system is set up, I always have more power because I have more knowledge, I know the system, and I evaluate them. We'll never be equal partners, it's impossible. But you try and give them enough so they can be, have some dignity and learn at the same time, but be free to take a risk. (Expert 02)*

The two novices who acknowledged the issue of power in the relationship with the student did so only in so far as they acknowledged that power was a factor in the student-clinical teacher relationship. From the perspective of these novices, clinical teachers held the power in the relationship because of the evaluative component of clinical teaching responsibilities. They did not consider their knowledge or experience as factors influencing the balance of power in the student-clinical teacher relationship. Neither novice discussed how they might share power with students or how the sharing of power might impact upon the students' learning.

> *Now I realize that in the middle of a posting it is highly unlikely that they are going to tell you something that is dreadful (evaluating the clinical teacher) because you're grading them and there is the whole power structure. (Novice 04)*

Knowing Students was viewed as an integral part of effective clinical teaching. As with the other themes in the study, novices were more limited in their understanding of students. Experts were more able to deal sensitively with students related to their deeper understanding.

Summary

This chapter has described the three major themes of the study i) Learning Clinical Teaching, ii) Practices of Clinical Teaching, and iii) Knowing Students. In particular, the conceptualization of effective clinical teaching from the perspective of five novice and five expert clinical teachers illustrated the similarities and differences in their thinking. Implicit and explicit meanings arising from the experiences of the individuals were analyzed in order to interpret the meanings attached to clinical teaching. The importance of the interpretation of oneself and others was seen in the development of the concepts of effective clinical teaching. Symbolic interactionism supports this perspective in which one's values and beliefs are developed within the individual's lived experience. While novice and expert clinical teachers had common beliefs about some aspects of clinical teaching, the views of the expert were more clearly detailed and understood. Moreover, individual experiences of each participant engendered unique perspectives in some circumstances.

CHAPTER FIVE

DISCUSSION

The findings of this study reveal much about the conceptualization of effective clinical teaching by novice and expert clinical teachers. The final chapter begins with a discussion of the interpretation of the findings in the light of the conceptual framework, that is symbolic interactionism. The integration of the findings in view of the existing literature, primarily in nursing education are considered. Finally, implications for nursing education are discussed and recommendations for further research are made.

The Conceptual Framework Revisited

The findings of the study were interpreted through the screen of symbolic interactionism which focusses on the dynamic interaction between and within individuals and the meanings which are attached to these interactions (Charon, 1989; Chenitz & Swanson, 1986; Musolf, 1992). The beliefs of the clinical teachers in this study with respect to effective clinical teaching arose out of their experiences in a variety of circumstances, in particular, those which involve interactions with others. The impact of these beliefs is central to how their conceptualization of clinical teaching is shaped. The importance of both positive and negative role models and paradigm experiences are evidenced in the development of the study participants' thinking about effective clinical teaching. The experiences are turned around in the mind, reflected upon, and given meaning. At times this reflection is done by the self and at other times, the experiences are shared with others in an attempt to understand and make sense of what has occurred. The development of one's conceptualization of effective clinical teaching is a result of

the participant's experiences with the self (as a student, nurse, and clinical teacher) and in interactions with others (other clinical teachers, nurses, students, and significant others). Moreover, the implicit and explicit meanings of their clinical teaching practices are explored within the context of their practice with students. In the clinical teaching enterprise clinical teachers communicate their understanding and knowledge in their interactions with students and others. The types of interactions and the meanings ascribed to these interactions facilitate the development of expertise in clinical teaching.

Novice and expert clinical teachers have different conceptualizations of effective clinical teaching, largely as a outcome of their lesser or greater experiences as clinical teachers. In addition, there are idiosyncratic differences that result from how the individual clinical teacher makes meaning of her particular experiences. Nonetheless, there are also similarities across the two levels of expertise that are consistent amongst the two groups of study participants. Furthermore, while the actions of the clinical teachers might look the same to an observer, what is going on in the mind of the individual may be different. For example, in working with a student when s/he is caring for a patient, novice clinical teachers focus on the patient. Their referent experiences are limited primarily to their experiences as a nurse and a few experiences as a clinical teacher. Consequently, the meanings which they attach to the patient situation are rooted predominately in their experiences as a nurse. On the other hand, expert clinical teachers have many similar situations in which they have encountered the student and patient. Their focus is broader and enables them to consider not only the patient, but the student and his/her learning.

The symbols and the meaning of the clinical experience for the expert are unlike those of the novice clinical teachers.

Paradigm Experiences.

Paradigm experiences are those experiences that make a substantial impact on the individual to the extent that the experience is remembered in vivid details many years later. In reviewing their paradigm experiences (both in the clinical and personal arena), clinical teachers ascribe meanings to them that underpin their beliefs and values about effective clinical teaching. Paradigm experiences were significant to the development of the thinking of effective clinical teaching for the study participants. Expert clinical teachers were able to describe their paradigm experiences and the relationship of these experiences to their clinical teaching practices. For example, Expert 01 discussed how she had developed a philosophy of nursing practice and its impact upon her thinking. As a clinical teacher, she described how important it was to convey to her students this philosophy of nursing practice, how it influenced her expectations of students as they worked with patients, and how this philosophy was implicit to the manner in which she worked with students.

Novices can, in some instances, understand the relevance of their paradigm experiences to their clinical teaching practices. However, at other times, while the novice has connected pieces of the paradigm to her clinical teaching, the overall significance of the paradigm experience has not surfaced nor is she able to act on those beliefs. For example, Novice 04 described the importance of the calming influence of an exemplar clinical teacher on her beliefs about effective clinical teaching. In her clinical teaching,

Novice 04 tried to convey a sense of calm and confidence to her students. Nonetheless, in situations in which students were placing patients in jeopardy her first reaction was to say, "No!" In addition, she recounted how she admired the clinical expertise of this exemplar clinical teacher, but had not linked that with her dissatisfaction about her own expertise as a practicing nurse. Even though she recounted these stories in detail to the researcher, when asked where she had learned to be a clinical teacher, she replied, "I don't have a clue".

The importance of the meaning of paradigm experiences to the development of effective clinical teaching cannot be overstated. In considering how they assist the individual in the development of expertise, one could speculate that the meanings that are most apparent to the clinical teachers are those which are used in a more immediate way by the clinical teacher. In order to manage in a complex environment, novice clinical teachers reflect on those experiences which are most salient to their survival. As they become more familiar with clinical teaching, they are able to reflect on their experiences in a more meaningful way, that is they can make direct connections between their experiences and their clinical teaching practices. Other facets of clinical teaching surface and they begin to relate these to their thinking, reflecting on the potential meaning to their clinical teaching.

Linkages With the Literature

Literature in education, higher education, nursing, and medicine were consulted in order to situate the study within the context of what was known about effective clinical teaching. These literatures were incorporated within the beginning two chapters of the

dissertation. For the purpose of the discussion of the findings, the literature will be confined primarily to the nursing education literature and, where appropriate, other more general literature will be considered.

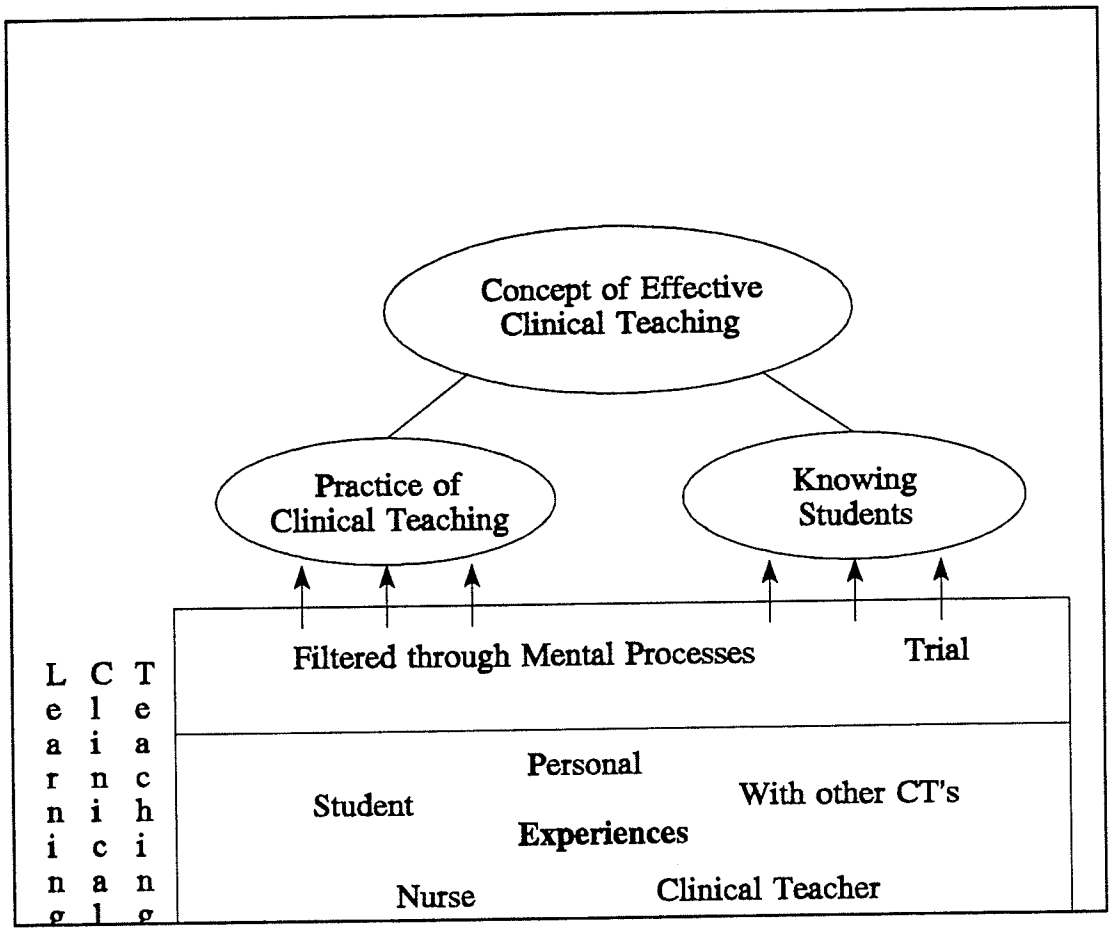
Diekelmann (1988, 1990a, 1990b) contends that research in clinical teaching must focus on designs that enable the voice of clinical teachers to be heard to uncover the practical knowledge of nursing and make visible the nature of teacher's work. This study was designed within the qualitative paradigm to give voice to clinical teachers' experiences. The findings extend the literature uncovering the invisible practices of clinical teaching as revealed by novice and expert clinical teachers in a manner heretofore not delineated. Learning Clinical Teaching, a process which has not been addressed in the literature, is described. Broader, more conceptually derived categories of effective clinical teaching have been revealed, that is, Practices of Clinical Teaching (Making Content Understandable, Developing Students' Assignments, Monitoring and Evaluation, and Developing Relationships with Nursing Staff) and Knowing Students. Although the themes are presented as separate entities, in reality they interact with and impact upon one another as the clinical teacher works with students. What clinical teachers know about students influences how they choose to work with students in the clinical setting. Moreover, the development of their thinking (Learning Clinical Teaching) shapes how they use their experiences to understand effective clinical teaching.

Learning Clinical Teaching

The nursing education literature is silent on how nursing faculty learn the craft of clinical teaching. Powell (1992) asserts that teachers enter preservice education programs

with strong beliefs about teaching and personally constructed theories of classroom instruction based on many years of interacting and observing classroom teachers. The findings of this study support Powell's contention. Novice clinical teachers use their experiences to inform their clinical teaching practices.

This study has revealed the significance of multiple experiences in the development of clinical teaching expertise, more wide ranging than one might suppose. The development of the conceptualization of effective clinical teaching can be delineated in a model (see Figure 5).



In this model the experiences that the clinical teacher has (both past and present) are filtered through different mental processes in the development of their thinking about clinical teaching. Mental processes such as reflection, problem solving, and hypothesizing are used by clinical teachers to consider the meaning of those experiences to their understanding of effective clinical teaching. Moreover, implicit, intangible processes play a role in the development of expertise in clinical teaching, processes which the clinical teachers cannot explain. An intuitive understanding of the experiences of clinical teaching was recognized by all the study participants. However, only with expertise are clinical

teachers able to trust and rely on intuition as a means of comprehending their clinical teaching practices and experiences with students.

Trial and error is the primary strategy used by novice clinical teachers as they struggle to make sense of the complex world of the clinical setting in which they are charged with the responsibility of developing the neophyte nursing student. Using clinical teaching practices that they encountered as students or observed in practice, novices test out various approaches to working with students. When they leave the clinical setting, they engage in dialogue with others or themselves in order to understand the efficacy of what has transpired in their interactions with students and nursing staff.

Practices of Clinical Teaching

Within the nursing education literature the need for research in clinical teaching is well documented (Allemang & Cahoon, 1984; Bevis & Murray, 1990; Diekelmann, 1990b, 1991, 1993; Infante, 1985; Pugh; 1983 Sleightholm, 1985; Tanner, 1990; Tanner & Lindeman, 1987). The literature suggests that characteristics of effective clinical teaching are grouped around five categories of behaviors: teaching ability, interpersonal relationships, personality, knowledge and nursing competence, and evaluation (e.g., Hedin, 1989; Knox & Mogan, 1985; Krichbaum, 1994; Mogan & Knox, 1987; Mogan & Warbinek, 1994; Morgan, 1991; Nehring, 1990; Oermann, 1996). However, the categories of effective clinical teaching used in the literature are conceptually "fuzzy". For example, what constitutes evaluation in some studies (e.g., Knox & Mogan,1985; Mogan & Knox, 1987; Nehring, 1990) is described as feedback in other studies (e.g., Krichbaum, 1994; Mogan & Knox, 1994).

This study supports the importance of teaching activities, interpersonal relationships, nursing competence, and evaluation as attributes of effective clinical teaching. However, the study develops and describes these components through the words of the study participants in a manner that has not been documented in the nursing education literature. Furthermore, it conceptually links the characteristics of effective clinical teaching in a different configuration. The overall theme is labelled Practices of Clinical Teaching. Subsumed under this broad theme are four categories: Making Content Understandable, Developing Students' Assignments, Monitoring and Evaluating, and Developing Relationships with Nursing Staff. Although the personality of the clinical teachers was not a focus of this study and these attributes were not pursued in any detail, some of the personal characteristics of the participants emerged as they related to the other four categories.

The literature indicates that questioning and answering skills are qualities of effective clinical teaching. However, what is presented in the literature focusses primarily on whether or not the questions are at a high or low level of cognition (Krichbaum, 1994; Mogan & Warbinek, 1994), the relevance of the level of question to the level of student ability (Mogan & Warbinek, 1994), and the relevance of the questions to the clinical situation (Krichbaum, 1994). In examining the thinking of why clinical teachers ask questions and how they answer student questions, a rich description of the reasons which underpin questioning and answering clinical teaching behaviors was uncovered. Moreover, idiosyncratic approaches to this practice of clinical teaching reveal that beliefs about what is most effective for student learning shapes how and what a clinical teacher does. In

order to understand the questioning and answering practices of clinical teachers, perhaps the more important questions are related to the function of the practice to effective clinical teaching, rather than the level of the question in any given situation.

Mogan and Warbinek (1994) mention prompting as a strategy subsumed under teaching skills. No descriptions of how and when it is used are given and its relationship to cuing the student is not identified. The importance of cuing and prompting as a means of facilitating student understanding of clinical practice is disclosed in the present study and is similar to Paterson's (1991) description of cuing for the purpose of promoting student's recall of previously learned information. The findings of this study move beyond Paterson's findings with respect to cuing to include prompting as a practice of clinical teaching. Thinking aloud as described by the participants of this study is a characteristic of cuing and prompting used to assist students' understanding of the thought processes inherent in making decisions about patient care. Use of thinking aloud facilitates the development of abstract processes such as decision making and problem solving in nursing students.

Benner (1993) and Tanner (1993) discuss the relationship of research based theory to clinical practice and suggest that the direction between theory and practice is predominantly one way, that is, theory to practice. Students are placed in clinical settings in which they can presumably see examples of theory which is taught in the classroom. Tanner contends that the relationship is more complex than the instrumental application of theory to practice. In this study expert clinical teachers reversed the direction of the theory to practice model. What was critical was waiting for the "teachable moment" when

the student's experience revealed what the theory proclaimed. Expert clinical teachers are able to engage their students in discussions based on the students' experiences in which the meaning of theoretical knowledge become real and alive.

While the literature (Campbell, Larrivee, Field, & Reutter, 1994; Hedin, 1989; Krichbaum, 1994; Mogan & Knox, 1987; Mogan & Warbinek, 1994; Morgan, 1991; Nehring, 1990; Paterson, 1991; Wiseman, 1994) discusses the importance of role modelling to clinical teaching, the circumstances in which role modelling is employed are unknown. Expert clinical teachers in this study used modelling when students were uncertain and needed assistance in order to proceed with nursing care. In addition to modelling the physical components of nursing care, experts also convey their thinking to students by talking aloud as they model the care or explaining their thinking to the students outside of the patient's hearing. Novice clinical teachers discuss the use of modelling infrequently. However, when novices use modelling, they are more focussed on the patient than the student.

Only Mogan and Warbinek (1994) mention the use of directing as a subset of teaching skills. Both novice and expert clinical teachers use directing, particularly when a student does not know how to carry out a nursing procedure. They call this type of directing "walking the student through". Directing as a strategy is used less frequently by experts than novice clinical teachers, primarily related to the novices' inaccurate judgments of students' abilities in the clinical setting. Given the uncertainty which novices describe and the responsibility which they feel, it is understandable that they become overly controlling when they assume that students are in difficulty.

Paterson (1991) describes the selection of patient assignments for students as "fraught with difficulties" (p. 295), yet this study describes its centrality to the growth of students' clinical expertise. The juggling of multiple factors inherent in the student, the patient, and the nursing staff are considered in carrying out this task of clinical teaching and the ability to weigh all these factors is a distinguishing characteristic of clinical teaching expertise. In considering patient assignment, novices operate at a more general, superficial level. They are unable to move beyond the types or numbers of patients and may frame the dilemma in terms of how they will manage to supervise the students, rather than the students' learning. One might speculate that the inability to consider multiple aspects of the situation may be related to their focus on the most crucial aspects in the clinical situation and that the ability to manage increasing complexity develops with experience.

Evaluation (and the practices inherent in this practice) consumes a tremendous amount of the clinical teacher's time and energy and is stressful, particularly for novice clinical teachers. Aspects of evaluation are described in virtually all of the studies which consider effective clinical teaching. Providing effective feedback in a constructive manner is one of the consistent attributes of effective clinical teaching (e.g., Bergman & Gaitskill, 1990; Hedin, 1989; Krichbaum, 1994; Mogan & Werbinek, 1994; Nehring, 1990). However, other aspects of the evaluation process, (i.e., letting go, how clinical teachers gather data and from where, and student cues) as described in this study are not generally considered when delineating evaluation of student practice.

Paterson (1991) describes the decisions for supervision made by the clinical teacher to be determined by the amount of trust in the student's ability to perform nursing care safely. The present study describes this process as Letting Go and extends the understanding of the need for monitoring as a process in which clinical teachers resolve the dilemma of how much supervision is necessary by assessing the student's capabilities in light of the demands of the patient situation. A continuum of Letting Go is proposed, one in which the expert is more able to weigh the critical factors in making a decision regarding the independence of practice of which a student is capable. Moreover, the ability to give up control of the patient care situation is one which develops with expertise. Specific cues in either the student or patient facilitate the experts' judgment. Risk Taking, an attribute of Letting Go, is exclusively associated with clinical teaching expertise. Experts use their knowledge of the student and understanding of nursing practice to think ahead with respect to the potential dangers in the situation and when intervention may be necessary. Mindful of their responsibility to ensure patient safety and lacking an understanding of students, novices are reluctant to place students in risky situations. Rather than allow students to make errors, they intervene before their occurrence.

The method of monitoring students and gathering data is described in this study. Expert clinical teachers develop routines around which they structure their monitoring of students' activities. For example, experts make "rounds" of all the patients for whom students are caring soon after nursing report, an activity similar to the participants in Paterson's (1991) study. Leinhardt, Weidman, and Hammond (1987) discuss the

importance of routines to teaching. They contend that teachers build a "skeletal sequence of actions that has embedded in it the schemata for collecting information, storing it, and then using it in different (later) locations in the sequence" (p. 138). These mental schemata enable teachers to act fluidly in familiar situations. They conclude that effective teaching entails the construction of complex patterns of relevant behavior. Novice clinical teachers do not use any routines. Lacking the experiences necessary to construct mental schemata, they are preoccupied with managing the details of the situation, uncertain, and have difficulty seeing the whole of the student's performance.

A hallmark of expert clinical teaching is the ability to see patterns in the student's behavior. In gathering information about students, experts are able to make meaning out of highly inferential data and listen to their intuition when it is engaged regarding a student's nursing practice. Novices are often unsure with even the most basic issue of what they should be looking for in students' practice. Their descriptions of student performance are general and they have difficulty synthesizing inferential cues in order to arrive at an overall assessment of the student. When their intuition is engaged, rather than act on it, they look for confirming information before they confront the student.

Only expert clinical teachers have the courage to fail students in the clinical setting. They view the ability to give a failing grade as integral to the integrity of their practice as a clinical teacher. Experts have developed a repertoire of students cues around which they gather information about the student's nursing practice. They look for growth in the student over time and, in conjunction with the patterns inherent in the student's behavior, make decisions about the student's nursing competence. The feedback which

they give the student is specific and detailed, enabling the student to hear the negative evaluation. This ability to give negative feedback in a constructive manner differentiates the expert from the experienced clinical teacher. Furthermore, it is important to expert clinical teachers that the student's self confidence and self image are not destroyed in the feedback process. In situations in which an expert is concerned about a student, she will set up the clinical experience so that the student either succeeds or fails on his/her own merit. This is in contrast to Paterson's (1991) findings which suggest that when the clinical teacher makes a decision about the ability of the student, she structures the clinical experience so that the student either passes or fails. Possibly Paterson's findings reflect that fact that she did not identify study participants according to their level of clinical teaching expertise. The ability to let students influence the outcome and enable students to accept a failing grade are distinguishing characteristics of clinical teaching expertise.

Nursing competence is detailed in the effective clinical teaching literature (e.g., Benor & Leviof, 1995; Mogan & Knox, 1987; Mogan & Warbinek, 1994; Nehring, 1990) and its importance is reflected in the narratives of the participants of this study. Both novices and experts recognize the significance of their relationships with nursing staff. However, the nature of the relationship with the nursing staff differs with novice and expert clinical teachers. Experts establish reciprocal relationships with the nursing staff and consider the development of their credibility as a nurse with nursing staff essential to effective clinical teaching. Novice clinical teachers' relationships reflect the "guest in the house" position described by Glass (1971). Although novices attempt to establish

cordial relationships with staff, they are peripheral to the staff and their relationships are characterized as a peacemaker or buffer between staff and students. Given that the novice is dealing with so many challenges as she functions as a clinical teacher, the development of relationships with staff have lesser priority in her survival in the clinical setting. In light of the findings of Campbell, et al. (1994) who found that negative feedback from nursing staff can be detrimental to student learning, the potential consequences for poor relationships with nursing staff cannot be minimized.

Knowing Students

Benner and Tanner (1987) claim that knowing the patient is central to expert nursing practice. Knowing the student is essential to effective clinical teaching. Yet the majority of the literature on effective clinical teaching does not address this central tenet. Diekelmann (1991) contends that finding the right level of involvement and the boundaries of teaching practices in nursing evolve over time. Knowing (the student) is related to knowing about him/her as an individual in order to enhance the clinical teacher's ability to provide meaningful learning experiences (Paterson, 1991). The present study describes what clinical teachers know about students (knowledge, practice, characteristics, and circumstances in which students learn) and how clinical teachers develop relationships with students.

Novices use their own experiences as students in order to understand the students with whom they are working. When this understanding is insufficient to explain the student's behavior, novices are uncertain about what they should do. As with other aspects of clinical teaching, novices tend to work at the surface, responding to the general aspects

of the situation, unable to comprehend its deeper meaning. This inability to understand the nuances of student knowledge and practice causes novice clinical teachers to overestimate the students' abilities, frequently placing both students and their patients at risk.

The rich descriptions of students by expert clinical teachers reflect their broad experiential base. They are able to describe the qualities of strong and weak students. A distinguishing feature of clinical teaching expertise is the ability of the expert clinical teacher to appreciate that students cannot sort out the relevance of data in the clinical setting without assistance. Using this knowledge of students, they are able to select patient assignments which present a challenge to students and allow them to progress at their own rate in their development of nursing practice proficiency. Expert clinical teachers anticipate what students might do. This ability to anticipate alerts experts regarding when to observe and/or intercede at the right time.

Hedin (1989) portrays the expert clinical teacher as one who can get the student beyond his/her anxiety. Although both novice and expert clinical teachers recognize that students are anxious in the clinical setting and that this anxiety frequently influences their ability to practice, experts understand the importance of assisting students to reduce their anxiety. They describe ameliorating anxiety as a critical aspect of effective clinical teaching. Experts also contend that weak students cannot develop a relationship with their clinical teacher due to their anxieties in clinical practice. Only the more experienced novice in this study was able to approximate the descriptions of the weak, anxious

student. It is likely that the ability to identify specific characteristics of weaker students and intervene appropriately develops with clinical teaching expertise.

Both novice and expert clinical teachers believe that students need opportunities to practice and repetition to learn, a belief supported in the literature (Campbell, et al., 1994; Krichbaum, 1994; Paterson, 1991). In addition, novices and experts assert that students also learn how others manage patient care situations through observation. This latter finding supports Krichbaum who found a positive correlation between students' learning and opportunities to observe a nursing procedure before actually assuming responsibility to do the procedure themselves.

Although both novice and expert clinical teachers convey their expectations to students, there are qualitative differences in the description and depth of these expectations. In addition to more details about what is necessary to communicate to students, experts understand the uncertainties and anxieties which students feel in the clinical setting. Using this sensitivity and understanding of students, experts convey to students their confidence in the abilities of the students to master the complexity of nursing practice. In contrast, novices are more tentative with regards to what and how they should convey their expectations to students. They are more preoccupied with themselves rather than the students. Although they understand students confusion when expectations are unclear, their attempts to respond to the situation result in more definitive rules and structure.

Good relationships with students are considered fundamental to effective clinical teaching (Benor & Leviyof, 1995; Campbell, et al.; Mogan & Knox, 1987; Hedin, 1989;

Nehring, 1990; Paterson, 1991). Diekelmann (1994) describes the process of getting to know the students as "Staying". In interactions between students and clinical teachers, stories are shared. Revealing oneself as a person is a characteristic of expert clinical teachers, one which facilitates development of relationships with students. Novices do not reveal themselves as people to their students, rather they focus on the information they postulate is important to know about students. They are uncertain how much data regarding the students are appropriate and how they will use the data. Novices begin by delineating what information is appropriate to their relationships with students by asking them for primarily demographic information. With experience clinical teachers learn to reveal personal information to students. Initially this information revolves around stories of nursing practice. As expertise in clinical teaching develops, clinical teachers begin to share some personal information, understanding its importance to the student/clinical teacher relationship.

Development of Expertise in Clinical Teaching

The findings of this study reveal the differences in the thinking of novice and expert clinical teachers in their conceptualization of effective clinical teaching. Novices' clinical teaching is limited by their experiences. They have a great deal of uncertainty about their clinical teaching practices and they are unsure about what to do and how to do it. As a consequence, novices worry about whether they are "doing clinical teaching correctly" and accept criticism from others as valid. Novices' lack of knowledge places them in unfamiliar territory, situations in which they do not know what to expect of the

students nor how they should be working with them. They feel responsible for the patients and the students and intervene when there is any doubt that either may be in jeopardy.

Expert clinical teachers are clear about clinical teaching and have developed a deep understanding of what they do as clinical teachers and why they do it. In addition, their clinical teaching is characterized by a style of clinical teaching which is unique to the individual, a finding similar to Irby (1992). Experts are able to trace the development of their thinking from the time when they were novice clinical teachers. They have sorted out much of the ambiguity in clinical teaching. Experts are able to move beyond concerns for themselves in the clinical setting, focussing instead on the students and the patients for whom they are caring. Maintaining and supporting students' self-esteem in clinical practice is viewed by expert clinical teachers as a mediating factor in the students' capacity to learn.

Not every clinical teacher becomes an expert. Expert clinical teachers are reflective practitioners and they use their experiences to inform their clinical teaching practices. One might speculate that only those clinical teachers who are truly reflective can become expert clinical teachers. Stephen Brookfield (1996) contends that in order to become a critically reflective teacher, one must be able to examine one's teaching through four critical lenses i) autobiographical experiences, ii) the eyes of one's students, iii) colleagues' reflections of one's teaching, and iv) various theoretical perspectives. Furthermore, he asserts that the autobiographical experiences are those most neglected by the teacher because one tends to underplay the importance of one's own experiences. When there is a conflict between the literature and one's practice, the teacher negates the

practice and believes the literature. The findings of this study indicate that experts are confident in their abilities as clinical teachers. Using their "knowing-in-action" (Schon, 1983), experts rely on their experiences to inform their clinical teaching practices rather than the literature.

Novices have difficulty holding all the pieces of the puzzle together as they work with students in the clinical setting. They have trouble seeing the whole picture and are only able to look at one or two aspects of the situation at any one time. In an environment which places multiple demands on them, novices frequently misjudge the situation and students may be unable to cope with the consequences.

The experiences upon which novice and expert clinical teachers rely to inform their clinical teaching practices are different and can be depicted as seen in Figure 6. Past experiences as a student and nurse underpin the clinical teaching of novices. As they work with students in the clinical setting, the reliance on these experiences are supplemented with their own experiences as a clinical teacher. In addition, paradigm experiences which have powerful meaning to the clinical teacher remain central to their thinking about effective clinical teaching. With the development of expertise, the meaning of experiences as a clinical teacher become more salient and are those which the clinical teacher learns to trust and use.

Some aspects of clinical teaching are shared by novices and experts (see Tables 2-6, Chapter 4). Issues which are more akin to the student or nursing role are incorporated more quickly by novices into their thinking about effective clinical teaching. For example, ensuring the safety of the patient is fundamental to nursing practice and is a facet of care

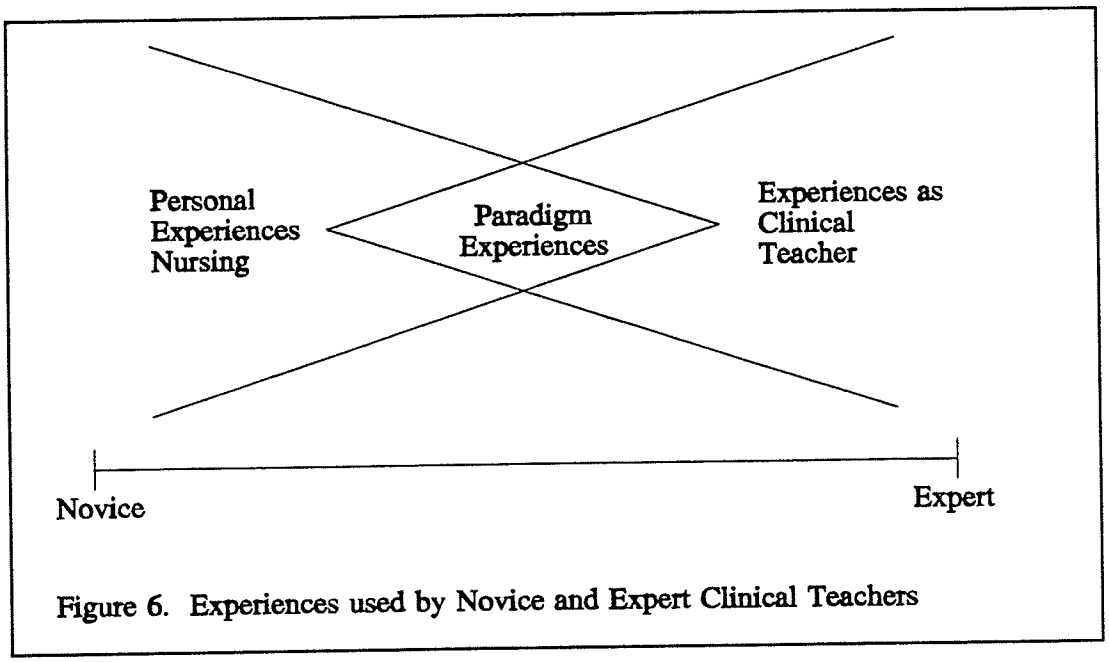


Figure 6. Experiences used by Novice and Expert Clinical Teachers

rapidly learned as a student. Although the novice clinical teacher can focus on this aspect of clinical teaching, she is unable to move past what she knows about patient safety. In contrast, expert clinical teachers focus on ensuring that the student is in a safe situation, one in which s/her can manage. The expert knows that if she can ensure the safety of the student, then the safety of the patient is also assured.

Implications of the Study

This study has described the primary strategy for learning clinical teaching as trial and error. In the absence of a formal structure to inculcate novice clinical teachers into nursing education, novices struggle to survive in a complex environment with few, if any, supports. In their words, they are "thrown into the clinical area". The paradox for nursing education is that clinical practice is viewed as the heart of the nursing education program. Yet the most inexperienced of nurse educators are responsible for this crucial part of the nursing students' education. This investigation has identified areas in which there are gaps

between the novice and the expert clinical teacher. In addition, it has identified the thinking of novice and expert clinical teachers, for example understanding characteristics of weak and strong students. Administrators in nursing education programs should establish developmental programs for novice clinical teachers. Clinical teaching effectiveness impacts upon student learning (Campbell, et el., 1994). The differences in the students' experiences with a novice and expert are obvious. It behooves nursing education administrators to address this gap and facilitate the development of novice clinical teachers which, as a consequence, will enhance the clinical experiences and development of nursing students.

Novice clinical teachers need to be linked to expert clinical teachers in order to have effective role models who can facilitate the development of their thinking. Morgan, (1991) contends that role models are limited for clinical teachers. In that case, other opportunities need to be created for novice clinical teachers. The clinical teachers in this study suggested that one way of identifying good role models are those clinical teachers who receive high ratings from students. In making the match between novices and experts, it is important to consider the personal fit between the individuals. Novices suggested that they need to be linked with someone with whom they feel comfortable. Even in these circumstances, novices will evaluate what they learn against their own beliefs about clinical teaching, accepting what fits and rejecting what does not. Spending time with an expert clinical teacher when the novice has no responsibilities for students will enable him/her to observe expertise in action. Creating opportunities to learn what clinical teachers do will allay some of the uncertainty about clinical teaching and

ameliorate the need for "doing it right". In the absence of role models, novices do not know what is expected of them. Rather, they rely on what they think is effective clinical teaching. Uncertain in their new role, novices strive for correctness, fearful that they or their students will do something wrong.

The centrality of the role of experiences in the development of expertise in effective clinical teaching was revealed in this study. How can nursing education assist clinical teachers to tell their stories (Diekelmann, 1991). Personal reflection alone is limited by one's own understanding and knowledge (Scanlan & Chernomas, 1996). Through the telling of stories, clinical teachers can get in touch with those paradigm experiences that have been pivotal in the development of their thinking about effective clinical teaching. Opportunities for reflection with others need to be created so that clinical teachers are challenged to understand the implications of their experiences to their assumptions and beliefs about effective clinical teaching.

Clinical teachers in this study related the belief that transmission of nursing practice is central to clinical teaching. However, the findings of this inquiry reveal that clinical teachers also are transmitting how (how not) to be a clinical teacher. Clinical teachers need to be aware of the long ranging impact their practices have on nursing students and, as a consequence, nursing practice.

Frequently clinical teachers are moved from one clinical setting to another one based on the assumption that a clinical teacher is a clinical teacher. This study has revealed the importance of the relationship between the clinical teacher and the nursing staff on the clinical unit. Frequent movement of clinical teachers decreases their ability

to establish the types of relationships with nursing staff that are necessary to enhance clinical teaching effectiveness.

The confusion between when to teach and when to evaluate is a thorny issue, exacerbated by the fact that teaching and evaluation occur in the same circumstances. In many nursing education programs, testing of clinical practice is not done, rather the clinical teacher must decide in the clinical setting whether to teach or evaluate. Often the situation is exacerbated by short rotations to clinical settings in which the clinical teacher is faced with having to make summative statements about students' practice when the students are still learning. This study reflects the ambiguity of this issue. Expert clinical teachers do not have consistent characteristics with respect to how they conceptualize when to teach and when to evaluate. Instead, each expert reaches an individual determination of how she differentiates between the two practices. This uncertainty is reflected in the thinking of novice clinical teachers. The issue of when to teach and when to evaluate is an enigma to them. Nursing education should reexamine the practices around clinical evaluation of students. Consideration should be given to alternate strategies, such as clinical examinations.

Recommendations for Further Research

In the past 25 years, research in nursing has shifted dramatically from nursing education to nursing practice. While not negating the importance of research which examines practice issues, research in nursing education has suffered. The findings of this study support the notion that clinical teachers use their experiences as students and nurses in conceptualizing effective clinical teaching. Therefore, there is a danger that outmoded

practices of nursing are being perpetuated by clinical teachers. A research agenda which addresses issues of effective clinical teaching is essential to move not only nursing education, but the discipline of nursing as well. This study raises a number of issues regarding effective clinical teaching which warrant further research.

This study has begun to uncover the similarities and differences in the conceptualization of effective clinical teaching by novice and expert clinical teachers. Further study is needed to understand if the thinking of the participants in this study are similar to the thinking of clinical teachers in other settings. More definition is needed of some of the clinical teaching behaviors and thinking that emerged from the findings. Expert clinical teachers were not always in agreement, for example in questioning and answering practices. Idiosyncratic differences emerged. As individuals, the experts believed that their approach was best and, indeed, it was for them in their unique circumstances. However, is there one approach that is better? Do some clinical teaching practices work better in some circumstances and not in others? In examining this issue, other mediating characteristics of effective clinical teaching may play a role in expertise. For example, the negative impact of questioning strategies was ameliorated by respect for the students according to Expert 04. While the literature supports the importance of respect in the clinical teacher-student relationship (Halstead, 1996), is respect for the student a characteristic of effective clinical teaching which must be present before the clinical teacher is judged as effective and what is its mediating influence upon effective clinical teaching?

The findings of this study reveal that some aspects of clinical teaching are acquired earlier in the development of clinical teaching expertise. However, the sequence of knowledge development of clinical teaching expertise is unclear. A research agenda which addresses the development of clinical teaching expertise over time is needed.

The clinical teachers in this study had a variety of years of experience as nurses prior to becoming clinical teachers and the importance of clinical expertise is supported. Interestingly, with the exception of one expert, the nursing experience of the expert participants was substantially less than that of the novice participants. In part, this difference in nursing practice experience may be related to the changing times in nursing education. When the experts entered into clinical teaching, the educational credential that was accepted was a baccalaureate degree in nursing. Today, nursing educators are expected to have at least a master's degree and, in the foreseeable future, that will change to a doctoral degree. How much nursing practice experience is necessary or desirable for clinical teaching? What is the relationship of education to the development of clinical teaching expertise?

The inability of clinical teachers to fail nursing students has serious implications for the nursing profession. Although this investigation has shown that only expert clinical teachers fail students, are there other reasons in addition to expertise for the inability of clinical teachers to fail students? For example, do clinical teachers not fail students because they fear the consequences, for example, student appeal? What supports are necessary in the nursing education system to support clinical teachers so that they feel confident in their negative decisions about a student? Are there some fundamental

changes to clinical practice that should be made? For example, should students remain for longer than the typical three to six weeks in any one clinical setting and what would be the impact of this change on evaluation practices?

The literature describes the importance of personal qualities to effective clinical teaching, for example, enthusiam, patience, flexibility (Oermann, 1996). While not a focus of this study, the importance of reflection in the development of clinical teaching expertise was revealed. Further study of the role that reflection takes in the development of clinical teaching expertise is warranted. For example, is reflection a mediating variable for the development of expertise in clinical teaching?

Conclusion

Clinical teaching in nursing suffers from the lack of a coherent theoretical base. Consequently, clinical teachers have tended to teach as they were taught. This study presents a perspective of clinical teaching which adds to the theoretical understanding of clinical teaching. Through the voices of novice and expert clinical teachers, aspects of clinical teaching in the development of expertise emerge.

The findings of this study provide a beginning understanding of how clinical teachers in nursing think about effective clinical teaching. Symbolic interactionism is a useful framework within which examination of the perspectives of clinical teachers can be conducted. The study offers an explanation of the development of expertise in clinical teaching, development which emanates out of the lived experiences of the study participants. Through interactions with the self and others, one's conceptualization of clinical teaching evolves.

There is danger is defining clinical teaching using a predetermined list of effective clinical teaching behaviors. Critical aspects of clinical teaching are revealed in the qualitative paradigm used in this study, characteristics of clinical teaching expertise not previously identified in the literature. Although the study supports the factors previously identified in the literature as important to effective clinical teaching, the findings conceptually link the characteristics of effective clinical teaching in a different configuration. Characteristics of clinical teaching expertise are described in this study, adding clarity to the existing literature. Moreover, the study reveals other aspects of effective clinical teaching heretofore not recognized in the literature.

Clinical teaching is a complex phenomenon and is perplexing to novice clinical teachers. Nursing education must find ways to assist novices to learn about clinical teaching other than trial and error as described by this study's participants. As revealed in this study, novices need opportunities to understand the meaning of their experiences to their clinical teaching practices. Moreover, the practices of expert clinical teachers can serve as a basis for the development of educational programs to facilitate the growth of novice clinical teachers.

Findings of this study offer a description of the development of clinical teaching expertise in nursing education and reveal that the thinking of novices and experts is quite different. Further work is necessary to expand the current study, to discover the validity of the findings in other settings and refine the conceptualization of effective clinical teaching as presented here. A research agenda which addresses these issues will further the scientific understanding of clinical teaching expertise.

REFERENCES

Abrami, P. C., Leventhal, L., & Perry, R. P. (1982). Educational seduction. Review of Educational Research, 52, 445-464.

Adler, P.A., & Adler, P. (1987). Membership roles in field research. Newbury Park: Sage.

Allemang, M. M., & Cahoon, M. C. (1984) Nursing education research in Canada. Annual Review of Nursing Research, 2, 261-278.

Anderson, D. C., Harris, I.B., Allen, S., Satran, L., Bland, C. J., Davis-Feickert, J. A., Poland, G. A., & Miller, W. J. (1991). Comparing students' feedback about clinical instruction with their performances. Academic Medicine, 66(1), 29-34.

Aguilar, J. L. (1981). Insider research: An ethnography of a debate. In D.A. Messerschmidt (Ed.), Anthropologists at home in North America methods and issue in the study of one's own society (pp. 15-26). New York, NY: Cambridge University Press.

Archbold, P. (1986). Ethical issues in qualitative research. In W.C. Chenitz & J.M. Swanson, From practice to grounded theory (pp. 155-163). Menlo Park, CA: Addison-Wesley.

Arnheim, R. (1985). The double-edged mind: Intuition and the intellect. In E. Eisner, Learning and teaching the ways of knowing, Eighty-fourth Yearbook of Society for the Study of Education (pp. 77-96). Chicago: University of Chicago Press.

Babbie, E.R. (1979). The practice of social research. Belmont, CA: Wadsworth.

Barham, V.Z. (1965). Identifying effective behavior of the nursing instructor through the critical incident. Nursing Research, 14(1), 65-68.

Benner, P. (1982). From novice to expert. American Journal of Nursing, 82(3), 402-407.

Benner, P. (1983). Uncovering the knowledge embedded in clinical practice. Image: The Journal of Nursing Scholarship, 15(2), 36-41.

Benner, P. (1984). From novice to expert: Excellence and power in clinical nursing practice. Menlo Park, CA.: Addison-Wesley.

Benner, P. (1993). Transforming RN education: Clinical learning and clinical knowledge development. In N. L. Diekelmann & M.L. Rather (Eds.), Transforming RN education dialogue and debate (pp. 3-14). New York: NLN Press.

Benner, P., & Tanner, C.A. (1987). Clinical judgment: How expert nurses use intuition. American Journal of Nursing, 87(1), 23-31.

Benner, P., & Wrubel, J. (1982). Skilled clinical knowledge: The value of perceptual awareness. Nurse Educator, May-June, 11-17.

Benor, D.E., & Leviyof, I. (1995, April). The development of students' perception of effective teaching: The ideal, best and poorest clinical teacher in nursing. paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.

Bergman, K., & Gaitskill, T. (1990). Faculty and student perceptions of effective clinical teachers: An extension study. Journal of Professional Nursing, 6(1), 33-44.

Berliner, D.C. (1986). In pursuit of the expert pedagogue. Educational Researcher, 15(7), 5-13.

Berliner, D.C. (1988, February). The development of expertise in pedagogy. Charles W. Hunt Memorial Lecture, American Association of Colleges for Teacher Education Annual Meeting, New Orleans, LA.

Bevis, E.O., & Murray, J.P. (1990). The essence of the curriculum revolution: Emancipatory teaching. Journal of Nursing Education, 29(7), 326-331.

Beyerbach, B.A. (1988). Developing a technical vocabulary on teacher planning: Preservice teachers' concepts maps. Teaching & Teacher Education, 4(4), 339-347.

Blumer, H. (1969). Symbolic interactionism. Englewoods Cliff, NJ: Prentice Hall.

Brookfield, S. (1996, June 17-20). Becoming a critically reflective teacher. Key Note Address, International Nursing Education Conference - Global Connections in Nursing Education, Hamilton, ON.

Brown, S.T.(1981). Faculty and student perceptions of effective clinical teachers. Journal of Nursing Education, 20(9), 4-15.

Calderhead, J. (1987). Teaching as a 'professional', thinking activity. In J. Calderhead (Ed.), Exploring teachers' thinking (pp. 1-19). London: Cassell.

Campbell, I.E., Larrivee, L., Field, P.A., & Reutter, L. (1994). Learning to nurse in the clinical setting. Journal of Advanced Nursing, 20, 1125-1131.

Carr, A.M. (1983). Towards a theory of clinical teaching in nursing. (Doctoral dissertation, Boston University School of Education, 1983). Dissertation Abstracts International, 44, 1430 A.

Carter, K. (1990). Teachers' knowledge and learning to teach. In W.B. Houston (Ed.), Handbook of research on teacher education (pp. 291-310). New York: McMillan.

Carter, K., Cushing, K., Sabers, D., Stein, P., & Berliner, D.C. (1988). Expert-novice differences in perceiving and processing visual classroom information. Journal of Teacher Education, 39(3), 25-31.

Carter, K., Sabers, D., Cushing, K., Pinnegar, S., & Berliner, D.C. (1987). Processing and using information about students: A study of expert, novice, and postulant teachers. Teaching and Teachers' Education, 3(2), 147-157.

Charness, N. (1979). Components of skill in bridge. Canadian Journal of Psychology, 33(1), 1-16.

Charon, J.M. (1989). Symbolic interactionism. Englewood Cliff, NJ: Prentice Hall.

Chenitz, W.C. (1986). Getting started: The research proposal for a grounded theory study. In W.C. Chenitz & J.M. Swanson, From practice to grounded theory, (pp. 3-15). Don Mills: Addison-Wesley.

Chenitz, W.C., & Swanson, J.M. (1986). Qualitative research using grounded theory. In W.C. Chenitz & J.M. Swanson (Eds.), From practice to grounded theory (pp. 3-15). Don Mills: Addison-Wesley.

Chi, M.T.H., Glaser, R., & Farr, M.J. (1988). The nature of expertise. Hillsdale, NJ.: Lawrence Erlbaum.

Chi, M.T.H., Feltovich, R.J., & Glaser, R. (1981). Categorization and representation of physics problems by experts and novices. Cognitive Science, 5, 121-152.

Chi, M.T.H., Glaser, R., & Rees, E. (1982). Expertise in problem solving. In R.J. Sternberg (Ed.), Advances in the psychology of human intelligence: Vol. 1. Hillsdale, NJ.: Lawrence Erlbaum Associates.

Choudhry, U.K. (1992). New nurse faculty: Core competencies of role development. Journal of Nursing Education, 31(6), 265-272.

Clandinin, D.J. (1986) Classroom practice: Teacher images in action. Philadelphia: Falsner.

Clark, C.M. (1988). Asking the right questions about teacher preparation: Contributions of research on teacher thinking. Educational Researcher, 17(2), 5-12.

Clark, C.M., & Peterson, P.L. (1986). Teachers' thought process. In M.C. Wittrock (Ed.), Handbook of research on teaching (pp. 255-296). Toronto: Collier McMillan Canada.

Clark, C.M., & Yinger, R.J. (1980). The hidden world of teaching: Implications of research on teacher planning (Research Series No. 77). East Lansing: Michigan State University, Institute for Research on Teaching.

Constas, M.A. (1992). Qualitative analysis as a public event: The documentation of category development procedures. American Educational Research Journal, 29(2), 253-266.

Daggett, C.J., Cassie, J.M., & Collins, G.F. (1979). Research on clinical teaching. Review of Educational Research, 49(1), 151-169.

Davis, D.C., Dearman, C., Schwab, C., & Kitchens, E. (1992). Competencies of novice nurse educators. Journal of Nursing Education, 31(4), 159-164.

Denzin, N.K. (1978). The research act. A theoretical introduction to sociological methods. New York: McGraw-Hill.

Diekelmann, N.L. (1988). Curriculum revolution: A theoretical and philosophical mandate for change. In National League for Nursing (Ed.), Curriculum revolution: Mandate for change (pp. 137-157). New York: NLN.

Diekelmann, N.L. (1989). The nursing curriculum: Lived experiences of students. In National League for Nursing (Ed.), Curriculum revolution: Reconceptualizing nursing education (pp. 25-41). New York: NLN.

Diekelmann, N.L. (1990a). Preserving the practice of teaching in nursing. Journal of Nursing Education, 29(5), 195.

Diekelmann, N.L. (1990b). Nursing education: Caring, dialogue, and practice. Journal of Nursing Education, 29(7), 300-305.

Diekelmann, N.L. (1991). The emancipatory power of the narrative. In National League for Nursing (Ed.), Curriculum revolution: Community building and activism (pp. 41-62). New York: NLN.

Diekelmann, N.L. (1992). Learning-as-testing: A Heideggerian hermeneutical analysis of the lived experiences of students and teachers in nursing. Advances in Nursing Science, 14(3), 72-83.

Diekelmann, N.L. (1993a). Behavioral pedagogy: A Heideggerian hermeneutical analysis of the lived experiences of students and teachers in baccalaureate nursing education. Journal of Nursing Education, 32(6), 245-250.

Diekelmann, N.L. (1993b). Transforming RN education: New approached to innovation. In N.L. Diekelmann & M.L. Rather (Eds.), Transforming RN education dialogue and debate (pp. 42-57). New York: NLN Press.

Diekelmann, N.L. (1994, August). Transforming nursing education: New paths and possibilities. Keynote Speaker at the Grace General Hospital Nursing Education Day, Winnipeg, MB.

Dinham, S M., & Stritter, F.T. (1986). Research on professional education. In M.C. Wittrock, (Ed.), Handbook of research on teaching (pp. 953-970). Toronto: Collier MacMillan Canada.

Douglas, J.D. (1976). Investigative social research. Beverly Hills, CA: Sage.

Dreher, M. (1994). Qualitative research methods from the researcher's perspective. In J.M. Morse (Ed.), Critical issues in qualitative research (pp. 281-297). London: Sage.

Drew, N. (1989). The interviewer's experience as data in phenomenological research. Western Journal of Nursing Research, 11(4), 431-439.

Dreyfus, H.L., & Dreyfus, S.E. (1986). Mind over machine: The power of human intuition and expertise in the era of the computer. New York: The Free Press.

Dunkin, M. J., & Biddle, B. J. (1974). The study of teaching. Toronto: Holt, Rinehart and Winston.

Dunn, T.G., & Taylor, C.A. (1995, April). Are physicians aware of their pedagogical content knowledge? Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.

Elbaz, F. (1981). The teachers' "practical knowledge": Report of a case study. Curriculum Inquiry, 11(1), 43-71.

Eisner, E.W. (1981). The differences between scientific and artistic approaches to qualitative research. Educational Researcher, 5-9.

Ellen, R. F. (1984). The fieldwork experience. In R. F. Ellen (Ed.), Ethnographic research (pp. 87-132). Toronto: Academic Press.

Engle, R. W., & Bukstel, L. (1978). Memory processes among bridge players of differing expertise. American Journal of Psychology, 91(4), 673-689.

Erdle, S., & Murray, H. G. (1986). Interfaculty differences in classroom teaching behaviors and their relationship to student instructional ratings. Research in Higher Education, 24(2), 115-127.

Erdle, S., Murray, H.G., & Rushton, J.P. (1985). Personality, classroom behavior, and student ratings of college teaching effectiveness: A path analysis. Journal of Educational Psychology, 77(4), 394-407.

Espers, P.S. (1995). Facing transition - Nurse clinician to nurse educator. Journal of Nursing Education, 34(2), 89-91.

Evans, J.S., & Masler, M. (1977). The effective clinical teacher. Journal of Dental Education, 41(10), 613-617.

Farley, V.M. (1990). Clinical Teaching: A Shared adventure. In National League for Nursing (Ed.), Redefining the student-teacher relationship (pp. 87-93). New York: NLN.

Field, P.A. (1991). Doing fieldwork in your own culture. In J.M. Morse (Ed.), Qualitative nursing research (pp. 93-105). Newbury Park: Sage.

Fine, G.A. (1992). Agency, structure, and comparative contexts: Toward a synthetic interactionism. Symbolic Interaction, 15(1), 87-107.

Frey, P.W. (1978). A two-dimensional analysis of student ratings of instruction. Research in Higher Education, 9, 69-91.

Gage, N L. (1978). The scientific basis of the art of teaching. New York: Teachers; College Press.

Glaser, B.G. (1978). Theoretical sensitivity. Mill Valley, CA: Sociology Press.

Glaser, R., & Chi, M.T.H. (1988). Overview. In M.T.H. Chi, R. Glaser, & M.J. Farr (Eds.), The nature of expertise (pp. xv-xxviii). Hillsdale, NJ.: Lawrence Erlbaum Associates.

Glass, H.P. (1971). Teaching behaviors in the nursing laboratory in selected baccalaureate nursing programs in Canada. Unpublished doctoral dissertation, Teachers College, Columbia University, New York.

Guba, E.G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. Educational Communications and Technology Journal, 29, 75-92.

Guba, E.G., & Lincoln, Y.S. (1989). Fourth generation evaluation. Newbury Park: Sage.

Halstead, J.A. (1996). The significance of student-faculty interactions. In K.R. Stevens (Ed.), Review of research in nursing education (pp. 67-90). New York: National League for Nursing.

Hedin, B.A. (1989). Expert clinical teaching. In National League for Nursing (Ed.), Curriculum revolution: Reconceptualizing nursing education (pp. 71-89). New York: NLN.

Hutchinson, S.A. (1988). Education and grounded theory. In R.R. Sherman & R.B. Webb (Eds.), Qualitative research in education: Focus and methods (pp. 123-140). London: Falmer Press.

Infante, M.S. (1985). The clinical learning lab in nursing education. Toronto: John Wiley.

Infante, M.S. (1986). The conflicting roles of nurse and nurse educator. Nursing Outlook, 34(2), 94-96.

Infante, M.S., Forbes, E.J., Houlden, A.D., & Naylor, M.D. (1989). A clinical teaching project: Examination of a clinical teaching model. Journal of Professional Nursing, 5(3), 132-139.

Irby, D.M. (1978). Clinical teacher effectiveness in medicine. Journal of Medical Education, 53, 808-815.

Irby, D.M. (1992). How attending physicians make instructional decisions when conducting teaching rounds. Academic Medicine, 10, 630-638.

Irby, D.M. (1994). What clinical teachers in medicine need to know. Academic Medicine, 69(5), 333-342.

Irby, D.M.., & Rakestraw, P. (1981). Evaluating clinical teaching in medicine. Journal of Medical Education, 56,181-186.

Irby, D.M., Ramsey, P.G., Gillmore, G.M., & Schaad, D. (1991). Characteristics of effective clinical teachers of medicine. Academic Medicine, 66(1), 54-55.

Jackson, P.W. (1968). Life in classrooms. New York: Holt, Rinehart & Winston.

Jacobson, M.D. (1966). Effective and ineffective behavior of teachers of nursing as determined by their nursing students. Nursing Research, 15(3), 218-224.

Kagan, D.M. (1988). Teaching as clinical problem solving: A critical examination of the analogy and its implications. Review of Educational Research, 58(4), 482-505.

Kiker, M. (1973). Characteristics of the effective clinical teacher. Nursing Outlook, 21(11), 721-723.

Knox, J.E., & Mogan, J. (1985). Important clinical teacher behaviors as perceived by university nursing faculty, students and graduates. Journal of Advanced Nursing, 10, 25-30.

Krabbe, M.A., & Tullgren, R. (1989, March). A comparison of experienced and novice teachers' routine and procedures during set and discussion instructional activity segments. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.

Krichbaum, K. (1994). Clinical teaching effectiveness described in relation to learning outcomes of baccalaureate nursing students. Journal of Nursing Education, 33(7), 306-316.

Lampert, M. (1984). Teaching about thinking and thinking about teaching. Journal of Curriculum Studies, 16(1), 1-18.

Lampert, M. & Clark, C.M. (1990). Expert knowledge and expert thinking in teaching: A response to Floden and Klinzing. Educational Researcher, 19(5), 21-23.

Leinhardt, G. (1990). Capturing craft knowledge in teaching. Educational Researcher, 19(2), 18-25.

Leinhardt, G., & Greeno, J.G. (1986). The cognitive skill of teaching. Journal of Educational Psychology, 78(2), 75-95.

Leinhardt, G., & Smith, D.A. (1986). Expertise in mathematics instruction: Subject matter knowledge. Journal of Educational Psychology, 77(3), 247-271.

Leinhardt, G., Weidman, C., & Hammond, K.M. (1987). Introduction and integration of classroom routines by expert teachers. Curriculum Inquiry, 17(2), 135-176.

Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Beverly Hills, CA.: Sage.

Lindeman, C.A. (1989). Clinical teaching: Paradoxes and paradigms. In National League for Nursing (Ed.), Curriculum revolution: Reconceptualizing nursing education (pp. 55-69). New York: NLN.

Lipson, J.G. (1984). Combining researcher, clinical and personal roles: Enrichment or confusion. Human Organization 43(4), 348-352.

Lipson, J.G. (1991). The use of self in ethnographic research. In J.M. Morse (Ed.), Qualitative nursing research (pp. 73-89). Newbury Park: Sage.

Lofland, J., & Lofland, L.H. (1995). Analyzing social settings. Belmont, CA: Wadsworth.

Marsh, H.W. (1984). Students' evaluations of teaching: Dimensionality, reliability, validity, potential biases, and utility. Journal of Educational Psychology, 76, 707-754.

Marson, S.N. (1982). Ward sister - teacher or facilitator? An investigation into the behavioral characteristics of effective ward teachers. Journal of Advanced Nursing, 7, 347-357.

Mathison, S. (1988). Why triangulate? Educational Researcher, 17(2), 13-17.

Matsueda, R.L. (1992). Reflected appraisals, parental labelling, and delinquency: Specifying a symbolic interationist theory. American Journal of Sociology, 97(6), 1577-1611.

May, K.A. (1989). Interview techniques in qualitative research: Concern and challenges. Qualitative nursing research a contemporary dialogue (pp. 171-182). Rockville, MD: Aspen.

McKeachie, W.J. (1990).Research on college teaching: The historical background. Journal of Educational Psychology, 82(2), 189-200.

McLeod, P. J., James, C. A., & Abrahamowicz, M. (1993). Clinical tutor evaluation: A 5-year study by students on an in-patient service and residents in ambulatory care clinic. Medical Education, 27, 48-54.

Meerabeau, L. (1992). Tacit nursing knowledge: An untapped resource or a methodological headache? Journal of Advanced Nursing, 17, 108-112.

Meltzer, B.N. (1972). The social psychology of George Herbert Mead. Kalamazoo: Centre for Sociological Research, Western Michigan University.

Miles, M.B., & Huberman, A.M. (1994). Qualitative data analysis. Newbury Park, CA: Sage.

Mogan, J., & Knox, J.E. (1983). Students' perceptions of clinical teaching. Nursing Papers, 15(3), 4-12.

Mogan, J., & Knox, J.E. (1987). Characteristics of 'best' and 'worst' clinical teachers as perceived by university nursing faculty and students. Journal of Advanced Nursing, 12, 331-337.

Mogan, J., & Warbinek, E. (1994). Teaching behaviors of clinical instructors: An audit instrument. Journal of Advanced Nursing, 20, 160-166.

Morgan, S.A. (1991). Teaching activities of clinical instructors during the direct client care period: A qualitative investigation. Journal of Advanced Nursing, 16, 1238-1246.

Morse, J.M. (1989). Strategies for sampling. In J.M. Morris (Ed.), Qualitative nursing research (pp. 117-131). Rockville, MD: Aspen.

Murray, H.G. (1983). Low-inference teaching behaviors and student ratings of college teaching effectiveness. Journal of Educational Psychology, 75, 138-149.

Murray, H.G. (1991). Effective teaching behaviors in the college classroom. In J. Smart (Ed.), Higher education: A handbook of theory and research (Vol. 7) (pp.135-172). New York: Agathon..

Murray, H.G., Rushton, J.P., & Paunonen, S.V. (1990). Teacher personality traits and student instructional ratings in six types of university courses. Journal of Educational Psychology, 82(2), 250-261.

Murray, H.G., & Smith, T.A. (1989). Effects of midterm behavioral feedback on end-of-term ratings of instructor effectiveness. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco.

Musolf, G.R. (1992). Structure, institutions, power, and ideology: New directions with symbolic interactionism. The Sociological Quarterly, 33(2), 171-189.

Myers, B. (1977). Beliefs of dental faculty and students about effective clinical teaching. Journal of Dental Education, 41, 68-72.

Nehring, V. (1990). Nursing clinical teacher effectiveness inventory: A replication study of characteristics of 'best' and 'worst' clinical teachers as perceived by nursing faculty and students. Journal of Advanced Nursing, 15(8), 934-940.

Nisbet, R.E., & Ross, L. (1980). Human inference: Strategies and shortcomings of social judgment. Englewood Cliffs, NJ: Prentice-Hall.

O'Shea, H. S., & Parsons, M. K. (1979). Clinical instruction: Effective and ineffective teaching behaviors. Nursing Outlook, 411-415.

Oermann, M.H. (1996). Research on teaching in the clinical setting. In K.R. Stevens (Ed.), Review of research in nursing education (pp. 91-127). New York: NLN Press.

Paterson, B.L. (1991). The juggling act: An ethnographic analysis of clinical teaching in nursing education, Unpublished doctoral dissertation, Winnipeg, MB.

Paterson, B.L. (1994). The view from within: Perspectives of clinical teaching. International Journal of Nursing Studies, 31(4), 349-360.

Pearsall, M. (1965). Participant observation as role and method in behavioral research. Nursing Research, 14(1), 37-42.

Perry, R.P. (1990). Introduction to the special section. Journal of Educational Psychology, 82(2), 183-188.

Perry, R.P. (1991). Perceived control in college students: Implications for instruction in higher education. In J. Smart (Ed.). Higher education: A handbook of theory and research (Vol. 7) (pp.). New York: Agathon.

Perry, R.P., Abrami, P.C., & Leventhal, L. (1979). Educational seduction: The effect of instructor expressiveness and lecture content on student ratings and achievement. Journal of Educational Psychology, 71, 107-116.

Perry, R.P., & Magnusson, J.L. (1987). Effective instruction and students; perceptions of control in the college classroom: Multiple-lecture effects. Journal of Educational Psychology, 79, 453-460.

Perry, R.P., & Penner, K.S. (1990). Enhancing academic achievement in college students through attributional retraining and instruction. Journal of Educational Psychology, 82(2), 262-271.

Peterson, P.L., & Comeaux, M.A. (1987). Teachers' schemata for classroom events: The mental scaffolding of teachers' thinking during classroom instruction. Teaching & Teacher Education, 3(4), 319-331.

Peshkin, A. (1985). Virtuous subjectivity: In the participant-observer's I's. In D. Berg & K. Smith (Eds.), Exploring clinical methods for social research, pp. 267-281. Beverly Hills, CA: Sage.

Peshkin, A. (1988). In search of subjectivity - One's own. Educational Researcher, 17-22.

Peterson, P.L. & Comeaux, M.A. (1987). Teachers' schemata for classroom events: The mental scaffolding of teachers' thinking during classroom instruction. Teaching & Teacher Education, 3(4), 319-331.

Powell, R.R. (1991, April). The development of pedagogical schemata in alternative preservice teachers. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago.

Powell, R.R. (1992). The influence of prior experiences on pedagogical constructs of traditional and nontraditional preservice teachers. Teaching & Teacher Education, 8(3), 225-238.

Prawat, R.S. (1989). Promoting access to knowledge, strategy, and disposition in students: A research synthesis. Review of Educational Research, 59(1), 1-41.

Pretzel, R.A., Harris, I.B., & Masler, D.S. (1982). The empirical validation of clinical teaching strategies. Evaluation and the Health Professions, 5(4), 499-508.

Price, D.A., & Mitchell, C.A. (1993). A model for clinical teaching and learning. Medical Education, 27, 62-68.

Pugh, E.J. (1980). Factors influencing congruence between beliefs, intentions, and behavior in the clinical teaching of nursing. Dissertation Abstracts International, 41(6), 2531A-2522A. (University Microfilms No. 8026902).

Pugh, E.J. (1983). Research on clinical teaching. In W. Holzemer (Ed.), Review of Research in Nursing Education (pp. 62-75). Thorofare: Slack.

Pugh, E.J. (1988). Soliciting student input to improve clinical teaching. Nurse Educator, 13(5), 28-33.

Ramos, M.C. (1989). Some ethical implications of qualitative research. Research in Nursing & Health, 12, 57-63.

Rauen, K.C. (1974). The clinical instructor as role model. Journal of Nursing Education, 13(3), 33-40.

Robinson, C.A., & Thorne, S.E. (1988). Dilemmas of ethics and validity in qualitative nursing research. The Canadian Journal of Nursing Research, 20(1), 65-76.

Rose, A.M. (1980). A systematic summary of symbolic interaction theory. In J. P. Riehl & C. Roy (Eds.), Conceptual models for nursing practice, (pp. 38-50). New York, NY: Appleton-Century-Crofts.

Rosenthal, T.T. (1989). Using ethnography to study nursing education. Western Journal of Nursing Research, 11(1), 115-127.

Sabers, D.S., Cushing, K.S., & Berliner, D.C. (1991). Differences among teachers in a task characterized by simultaneity, multidimensionality, and immediacy. American Educational Research Journal, 28(1), 63-88.

Sandelowski, M. (1986). The problem of rigor in qualitative research. Advances in Nursing Science, 8(3), 27-37.

Scanlan, J.M. (1992a). Review of the concepts of novice/expert. Unpublished paper, Winnipeg, MB.

Scanlan, J.M. (1992b). Mini pilot of research protocol. Unpublished paper, Winnipeg, MB.

Scanlan, J.M., & Chernomas, W.M. (1996, June 17-20). Developing the reflective teacher. Paper presented at the International Nursing Education Conference - Global Connections in Nursing Education, Hamilton, ON.

Schmidt, H., Norman, G., & Boshuizen, H.A. (1990). Cognitive perspective on medical expertise: Theory and Implications. Academic Medicine, 65, 611-621.

Schon, D.A. (1983). The reflective practitioner. New York: Basic Books.

Schon, D.A. (1987). Educating the reflective practitioner. San Francisco: Jossey-Bass.

Seidman, I.E. (1991). interviewing as qualitative research. A guide for researchers in education and social sciences. New York: Teachers College.

Sellick, K., & Kanitsaki, O. (1991). A comparison of faculty and student perceptions of clinical nurse teacher behaviors. The Australian Journal of Advanced Nursing, 9(1), 3-7.

Shavelson, R.J., & Stern, P. (1981). Research on teachers' pedagogical thoughts, judgments, decisions, and behavior. Review of Educational Research, 5(4), 499-508.

Schroeder, M.A.K. (1981). Symbolic interactionism: A conceptual framework useful for nurses working with obese persons. Image, XIII, 78-81.

Shulman, L.S. (1986a). Paradigms and research programs in the study of teaching: A contemporary perspective. In M.C. Wittrock (Ed.), Handbook of research on teaching (pp. 3-36). Toronto: Collier McMillan Canada.

Shulman, L.S. (1986b). Those who understand: Knowledge growth in teaching. Educational Researcher, 15(2), 4-14.

Shulman, L.S. (1987). Knowledge and teaching: Foundations of the new reform. Educational Researcher, 15(2), 4-14.

Sieber, J.E. (Ed.). (1982). The ethics of social research. Fieldwork, regulation, and publication. New York: Springer-Verlag.

Siedentop, D., & Eldar, E. (1989). Expertise, experience, and effectiveness. Journal of Teaching in Physical Education, 8, 254-260.

Sieh, S., & Bell, S.K. (1994). Perceptions of effective clinical teachers in Associate Degree programs. Journal of Nursing Education, 33(9), 389-394.

Skodol Wilson, H. (1989). Research in nursing. Don Mills: Addison-Wesley.

Sleightholm, B.J. (1985). The real world of the nurse educator. The Canadian Nurse, 81(11), 28-30.

Stanko, B.L. (1981). The student experience: An ethnographic analysis of the clinical laboratory experience of diploma nursing students. Unpublished masters thesis, Winnipeg, Manitoba.

Stephenson, J.B., & Greer, L.S. (1981). Ethnographers in their own cultures: Two Appalachian cases. Human Organization, 40(2), 123-130.

Strauss, A., & Corbin, J. (1990). Basics of qualitative research. Newbury Park, CA: Sage.

Stritter, F.T., & Baker, R.M. (1982). Residents preferences for the clinical teaching of ambulatory care. Journal of Medical Education, 57, 33-41.

Stritter, F.T., Hain, J.D., & Grimes, D.A. (1975). Clinical teaching reexamined. Journal of Medical Education, 50, 876-882.

Stuebbe, B. (1980). Student and faculty perspectives on the role of the nursing instructor. Journal of Nursing Education, 19(7), 4-9.

Sullivan, A.M., & Skanes, G.R. (1974). Validity of student evaluation of teaching and the characteristics of successful instructors. Journal of Educational Psychology, 66, 584-590.

Tanner, C.A., & Lindeman, C.A. (1987). Research in nursing education: Assumptions and priorities. Journal of Nursing Education, 26(2), 50-59.

Tanner, C.A. (1990). Reflections on the curriculum revolution. Journal of Nursing Education, 29(7), 295-299.

Tanner, C.A. (1993). Re-thinking clinical judgment: Implications for RN education. In N.L. Diekelmann & M.L. Rather (Eds.), Transforming RN education dialogue and debate (pp. 15-41). New York: NLN Press.

Walberg, H.J. (1986). Synthesis of research on teaching. In M.C. Wittrock (Ed.), Handbook of research on teaching (pp. 214-229). Toronto: Collier MacMillan.

Walker, L.O., & Avant, K.C. (1988). Strategies for theory construction in nursing. Norwalk: Appleton & Lange.

Wang, M.A., & Blumberg, P. (1983). A study on interaction techniques of nursing faculty in the clinical area. Journal of Nursing Education, 22(4), 144-151.

Wax, M.L. (1982). Research reciprocity rather than informed consent in fieldwork. In J.E. Sieber (Ed.), The ethics of social research (pp. 33-48). New York, NY: Springer-Verlag.

Weber, S.J. (1986). The nature of interviewing. Phenomenology and Pedagogy, 4(2), 65-72.

Werner, R., Brueggemayer, A., & Kenner, C. (1986). Surviving academia. Nursing Outlook, 34(2), 97-97.

Wilson, S.M., Shulman, L.S., & Richert, A.E. (1987). '150 different ways' of knowing: Representations of knowledge in teaching. In J. Calderhead (Ed.), Exploring teachers' thinking (pp. 104-124). London: Cassell.

Windsor, A. (1987). Nursing students' perception of clinical experience. Journal of Nursing Education, 26(4), 150-154.

Wiseman, R.F. (1994). Role model behaviors in the clinical setting. Journal of Nursing Education, 33(9), 405-410.

Wong, S. (1978). Nurse-teacher behaviors in the clinical field: Apparent effect on nursing students' learning. Journal of Advanced Nursing, 3, 369-372.

Wong, S., & Wong, J. (1980). The effectiveness of clinical teaching: A model of self-evaluation. Journal of Advance Nursing, 5, 531-537.

APPENDIX A

LETTER TO DEAN/DIRECTORS

Dear Director:

As a nurse educator, I am interested in and committed to the quality of clinical education experienced by nursing students in their basic education programs. Although nurse educators agree that clinical practice for nursing students is integral to their professional development, research in clinical teaching has been underdeveloped for decades. As a result, the evolution of theory around issues of clinical teaching has not occurred and there is a need to develop the theoretical basis of clinical teaching.

I am an Interdisciplinary doctoral student at the University of Manitoba. As part of my Ph.D. program, I will be conducting a research investigation. The overall question that will guide the research is: "How do novice and expert clinical teachers conceptualize effective clinical teaching?" In order to investigate this phenomenon, I plan to do a qualitative study. In this study, I will interview clinical teachers and ask them to keep a journal for two weeks in which they will record their thoughts about their clinical teaching practices. Each teacher will be interviewed at least three times, with each interview lasting approximately one to one and a half hours. The results of this study will be used to develop a comprehensive theoretical description of the conceptualization of effective clinical teaching and will contribute to the overall development of the theoretical basis of clinical teaching. Teachers who participate in this study ultimately will benefit indirectly as they will have the opportunity to thoughtfully examine their thinking about their clinical teaching practices. As well, it is anticipated that findings of this study may be used to assist clinical teachers develop expertise in their teaching practices with nursing students. Enclosed please find a copy of the proposal which has been submitted to the Ethical Review Committee of the Faculty of Nursing, University of Manitoba.

I am requesting that you grant me access to the clinical teachers in your School of Nursing. If your permission is granted, I will arrange a mutually convenient time and place to meet with you to describe the research and selection of participants for the study. I have attached a page which outlines the selection criteria for study participants. You will note that I will ask you to nominate clinical teachers whom you think best fit the study criteria. I am using this approach because the identification of novices and experts in any domain of practice is difficult. However, the literature supports nomination by supervisors in the absence of clear criteria to identify expertise. I have attached a brief description for use in identifying potential study participants. Clinical teachers whom you identify will be contacted by letter explaining that they have been nominated by you for participation in the study. These clinical teachers will receive written information about the study. Any information given to me by the participants in this study will be held in confidence. Ethical considerations regarding anonymity, consent, and the right to withdraw will be addressed in the explanation of the study.

I would be pleased to meet with you at your convenience to provide you with further information about the study. You can contact me in writing at the above address, or by telephoning me at 474-8175 (work) or (home).

Thank you for your consideration of this request. I look forward with anticipation to hearing from you.

Yours sincerely

Judith M. Scanlan, R.N., M.Ed.

APPENDIX B

DESCRIPTION OF NOVICE AND EXPERT

Description of Novice and Expert

The literature does not give clear directions for the selection of either novices or experts and there are no observable criteria that can be used to identify novices and experts. In the absence of clear criteria, the studies to date using novice and expert practitioners have used nomination by supervisors for selection of study participants. Given the difficulty in defining and describing expertise, inferential strategies can be justified to identify study participants.

Novice Clinical Teacher

A clinical teacher who has two years or less experience in that role.

Expert Clinical Teacher

A clinical teacher with at least five years clinical teaching experience who is recognized by others in your faculty and yourself as an expert clinical teacher. These clinical teachers will be known as those who consistently are rated highly by both students and faculty as successfully facilitating development of students' practice in clinical nursing. They will often try innovative teaching strategies. If you had you own son or daughter in a nursing education program, you would want him/her assigned to this clinical teacher.

APPENDIX C

DESCRIPTION OF STUDY FOR PARTICIPANTS

Dear Study Participant:

I am an Interdisciplinary doctoral student at the University of Manitoba. As part of my Ph.D. program, I will be conducting a research investigation entitled "A qualitative study of the conceptualization of effective clinical teaching by novice and expert clinical teachers". The overall question guiding this study is "How do novice and expert clinical teachers conceptualize effective clinical teaching?"

The purpose of clinical practice in professional education programs is the transmission of knowledge to neophyte practitioners. However, there is a paucity of research about how clinical teachers learn to teach or what thinking and/or knowledge drives clinical teaching practices. The purpose of this exploratory, descriptive study will focus on how clinical teachers in nursing conceptualize effective clinical teaching and will include an investigation of the meanings that are attached to clinical teaching, past experiences which shape and influence clinical teaching, and conceptual organization of clinical teaching knowledge. Using a qualitative method of inquiry, the perspectives of novice and expert clinical teachers will be sought in order to understand how clinical teaching is conceptualized by those in practice.

I have asked your Director (Dean) of your School (Faculty) of Nursing to provide a list of potential participants who fit either of the criteria for a novice/beginner clinical teacher or expert clinical teacher. Your name was listed as a new clinical teacher and your perspectives of clinical teaching are essential to understanding the thinking of beginning teachers. (Your name was listed as an expert teacher, one who is known in your program for your expertise in clinical teaching. It is essential to the study to understand the thinking of expert clinical teachers from the perspective of someone who excels in this practice.) If you choose to take part in this study you will be asked to participate in at least three interviews which will last approximately one to one and one half hours. Each interview will be audio recorded. Should you find that you do not wish to answer a particular question, you may do so at any time. As well, you may withdraw from participating in the study at any time. During the first two interviews you will be asked to discuss your thoughts, beliefs, and practices as a clinical teacher. The third interview will focus on validation of a concept map (a visual description on paper of your thinking about effective clinical teaching). I will leave a copy of this concept map with you for you to peruse at your leisure. Within two weeks, I will call you to ensure that this map accurately reflects your thinking. If necessary, we will arrange to meet a fourth time if there are substantive issues about the concept map with which you do not agree.

In addition to the interviews, you will be asked to keep a reflective journal for two weeks in which you will record you thoughts, feelings, values, and beliefs about your clinical teaching practices. As well, I will ask you to record in the journal what you believe to be effective clinical teaching and any reflections that you may have after the interviews

with me. I anticipate that this journal will take you approximately 30 minutes each working day to complete. The journal will become part of the data which will be included in the analysis. Demographic information will be complete the data collected.

It is important for you to understand that any information that you provide during the course of the study will be kept confidential. As a nurse educator, the data obtained in this study will not be used in the context of my working role. Only I, the members of my thesis committee, and a secretary will have access to the tapes and transcripts of the interviews and the journals. These tapes and transcripts will be identified with a code number only and your name will not appear on any of this information. Your Director will not know if you choose to participate. (Dr. Beaton, as a member of my committee, will not have access to the audio tapes or the transcriptions. Her access will be limited to the coded and grouped data only in order to ensure that your anonymity will be protected.)

I will call you within the next week to ascertain your willingness to participate and to answer any questions that you might have. If you choose to participate, we will set a time and place for the first interview. At that interview you will sign a Consent Form and receive a copy for your future reference. The proposal has been approved by the Ethical Review Committee of the Faculty of Nursing.

Thank you for considering this request. I look forward to talking to you.

Sincerely

Judith M. Scanlan, R.N., M.Ed.

APPENDIX D

CONSENT FORM

CONSENT FORM

This certifies that I, _____ having met the conditions for this study, agree to participate in the study entitled "A qualitative study of the conceptualization of effective clinical teaching by novice and expert clinical teachers". The proposal has been approved by the Ethical Review Committee of the Faculty of Nursing, University of Manitoba. Specifically, I understand and agree to the following:

1. The purpose of this study is to identify how clinical teachers conceptualize effective clinical teaching. In particular, the study will attempt to elicit an understanding of how clinical teachers think, the knowledge that underpins clinical teaching practices, and the development of a concept of effective clinical teaching.

2. The study is being conducted by Judith M. Scanlan as part of the requirements for her doctoral program. The members of the thesis committee include: Dr. Kenneth Hughes (Advisor), Dean, Faculty of Graduate Studies; Dr. Janet Beaton, Dean, Faculty of Nursing; Dr. Sheryl Bond, Director, Centre for Higher Education Research & Development (CHERD); Dr. Karen Fox, Assistant Professor, Faculty of Physical Education and Recreational Studies; and Dr. Raymond Perry, Assistant Director, CHERD.

3. I have been provided with an explanation of the study.

4. I understand that my participation in the study involves at least three interviews with the principal investigator, the recording of my thoughts about clinical teaching in a journal for a period of two weeks, and demographic information about me. Each interview will occur at a time and place mutually convenient to me and the principal investigator, will be tape recorded, and last approximately one to one and one half hours. The journal recordings will take approximately 30 minutes each working day for two weeks and will be given to the investigator when it is completed to become part of the data set.

5. I understand that I may withdraw from the study at any time without penalty to myself. I may decline to answer specific questions during the interview if I so wish.

6. I understand that any information which I provide during the course of the study will be kept confidential. Only the principal investigator, members of her thesis committee, and a secretary will have access to the tapes and transcripts of the interviews in which I participate. The tapes and the transcripts will be identified by a code number only. My name will not appear on any tape or transcript. Only the principal investigator will know the names of those who participate in the

study and this list will be kept separate from the list of the code numbers. Both lists will be kept in a locked filing cabinet. Further, I understand that I will not be identified in any way in the report of the study.

7. I understand that the principle investigator is a member of the nursing education community, but that the data obtained in the study will not be used in the context of her working role.

8. I understand that the results of this study may be published.

9. I understand that I will be provided with a copy of this consent form.

10. I understand that I may contact Judith Scanlan, Principal Investigator at any time if I have any further questions about my participation in this study. Her telephone number is 474-8175 (work) or (home).

My signature below indicates my willingness to participate in this study.

_____ _____

_____ Participant Researcher

_____

Date

I wish to receive a summary of the results of this study. _____ _____

Yes No

If Yes:

NAME: _____

ADDRESS: _____

_____

_____

APPENDIX E

RELATIONSHIP OF CONCEPTUAL FRAMEWORK

TO

RESEARCH AND INTERVIEW QUESTIONS

Assumptions of Symbolic Interactionism	Research Questions	Interview Questions
1. Symbolic meanings	Questions # 1 & 4	Questions # 6, 8, 10, 11, & 13
2. Role taking	Questions # 2 & 4	Questions # 1, 2, 3, 6, 12, 14, & 15
3. Meaning of symbols in the context/culture of the individual	Questions # 2 & 3	Questions # 3, 9, 10, 11, & 14
4. Values/attitudes developed through lived experiences	Questions # 1, 2 & 4	Questions # 1, 4, 5, 6, 8, 12, 13, & 16
5. Reflective thinking	Question # 5	Questions # 2, 7, 9, 12, 13, 14, 15 & 16

APPENDIX F

INTERVIEW GUIDE

Interview Guide

1. Tell me about your experiences (both as a learner and a teacher) that have influenced the way in which you teach.

2. Tell me about your clinical teaching. How has it changed from the first time you taught until now? In your opinion, what factors have influenced those changes over time?

3. How do you function as a nurse as compared to your functioning as a clinical teacher?

4. Give me some examples of how you relate to ...? How do you act as a clinical teacher?

5. Give me an example of a positive relationship/experience with a student; and a negative relationship/experience with a student.

6. Describe to me how you do clinical assignment.

7. There is little information available about how to teach students in the clinical area. Tell me how you learned about clinical teaching.

8. Often clinical teachers find that more than one student needs them at one time. Describe to me how you handle this situation.

9. If you were to describe the most important assets of a clinical teacher, what would they be? How are you able to incorporate these ideas about teaching into your own practice?

10. Clinical teachers are often caught in a bind between meeting the client's needs and meeting the student's needs. How do you handle situations like this?

11. Often clinical teaching has been described as a balancing act between keeping various groups happy, e.g. students, administrators, other health care professionals, patients. How do you handle these competing demands?

12. What does effective clinical teaching mean to you? How do you define it?

13. Why do like being a clinical teacher?

14. If you think back to when you first began to teach, can you describe to me some of the changes that you have made in your teaching?

15. How do you monitor your own clinical teaching?

16. Describe the routines that you use in your clinical teaching?

APPENDIX G

BELIEFS AND ASSUMPTIONS ABOUT CLINICAL TEACHING

Beliefs and Assumptions About Clinical Teaching

1. Teaching is an activity that is different from nursing practice and it can be learned.

2. A good nurse does not necessarily make a good clinical teacher.

3. A clinical teacher needs both content knowledge skills (nursing), as well as pedagogical teaching skills. There are some pedagogical skills that are unique to clinical teaching in nursing.

4. The student should be an active learner in his/her own learning.

5. Most clinical teachers teach as they were taught.

6. Clinical teachers learn clinical teaching primarily through trial and error. They rely also on strategies that work for them as learners.

7. The clinical teacher has many constituencies that he/she must please other than themselves, e.g. students, other faculty, administrators in their School of Nursing, staff nurses, patients, other health care workers.

8. The experiences (particularly exemplar) one has as a learner/teacher/practitioner shape one's beliefs and practices of effective clinical teaching.

9. One's view of effective clinical teaching evolves as a result of one's own experiences/knowledge.

10. Reflection on one's own clinical teaching enhances effectiveness and development as a clinical teacher.

11. Clinical teaching may vary according to clinical site/level of student, but the overall, underlying tenets of effective clinical teaching are constant.

12. Novices and experts teach differently.

13. Education (Masters/Ph.D) in a content area will not necessarily mean that the individual will be a good clinical teacher. However, education which focusses on clinical teaching will enhance clinical teaching practices.

14. It is not known how the research on effective teaching in the classroom translates to effective clinical teaching in the clinical area.

15. Clinical teachers may not be cognizant of how/why they are effective or ineffective.

APPENDIX H

CONCEPT MAPS OF STUDY PARTICIPANTS

Goal: teach S's to think

Novice 01

Style:
- flexible < S's needs / pt's needs
  - allows CT to be
    - responsive
    - change as she goes
- democratic - terrible to be "the heavy"
- not demanding
- doesn't know
  - why CT strategies < work / don't work
  - how directive to be
  - own perspective CT'ing

Believes Effective CT should be
- respond/reflect indiv. S's learning needs
- non-directive
- listen to learner
- nurturing
- articulate implicit
- model nrsg. care
- teach what they know best

Practices of CT'ing

Student Assignments

- considers < agency - level of supervision available / S's: interests, requests, strengths, previous experiences, carpool
- won't change assignment at S's request
- doesn't know
  - how to match S/agency
- interprets to S's < staff nrsg. care / S's behavior / CT's behavior < own / other CT's / Novice CT'ing

Knowing S's

- uses own experiences as S. to understand S's

Practice

- S's #1 priority
- focussed on skills
- break rules of practice b/c doesn't know them
- need to learn < reality to survive as graduate / more than CT's rules/system
- can't deal ∈ disruptive patient behavior
- accept < staff nurse's perception of pt. / CT's view > don't Q nrsg. practice
  - try to please
- describe phenomenon - can't label
- some < hold back "skilled observers / get involved immediately

Novice 01

Making Content Understandable

- encourages S's
  - identify own learning needs
  - disagree = CT
  - ask Q's
    - nrsg. practice
    - alternative perspective
- cues S's
  - what to look for in practice
  - consider different perspectives
  - learning opportunities available
- gives eg's to illustrate point
- ties present situation → past experiences
- explains reflection
- Q's S's
  - encourage self-evaluation
  - reflect on nrsg. care
  - pt's responses to nrsg. care
  - meaning of situation
    - pt.
    - family
    - S
  - nurse's role
  - role of health care system
- tells S's
  - about practice
  - context of practice
- models flexibility = rules b/c practice not rule governed
- focusses on thinking processes rather than skills

Characteristics

- more senior S's like less structure
- good thinkers / problem solvers
- smart S's not necessarily good practitioners
  - values need to fit = profession
- have other priorities / multiple roles → interfere = performance
- vulnerable esp. to -ve feedback
- support one another
- limited life experiences
- take CT literally
- some
  - concrete / others see variations
  - don't criticize well
  - afraid of authority
  - confident / determined
  - don't Q. initially
  - inappropriate
  - lie - afraid to tell truth
  - reflective
- strong S's
  - do excellent work even when no marks
  - pick up on values
  - mature / responsive / not scared
  - ask good Q's
  - seek out info / suggestions
  - responsible

Monitoring & Evaluating "gatekeeper for profession"

- sources of data < direct < observation of S
  - journals
  - indirect - agency nurse (trusts feedback)
  - Some data learned accidently
- data objective
  - doesn't prejudge S
    - use intuition much
  - gives S's benefit of doubt
- feedback to S < written < explains < grading comments
  - oral < praises S's
  - responds to S's distress re -ve grade
- confronts S's & problems
- doesn't know how to
  - document S's "bad attitude"
  - defend minority opinion of S & other CT's
  - deal & upset/confrontive S re grades

Relationship & Nursing Staff

- maintain communication < phone
  - in person
    - assess S's situation
    - assist staff to provide structure for S's
- advocates for S's
- considers balance < over critical of staff
  - what's possible in reality

- challenging S's
  - confrontive/hard to deal &
  - see things in black/white
  - patronizing
  - look for simple solutions → problems
  - may have difficulty getting along & others
  - don't accept -ve feedback
  - push CT to limit
  - arrogant/disrespectful
- didn't know
  - overestimated capabilities
  - thought S's would know professional values
  - some S's don't value clinical practice

Learn When

- interested
- need to know
- given choices
- CT flexible
- supportive/safe environment
- through own experiences
- ask insightful Q's

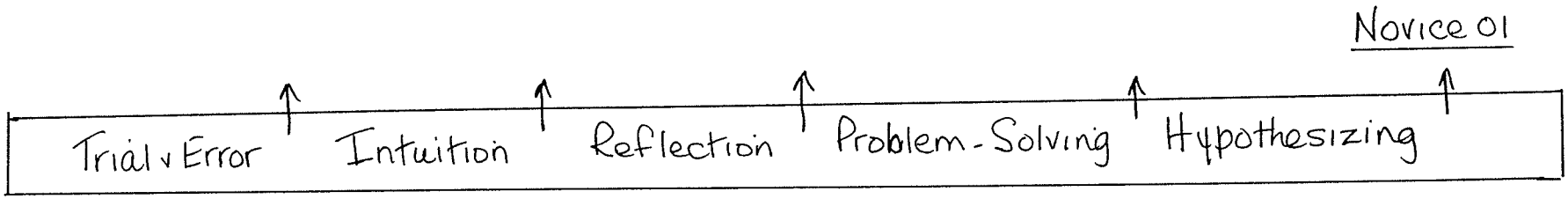
Novice 01

Relationships ≥ S's

- conveys
  - non-negotiable rules
  - expectations
  - syllabus/guidelines
  - limits of program
- encourages S's to reveal self
- CT position of power b/c assigns grades → CT anxiety
- beginning to use intuition to know S's
- models professional values
  - responsibility
  - respect
  - caring integral to practice

Doesn't Know

- exactly what to convey
- can't identify process
- how S's learn rules of practice
- how much CT/S should reveal
  - surprised how much S's reveal
- how to use S's data
- what CT needs to know
- how to be accessible outside practice
- missing relevant cues in S/CT relationship
- make implicit → explicit
- how she learned prof. values
- how to teach caring



learning CT'ing

Personal

- values
  - democratic approach
  - S's learning
- respectful of others

Personality

- stubborn
- independent
- sarcastic
- passionate
- gets frustrated
  - S's > b/c
  - self > doesn't know how to handle sit°

Nursing

- communication most NB nrsg. skill
- caring integral to nrsg.
- learned to be flexible/responsive
- CHN more qualitative than quan.
- uses/trusts intuition
- relies on many cues to know pt.
- independent practice (CHN)
- teaching adults

"nrsg. care values influence beliefs what's NB for S's practice"

Other

- discussions < CT's, husband
- own exp < family - mother a nurse; education program; observing < undergraduate; as a S. < graduate; = S's - guides further action
- feedback < S's - esp. challenging S's; other CT's
- observation < professors = S's; CT's = S's; other health prof.
- reading literature
  - assure on "right track" < support CT'ing "right" way
  - understand novice behavior of S's
- sought help from experts
- reflective journal for researcher

Goal: assist S's link theory → practice

Novice 02

Style: "can't articulate"

- supportive/encouraging
- facilitative/flexible
- directive < when S's doing something new / not eager to let S's sink/swim
- helper/available to S's
  - difficult dealing ≈ competing S demands
- strong work ethic
- responsive S's needs
- encourages S's < try new things / Q/critique nrsg. care
- clinically competent

Practices of CT'ing

Making Content Understandable

- reinforces link theory → practice
  - pulls out theory eg's in pts
  - explores concepts/S's see relevance
  - defines concepts
  - looks for pt eg's
  - links literature → practice
- Q's S's
  - assessment of pt - encourage critical thinking
  - appropriateness nrsg care/plan
  - eg's of theory in practice / meaning
  - S's plan
  - ascertain learning / < theory > ensure pt. safety
    - skills lab
    - competence
    - courses
  - inconsistencies theory/practice
- prompts S's < what to look for in pts / gives eg's ≈ Q's
- models thinking - gives S's frameworks
- breaks concepts → small pieces
- identifies NB data
- seminars provide guidance for practice

Knowing S's

Knowledge

- don't know how theory relates → practice
- see inconsistencies between real/ideal
- some S's struggle ≈ < concepts / meaning / links T → P
- have considered concepts - can't focus on relevant data
- should think conceptually
- responsible own learning

Monitoring v Evaluating

- ensures pt. safety < reviews assignment ± staff
  < attempts to see S's initially
- lets S's know when available
  - competing S's demands difficult
- Sources < observes S's
  < HN
  < journals < safety
  < critical thinking
  < planning
  < Q's S's
  < intuition - somewhat after reading journals
- feedback < strengths
  < areas to develop
  < inappropriate behavior
- evaluation - teaching/evaluation incongruent
  - sends good/bad messages → S's
  - S's need to learn before evaluation
  - need a standard to evaluate
- letting go
  - panics when S makes error/jumps in
- doesn't know
  - how much to supervise S's
  - how to record data on S's practice
  - how much to rely on intuition

Student's Assignments

- match S/pt. needs
- allows S's to choose pt.

Novice 02

Characteristics

- some < excited → learn as much as possible
  < low level interest < not committed
  < cool
- scattered when something outside bothering S.
- can't articulate what want to learn
  - low insight
  - not thinking
- concerned about assignments
- have own sense of self
- some nasty - challenge CT - surprising
- OK S's "air of confidence"
- not confident - stand back
  - aura < nervous
    < afraid
    < uncertain
- challenging S's
  - ask interesting Q's
  - see things differently
  - reframe Q's
- some ♂ → S's try to attract ♀ S's attention
- afraid to admit weaknesses
  - CT overloads S b/c < overestimates S's ability
    < doesn't ensure S's have nec. skills
- hiders
  - doesn't know whether to < respect need to do on own
    < take by hand/walk S through
  - CT doesn't see

Relationships ≥ Nursing Staff

- oriented self to unit to enhance credibility ≥ staff
- Interactions CT - S's - pts - staff overlays S's practice
- staff helps S's if CT busy
  → OK if CT seen S perform skill before

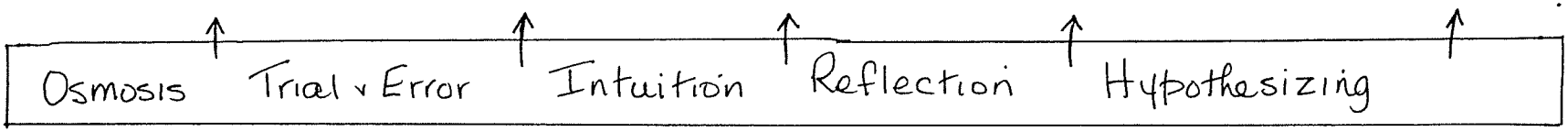
Practice — Novice 02

- afraid to try new skills
- don't understand learning opportunities
- can miss obvious
- nervous when supervised ← feel inadequate when CT sees error; CT reinforces S's anxieties
- want CT rather than staff to supervise to ensure consistency ≥ skills
- challenging assignment ← prepare; seek help
- use intuition somewhat

Relationships ≥ S's

- Conveys expectations ← roles/responsibilities in practice; knowledge req'd; criteria for evaluation; what CT will observe
- Communication ≥ S's ← clear; consistent
- quality of relationship affected by personalities S's/CT's ← +ve, -ve
  - can't be personally involved b/c CT evaluates
  - strong CT personality may intimidate S's
  - some S's more difficult to work ≥
    - shy S's
    - ♂ S's (some inappropriate)

Novice 02



learning CT'ing

Personal

- respects experience
- honest
- open to criticism
- likes to be supported/supportive
- strong work ethic
- impatient ∈ S says "can't"
- open
- reflective

Personality

- "strong"
  - → direct ∈ S's
  - → may intimidate

Nursing

- administrative → uses to think what helpful
- professionals respect confidentiality
- expert in gerontological nrsg.
- uses colleagues for support/ideas
- links between theory/practice most NS in nrsg. → as staff nurse caught up in tasks, not concepts/theories

Other

- own experiences as S
  - what worked
  - emulate favourite CT/professor
- reading < supports approach / assists in eval. of S's
- discussions ∈ others < husband / supervisor / course leader / CT's
  - asks Q's
  - shares exp.
  - feedback
- exp. as CT < marking ∈ S's
- educational preparation - approach to prob. solving
- feedback < S's / course leader
  - +ve/-ve → improve CT'ing
- mother's work values
- researcher's journal < keep track trial/error / identifies issues / puzzles?

Novice 03

Goal: challenge S's to think logically
influence/transmit practice

Style:

- empathic/caring
- negotiates/gets issues on the table
- organized
- challenges in non-adversarily way
- facilitates S's to < identify problems
  verbalize/prioritize nrsg. care
- open/approachable < creates relaxed atmosphere
  uses humour
  admits mistakes
  direct ≈ S's

Practices of CT'ing

Making Content Understandable

- asks Q's < challenges S's < other perspectives
  what if?
  why?
  decisions - justify
  understand S's thinking
  prompt
  put S back in situation
  figure out "puzzle" of nrsg. care
- ↓ stress by conveying reason for Q.
- explains < clearly/concisely
  complex → simple < breaks down tasks
  intuitive part of practice takes S thro' step by step
- relates nrsg care < physiology
  critical thinking > assists S's to think logically
- models < Q's to ask
  thinking < thinks aloud
  shares own paradigms/impact on learning
  tells stories
  uses pictures/verbal cues

Knowing S's

Knowledge

- may not understand CT's Q's
- not good at verbalizing thinking
- may make logical decisions - can't verbalize
- have difficulty ≈ critical thinking
- BN S's have difficulty linking theory → practice b/c of limited experiences
- don't have overall view of what to learn
- may know, but not secure in knowledge
  ∴ feel threatened
  - may prevent from verbalizing knowledge
- sometimes learn accidently

- relates theory → practice
  - identifies patterns in nrsg. care
  - links learning to past/future exp.
  - builds on common knowledge
  - exposes to role models - demonstrate nrsg. care embedded in theory
- reviews situations post-hoc
- uses models of decision-making < algorythym / mysteries eg. Nancy Drew

helps to verbalize critical thinking

Monitoring & Evaluating "safety bottom line"

- sources < S's < think aloud < "see" thinking / verbalize/prioritize
  - Q's
  - observation
- provide safe environment for S's < succeed - praise → ↑ self-esteem
  - fail - preserve self-esteem
- standards
  - need clear, measurable objectives
    - fair
    - not swayed by < emotion / personality
    - vague - can't "call" S
  - S's practice
    - defend nrsg. care plan
    - account for mistakes
    - justify actions
    - validate decisions
- feedback
  - midway < no surprizes at end / negotiate for S's progress
  - end
  - ensure privacy
- set up scenario to test if no opportunity in practice

Novice 03

Characteristics

- anxious
- don't know how to deal c < frustrations / problems
- like approachable CT
- surprized if CT admits errors
- may get upset if CT expects problemsolving
- may feel threatened if challenged by CT.
- stops when overwhelmed
- quiet S's hard to elicit data
- fear unknown

Practice

- level of learner shapes expectations
- first clinical exp. anxiety provoking
- insecurity impacts judgment
- success fosters < success / ↑ self-confidence
- may not know CT's expectations b/c
  - CT not clear
  - S didn't understand
- stellars may meet objectives 1st week
- stressed in test situations
- some seek challenges/others need to be stretched
- easier to perform c out < stress / changes / interruptions

- letting go:
  - intervenes when ← S not fast enough; frustrated ≈ S; pt. safety at risk; S not doing nrsg care correctly
- Some S's especially fearful
  - harder for CT to negotiate to leave

Relationships ≈ Nursing Staff

- may sabotage S's learning ← cutbacks, layoffs
- interpret ← nurses' behavior, -ve environment → to S's

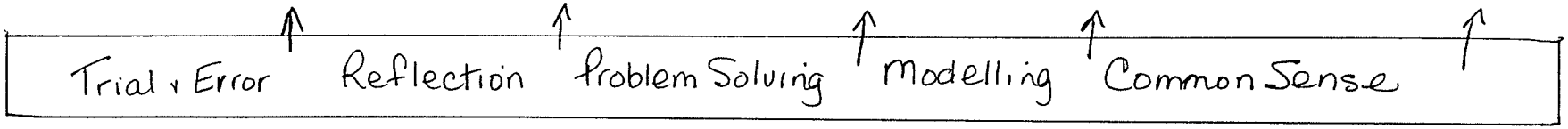
Student's Assignments

- considers ← S's requests; what would challenge S; learning needs (S's resp. to identify); past experiences
- directs S's to learning opportunities
- more challenging assignment ← ↑ S's independence; S's in difficulty
  - not to fail
  - BUT to test

Relationships ≈ S's

- conveys ← clear expectations ← nrsg care, grading, preparedness; evaluation process; personal nrsg. experiences; nrsg. competency
- knows S's ← info. from other CT's; intuition; remembers own experiences as a S.
- quality of relationship
  - can't be "pal" – fine line
  - some CT's/S's personalities "click"
  - problems when S's can't see other's perspective
- communication ← clear, respectful, non-threatening

Novice 03



Learning CT'ing

Personal
- difficult to confront others ≈ -ve feedback
- fair
- sensitive
- caring

Personality
- intuitive
- critical of
  - own errors
  - may be harsh ≈ others
- likes to be liked

Nursing
- expert practitioner
- learns from critical analysis of practice
- need to:
  - reflect on practice
  - be emotionally involved
- uses nrsg. experiences to relate → CT'ing

"uses nrsg. experiences as basis for functioning as CT."

Other
- experiences as S
  - what worked
  - "sitting under" good teacher
  - respected ≈ justify actions
  - identify paradigm experiences
  - remembers own S's experiences
- other CT's
  - observes
  - seeks advice
  - shares experiences
- discusses ≈ husband
- feedback from S's
  - verbal
  - written

Goal: independent S practice / learn to think critically

Novice 04

Style:

- helps S's by
  - being open/available
  - discusses issues NB to S
  - provides S's ± readings
    - sparks interest
    - challenges S's to think
  - assist ± nrsg. care
- "there" for S
- teacher, not supervisor
- gives direct, explicit instructions
- admits errors to S's
- feels responsible for S's

Believes Effective CT should be

- Knowledgable
  - able to answer S's Q's
  - broad understanding of issues of practice area
- clinically excellent
- understand role of staff nurse
- deal ± crisis calmly
- doesn't embarrass / humiliate S's
- doesn't hover – let's S's practice on own
- active communication ± S's
- well organized
- puts S's first
- sees errors as opportunity for learning
- flexible

Practices of CT'ing

Student's Assignments

- purpose: increase S's clinical expertise
- considers
  - pts ± variety of concerns
  - am't of time req'd for nrsg. care
  - ward routines
  - individual S
    - abilities
      - handle pt workload
    - past exp.
    - types of pts
    - language skills (eg ESL)
- match S's → pts
  - S's should identify own learning needs → gives S's control

Knowing Students

- had to reframe high expectations

Knowledge

- doesn't assume much b/c know little
- beginning Yr II (initially expected able to do)
  - can't put nrsg. process together
  - have pieces of data
  - can become fixated on 1 piece data

Making Content Understandable

- encourage S to see whole sitn < pt, family > what experiencing
- Q's S's < see how use data, level of preparation
  - recognizes causes S's anxiety
  - ∴ has S's come back ∃ answer
- S's Q's - initially answered - now
  - let other S's answer
  - look up answer ∃ S.
- reframe/use different terms when S's don't understand.
- uses peers to suggest alternatives to care
- links theory → practice
  - relates to
    - S's past exp.
    - exp. of others
  - gets S's to express view of exp.
  - understand what S's know < basics, issues

Nursing Staff Relationships

- convey info to preceptor
  - S < level in course, previous experiences
  - CT - available
    - novice
    - course < objectives, policies, eval. criteria/forms
- interprets S's → preceptor
  - liaison between S + preceptor
- communications < establish relationships, careful how say things, can't challenge Nurses' practice
  - challenging
  - diplomatic

Novice 04

Characteristics

- anxious/tense b/c constantly evaluated
- initially < don't ask Q's, quiet
- easily frustrated
- responsible adults
- can be intimidated by CT's Q's
  - → can't answer even if know
- challenging S's
  - high achievers
  - enthusiastic
  - consider total pt
  - bring another dimension to nrsg.
  - make CT's think - asks Q's / CT don't know answer

Practice

- knowing ward routines < want to fit in, ↑ comfort
  - NB to S's
- poorly prepared < anxious, ↑ sick time
- some S's don't value clinical
- need practice to put pieces together
- don't like CT's who don't allow independence
- may have knowledge but difficult to apply

Novice 04

Monitoring v Evaluating "protect pt"

- sources
  - pt - validates CT's concerns
  - preceptor
  - S's
    - ability
      - complete work
      - communication
      - answer Q's
    - affect
  - intuition - doesn't trust if can't validate
- S's cues
  - ability to discuss pt
    - insight
      - pick up pt. cues
      - pursue pt. concerns
      - knows when pieces don't fit
      - understands significance of data
      - think beyond immediate pt. concerns
    - vague
  - level of preparation
  - ability to establish workplan
- feedback
  - should give throughout
  - give +ve during procedures
  - provide privacy
  - NB to S's
- teaching / evaluation different
  - shouldn't eval. 1st time - eval. 3/4th
  - constant eval. intimidates S's
    - ↑ stress
    - ↓ learning
- letting go
  - 1st reaction to crisis
    - "squeal"
    - "No"
  - tries to count to 5
  - take over for S - conveys pt. can't trust S
  - trust S to come to CT
  - intervene when S in difficulty

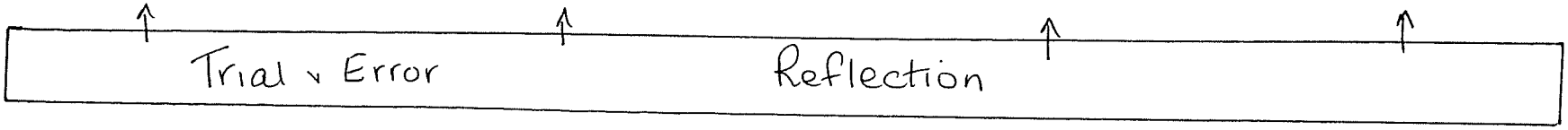
Learn when

- practice directly
- from mistakes
- sharing experiences ± peers

Relationships ± S's

- conveys
  - novice CT
  - phone number
- quality of relationship
  - friendly, not buddy
  - intellectual exchange of knowledge
  - CT/S personality may not match
- learns about S's through
  - interactions
  - intuition – S's affect
  - other CT's - don't rely on too much "clean slate"
- feels lack of clinical competence → ↓ S's respect

Novice 04



learning CT'ing

Personal

- high achiever impatient ≈ S's if low achiever
- values expertise
- accepts own strengths/weaknesses
- new situations a challenge
- professional relationships

Personality

- abrupt/direct
- formal
- reflective
- self-critical
- reserved
- quiet/soft spoken

Nursing

- feels incompetent in some areas → ↓ S's respect
- feels disadvantaged b/c not much practice as staff nurse ∴ no clear understanding practice
- goal - ↑ clinical expertise
- uses intuition to know pts
- difficult to develop rapport ≈ pts → what pts. reveal depends on nurse/pt. relationship

"uses practical knowledge of nursing in CT'ing"

Other

- nurse < preceptor, observed co-workers, pts/families
- S's < working ≈ them; feedback < written, verbal
- other CT's < help redefine expectations, planning for S's, observing, discussions
- own exp < S < undergrad, graduate; CT; researcher's journal; emulate model CT
- feedback from supervisor
- reading literature - basis for some beliefs

Goal: encourage S's to look at total pt. rather than just skills

Novice 05

Style:

- helps S's by
  - being available
  - working ≅ S's
  - looking up info for S's
  - being supportive
  - adjusting to unpredictable
- focusses on +ve, rather than -ve
  - → reframes experience as learning
- CT'ing
  - overwhelming for new CT < no preparation, multiple demands
  - rewarding b/c contribute → S's learning
- sees self as a nurse
  - resp. for pt. care < S's nrsg reflection on CT; rectify errors before leaving ward
  - delivers nrsg. care < enhances S's learning; reinforces self-worth; S's sometimes ↑ pt's anxiety

Believes Effective CT should be

- approachable
- confident
- able to answer S's Q's or direct S to info.
- calm

Practices of CT'ing

Making Content Understandable

- talks S's thro' nrsg care
- discusses nrsg care
  - before → identify potential problems
  - after
    - ensure S's knowledge
    - get S's perspective
    - other factors besides presenting problem
    - previous experiences
- models nrsg care
  - helps S's learn
  - thinks aloud (what doing / when)
- prompts
  - prepare Ss difficult assignment
  - ± Q's
  - when Ss fumbling
  - re· organization
  - pre-conference plan for care
- uses nrsg. exp. to
  - give S's (alternatives / hints)
  - enhance S's learning
- Q's Ss
  - knowledge/rationale for care
  - how to deliver nrsg. care
  - what Ss looking for (now / future)
  - ? finish skill on own
  - drills re specific skills

Knowing S's

Novice 05

Characteristics

- all different individuals
- nervous/fearful (- new clinical area / - make errors)
- inexperienced
- confidence slow to develop
  - "whiners" don't have good self-concept
- need time to learn
- strong S's
  - overpower weaker S's
  - want to learn ++ → hard CT to keep up
- like competent CT
  - pick up on CT's anxiety

Knowledge

- learn ++ in Year I
- benefit from lenient marking
- should make effort to learn
- want concrete, not abstract info
- give CT details ++ b/c don't know expectations

Novice 05

Monitoring + Evaluating "maintain pt. safety"

- focus on +ve, rather than -ve
  - → needs to be more critical
- +ve feedback < good nrsg care / areas to improve
- -ve feedback
  - softens by explaining context
  - frames +vely < ↑ S's confidence
  - gives privately < enhance learning
- Q's S's in difficulty
- sources of data
  - watch/listen outside pt's door
  - pt's comments
  - staff
  - intuition – cues to S's but doesn't act on it
- continuous eval < where S going / how can CT help
- assesses what to supervise thro'
  - preconference discussions
  - complexity < pt. skills
  - visits S's
  - listens to nurse give S's report
  - assess S's ability
- satisfactory < answers Q's appropriately / can focus on priority diagnosis / give safe nrsg. care
- letting go
  - learning to "sit on hands" b/c wants to give care
  - lets S's do as much as possible before intervening
    - let go < S's fumbling OK for pt. / demonstrates ↑ competence
    - take over – nrsg/task needs to be done immediately / detrimental to pt < hurting / potential for error
      - hollers "No"

Practice

- priorities change as S's get to know pt.
- eager to do skills
  - → think learn only ≈ < tasks / procedures
- focus on immediate problems, don't see others / unable distinguish priorities
- needs practice ++
- clumsy ≈ new skills
- make errors sometimes b/c too eager
- sometimes unprepared

Learns When

- S's share experiences
- focus on S's strengths
  - → brings out weaknesses
- practice at home
- good relationships between CT / S's / staff
- errors reframed so S's can see learning opportunity
- watch CT give nrsg. care
- care for complex pts
- do skills on own
- CT competent nurse

Student's Assignments

- assigns only 1 pt until < "feel" of S
  < S demonstrates competence
- considers < demands CT's time
  < # of skills
  < different pt. conditions
  < patient < complexity < needs
  < student < needs
    < competencies
    < fears
    < willingness to try new things
    < self-esteem

Nursing Staff Relationships

- "PR" ≈ staff < ask staff problems ≈ S's
  < buffer between < staff < S's
- interpret S's < HN staff > maintain relationships
- interprets staff → S's

Relationships ≈ S's

- partner ≈ S's "we"
- cares for S's < reassures/explains
  < allows S's time to regroup
- conveys < expectations - may expect too much
  < learning opportunities
  < what can/can't do on unit
  → overestimate S's ability → pt. care suffers
- uses intuition to know S's
- S's -ve behavior can impact on CT

Novice 05

Trial & Error	Reflection	Questioning	Intuition

learning CT'ing

Personal

- people are individuals
- values +ve
- responsible for S's errors
- family more IS than career
- likes challenges

Personality

- vulnerable to criticism
- ↓ self-confidence b/c novice CT
- caring

Nursing

- nurse need to care → implicit part of practice
- pt. safety priority
- better CT b/c experience as staff nurse
- nursing care becomes automatic "like riding a bike"
- uses own exp. as a nurse
- proficient clinician
- nurses need to work quickly

Other

- other CT's
  - watching S's
  - feedback
  - discussions - compare/contrast CT'ing
- from S's
  - experiences & watching S's
    - staff nurse CT
- as S's
  - own experiences - only remembers CT's anger
  - own learning
- reading literature
- seminars
- discussions & researcher
- uses exp. as
  - new graduate nurse
  - personal
    - family of origin
    - other
- monitors self

Expert 01

Goal: enable/guide S's to learn to care (crux of nrsg)

Style: "nice but not easy"

- intuitive/caring
- facilitates rather than evaluate
  - → doesn't smother
- flexible, guided by the situation
- uses humour
  - → transform situation
  - → laughs ≥ S's
- cares for S's
  - → "being there" - focus on S only
  - → models caring for S
  - → gives S immediate feedback
- pt most NB in pt-S relationship

Expert CT'ing

- asks S's more questions because
  - → increased confidence
  - → in habit
- knows S can do more on own
- evaluation more detailed/less general
- more nrsg. experience → more eg's for S's
- knows theory of nrsg. better
- more relaxed

Expert 01

Practices of CT'ing

Making Content Understandable

- role models < nrsg. care, alternative nrg care, caring thinking < present nrsg care, future nrsg care
- uses pt. situation to illustrate theory
  - differentiates between class/practice
  - A+P to understand nrsg. care
  - identifies results faulty nursing care
- answers S's questions
- questions S's to probe for
  - → safety
  - → Nursing care/outcomes
  - → understand difference < real, ideal
  - → S's status
- encourage S's problem-solving using own Knowledge base

Student Assignment

- Considers
  - S's
    - busy?
    - academic ability < weak-not too complicated, strong- on own
    - adjustment to ward
    - what S not good at
    - requests - doesn't change if S unhappy
  - pts
    - complexity
    - location on unit
      - weak S's in middle → ↑'s opportunities to observe S's
      - don't use complex pt at far end → ↓ opportunities to observe S's
    - offers S < assistance, explanation
- assign < variety, less technical → can S manage?, ↑ complexity
  - gradual for weak S's
  - S concerned L. about

Knowing Students

Characteristics

- anxious because < anticipating nrsg. care, preoccupied ε detail, drug calculations, skills ε babies, sick children, unfamiliar ε staff, assignments due
- passive - waits for CT to initiate contact
- hiders < easiest to miss b/c wrongly conclude OK
  - don't ask Q's (questions)
  - don't want CT's assistance around
- try to please CT
- weak students
  - anxious
  - slow to adapt to ward
  - can't manage complex assignment < slow, disorganized, ?ill-prepared
  - scattered
  - low self-esteem
  - fearful increased independence
  - can't manage at end pts strong S's can initially
- strong students
  - ask good questions
  - like challenges
  - ask for more
  - know intuitively what to do
  - pick up on pt. cues
  - not overly anxious/excited in new situations
  - adaptable
  - pick up on classroom theory

Knowledge

- current
- creative - use experiences outside nrg to understand practice

Expert 01

Monitoring/Evaluating

- makes rounds initially to < ensure S/pt safe; determine priorities ≈ S's; make written schedule for self
- identifies for S's < anxious behavior < S knows self / cues when ≈ pts; positives nrsg. care; suggestions/alternatives for nrsg. care (weaknesses/how to improve)
- observes < directly; indirectly < in halls / thro' windows > sees good nrsg. care
- confronts hiders < label; explain > behavior to S's
- uses intuition < forward knowledge re. what will occur; recognize patterns; know when S's overwhelmed
  - → trusts b/c substantiated by experience
  - → general - may miss detail
  - → documents ≈ concrete data - substantiate -ve eval
- letting go "hands in pocket"
  - → struggles ≈ < modelling nrsg. care - S's see good nrsg. care; S's do/experience nrsg. care
  - → takes risks < assigns difficult pts; leaves S to problem solve
  - → fosters S's independence
    - S tells CT nrsg plan - rather than - CT tells S plan
  - → cues to let go
    - S < trustworthy; responsible
    - pt < safe/stable; interacts comfortably ≈ S.
    - nrsg care < not complex; familiar
  - → cues to stay
    - S < overconfident; overwhelmed
    - pt < serious; unstable
    - nrsg care < complex; unfamiliar
- evaluation
  - → learned vocabulary
  - → standards nrsg. care most NB
  - → no surprises
  - → documents data < mentally; written
  - → needs to be ... for fails

Practice

- focussed on < skills, not patient; only 1 thing at a time
- awkward in new situations
- responsible for own practice
- unable to help ≈ technical skills in rapidly changing situations
- challenging assignment < good S's blossom; poor S's in tears
- give good nrsg. care
- some don't like to be challenged

Learn When

- comfortable/relaxed
- repetition
- observe staff nurses
- CT relaxed
- negative feedback not destructive
- reflects on nrsg. care

Relationships ≈ Students

- conveys < clear expectations; confidence in S's abilities; reassurance will be there for S's; high expectations; S's responsible own learning
- creates relaxed/comfortable environment
  - available
  - acknowledges S's stress
  - "there" for S
- knows S's < intuition; S's journals; through interaction < class < group activities; role play; clinical - → non-verbal cues
- differentiates < CT; counsellor > role
- professional
  - risks S's displeasure
  - respect more NB than liking from S's
  - encourages S's to identify own professional values

Expert 01

Relationship ≈ Nursing Staff

- assists S's when < pt. situation unclear / S not comfortable
- interprets < S's behavior/roles → staff / staff behavior → S's / differences in hospital policies
- advocates on S's behalf ≈ staff

Reflection | Trial & Error | Intuition | Forward Thinking

Learning CT'ing

Personal

- bends rules to fit personal philosophy
- considers self a teacher
- fair
- visual memory

"Clinical teaching comes from self"

Personality

- uses humour
- nice

Nursing Experience

- professional standards NB
- paradigm experiences as a nurse
- care for whole pt.
- technology interferes ≈ caring
- caring crux of nrsg.
- takes risks in practice

"use philosophy of nursing as basis for CT'ing.

Other

- experiences as a student
- other CT's < buddy / discussions → picks up what fits ≈ personal philosophy
- reading literature
- conferences
- experiences ≈ S's
  - feedback < written / oral
  - paradigm experiences
- journal for researcher

Goal: set stage for graduate practice

Style: "option giver"
- S's make choices → empowers CT; S's in control of learning; accountable for practice
- facilitator/helper
- takes risks → empowers S's; S's learn
- focus - affective domain/not skills
- S's needs secondary to pt's
- caring
  - "there" for S's
  - S's need to learn → how to care; own resp. to caring; to document caring
  - models (impacts caring)

Expert 02

Novice/Expert CT'ing

	Novice	Expert
• focus on	• evaluation → couldn't separate from teaching	• teaching → flexible/ receptive to S's ideas
• post-conferences	• pathophysiology/ procedures	• learning how to be a nurse
• focussed on	• self/not S's	• S's
• S's learning	• CT responsible fill S ≠ knowledge	• S's responsible own learning
• approach to S's	• authoritarian/ traditional	• open/ approachable
	• cure	• care
	• treat like children	• treat like adults
• control	• only CT	• shares ≠ S's
• pt. responsibility	• only CT	• S's/staff
• feedback to S's	• little	• daily
• nursing care	• done step by step	• fit real ≠ ideal/ flexible
• personal	• anxious/ nervous/ quiet	

Expert 02

Practices of CT'ing

Making Content Understandable

- ties new experiences → previous knowledge
- uses pt. experience → connect theory
- Questions S's to
  - relate principles → pt
  - reflect on practice
  - go beyond own setting
  - encourage forward thinking
  - see nuances of care
  - understand nrsg care plan/goals for care
  - help cope ≥ difficult situation
- gives S's opportunity to ask Q's - cued by S / complexity of task
- directs to references
- uses errors for S's learning
- presents pros/cons nrsg. actions
- role models < nrsg care, accountability, caring, thinking (talks aloud)

Student Assignment

- identifies S's expressed learning needs
  - ↓ accurate assessment → design experience to meet needs
- considers < S's < choices, capabilities - responsible to know limitations
  - Collaboration ≥ staff
  - CT knows pts

Knowing Students

Knowledge

- basic nrsg care
- application theory → practice < difficult, enhanced when applied to pt. sit^{n}
- asking questions means responsible / know what doing
- sound problem solving skills

Practice

- few expectations on medical ward/S's don't like medical nrsg.
- desperate for skills
- need to learn to care
- can't see invisible nrsg. practice
- competent at own level
- may be affected by personal life
- inexperienced: see pieces rather than whole
- some reflect on practice - raises issues to explore
- some don't want choices/challenges → want to be told b/c less time/energy
- cues to spend time ≥ S
  - uncomfortable
  - anxious
  - compromise
  - talk ++
  - no work
  - disorganized

Monitoring/Evaluating (form of learning)

- purpose: assess S's < ability to practice / knowledge
- CT < internalizes competencies / reflects on S's practice / compares → standards
- how
  - makes rounds to < identify priorities (on own ≥ S's) / ensure pt. safety
  - doesn't eavesdrop/views from a distance
  - lets S's set parameters for supervision
  - supervises procedures
  - gives wrong idea to test
- sources of information
  - staff
  - documents < charts / kardex
  - patients (-ve feedback NB)
  - students < reporting / questions/answers / discussions ≥ S's / nrsg. care plan / use of principles
  - direct observation of S's < behavior / interactions / organization
- weak students
  - take most CT's time → meet ≥ frequently
  - must demonstrate ability to perform
    - set up situation
      - S's in control
      - progressively more difficult
    - pass / fail
    - → if fail, preserve self-concept
- letting go
  - S's rely on own feedback → ↑ confidence
  - takes over only when < S unsafe / pt can't tolerate S's uncertainty
  - S's need to < take risks / make mistakes

Expert 02

Characteristics

- least empowered
- less compliant/obedient
- responsible/recognize limitations
- older S's
  - more life skills < facilitates learning / helps S's cope ≥ pts
- challenge CT
- want to know CT's expectations
- anxious - interferes ≥ nrsg. care
- some hide
- adults who make choices

Learn When

- sees theory in pt. situations
- open atmosphere
- pt. in crisis
- makes mistakes
- master situation → ↑ confidence.
- takes risks
- active participation
- repetition

Relationships ≥ Students

- reveals to S's < self / weaknesses → S's will reveal self to CT
- conveys < expectations / confidence in S's abilities
- uses intuition < know S's / cue S's
- S advocate
- "we" relationship
- shares control
  - CT/S work co-dependent
  - CT power — evaluates S's
  - knows system
- trusts S's
- professional
- respectful
- cares

Expert 02

Relationships ∈ Nursing Staff

- builds rapport < HN, staff nurses
  - ↕ trust CT's competence
- encourages S's interactions ∈ staff
- interprets S's behavior < HN, staff nurses, nrsg. assistants, cleaning ladies

Intuition ↑ Asking Questions ↑ Trial & Error ↑ Reflection < ∈ S's post hoc

Learning CT'ing

Personal

- respects S's
- fair
- balance bet. pers/prof. life
- job satisfaction
  - pt. care
  - seeing s's grad.
  - S's feedback
  - new challenges
  - learning < S's, CT's
- doesn't learn when under pressure/anxious
- open to new ideas

"CT'ing derived fr. personal philosophy"

Personality

- trusting
- self-aware
- use of humour
- reflective
- open/approachable relaxed
- traditionalist
- naive
- judge self harshly
- works well ∈ others
- spiritual
- internal locus of control
- sensitive

"influences CT'ing"

Nursing

- aware < strengths, weaknesses
- expert medical nurse
  - can intervene if necessary
  - teaches S's reality
- knows nrsg. staff
- loves medical nrsg.
- models nrsg. care < staff, S's

"growth as profession → growth as CT"

Other

- own experiences as a S
- discussions ∈ < supervisor, husband, other CT's
- challenges < conferences, students, health care reform
- from S's < feedback, problems ∈ S's, paradigm experiences
- reading literature
- from mistakes
- watching other CT's

Goal: "move" S's

Expert 03

Style:

- prepared / plans for CT'ing
- doesn't hover
- flexible - depends on needs < S's / pts
- caring < picks time for Q's / recognizes S's vulnerability
- verbally encourages

Practices of Clinical Teaching

Making Content Understandable

- models/role plays nrsg. care
- answers S's Q's/directs to resources
- cues S's to learning opportunities
- encourages mental rehersal
- hypothesizes possibilities ≈ S's
- prompts by thinking aloud
- uses pt. experiences to link theory & practice
  - uses pt. examples
  - compares/contrasts
  - encourages S's reflection
- questions
  - clarify S's thinking
  - ensures S's "on track"
  - prompts S's < practice / thinking

Knowing Students

Knowledge

- greater than S's think

Practice

- repetition builds < confidence / learns skills
- need more assistance initially
- expect technical skills in surgical nrsg.
- timing of experience NB.
- focus on skills < can't talk to pt until skill mastered / unaware of behavior
- develop therapeutic relations ≈ pts.
- pace of unit affects S's practice
- satisfied ≈ good nrsg. care

Monitoring v Evaluating

- looks for < patterns, trends, consistency/inconsistency, improvement over time
  - → student behavior
    - data collection/assessment skills
    - ability to use pt's verbal/non-verbal cues
    - maintenance pt. safety
    - making nrsg. decisions
    - organization
    - independence
    - relationship ≈ pts.
- alerted when < doesn't fit ≈ other S's; can't find; intuition engaged
- sources
  - direct observation (sees only sample)
  - S's < verbal report, self-evaluation, answering Q's, interactions ≈ staff, practice
  - staff nurses
  - pts.
- hypothesizes/Q's herself → understand S's
- evaluates towards end of rotation
- records data < mentally, written
- gives immediate feedback (ensures privacy)
- letting go
  - encourages S's independence
  - helps S's in complex situations
  - decision to take over < pt OK, pt not OK

Expert os

Characteristics

- honest ≈ CT
- terrified of technical skills
- overwhelmed initially
- not all S's the same
- anxious
  - interferes ≈ ability to process data
  - some pt. situations more anxiety provoking
  - source of anxiety may be external to clinical practice
- intimidated by Dr's
- reluctant to be ≈ pts < sit at desk, in hallways
- don't like changes midway
- older S's
  - stressed - take longer to adapt
  - not used to evaluation
  - know strengths/weaknesses
  - demanding CT's time
  - want CT present
- strong S's
  - identify weaknesses
  - seek out CT
  - use feedback from CT
- weak S's
  - knowledge
  - questions < don't ask many, indicate lack of knowledge
  - blank look
  - can't identify critical pt. situations
  - don't pick up relevant cues fr. pt. report.
  - can't picture what clin. teacher saying

Student Assignment

- sets S's up for success
- simple → complex : timing NB.
- matches S's/pt's needs
- considers < skills
  - pt's < condition, complexity nrsg. care
  - age
  - comments < H/N staff nurses
  - receptivity of staff nurses
  - S's < goals/objectives, requests

Relationships ∈ Staff Nurses

- interprets behavior < S's → staff, staff → S's, pts → S's, CT's → staff
- ensures S's communicate ∈ staff
- staff helps CT ∈ S's < supervise nrsg. care, helps S's ∈ nrsg. care, buddy ∈ S's
  - selects staff knowing < strengths, weaknesses

Expert o3

- weak S's (con't)
  - practice
    - need more direction from CT.
    - if manage assignment leads to ↑ confidence
    - afraid of staff nurses
    - poorly organized
    - little insight into own practice
  - characteristics
    - vulnerable
    - make excuses
    - need to be challenged
    - may focus on -ve, not hear +ve.

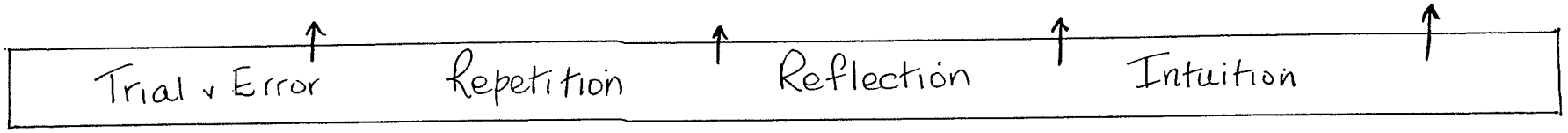
Relationships ∈ Students

- conveys to S's < expectations (high), enthusiasm/enjoyment CT'ing, personal limitations, confidence in S's abilities
- professional < reveals self, but sets limits to personal dimension
- shapes parameters of experience
- S's responsible for own learning
- assists/supports/encourages
- acknowledges presence stressful for S's
- CT's have reputation known to S's

Learn When

- repetition
- new situation's
- doing on own
- reasonable pt. load

Expert 03



Personal
- honest
- fair
- respect for S's

Personality
- caring
- relaxed
- self-confident
- sense of humour
- serious
- approachable
- not intimidating

"underpins CT'ing"

Nursing
- competent
- knowledgable
- knows pts.

Other
- taking courses/attending workshops
- worked ≥ CT'ing preceptor
- student experiences
- CT'ing experiences < supervisor / S's
- discussions - other CT's
- reading literature

Expert 04

Goal: prepare competent, efficient practitioners

Style: "questioning v pushing"
- flexible - S's support & rationale
- facilitates S's problem solving
- reinforces positive
- pts. needs most NB.
- uses humour / challenges S's

Practices of CT'ing

Making Content Understandable
- uses pts. to connect theory
- compares ideal to real
- assists S's to see principles
- compares/contrasts pt. situations
- focus on skills/pathology/disease (Yr. I S's)
- questioning
  - makes S's think/access own knowledge
  - asks Q's until S's can't answer
  - engages S's in learning
  - Q's S's until they don't know
  - draw connections/see relationships
  - answers Q's & Q's.
- role plays nrsg. care
- prompts verbally during nrsg. skills

Relationships & Nursing Staff
- mutual respect < H.N. staff nurses
- staff supervise S's at times

Knowing Students

Knowledge
- knows basic nrsg. care
- well rounded by end of program
- don't realize all information possessed
  - difficult to find answers
- responsible own learning

Practice
- develop own way of practice
- need rationale for practice
- make mistakes - basis for problem-solving
- 2 S's together won't make error
- prefer skills to other aspects nrsg. care
- do well in one area, not in another
- need success to build confidence
- student cues
  - hesitant
  - level of interaction (pts, Dr's, staff)
  - how answer Q's
  - level of discussion
  - hiders
- need to be pushed by CT

Expert 04

Monitoring & Evaluating

- monitoring biggest part CT'ing
  - Q's S's based on monitoring
- cues
  - intuition alerts who/what
  - some skills have higher priority
  - S's ability to focus on pt.
  - changes over time in S's.
- observation < indirectly / directly - balance between close (ensure correctness) / too close (-↑ intimidation, -↓ performance)
  - must observe -ve directly
- fail S when safety compromised
- feedback "no news, good news"
  - at/around time of S's error
  - ensure privacy < pts / other S's
  - ongoing during procedures
- sources
  - doesn't use data other CT's
  - CT's observations
  - staff nurses
  - S's journals
  - pts < results of nrsg. care / ask
- letting go "hands in pocket" crisis/little time
  - don't take over unless < pt. safety compromised

Characteristics

- strong S's
  - competent/efficient
  - accountable/responsible
  - knowledgeable
  - questioning
- weak S's
  - poor organizational skills - can't complete task
  - can't answer Q's
  - seeks direction CT b/c doesn't know what to do
  - not practicing in lab
  - difficulty making decisions
  - doesn't understand CT's directions → can't follow thinking.
  - looks < confused / disoriented / Q'ing look in eyes

Relationships ± S's

- reveals self
  - shares own experiences < child S / personal learning
- respects S's
- CT in charge
- conveys < style - S's need to accept / expectations / confidence in S's
- S's relationship ± CT
  - frustrated by CT Q's
  - fearful/intimidated - not all S's like style
  - try to please CT
  - voice/manner conveys displeasure

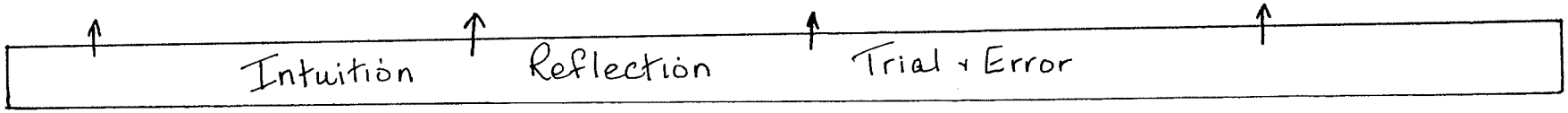
Student Assignments

- S's can participate in selection
- select pts. where S's having problems
- S's needs
- skill list
- opportunity to apply theory

Learn When

- find own answers
- respectful environment
- doing nrsg. care themselves - actively involved
- lots +ve reinforcement
- possibility of evaluation motivating
- work hard / busy
- wide range of experiences
- repetition
- exceptional experience may be pivotal

Expert 04



Learning CT'ing

Personal

- honest
- fair
- flexible
- loves CT'ing
- open to S's
- respects S's

Personality

- uses humour
  - relieve tension
  - fac. learning
- perfectionist
- logical thinker
- comfortable/ confident CT
- intimidating
- doesn't require external reinforcement

"uses own learning style/needs"

Nursing

- uses intuition
- skilled nurse can be CT
  - nurse first, then CT
- pt. safety critical to practice
- care for/help pts.
- emotional support NS.
- surgical nrsg. results oriented
- critical thinking - ability to individualize
- nurses adaptable
- maintains clinical competence
- shapes fundamental beliefs

Other

- S experiences ≥ CT's / other S's
- personal experiences - child / adult
- discussions - other CT's
- student feedback - verbal / written
- conferences
- reading literature

Goal: decrease S anxiety to enhance/enable learning

Expert 05

Style: "helper"

- conveys NBance S learning
- uses humour - ↓ S anxiety
- cares for S's
- encourages S's self-awareness
- helps S's to ↓ impact of presence
- reinforces +ve S behavior

Practices of CT'ing

Making Content Understandable

- uses pt. e.g.'s to connect practice → theory
- connects new learning → familiar - bases in S's exp.
- answers S's Q's - discovery inefficient
- Q's S's < cue/prompt
  < model nurse's thinking
- explains pt. → S's
- models < nrsg. care
  < thinking (thinks aloud)
- provides framework to understand content
- grounds nrsg. care in reality
- identifies significant data
- hypothesizes

Relationships ≈ Nursing Staff

- credible practitioner/respected by staff
  - concerned about poor nrsg. care
- maintains relationships
- interprets staff/S's behavior to each other

Knowing Students "essential to CT'ing"

Knowledge

- narrow/focussed
- overwhelmed ≈ vasts am't data
- uses knowledge when meaningful

Practice

- self awareness key to growth
- need opportunities to demonstrate ability
- readiness to learn essential
- determining individuality
  - specific behaviors cue CT
  - choice of assignment reveals S's
- S's have reputations < halo
  < poor
  - physical appearance may influence CT's perception.
- responsible own successes/failures
- focus on -ve parts of evaluation

Monitoring v Evaluating: "collaborative process"

- purpose - ensure pt. safety
  - Novice: validate evaluation
  - Expert: teaching/helping S's
- assumption - see only sample S's practice
- looks for patterns
  - puts pieces of the puzzle together
  - growth in S's
- interprets evaluation → S.
  - substantiates ≈ data/eg's < S's hear +ve/-ve evaluation; understand reasons for assessment esp. failure
- final judgment only when data complete
- level of S's directs CT involvement
- sources < observes S's; pts; intuition - alerts CT to gather data
- S's cues < level of self-awareness; level of preparation; understanding of pts; ability to use theory in practice; amount of data gathered independently
- letting go
  - risk taking ≈ S's < conveys confidence; essential for S's growth

Student Assignments: essential role CT'ing

- time consuming
- consider < complexity of pt - ↑ complexity ≈ experience; S's requests; pt's needs; S's ability < where they're at; where CT thinks S can move to; previous experiences
  - NB to have as much data as possible
- selects pts < collaborates ≈ S's/outlines learning opp.; S's select from list CT develops → reveals S's insight to own practice
  - S's don't know enough to select on own

Characteristics

Expert OS

- make mistakes learning
- ask Q's - especially "why?"
- preoccupied ≈ skills < measureable/expose S's; focus on skill, not pt.
- need time to learn
- may underestimate abilities
- anxious (increases)
  - interferes < performance; learning
    - by: erecting barriers; interfering ≈ CT/S relationship
  - believe CT powerful b/c of evaluation
- S's shaped by life experiences
- weak students
  - characteristics
    - low self-awareness ∴ often don't anticipate failure
    - poorly motivated
    - difficulty using feedback
    - attribute failure to external causes
  - practice
    - don't want CT present b/c exposes them
    - expect direction from CT
    - low commitment to quality nrsg. care
    - satisfied ≈ limited pt. contact
    - can't handle unusual
    - may miss a day if overwhelmed
  - knowledge
    - long time to gather/use data
    - can't sort/analyze data
    - can't use knowledge at bedside
    - trouble stating what's in head - "blank look"
    - can't see what CT models

Expert 05

- strong students
  - characteristics
    - use data re self to grow
    - desire to learn/work hard - motivated
    - prepared
    - asks Q's
    - accepts failure & supporting data
    - admits errors / follows up
  - practice
    - needs little assistance - but likes CT. there
    - pursues pt's concerns
    - committed to good nrsg. care
  - knowledge
    - identifies < what doesn't know / needs assistance &
    - uses available data immediately

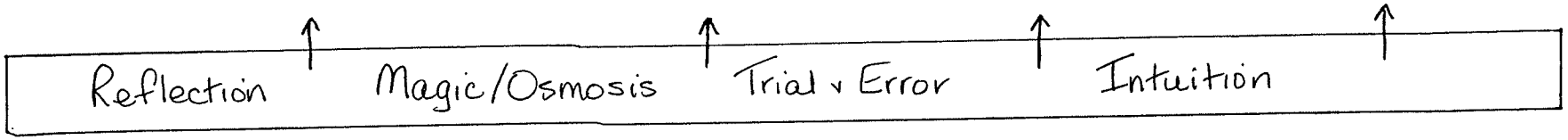
Relationships & S's

- characterized by "we" CT ⟷ S
- reveals self
  - gives S's implicit permission to reveal self → CT
  - facilitates knowing one another
- conveys < expectations / confidence in S's / learning opportunities / thoughts/concerns
- degree of interaction

  depends on

  S's understanding of pt. assignment
  - less interaction/high understanding
  - high interaction/low understanding

Expert 05



learning CT'ing

Personal
- fair
- eager
- idealist
- generous
- honest
- integrity

Personality
- intense
- uses humour
- self aware
- anxious
- open
- makes things complicated

Nursing
- knowing pt. guides nrsg practice
- expert surgical nurse
- clinically knowledgeable

Other
- own experiences as a S
- discussions ≥ CT's
  - perceptions of ≤ S's CT
- parameters of program
- TV program
- student feedback