THE EXPERIENCE OF FACULTY UNDERGOING A MAJOR CURRICULAR PARADIGM SHIFT IN NURSING EDUCATION

by

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ABSTRACT

Nursing education is experiencing a revolutionary change where traditionally held belief systems are being challenged and replaced with beliefs and values that are based on an entirely different philosophy of teaching and learning. This results in a significant challenge for the teacher who must move from one paradigm to another to be able to function in the new world. The purpose of this study is to explore and describe the experience of nurse educators who are experiencing a major paradigm shift. The newness of this current paradigm shift has allowed for little research as yet being conducted concerning this shift from traditional to non-traditional ways of teaching.

An ethnographic design was used to structure the data collection and analysis. The culture of nurse educators who had experience working in both paradigms was sampled and five interviews were held. All participants were employed at different educational institutions. Analysis of the data revealed a varied experience during the paradigm shift. In each participants experience, a small key group of individuals were responsible for initiating the

paradigm shift. These individuals responded in a unique fashion to new ideas that they discovered or were presented with. The effect of exposure to new philosophical ideas profoundly affected the individuals, so that their world view was dramatically changed and their belief and values system was transformed. The experience of this key group was then communicated to colleagues who went through a process of evaluating the revolutionary concepts. Those faculty for whom there was relative congruence between their personal beliefs and values and the beliefs and values inherent in the non-traditional curriculum accomplished the paradigm shift relatively easily. The wider the divergence, the more difficulty faculty had in adjusting to the new paradigm. A dynamic continuum of acceptance was described, placing faculty along the continuum from acceptance to rejection of the new paradigm concepts. Faculty who totally rejected the new paradigm were considered to be threats to the successful implementation of the new curriculum. The process of paradigm shift involved a personal transformation of world view that required profound inner reflection. This process was aided by discussion

with others and in some instances, formal facilitation. Implications for nursing education, research and practice are discussed.

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CHAPTER ONE

Background to the Problem

Significant changes are occurring in the world of nursing education. While small modifications and fine-tuning of nursing curricula have been consistently on-going, evolution of a major change has been slow in coming (Watson, 1988; Bevis, 1988; de Tornyay, 1990). Nursing education is currently at a point in time when revolutionary ideas are being implemented in curriculum models, resulting in changes of such proportion that the current curricula of nursing education programs looks nothing like the traditional curricula with which nurse educators have been previously familiar (Chinn, 1989; Diekelmann, 1988).

Traditional Nursing Curricula

The foundation of the traditional nursing curricula is behaviourism, evolving in the late 1940's with the work of Tyler (Bevis, 1989). Tyler's use of behavioral objectives became an accepted way of ensuring standardized education by allowing educators to be able to measure educational outcomes in terms of clearly definable and observable behaviours (Hedin, 1989; Bevis, 1988). Because of the appeal of

measurable outcomes in the Tylerian model, elementary, secondary and post-secondary education quickly adopted Tyler's ideas (Tompkins, 1986).

In the 1940's, it could be considered that a crisis in nursing education was occurring, necessitating a shift to a new paradigm. According to Bevis (1989), nurse educators in the late 1940's were experiencing a gap in a theoretical foundation with which to structure their curricula. Prior to Tyler's entrance onto the scene of education, nurse educators were using the "Curriculum Guide for Schools of Nursing", first established in 1917, then revised in 1927 and 1937. The significant changes in nursing resulting from World War II made this curriculum guide totally obsolete. Because of the great expansion of medical and nursing knowledge, a new framework was required for teaching. Tyler proposed a systematic way to select, manage, and evaluate the content. A parallel change was also occurring in the educational world. Up until this time, education had been largely governed by the influence of Dewey (Bevis, 1989). However, in the mid 1940's, Dewey's influence began to diminish, leaving room for other ideas such as those

proposed by Tyler that incorporated behaviourism and objectives. The Tylerian method was soon adopted by the accrediting and approval processes of the professional bodies and thus became institutionalized within the system.

Tyler (1949) described the purpose of presenting his ideas as being to outline "one way of viewing an instructional program as a functioning instrument of education" (p. 1). He emphasized the necessity of educators to clearly define their purposes and goals, or their educational objectives, rather than being dependent upon serendipity or intuition: "All aspects of the educational program are really means to accomplish basic educational purposes" (Tyler, 1949, p. 3). Tyler (1949) viewed educational objectives as being "value judgements of those responsible for the school. A comprehensive philosophy of education is necessary to guide in making these judgements" (p. 4). In order to select content for instruction, additional information and knowledge assist in guiding the educator in the use of the philosophy. This information and knowledge comes from a variety of sources. Both the learner and the cultural heritage of

society can be studied to provide direction in determining objectives. As well, "many sociologists and others concerned with the pressing problems of contemporary society see in an analysis of contemporary society the basic information from which objectives can be derived" (Tyler, 1949, p. 5). A final source of information is from educational philosophers who

> recognize that there are basic values in life, largely transmitted from one generation to another by means of education. They see the school as aiming essentially at the transmission of the basic values derived by comprehensive philosophic study and hence see in educational philosophy the basic source from which objectives can be derived (Tyler, 1949, p.5).

Once various sources have been tapped and the educational objectives determined, content can be selected, instructional procedures developed and test and examinations prepared. This framework is likely very familiar to any educator teaching prior to the evolution of the non-traditional curriculum.

While the Tylerian approach made educators accountable to students and the public for objective standards of performance in nursing education programs, it created dilemmas for educators and students alike (de Tornyay, 1990; Diekelmann, 1988). Educators in Tylerian programs were frustrated at having to teach to

rigidly prescribed "rules", or objectives. Consistency and predictability were highly valued in the Tylerian regime (Diekelmann, 1988; Bevis, 1988). Little room existed for creativity in teaching. All students were expected to conform to set patterns of behaviour, and were expected to achieve the same minimal level of objective achievement upon graduation. Students who were achieving either at levels over or under this minimal standard were often not challenged to reach their potential (Bevis, 1988, de Tornyay, 1990)).

Over the last ten years, a considerable body of writing has been generated by educators that suggests that the Tylerian system of professional education is not effective (Benner, 1984; Bevis & Watson, 1989; Tanner, 1990; Donley, 1989; Diekelmann, 1988; de Tornyay, 1990). Some nurse educators have shown that, for them, the system is in crisis (Diekelmann, 1989). Leaders in nursing education have taken up the challenge to revolutionize education in nursing. The ideas of these leaders are being put into place in various educational institutions throughout the world.

Non-Traditional Nursing Curricula

New curricula currently being developed and

implemented in nursing education are truly revolutionary (Bevis, 1988; Chinn, 1989; Diekelmann, 1989; Clayton & Murray, 1989). The driving philosophical forces of the new curricula differ from those in traditional nursing education. Phenomenology, humanism and caring, feminism and critical social theory, are examples of philosophies that might drive the non-traditional curricula. The traditional understanding of the nature of teaching and learning is challenged by the developers of new curricula (Donley, 1989; Chinn, 1989; Diekelmann, 1989; Bevis, 1988). Students and educators can no longer be expected to be experts in a large volume of content that is constantly changing. Instead, educators are assuming to a greater degree the role of "expert learners" who together with the student explore the issues that students identify as being critical. Consequently, changes to the traditional view of student-teacher interactions is promoted. The traditional role of the teacher in the classroom, laboratory setting, and clinical setting is now subject to much debate (Donley, 1989; Chinn, 1989; Diekelmann, 1988; Symonds, 1990; Bevis & Murray, 1990). Educators used to seeing curricula designed around

behavioural objectives and content will now see curricula designed around outcomes, concepts, and learning activities. The emphasis of the curricula is on teaching learning how to think, not what to think. Perhaps the most significant change occurring is an attempt to even out the power structures in education, so that true collaborative learning can be developed.

The current curricula often appear to a nurse educator who was educated in the traditional system like a foreign world, with unrecognizable vocabulary, assignments, and content (Chinn, 1989). Largely absent is the development of curricula around objectives (except for some forms of learning that are largely behavioral, such as psychomotor skills). Gone is the emphasis on multiple choice examinations as the primary test of the student's learning. Students are instead being encouraged to show their ability to critically think using tools such as journalling and qualitative evaluation systems. The meaning of being a nursing professional is being explored in depth and students are being prepared to accept an equal status with other health team members. Clinical experience is no longer the learning laboratory used to apply theory learned

largely by rote in class. Now students are being encouraged to develop their theory directly from their clinical experiences (praxis). As they venture into the unfamiliar territory of the new curricula, nurse educators are expected to grasp the complex philosophical concepts and translate them into actions in the classroom or clinical setting (Diekelmann, 1989; Bevis, 1989; Oiler Boyd, 1988; Allen, 1990).

Paradigm Shift in Nursing Education

The outcome of a successful revolution is a shift in the way that the world is seen (Kuhn, 1970). A successful political revolution changes the structures of society. A successful scientific revolution changes the way scientists view both a particular phenomenon and the development of knowledge. A successful revolution in education changes the way teaching and learning occurs.

Thomas Kuhn (1970) coined the term "paradigm", defined as "universally recognized scientific achievements that for a time provide model problems and solutions to a community of practitioners" (p. viii). Two characteristics of paradigms are that they "attract an enduring group of adherents away from competing

modes of scientific activities" (p. 10) and at the same time they are "sufficiently open-ended to leave all sorts of problems for the redefined group of practitioners to resolve" (p. 10). In elaborating on this understanding, Kuhn (1970) says that "some accepted examples of actual scientific practice..... provide models from which spring particular coherent traditions of scientific research" (p. 10). A scientific discipline that is sufficiently mature to have acquired a paradigm is a fairly well-developed field. A paradigm of any given specialty can be characterized by "a set of recurrent and quasi-standard illustrations of various theories" (Kuhn, 1970, p. 43). A student of the discipline builds on their knowledge of the field by studying these paradigms. The paradigms allow scientists to communicate in a consistent manner so that their use of words and descriptions of events means the same thing to each other. Considering this definition and these characteristics, the transformation in nursing education from the behaviourist, objective-driven curriculum, to the humanistic, individualistic mode of operation can be considered a major paradigm shift.

A major deviation in thinking, or a paradigm shift, has a significant effect on those professionals working in the field. Kuhn (1970) describes the effect of a paradigm shift on a group of scientists:

> When, in the development of a natural science, an individual or group first produces a synthesis able to attract most of the next generation's practitioners, the older schools gradually disappear. In part their disappearance is caused by their member's conversion to the new paradigm. But there are always some men who cling to one or another of the older views, and they are simply read out of the profession, which thereafter ignores their work. The new paradigm implies a new and more rigid definition of the field. (p. 18).

It is the revolutionary experience of moving from one paradigm to another in nursing education that is the focus of this proposed research. Understanding the process of paradigm shift among faculty members, with its accompanying role transition and restructuring of beliefs and values, will ease the change for others who are yet to commit to the new paradigm.

Research Question

The research question to be answered in the proposed research study is: What is the experience of nurse educators who teach in nursing education programs that are in the process of redefining themselves because of a major paradigm shift in the curriculum?

Definition of Terms

Nurse Educators

Nurse educators are persons employed full time by an educational institution to teach nursing students enroled in a baccalaureate or diploma nursing education program.

Paradigm Shift

Movement from a traditionally held position to a position that is tradition-shattering constitutes a paradigm shift (Kuhn, 1970).

Nursing Education

Nursing education is the total composite of experiences that happen to an individual as a result of having joined a program of study that will lead, if successfully completed, to a diploma in nursing.

Curriculum

Curriculum is defined as "the interactions and transactions that occur between and among students and teachers with the intent that learning occur" (Bevis & Watson, 1989, p. 5).

Conceptual Framework

The conceptual framework chosen to guide this research evolves from Leininger's Sunrise Model and the

theory of "Cultural Care Diversity and Universality" (1991). According to Leininger, "Culture refers to the learned, shared, and transmitted values, beliefs, norms, and lifeways of a particular group that guides their thinking, decisions, and actions in patterned ways" (p. 47). Leininger's definition of a culture allows for nursing faculty engaged in a paradigm shift to be considered a cultural entity and thus they can be studied according to the constructs of this model.

Transcultural Models for Nursing and Health Care Systems

Early in her work, Leininger developed two conceptual frameworks which guided her research. Features of both frameworks are useful to consider. The first she entitles "A Conceptual and Theoretical Model for Transcultural Nursing Theories and Practice" (Leininger, 1978). In reference to this, she states "The theory behind this model is that the focus of transcultural nursing is caring behaviour, processes and intervention modalities...caring is the central unifying concept and essence of nursing theory and practice" (1978, p.40). Caring is also a key concept in the curricula that are currently being developed as

a result of the paradigm shift.

The second model, "A Transcultural Conceptual Model to Study and Analyze Health Care Systems" was developed to guide Leininger in studies of various cultures directed towards obtaining an understanding of their health-illness systems. Components of the model that make it particularly useful include the examination of major social and cultural factors, as well as examining the social meaning and function contained within the roles of the various health care workers (Leininger, 1978). It is this second model from which the current "Sunrise Model" seems to be most directly derived.

Leininger (1978) also refers to the idea of "cultural change" in developing her transcultural theory for analysis of health care systems. Two processes are identified through which cultural change occurs: those that are specific to the cultures that are changing, and those that generally guide the change process in any culture. By allowing for a look at the process of change within a culture, the utility of this conceptual framework to guide the research of paradigm shift, or major change, within the culture of a group

of nurse educators is clear.

The Sunrise Model

The most current model, the Sunrise Model (Appendix A), has been in development over the last three decades and has the purpose of showing the integration of the major and interrelated components of Leininger's emerging theory (1988). Leininger says of the model: "Essentially, the model helps the researcher envision a cultural world of different life forces or influencers on human conditions which need to be considered to discover human care in its fullest ways" (1991, p. 50). Leininger has expressed many of her earlier beliefs in the development of the Sunrise Model. For example, Leininger (1988) maintains the position that caring is a distinct concept that remains at the core of nursing and guides all nursing practice.

The Sunrise Model depicts three key components of cultural care. The first comprises Cultural and Social Structure Dimensions with emphasis on the social structure of the culture. Systems that must be examined in relation to their connection with the health care system include the political, economic, social, cultural, educational, and technological

systems (1978). The cultural and social structure can be composed of individuals, families, groups, and institutions.

The second major component of the model is the concept of Diverse Health Systems. There are two main categories of Health Systems, those being Folk Systems and Professional Systems. Folk Systems are defined as "culturally learned and transmitted, indigenous (or traditional), folk (home based) knowledge and skills used to provide assistive, supportive, enabling, or facilitative acts toward or for another individual, group, or institution with evident or anticipated needs" (Leininger, 1991, p.48). Professional Systems are defined as "formally taught, learned, and transmitted professional...knowledge and practice skills that prevail in professional institutions usually with multidisciplinary personnel to serve consumers" (Leininger, 1991, p.48). Both systems have a direct influence on and are influenced by nursing.

The third component of the model is included to ensure that culturally congruent judgements, decisions and actions are taken. The three modes which provide this guidance are:

1) cultural care preservation and/or maintenance;

2) cultural care accommodation and/or negotiation;

3) cultural care repatterning or restructuring.

Leininger explains that:

> the nurse grounded in culture care knowledge would plan and make decisions with clients with respect to these three modes of action or decision which was predicted to be in accord with the care data obtained from findings in the upper part of the model (1991, p. 42).

If nurse educators who are undergoing a paradigm shift in a school of nursing are regarded as a cultural entity, Leininger's theories of culture are applicable to the proposed research. For example, the study of the experience of nurse educators who are undergoing a paradigm shift in curricula should, according to Leininger's Sunrise Model, include consideration of how nurse educators ensure that culturally congruent decisions are made in the curriculum change. When looking at the process of the paradigm shift, both the specific and the general processes guiding the change should be considered. Along with the obvious educational factors, political, economic, social, cultural and technological systems should be considered. Influences analogous to the "Folk Systems" should be looked for, as well as those that occur via

the more obvious "Professional Systems".

Significance of the Study

Experiencing any change is difficult and challenging. When the change is as major as moving from traditionally held views to revolutionary ways of being, the transition can be expected to be very disruptive to the individuals involved and to the environment within which they operate. The curricular revolution in nursing education is currently in its infancy but it can be anticipated that it will grow quickly, with many educational institutions world-wide adopting the new paradigm. Obtaining an understanding of the experience of a paradigm shift will lessen the trauma for those educators destined to undergo this transition in the future. As well, assisting nurse educators to understand and analyze the experience of a paradigm shift may enable them to anticipate the needs of nursing students who will also be exposed to a new paradigm.

Overview of Thesis Content

This thesis consists of five chapters. This introductory chapter provides background information that is necessary to understand the problem to be

researched, followed by a statement of the problem. The terms that are central to the research question are defined and the conceptual framework is presented. The proposed study's contribution to nursing knowledge is explained.

Chapter Two consists of a review of the literature, relevant to the research question. The literature review will be presented in accordance with three major conceptual constructs; change, paradigm shift and curriculum revolution. Chapter Three includes a description of the research design. The research findings will be presented in Chapter Four. A discussion of the research findings and the implications of the findings for nursing education, research and practice will be discussed in Chapter Five. Chapter Five will also contain a summary and conclusions of the research.

CHAPTER TWO

Review of the Literature

According to the tenets of Leininger's Sunrise Model and theory of Cultural Care Diversity and Universality (1991), a faculty member's experience of a paradigm shift can be understood in the context of cultural change and the strategies used to adapt to this change. The two most relevant concepts at the core of this study are that of change as experienced in a paradigm shift and curriculum revolution. These concepts were explored in the literature and defined in nursing education.

A selected review of the literature was conducted to determine the scope of information related to paradigm shifts and curriculum revolution in the nursing and in the general education literature. Theoretical presentations and research studies that helped to define the concepts and that provide insight into the process of paradigm shift and curriculum revolution were considered for inclusion. Since little literature in these areas could be located, all related literature will be presented.

Change

As the concept of paradigm shift is grounded in the work of Kuhn, change theory is grounded in the work of Kurt Lewin (1951). Lewin identified three stages in the process of change: unfreezing the present, moving to a new level, and refreezing on that new level. In the stage of unfreezing, the motivation to create some sort of change occurs. A problem or a better way of accomplishing a task is recognized. According to Lewin, there are three motivational forces that cause change. These are lack of confirmation or disconfirmation, meaning that expectations have not been met; induction of guilt-anxiety, meaning the feeling of discomfort about some action or lack of action; or creation of psychologic safety, meaning that a former obstacle to the change has been removed. The second stage of change is characterized by a "shaking up" of the status quo with a resulting disequilibrium. Movement to establish a new equilibrium occurs. It is in this stage that new responses to the change are developed, based on collected information that clarifies and identifies the problem. The problem is seen from a new perspective. The third stage of

change, refreezing, occurs when the new changes are integrated and stabilized.

Part of Lewin's theory of change includes the concepts of driving forces and restraining forces. Driving forces facilitate the process of change and restraining forces impede this process. When driving and restraining forces are equal, no change occurs. However, when the strength of one force is greater than that of the other, the change will proceed.

Lewin's theory of change has been particularly useful in social science and humanities research. Change is usually depicted as a gradual process that can be managed in a controlled manner. While this understanding of change describes a concept closely related to paradigm shift, the two differ fundamentally. According to Kuhn (1970), paradigm shift describes a change on the magnitude of a revolution. An implosion occurs within the culture, causing change that is neither gradual, predictable, or easily managed. While helpful in supplying insight into the experience of major change, the literature on the change process is of limited use in providing insight into the experiences of those individuals who

undergo a paradigm shift.

Paradigm Shift

A sudden momentous personal change in world view, entailing a complete shift in beliefs and values, can be considered to be a paradigm shift. The pivotal work on the concept of paradigm shift was Thomas Kuhn's 1962 publication of "The Structure of Scientific Revolutions". The second edition of this work was published in 1970. This highly insightful work by a philosopher of science describes both the concepts of scientific revolution and paradigm shift in a manner that can be easily related to other disciplines. From Kuhn's descriptions, parallels can be drawn between the paradigm shifts which occur in scientific communities and the current revolution that is taking place in nursing education communities.

Kuhn (1970) describes a paradigm shift as being precipitated by the presence of certain occurrences in the field of study. These occurrences can be of two forms. The first presentation is as an anomaly which presents itself as a result of research conducted in the traditional paradigm, such as occurred in the discovery of oxygen or x-rays. The appearance of an

anomaly is not enough in itself to result in a rejection of the old paradigm. The discovery of anomalies can help to precipitate a crisis or can augment a crisis that is already present. The second presentation is as a crisis which results from discoveries that shake the roots of scientific pursuit, such as theories presented by Copernicus in the area of astronomy or by Newton or Einstein in the area of physics. The crisis in turn precipitates the necessity for extraordinary science that results in the appearance of a new paradigm that accounts for the anomaly.

Traditional science reacts in predictable ways to the emergence of novel theories. Kuhn describes the process as follows:

> it is a reconstruction of the field from new fundamentals, a reconstruction that changes some of the field's most elementary theoretical generalizations as well many of its paradigm methods and applications. During the transition period there will be a large but never complete overlap between the problems that can be solved by the old and by the new paradigm. But there will also be a decisive difference in the modes of solution. When the transition is complete, the profession will have changed its view of the field, its methods, and its goals (1970, p.85).

This response to crisis is a scientific revolution that occurs via a paradigm shift. A small portion of

the community identifies that "an existing paradigm has ceased to function adequately in the exploration of an aspect of nature to which that paradigm itself had previously led the way" (Kuhn, 1970, p.92). This is similar to the response in a political revolution.

Kuhn (1970) provides valuable insights about how the lives of those involved in the paradigm shift are affected. The transition between one paradigm and another may take a great deal of time. As the transition proceeds, the world itself does not change, but the way in which it is perceived is dramatically altered. "The proponents of competing paradigms practice their trades in different worlds" (Kuhn, 1970, p.150). During this time, communication between the two worlds is, at best, only partial.

Kuhn attempts to address the question of how conversion to the new paradigm is induced or resisted, but finds that "our question is a new one, demanding a sort of study that has not previously been undertaken" (1970, p.152). He refers to the discussion of crises and states that a powerful inducer for change is a paradigm's claim to solve crisis-provoking problems; however, this is usually not enough in itself. An

incentive to adopt a new paradigm may be "arguments that appeal to the individual's sense of the appropriate or the aesthetic; the new theory is said to be "neater", "more suitable", or "simpler" than the old" (Kuhn, 1970, p.154). Another factor for consideration is an educated guess as to which of the two paradigms is the best candidate to support the activities of future theorists and researchers. While these factors may influence an individual's decision to move from one paradigm to another, sometimes it is simply necessary to make a "leap of faith".

Kuhn's (1970) work makes substantial contributions to the understanding of radical momentous change. However, there are those who critique his work. Perhaps the biggest problem lies in his inconsistent use of the term "paradigm". Masterman (1970) has identified 21 different ways in which Kuhn uses the term. Kuhn (1970) replied to the criticism by saying that most of the differences are largely stylistic, but does acknowledge that on further analysis he can identify two distinct understandings implied by the term. Tanner (1990), in commenting on these anomalies, says that "one fairly consistent usage is that of a

world view, a way of understanding a phenomenon that is implicitly or explicitly agreed to by a community of scholars" (p. 296). It is in this context that the term is considered in this research.

Also of interest to nurse researchers is that criticism has been levelled at Kuhn for his reference to tacit knowledge and intuition as a means of developing scientific knowledge. Kuhn's (1970) response to this criticism reads much like Benner and Tanner's (1987) work on the same subject.

Paradigm Shift In Nursing Education

Little could be found in the nursing literature that relates directly to the process of paradigm shift in nursing education. This likely reflects the newness of the paradigm shift currently occurring within the field. Many nursing programs are in the process of adopting revolutional educational ideas within their curricula. Sufficient time has not yet passed to allow research to be completed and published.

One author, Hays (1994), discusses the paradigm shift in relation to community health nursing. It is unclear if Hays is addressing this issue as an armchair theorist, or as a nursing faculty member who has

directly experienced a paradigm shift. Hays has combed the theoretical literature and consolidated from it six constructs about what it means to teach in the new paradigm. Insights into faculty attitudes and behaviours needed to teach in the new paradigm can be found within these constructs: i.e., teaching must be congruent with a philosophy of emancipation; teaching occurs through authentic relationships between faculty and students; students must be socialized to the normative value of caring; faculty must revise their understanding of what it means to teach; a student's learning is enhanced through confirmation of the self as a knower; and faculty have to share the process of thinking, knowing, and learning with the student. In order to teach successfully in the new paradigm, Hays proposes several requisites for faculty: teachers must clearly understand the assumptions and themes of the paradigm; teachers must examine current patterns of teaching in order to assess their compatibility with the new paradigm; teachers must believe that the new paradigm will work; and faculty must experience a caring community, in which they feel connected to each other and to students.

Paterson and Bramadat (1992) describe the process of implementing a paradigm shift in clinical education. They developed and put into practice a novel way of approaching clinical education, based on the philosophical constructs of phenomenology and critical social theory and the theoretical work of Bevis and Watson (1989) and Diekelmann (1990). The resulting model developed by Paterson and Bramadat is called the "Growth Model of Clinical Education". The basic constructs of the Growth Model are: caring, learning, participation, and reflection. Students in this model of nursing education assume varying degrees of control over their clinical education, increasing their level of independence as they proceed through the program.

Paterson and Bramadat (1992) discuss their personal experience as faculty in a baccalaureate nursing program implementing a new model of clinical teaching and share insights useful to others considering a similar move. They describe the process of change as challenging, associated with losses and grief, and emancipatory. They warn other educators of some of the pitfalls they discovered that were inherent in the change process. These included: (1) essential

communication regarding the curriculum change with co-workers and nursing staff was difficult to arrange and, as a consequence, some key players had insufficient or faulty understandings of the paradigm shift; (2) some faculty and staff were reluctant to abandon their comfortable traditional paradigm; (3) the amount of time required by those developing new courses in the new paradigm to understand the new philosophies had been underestimated, resulting in incomplete implementation of the new paradigm in teaching practices; and (4) students in the curriculum expressed concerns about being the "guinea pigs" of the clinical courses.

Paradigm Shift in Educational Settings

Few studies were located in the educational literature that have followed up on Kuhn's observation that more work is needed to address the process inherent in adoption of a paradigm shift. One related study examines the process of a group of faculty involved in implementing educational innovation within an undergraduate teacher education curriculum. Patriarca and Buchmann (1983) examined the process of substantive curriculum change in an attempt to identify

the stages involved in the process and to identify any changes in programme goals that occur as the process unfolds. Their rationale for examining these parameters is that while the potential for innovation is present when a major change occurs, this is not necessarily guaranteed. They attempted to find predictors for successful change. Four stages of the paradigm shift experience were identified from their research: concept clarification; course development; programme design; and bureaucratic approval. Several themes emerged under the overall title of "complicating the complex". The theme of "clouds of ideas" describes the process that occurred when the conceptual questions were discussed. Beliefs and attitudes were discussed and, from these, new questions and ideas arose. The process continued without the players ever attending to the main purpose of the discussion; clarifying the concepts. The theme of "growth as addition" describes the process of developing curricular content and ideas. New content was simply added to the preexisting curriculum because the traditional attitudes were held to be sacrosanct by the players. The end result of the two year process was that the program goals were not

met because the substantive issues were never properly considered. The authors postulate a reason for this as "our fantasies and desires overwhelm us. We lack not intelligence or will-power, but the ability to step back from ourselves, reflect, attend to our own feelings and the world, and hold our attention steady" (1983, p. 420).

While the study by Patriarca and Buchmann (1983) was generally well conceived, some limitations must be considered. The conceptual framework for the research lacks clarity. The authors acknowledge the limitations of their primary data source, written documentation. They state that this method of data collection forced a greater reliance than probably should have been on the supplementary data that was also collected. Another limitation is that curriculum changes before 1988 did not involve paradigm shifts; they merely entailed re-structuring and re-naming of components of curricula (Diekelmann, 1990). When the aforementioned factors are accounted for, the findings of this study cannot be assumed to relate to the current curriculum revolution in nursing education.

In a similar vein, Fahy (1985) examined instructor

attitudes affecting adoption of instructional innovations. His interest in the topic stemmed from his observation that despite the many voices calling for fundamental reform in education, there are many reports of teachers and educational systems as a whole that do not embrace the new vision. His quest was to examine what is being resisted. From results obtained through a questionnaire completed by 37 instructors, Fahy identified a fundamental dichotomy in instructor attitudes that might also be applicable to the paradigm shift in nursing education. Instructors acknowledge that their adult educational world is changing radically, that they need to keep abreast of the changes, and that they are key players in this process of change. However, they remain unconvinced that the changes will result in any appreciable difference in student learning as compared to their current method of instruction. Fahy summarized these findings by saying "instructor resistance to change is not monolithic or arbitrary, but that it is often based on specific assumptions and concepts, or may arise from identifiable gaps in policy, communications, or training" (1985, p. 76).

While Fahy's research is useful in providing some groundwork for the present research, some limitations must be recognized. Data were collected through the use of a questionnaire and by interviews. While Fahy says in the abstract that validation procedures were instituted for interview protocols and questionnaire results, it appears that the validity and reliability of the questionnaire was not ascertained before it was used. The sample population of 37 completing the questionnaire was small and no mention was made of how the individuals were selected. On the positive side, the questionnaire was developed as a result of individual interviews conducted with fourteen instructors and administrators. An expert panel was assembled after the data were analyzed to clarify some problematic questionnaire results. The need for this may have been prevented by initially ensuring the reliability and validity of the questionnaire. The reader of this research report would have been greatly assisted by presentation of the results in a table format.

A more recent example of paradigm shift that seems to parallel the process that nursing education is

currently undergoing is found in a discussion of changes proposed in the teaching of reading/writing. Monson and Pahl describe the revolution in this field as follows:

> Whole language involves a fundamental change in a teacher's belief system about the culture of the classroom; this reconceptualization is at the core of the controversy surrounding the teaching of reading and writing...We have characterized this change as a paradigm shift from transmission--teachers transmitting knowledge to student--to transaction--students engaging in a transaction between what is known and what is unknown (1991, p. 51).

The movement towards a transaction model is "creating a ruckus because it is pushing against 100-year old assumptions about teaching; whole language requires a new set of assumptions about learning" (1991, p.52). In effecting the paradigm shift, Monson and Pahl observe that

> A paradigm shift of this magnitude is no easy feat, particularly if one has experienced success with the transmission belief system and practices. For practitioners, it means breaking down the prevailing norms of isolation and control and replacing them with the new norms of collaboration and responsibility (1991, p. 53).

Monson and Pahl suggest that a way to accomplish this is to shift the focus of staff development from the traditional "corrective orientation" to a more developmental "growth orientation", paralleling the

paradigm shift in language education. Some assumptions of this model are that learning is a process of meaning to make and problem-solving, and that learning is, in large part, self-directed.

Paradigm shifts within the educational system are mentioned in more general ways by several authors. Spector (1993) described the relationship between the paradigm shift that is occurring in society and the paradigm shift that needs to occur in education. The paradigm shift occurring in society is identified by Toffler (1990) as being a shift in power, with knowledge being "the highest quality, most versatile, and the most coveted form of power, thereby placing schools in the limelight of society" (Spector, 1993, p. 10). As well as power shifts, Spector identified a new recognition of the utility and distinctive qualities of the artistic mind, or creativity, as compared to the scientific mind. Creativity plays a significant role in the changes that have occurred in science as well as those one would expect in the arts. Spector says that

> This shifting paradigm in American society fits Kuhn's model (1970) for how paradigm shifts in scientific thinking occur, namely, the dramatic changes precipitated by advances in science and technology and the subsequent emergence of the new societal paradigm focused attention on the

anomalies in the educational enterprise (p. 10).

Cherem (1990) investigated paradigm shifts in the world of adult education. Cherem described the shift as being one in which adult education is moving from being considered "night school" for various purposes such as literacy training or vocation training, to a position of necessity for all adults who must maintain currency in this rapidly changing world. Cherem added to the understanding of "paradigm shift" by saying that "It is a leap, not an incremental evolution. Although those of us accepting the shift may accommodate, and then assimilate, the change little by little, piece-by-piece, the paradigm shift itself is a total gestalt shift" (1990, p.23). Using Kuhn's (1970) descriptors of the process of paradigm shift, she identified the "anomalies" as being that learning is beginning to be perceived as a process and not merely as content coverage. This makes coverage of a body of knowledge impossible due to its increased volume. Other anomalies Cherem identified are the exponential growth of information, changing demographics, and the emergence of a philosophy of adults' continuing development.

The personal journeys of educators through paradigm shifts are documented in the literature. One such documentation is that of Elliot Eisner's radical shift in thinking during the course of his career. Eisner's transition from the traditional scientific paradigm to a general qualitative paradigm, and then to his recent arrival as a critical theorist is revealed in his many writings. His biographer, Sharon Andrews, warns that "Trying to look at a paradigm shift is like trying to see the earth turning. We need the perspective of distance" (1989, p. 107).

Solsken (1993), like Eisner, has travelled through many paradigms during her teaching career, a journey that she describes in "The Paradigm Misfit Blues". Solsken also began in the positivist paradigm and is currently situated within the critical theory paradigm. Solsken sees this experience as moving herself closer to a more useful framework for her research; that of the individual within society. Solsken expresses concern with the labelling of various paradigms. Solsken's first objection to the use of labels is that it gives "momentary stability and coherence to what is dynamic, contradictory, and historical" (p. 319).

Solsken's second objection, which can be equally well applied to any labels, is that they put a distance between individual and the lived reality. As with most abstract concepts, there is also the danger of taking the paradigm and restructuring it to fit personal intentions. Solsken says of her research that there is a danger to search for the perfect paradigm instead of focusing primarily on relations with other people; the main focus of any of her work.

Paradigm Shift in Related Institutions

McLaughlin and Kaluzny (1990) discuss the paradigm shift that is occurring in some health care institutions. In this paradigm shift, the method of health care management is described as moving from "quality assurance" to "total quality management". The two approaches to management of health care are conceptually different and have a different set of assumptions. The traditional approach to health care management is by means of quality assurance, a process that is initiated by administrators who identify a set of outcomes that they deem as important. A search is then conducted for evidence that the outcomes are being met to a certain preset minimal standard. If the

outcomes are not met satisfactorily, the area staff are asked to improve the quality of care that they provide. In contrast, total quality management is a system by which the users of the system set the criteria that measures the efficacy of the system. The responsibility for meeting the set criteria rests with the entire health care team, rather than individual players. All members of the team are considered to be making equally important contributions. If the system does not measure up, the group collectively is responsible, rather than individuals within the group. Management is directed to place heavy weight on suggestions for improvement that come from the "grass roots". McLaughlin and Kaluzny clearly identify and evaluate the potential areas of conflict between the two organizational models. The authors suggest that a way to mediate these sources of conflict are to identify them early and develop action guidelines that will minimize the effects of the conflict. The preparation for change in this paradigm shift includes such actions as clear re-definition of key concepts such as the role of the professional, the corporate culture, the role of management; empowerment of staff;

developing mentoring capacity, and setting realistic time expectations. The author's experiences of a paradigm shift in a health care setting offers insights into experiences that may occur in a parallel fashion as a paradigm shift progresses within an educational institution.

Curriculum Revolution

According to Kuhn (1970), a scientific revolution occurs when a new paradigm is presented which provides explanations for occurrences which are unanswerable in the present tradition. A radical shift in beliefs, values, and assumptions that creates a paradigm shift in nursing education must then be followed by a plan that will assist educators to integrate the ideas inherent in the conceptual shift into the education environment. The paradigm shift in nursing education has resulted in a "curriculum revolution".

Kuhn (1970) defines the concept of a scientific revolution as being "those non-cumulative developmental episodes in which an older paradigm is replaced in whole or in part by an incompatible new one" (p. 92). Kuhn further describes scientific revolutions as being

> inaugurated by a growing sense, again often restricted to a narrow subdivision of the scientific community, that an existing paradigm has ceased to function adequately in the exploration of an aspect of nature to which that paradigm itself had previously led the way (1970, p. 92).

Curriculum Revolution in Nursing Education

Tanner (1990) traces the inauguration of the revolution in nursing education to the year 1986 when a group of nurse education gathered together "to consider the issues in nursing education and the changes necessary to launch nursing education into the next century" (p. 295). At this time, the movement was called the "Curriculum Revolution". Subsequently, each year the National Conference on Nursing Education focused on this topic. These conferences have resulted in the identification of the major themes and the core values of the curriculum revolution, as reported by Tanner (1990). They are: social responsibility; the centrality of caring; an interpretive stance, meaning the unveiling and understanding of "beliefs and assumptions that guide our practices, but which may be covered over by formal theories, rules or procedures" (p. 297); theoretical pluralism; and the primacy of the teacher-student relationship.

Much has been written since 1986 in an attempt to characterize the revolution. de Tornyay attributes the paradigm shift to "decades of rigidly prescribed nursing curricula, preconceived ideas about the ways students learn and should be taught, and the repression of creativity" (1990, p.292). The other impetus towards change has been the changing social climate towards health instead of illness, and the curbing of health care costs. de Tornyay sees the major philosophical shift as being one of empowering the recipient of care and says "nursing students must experience empowering experiences firsthand to be able to provide this kind of care to their clients" (1990, p. 292). de Tornyay captures the spirit of the revolution by saying:

> The curriculum revolution is about teacher-student partnerships. It is about flexibility and individual differences in how and what one learns. It is about instructors spending their time doing what no text, no program of learning, no computer, or learning resource can accomplish: developing the mind of the individual student through intimate give and take based on sound knowledge and understanding (p. 293).

In a similar theme, Moccia (1990) describes her vision of nursing education within the curriculum revolution as being "to create and extend an

educational community focused not on reproducing relationships of convenience, but on transforming existing power relationships" (p. 308).

For Diekelmann, (1990) the curriculum revolution is "conversations among students, teachers, and clinicians as we seek to transform health care, and the institutions in which we practice nursing, teaching, and research" (p. 300). Diekelmann proposes a new curricular model to help structure the new mode of teaching, "Curriculum as Dialogue and Meaning", which she says has similarities to both the critical and phenomenologic models. The basis of the model is a restructuring of the relationship between knowledge and skill acquisition. "The curriculum is a dialogue among teachers, practitioners, and students on what will constitute the knowledge in the nursing curriculum and what role experience will play in the curriculum" (Diekelmann, 1988, p. 144). Diekelmann defines dialogue as "being-in-the-world with others through language and experience" (p. 145). For Diekelmann, the revolution is

> about creating communities of care that empower and liberate us. It is about a form of resoluteness in which we enter the clearing struggling to transform our cultural practices.

> As nurses, grounded in a cultural practice of caring that values human connectedness, we see clearly the present political and economic threats to our country and the world (1990, p. 301).

One of the strongest voices to be heard writing in the "curriculum revolution" field is that of Em Bevis. She has authored and co-authored significant books and articles that define and explain her conceptualization of the revolution. Bevis attributes the problems with the current nursing educational system, that have led to the paradigm shift, to the rigid implementation of the Tylerian model of curriculum development. Bevis says that the Tylerian model leads to training, not education.

The differences in the philosophies of Bevis and Tyler become apparent when examining the conceptions of each of the theorists. For Tyler (1949), education is a "process of changing behaviour" (p. 5). In contrast, Bevis (1989) defines education as "that which enriches the learner in the syntactical, contextual, and inquiry categories of learning and/or helps the learner grow in maturity" (p. 73). In expanding on this view, Bevis proposes six types of learning: item learning; directive learning; rational learning; syntactical learning; contextual learning; and inquiry learning.

Bevis postulates that by learning solely in the first three modes, a technical nurse is mass produced. By adding the last three dimensions of learning, a professional nurse is educated. In providing for learning that occurs in the largely ignored syntactical, contextual, and inquisitive forms, the student's education proceeds in a manner that is vastly different from the traditional, necessitating a significant change in the role of the educator. This change occurs as a result of the changing philosophical outlook that results from adding the three additional dimensions to learning. Bevis elaborates on the difference by stating:

> To mount our revolution we must dispense with the view of the teacher as an information-giver either in the classroom or in the practicum. The teacher's main purpose, beyond the minimal activity of insuring safely, is to provide the climate, the structure, and the dialogue that promotes praxis...The teacher's role is to nurture the learner (1988, p. 46).

Rather than the traditional oppressive curricula, Bevis defines an emancipatory curriculum that is

> solidly egalitarian. It is from a philosophical context that provides that general directions be conjointly determined and that content and teaching strategies must be selected that conform to criteria that support critical consciousness, liberation, responsibility to and for community, counter-hegemony, and critical-thinking

scholarship (1990, p. 328).

For Tyler (1949), the curriculum is composed of learning experiences, which are defined as "the interaction between the learner and the external conditions in the environment to which he can react" (p. 63). Learning experiences are necessary to allow the learner to practise the necessary behaviours by which learning occurs. In contrast, Bevis (1989) talks about a "learning episode" which is "a natural grouping of events in which students engage in the process of acquiring insights, seeing patterns, finding meanings and significance, seeking balance and wholeness, and making judgements or developing skills" (p. 223).

In the on-going discussion of the curriculum revolution, Bevis (1989) identifies some themes which most educators working in the area agree upon: the curriculum as teacher-student interactions or dialogue; curriculum that stresses syntactical learning; curriculum as critical and creative thinking; reality based learning or being-in-the-world; practicum experiences; phenomenological teaching approaches; and caring as the moral imperative of nursing education. The resulting graduates of the revolutionary curriculum

will have characteristics of professionals, "meaning that they will be creative, critical thinkers, ethically astute, professionally autonomous, independent, and collegial in their relationships" (1989, p. 131). The hope is that resulting program graduates will be able to assist in the transformation of the health care system and eventually in many of our social and political systems.

In summary, from the review of the literature it can be seen that, through Kuhn's (1970) work, a good understanding of paradigm shift and curriculum revolution in the arena of the hard sciences is available. Much of the theoretical work in nursing education describes a process of paradigm shift that bears many resemblances to the process that Kuhn describes. There is a crisis that has precipitated the event (dissatisfaction with the Tylerian approach), and a reconstruction has occurred via the development of revolutionary curricula based on very different philosophical approaches. The crisis is largely precipitated by changes in society and the nursing culture, including the rapid changes in health care, the trend towards more mature learners, and the

improved educational preparation of nursing instructors who have increased exposure to differing philosophical outlooks. These changes in society and the nursing culture are coupled with an increased awareness of critical social theory and feminist thought. The result is a dramatic paradigm shift in nursing education. What is little discussed is the effect of the paradigm shift on the individuals involved. Beginning attempts have been made to implement a paradigm shift in nursing education and in elementary and secondary education. The process of implementation of a radically new curriculum has been described and some pitfalls identified. However, the individual's experience of a paradigm shift has not been investigated.

CHAPTER THREE

Research Methods

The Research Design

The research design chosen for this study was ethnography which literally means "portrait of a people" (Germain, 1986, p. 147). Ethnography belongs to the qualitative domain of research and was originally conceived and used by anthropologists in the 1920's. Sociologists later adopted this method of study. A central tenet of ethnography, reflecting its roots, is that "people's behaviour can only be understood in context" (Boyle, 1994, p.162). The context of people's behaviour is culture, the key component in the conceptual framework guiding the research.

There are characteristic features of ethnography that distinguish it from other forms of qualitative research methods, such as phenomenology and grounded theory. Atkinson and Hammersley (1994, p. 248) identify ethnography as

> forms of social research having a substantial number of the following features:
> - a strong emphasis on exploring the nature of particular social phenomena, rather than setting out to test hypotheses about them
> - a tendency to work primarily with 'unstructured'

> data, that is, data that have not ben coded at the point of data collection in terms of a closed set of analytic categories
> - investigation of a small number of cases...
> - analysis of data that involves explicit interpretation of the meanings and functions of human actions, the product of which mainly takes the form of verbal descriptions and explanations.

Two other characteristics of ethnography are important in understanding this research technique. The first is that, unlike other forms of research, researchers do not remove themselves from the situation that is being studied. As Germain states,

> The major ingredient is that one become part of the subculture being studied by physical association with the people in their setting... Through the essential methods of participant-observation and intensive interviewing of the members of the subculture, the researcher learns from informants the meaning they attach to activities, events, behaviours, (and) knowledge (1986, p.147).

The second characteristic is that ethnography is not a linear process in which all decisions about a study are made prior to beginning data collection and all analyses are undertaken once all of the data are collected. "Rather, ethnography is a dynamic, interactive-reactive approach to research.... Ethnographers must continually adapt their questions and plans to the local conditions of the setting as their studies progress" (Zaharlick and Green, 1991, p.

209).

More recently, ethnographic enquiry has found a place in many different disciplines. Muecke (1994, p.188) describes this process.

> The 1980's witnessed a renaissance of ethnography, taking this emblem of sociocultural anthropology into the realms of other social sciences, nursing and related health sciences, literature, agricultural development, and even policy making. In the process, ethnography has been transformed by anthropologists and nonanthropologists, has been applied to novel situations, and has reached new audiences.

As a result of adoption within different disciplines, the original form of socio-anthropological ethnography has been modified and many different classifications of ethnography now exist. Boyle (1994, p.171) has constructed four subgroups of processual ethnographies: classical or holistic ethnography; particularistic ethnography, of which focused ethnography is a member; cross-sectional ethnography; and ethnohistorical ethnography. This study was particularistic ethnography, and more specifically, focused ethnography. Particularistic ethnography is contrasted to holistic or classical ethnography in that instead of applying ethnographic methods to the study of an entire culture, the ethnographic, holistic

approach is used to study a social unit or group (Boyle, 1994). The term 'focused ethnography' was first used by Morse (cited in Boyle) "to describe the topic-oriented, small-group ethnographies found in the nursing literature" (p.172). Muecke offers her perceptions of focused ethnographic research as being:

> time-limited exploratory studies within a fairly discrete community or organization. They gather data primarily through selected episodes of participant observation, combined with unstructured and partially structured interviews. The number of key informants is limited; they are usually persons with a store of knowledge and experience relative to the problem or phenomenon of study, rather than persons with whom the ethnographer has developed a close, trusting relationship over time (1994, p.199).

Issues of Reliability, Validity, and Generalizability

Ethnography, belonging to the class of qualitative rather than quantitative research, is subject to many of the controversies that are raging about qualitative research. For example, those imbedded in quantitative methodology are concerned about the scientific rigor of the qualitative approach. Those supporting the merits of qualitative research argue that quantitative methods fail to capture the true nature of human social behaviour. They attribute this to two causes: studies are conducted in artificial settings; and meaning is

obtained only from that which is observable and measurable (Atkinson & Hammersley, 1994). While the discussion seems to have abated somewhat as qualitative research proves its value, the issues of validity, reliability, and generalizability remain important.

In quantitative research, scientific rigor is ensured through the mathematical approaches involved in sample selection and data analysis. In contrast, Sandelowski (1986) states that "The scientific approach to qualitative inquiry emphasizes the standardization of language, rules, and procedures for obtaining and analyzing data, for ensuring the replicability and validity of findings, and for presenting results" (p.28).

Qualitative research must ensure validity and reliability through different approaches. Although some researchers would argue that these quantitative terms cannot be applied to qualitative research, other writers support their use.

Germain (1993) states that the primary measurement of good ethnography is validity and defines validity as follows: "The test of validity in ethnography is how accurately the instrument (the researcher) captures

(measures) the observed reality and portrays this reality in the research report" (p. 262). Face validity is assured by choosing as informants individuals who have expert knowledge in the area under investigation. Content validity is ensured through reaching saturation and through verification with other experts. Internal validity is affected by sample selection bias, observer bias, accuracy in recording field notes, analytical accuracy, and bias in reporting (Germain). Omery (1988) suggests these errors may be attributable to the particular spatial location of the observer, the social skewing of reported opinion, or the particular cultural or societal alignment of the observer. Germain suggests that ways to enhance the internal validity or credibility of the study are to ensure the researchers direct and lengthy involvement in the cultural milieu, the selection of key informants, and the repeated testing of inferences until there is validation that meanings are shared. The researcher's biases in ethnography should be specifically stated.

External validity or generalizability is achieved when the research findings fit other contexts as judged

by readers, or when readers find the report meaningful in terms of their own experience (Omery, 1988). Suggestions for enhancing the likelihood of this occurring include the liberal use of thick description and verbatim quotations. Omery suggests that generalizability is limited to those sharing the same culture or participating in the same kinds of activities.

Reliability in the quantitative world is usually established through replication of the study. Since it is impossible to replicate an ethnographic study, reliability must be found in the consistent approaches of the researcher in collecting the data. Consistency can be ensured by having two or more observers observe and record the same event. Reliability is also enhanced by the asking of the same questions of different informants over a long period of time, obtaining the same information in a number of situations or seeking reasons for any discrepancies found, and by comparing and contrasting verbal and non-verbal behaviours (Germain, 1993; Mackenzie, 1994).

Other methods of ensuring rigor in qualitative research are suggested by Morse (1994). The leaving of

an "audit trail" by the researcher is important, so that the process by which conclusions have been reached can be retraced. Another suggestion is to verify the findings of the study with the informants. Muecke (1994) proposes six criteria for evaluating anthropologic ethnography: (1) the ethnography demystifies the people studied to the point of rendering their behaviour coherent to the reader; (2) the people described find it an honest and caring depiction of themselves in their situation; (3) the conceptual orientation of the ethnographer in constructing the ethnography is acknowledged and coherently linked to the study; (4) The relationship of the ethnographer to the people in the field is explicitly assessed for its influence on the information reported; (5) ethnographic depth is achieved through thick description; and (6) the narrative is competent literature.

In a provocative article, Liam Clarke (1992) poses warnings to qualitative researchers and questions the accuracy of their assumptions that issues of reliability and validity are addressed in qualitative research. Clarke's thesis is that language is rich in

meaning, and when an individual (researcher) attempts to interpret the language of another, mistakes can be easily made. Misunderstandings can occur when codes or abbreviations are used by the informant, such as those used by a particular occupational group. Misunderstandings can also occur because of concealed assumptions inherent in a particular word used. It then becomes important to take great care when any interpretation of data is called for. Ideally, the researcher should be a member of the professional group being researched, so abbreviations used have the same meaning to both subjects and researcher. Clarification of any areas of ambiguity with the subject through subsequent interviews and validation of results are ways to ensure accuracy of the data.

In this research, many checks were put into place to ensure the reliability and validity of the results and to enhance the general rigour of the research process. Criteria were set to ensure the participants were familiar with and involved in the phenomenon under investigation. These criteria were rigidly adhered to. The procedure for obtaining and analyzing the data was constant for all participants, although the questions

differed somewhat. Only one researcher was involved in the interviews, so that observer bias was reduced. Through the tape recording of the interviews, the accuracy of the data collected was enhanced. Accuracy of the data obtained was verified through face to face or telephone interviews with each participant. The researcher has been involved in the general cultural milieu of nursing education and also with the phenomenon under investigation, so errors of misinterpretation were minimal.

Ethical Issues

The ethnographic researcher must pay particular attention to ethical considerations in order to avoid harm to the individuals with whom the researcher is working. Germain (1986) proposes five ethical considerations: (1) informed consent, described by Fontana and Frey (1994) as the careful and truthful provision of information about the research; (2) the protection of privacy, anonymity, and confidentiality of members of the subculture during the period of data collection and at the time of publication of the report; (3) potential use of findings and power relationships among various levels of the study

population; (4) objectivity versus subjectivity with regard to selection, recording, and reporting phenomena; (5) intervention versus nonintervention in the activities of the subculture. In addition, Mackenzie (1994) writes that it is important to clearly state the researcher's relationship with informants at the outset of the research. An additional point is made by Fontana and Frey, that informants have the right to protection from harm, be it physical, emotional, or any other kind.

These ethical issues were considered and constraints were put into place to ensure that ethical parameters were not violated during the conduct of this research.

Sample Selection, Recruitment and Size

The informants for this research study were selected from a pool of applicants consisting of all students registered in graduate nursing education in the School of Nursing at the University of British Columbia, at either the master's or doctorate level. The informants were nursing instructors who had taught in a baccalaureate or diploma nursing education program for at least two years and who had participated in a

change of nursing educational curriculum from the traditional to the revolutionary paradigm.

Informants were recruited by placing a letter in the mail box of graduate students in the School of Nursing attending university during the summer session. The letter outlined the nature of the research, the criteria to be met for inclusion in the study, the time commitment involved, and assurance of adherence to ethical considerations (see Appendix B). When the prospective informant contacted the researcher, the study was further explained and the informant's eligibility for the study was determined. Following a screening interview, five female informants were considered to be good candidates and participated in the research.

Data Collection

Data for the research was collected by using the ethnographic interview, as defined and discussed by Spradley (1979). The length of interview was one hour for four of the informants and one and a half hours for one informant. The interviews were conducted at a place mutually convenient for the informants and the researcher. Both the informant's home and a room at

the School of Nursing were used. Prior to the start of the interview, any further clarification of the research project was provided and a consent for the interview was obtained from the informant (see Appendix C). The interviews were audio-taped with the consent of the informant.

Previously determined questions were asked of the initial informant. The questions were adapted for each of the succeeding interviews according to information previously obtained, as per the procedure outlined below. The informants always had the option of declining to answer any question, and of terminating the interview at any time. Following each interview, the tapes were transcribed by the researcher.

According to Germain (1993), the researcher will know that an adequate sample size has been reached when saturation and repetition of information occurs and consistent themes emerge. Germain (1993) says that "when no new data add to the emergent themes or patterns and no new dimensions or insights are identified that can shed light on the research question, the active fieldwork phase ends" (p.256). In this research, some themes that emerged from the first

two interviews were pursued in subsequent interviews and were found to be non-representational. Other themes discussed with all participants were found to be congruent with their experience. By the fifth interview, no new data was evident.

The data was verified as being accurate through discussion with each informant. These exchanges occurred either as a mini focus group involving two informants, or through individual telephone verification.

Data Analysis

An identifying feature of ethnographic research is that preliminary data analysis and data collection proceed concurrently (Germain, 1993). Germain (1993) states that "The ethnographer's cultural inferences... are working hypotheses that must be tested repeatedly until there is validation that people share a particular system of meanings" (p.256).

Data analysis consists of a search for patterns and for ideas that help explain the existence of the patterns (Boyle, 1994). The process, as explained by Mackenzie (1994), is one of data analysis leading to the development of hypotheses or propositions and the

subsequent testing of these hypothesized relationships through further data gathering and analysis. Through this process, the developing theory is either supported or challenged.

In this research, data analysis was accomplished by summarizing the research transcripts, then developing thematic categories for the summarized data. As the interviews progressed and the themes were explored, the categories were either retained or rejected. For themes that were retained, data supporting the concept was noted. Data supporting each theme was amalgamated and patterns of similarity were identified.

CHAPTER FOUR

Research Findings

In this chapter, data are presented that were obtained through the interviews of five research participants. The respondents provided information regarding their experience as faculty members during the time when they experienced a major paradigm shift while teaching in educational institutions. The five institutions are located throughout the province of British Columbia. One institution is a university/ college that offers a degree program with a diploma exit point; two institutions have unaffiliated diploma programs; and two institutions have programs that are affiliated with a major university. The research participants have varying amounts of experience in teaching in both old models and new paradigm models of nursing education, ranging from several months to several years. Since the transition from the old to the new paradigm did not occur overnight but was a more gradual process, it is impossible to quantify the time the participants spent teaching in each paradigm.

While many areas of commonalities in the participants' experience can be described, differing

viewpoints will also be outlined. The data will be presented according to the following categories: pre-paradigm shift; initiation into the new paradigm; affirming the philosophical perspective; and on-going development. Emerging themes will be identified under these classifications.

Pre-paradigm Shift

Characteristics of Early Teaching Experiences

An examination of the early teaching experience of the participants helps to understand their reactions to and involvement with the paradigm shift. From the outset of their teaching careers, several participants were forced to confront their preconceptions about teachers and learners. The participants described their initial teaching experiences as being "less than traditional", with learners who were older than the instructor, and learners who were more knowledgeable and had more nursing experience than the instructor. This led to their rapid realization that the traditional role of the teacher, as one who had all the knowledge and who was the expert, was "not going to work".

The participants stated they had varied reactions

as novice educators teaching within a behaviourist paradigm. Two participants identified an immediate dislike of teaching within the behaviourist paradigm. One described initiation into teaching as follows: "I very quickly got disillusioned with how we were approaching education and so, in terms of my own practice in the classroom, I shifted very quickly". Another described the early experience with the behaviourist paradigm as "not working for me". She stated that "it was like trying to fit round pegs into square holes". This instructor felt that teaching under the framework of the behaviourist curriculum was "not working for the students", that "it was not of any interest to them". A component common to several participants that facilitated making a paradigmatic shift involved taking risks in the classroom. This required that the participant moved away from the formal behaviourist curriculum while still working within this framework.

Two instructors described a more neutral experience with the behaviourist paradigm. Making a paradigm shift seemed to make sense for many reasons, but the emotional reaction experienced by the other two

participants undergoing a paradigm shift did not occur until later, if at all. One participant identified a rapidly changing world as the major impetus for a paradigm shift. According to this participant, changing health care needs are in evidence in a changing community, leading to changes in the practice arena. Other educational institutions are engaging in a paradigm shift, causing the faculty of other programs to feel "left behind" if they do not also make a similar shift. As well, the student population is changing towards older, more mature students who are seeking a second career. This necessitates a shift in relationship between the student and the instructor from the conception of the instructor as holding all the power to a more egalitarian partnership.

One participant, unlike the others, "bought into" the behaviourist paradigm immediately, thinking it was the best way to teach. Upon reflection, this self-described "highly behaviouralist" instructor perceived herself as having previously been a "very bad teacher" because, in the behaviourist paradigm, students were blamed for not learning or knowing something. Under these circumstances, the assumption was made that the

students were "bad students". Even though this participant had taken an adult education course during undergraduate studies, the principles of adult education were not applied in her teaching. The tenets of the behaviourist paradigm superseded those of adult education. Ongoing professional development enhanced her teaching skill and confidence. This led to her feeling that she was becoming a "better teacher" and had less self-involvement: "I didn't have this self esteem ego thing I had to protect by blaming students or staff".

Beginning of the Shift

The participants identified a number of complex and often interrelated factors that provided the impetus to move them towards a paradigm shift. These included exposure to new ideas through association with colleagues, some of whom were in the process of or had completed graduate education; their own previous learning experiences; and the influence of adult educational principles.

For four of the five participants, exposure to new ideas was a strong impetus to initiate a change in the individual's world view. For most participants,

exposure to these ideas occurred through personal or collegial involvement in graduate educational programs. One participant did not identify this as being the case. She described involvement in an educational curriculum that was behaviouralist "on paper" but, in fact, was focused on adult learning principles, such as emphasizing the individual learner by recognizing the value of past life experiences and recognizing differing learning styles. This caused an early programmatic shift to a group-oriented, student-driven process in teaching. This individual did not feel she experienced a true paradigm shift when the program moved to a humanistic, caring curriculum. Rather, she was buffered from experiencing the full effect of a paradigm shift by the previous curriculum.

> The people that started that curriculum were quite visionary already because it wasn't strongly based on behaviour, well, there were behavioural objectives in the course outlines, but I never really felt like I was teaching in a behaviouristic paradigm. I felt like I was teaching in an adult learning paradigm.

For one individual, the process of paradigm shift began when a colleague, who was a recent Master's graduate, formed a reading group and gave interested people copies of Peggy Chinn's "Peace and Power" upon

which to base discussion. Approximately three other people from the institution joined the instigator and the research participant in the study group.

For the participant, who was originally a behaviourist, the beginning of the paradigm shift occurred through a "chance conversation" with a colleague regarding the advantages of using student writing as a learning tool. This "opened some new doors" for the individual who then went on to explore the possible uses of this tool. This, in turn, led to her gathering information on teaching thinking and teaching learning, instead of focusing entirely on the teaching of content. As a result, she discovered the critical thinking movement and educational reform. This was the beginning of her personal paradigm shift. Dissatisfaction with her personal teaching grew as the participant became better informed about the potential of new paradigm ideas.

Two additional significant events occurred that fostered the paradigm shift. Colleagues with recent Master's degrees in education introduced the faculty to ideas of influential writers who challenge the traditional system. The faculty as a whole were

introduced to the work of Bevis (1989) and her ideas on curriculum revolution in nursing. These two events also parallel the experience related by other participants.

Two participants related that their previous educational experience as learners provided an impetus for making a paradigm shift as teachers. One described her experience in her undergraduate education where difficulties in writing multiple choice exams nearly led to failure within the program. This individual stated that "some faculty saw I was a good nurse so they were quite supportive; if they hadn't seen that, then I would have been out. They saw the individual". The other participant experienced an increased sensitivity to student's needs because of her unique needs as a student in a masters program. This led to an attempt to "level the playing field" by changing the power structures within nursing education.

Two of the participants describe the importance of having adult education courses in their background and how the principles of adult education were used as a "stepping stone" in the transition to the new paradigm. In fact, one participant felt compelled in the paradigm

shift to supplement her one undergraduate course in adult education with a master's degree in the same subject. This was found to be a useful, yet insufficient, way to assist in the task of developing a curriculum that conformed to the new paradigm. This realization resulted in her decision to undertake further education in nursing at the graduate level. This participant read the work of Bevis and Watson (1989), while at the same time developing an interest in critical thinking and philosophical issues. The accumulation of these approaches was a growing dissatisfaction with the content and medical physiological orientation of the current educational program and the way students were being evaluated.

Initiation into the New Paradigm

The Influence of the Few on the Many

All participants described the process of paradigm shift at their institutions as being strongly influenced by a small key group of individuals.

According to one participant, a growing awareness of the power of potential changes occurred during an on-going faculty study group. With the support of the study group, instructors initiated changes reflective

of a new philosophy in the respective courses that they were teaching. This individual described the experience of being asked to teach a "Professional" course. During preparation for teaching the course, she reviewed the behavioural objectives and course content and experienced great reluctance to teach in this prescribed, behaviourist manner any longer. She felt that the objectives were confining to the instructor in that they did not allow for any type of "free thinking". She believed that the objectives dictated content, but not the value or meaning of the content. Traditionally, the course was perceived to be a "slacker course" and attendance was very poor. In changing the dynamic of the course from one driven by a behaviourist philosophy to one centred around humanism and caring, phenomenology and feminism, the participant noted that the change in the students was "remarkable". While the students were somewhat reluctant to engage in these new ways of learning at first, attendance was excellent and the students "just flew". The participant felt that the content had "meaning" for the students, regardless of their preferred style of learning. She described a sense of pride in the

accomplishments of the students in this course. She stated that the new ways of teaching seemed to "fit really well with me" and that she had much more freedom. This participant described her role change in the paradigm shift as evolving from "being all-knowing omnipotent, autocratic, and very controlling" to being "a learner with the students".

Another participant described the journey of a few key individuals from different nursing programs who were able to make unique contributions towards the development of a curriculum based in the new paradigm for her school of nursing. She identified this process as a "terrific struggle", both personally and professionally, within the key group of people involved. She described the personal process as "sometimes I think of where I was and where I am now and the fight and the struggle". The professional process was characterized by saying "We fought and we struggled, she came over to my way of thinking a bit and I came over to her's a lot....so together we've come to this wonderful spot". This participant identified the "struggle" to exist largely between the visionary conceptualists and the visionary realists

"who try to keep people grounded on firm territory".

> Sometimes I was like, these guys have got their heads in the clouds and honest to God how do they think we're going to do all this and you really can't do this and what about the content?

Ideas were brought back to the home campus from this disparate group of individuals working across institutions. A different small core group of individuals became the first year instructors in the new curriculum. These first year instructors then became the "most committed" to the process out of necessity because they were going to be the first people who were teaching in the new paradigm.

One participant, working as a team leader for a small program, developed a curriculum reflective of a paradigm shift. This participant stated that "a couple of us" began working on a different approach to designing the curriculum and teaching in the clinical setting. Some new curriculum strategies were developed and the curriculum was rewritten. She described this process as one of "struggle, conflict and creating new knowledge and new ways of being". She had previously rejected teaching according to behavioural objectives because they "got down to such a level of minutiae that they missed the point... and could not cover every

contingency". Also, "they didn't capture the essence of what you were trying to teach". Although this individual was working as a part of a small team, significant ideas for change were largely self-proposed. This was because there was a gap in educational preparation between the team leader and the rest of the team. While the rest of the team were upgrading their education and were very supportive, the responsibility to develop the curriculum rested largely with the team leader. The participant described this group as "responding well to the new ideas because they were looking for themselves answers to their own discomfort. The vision was all kind of in the same direction". She believed that the group's commitment to a similar vision was largely due to the lucky circumstance that the faculty were hired by the person responsible for the curriculum change. One factor considered strongly in the hiring process was their congruency with the philosophical change anticipated for the new curriculum.

Affirming the Philosophical Perspective

A Continuum of Acceptance

According to the participants, moving from

initiation in the new paradigm to affirming the philosophical foundation is a pivotal step in developing acceptance of the new paradigm. This acceptance develops at different periods of time for different people and for various reasons. The participants stated that some people are never able to accept the philosophical ideas that underscore the new paradigm.

The participants concurred that taking the ideas of a small core group of individuals and transmitting them to an entire faculty group is an important component of making a successful paradigm shift. They stated that faculty experiencing a paradigm shift can be placed on a continuum of degrees of acceptance from total commitment in the old paradigm to total commitment in the new paradigm. Placement on the continuum at any point in time is not fixed. According to the participants, faculty are in a state of flux along the continuum but, for ease of conceptualization, can be classified into three main groups.

The first group consist of the key individuals previously described who instigate the paradigm shift. The participants described members of this group as

committed to the philosophical shift and willing to take informal risks in their teaching to trial their beliefs. Committed faculty are willing to take a "leap of faith" into the unknown, based on their readings, dialogue, experience of others outside of nursing education, personal perceptions, and informal trialing.

The second group are faculty who are interested in the philosophical change and new ideas, but remain uncommitted. This group was described by the participants as "sitting on the fence", and somewhat "slow to change their position". They are likely to move along the continuum based on solid evidence of the success or failure of the paradigm shift.

The third group identified by the participants consists of those individuals who are committed to the "old world view". The participants described this group as perceiving no need for a major change, believing that the traditional paradigm has served them well, and wishing to "stay where they are". The participants stated that these individuals might express their viewpoint by "passive resistance" to or "active sabotage" of the new curriculum. Not all participants felt that they had seen evidence of strong

resistance or sabotage within their school of nursing. One participant expressed this by saying: "I don't think people were all that resistant because people didn't know that they weren't doing it" (teaching in the new paradigm).

Manifestations of Faculty who Resist a Paradigm Shift

Faculty resistance to a paradigm shift may take different forms. One participant described a group of resistant faculty who chose to distance themselves from teaching within the new paradigm. She believed this group consisted of instructors who have taught in a specific term or course for a long time, and/or instructors teaching only in specialty areas. The participant hypothesized that these faculty members have a strong "comfort level" teaching in their particular area. She stated that these individuals mourn their lost identity as expert clinicians when they are required to teach in ways in which they have little experience. Lack of exposure and familiarity may cause them discomfort with area-specific nursing skills. The participant stated that these individuals do not participate in committee or faculty meetings and "are not very vocal" because they see the inevitability

of the change, perceiving their choices as being "either to just put up with it", or "to come on board". According to the participant, one or two of these instructors have left her school of nursing, possibly because of their inability to cope with the new curriculum. The participant reported that this group of instructors is largely treated with compassion by fellow faculty members who believe that "not everybody moves at the same speed" in making a paradigm shift.

Yet another group of faculty were identified by two participants as being those that "talk the talk but do not walk the walk". These are individuals who "pay lip service to the philosophy but do not engage in personal critical reflection on their own practice". They typically maintain "a position of power and authority over students and behave in an oppressive manner towards students". According to these participants, such people are difficult to identify because they "talk the talk", appearing to publicly support the tenets of the new paradigm. Individuals such as these were identified by the two participants as possibly sabotaging the paradigm shift. These individuals were are viewed as a "danger".

One participant described the difficult journey of a faculty member struggling with the new paradigm:

> She found it tremendously difficult to give up the existing curriculum because that had more structure in it...but she just couldn't make that, she really struggled with it and so she ended up teaching, I think because the faculty, the administration was sensitive to her dilemma and she was sort of a couple of years from retirement, and so they sort of shifted her teaching assignment and she has a perfect teaching assignment now where she's co-teaching with (type of course), the (type of course), which is sort of perfect for her.

Faculty Beliefs and Values

The beliefs and values system of faculty clearly play an important part in determining a position along the acceptance continuum. One participant stated that "The real core of your teaching should be directed by values and beliefs that you need to keep making explicit and be aware of". She continued to say that if the beliefs and values inherent in the new paradigm are not in keeping with personal belief systems, it will be a difficult job to accept the curriculum that reflects the paradigm shift. For an individual with congruent values, the paradigm shift will likely be made easier. An example provided by one participant was:

> There wasn't a great deal of importance placed on how students learned. If, as a student, you were able to follow the usual prescription and met certain unwritten expectations (e.g. spoke English well, enthusiastic) you passed. Being an individual was not given much weight.

Another participant said,

> You have to recognize what teaching means for you and how much value you place on it, whether it's the be-all and end-all in your life, whether it's just a job. If you're just in it for the job, you figure you'll do whatever's going.

Yet a third participant made reference to beliefs and values in her reflections on teaching in the new paradigm. She compared the internalization of values held by nurses who are educators with those values held by educators who are nurses. She described how this internalization helps to make the paradigm shift easier.

> I think what we did was we started to teach from more of our nursing hat than our teaching hat, and meaning that from our roles as nurses, we could understand what it means to care for someone and tried to carry more of that respectful caring with us.

This participant believed that nurse relationships with patients can be equated to educator relationships with students; however, in either relationship, an important value is the ability to be authentic or real.

> I think with this curriculum we're given more permission to be real to who we are as a person,

> both as students, as nurses and as teachers so I think everybody is given more permission to be true to who they are...teaching with integrity.

The freedom that results from being true to one's belief system is described as follows:

> I remember a lot of my colleagues saying it feels so good to be able to finally teach the way I've wanted to teach all along....quite a few of them think "Isn't it wonderful to teach what we really believe". So, maybe that comes back to sort of human nature and the values that nurse educators often carry with them but somehow the system kept us from really enacting those values that we carried before.

Movement Along the Acceptance Continuum

Faculty positions along the acceptance continuum can change over time. Movement by all four groups in one form or another was described by all participants. Two participants described movement by some members of the faculty group who were initially totally committed, to a position of uncertainty regarding the efficacy of the new paradigm. One participant believed that this transition may have occurred due to larger concerns and questions such as "should we have taken this this far?". The transition might be temporary because "everybody just has frustrating days". It may, however, reflect a "more realistic perception of what is happening in the curriculum and the growing pains

involved". This experience is well-illustrated by one participant, who remains highly committed to the new paradigm, in describing the first year of teaching in the new paradigm. The before-Christmas phase (Semester 1 of the new curriculum) is described as a "honeymoon phase" as compared to the after-Christmas phase (Semester 2) that had a large clinical component for which the faculty felt unprepared to enter in a new paradigm mode. Both these phases are characterized as follows:

> It was a really heady experience....it was just so exciting and it was so different and so HARD, because half the time we weren't sure of what we were doing was going to be right.....we'd had this most incredible energy because of the freedom...and the possibilities....the Dean from (Name of Institution) came and we mesmerized him for 4 hours, he couldn't get out of that room because of the energy....We crashed in January....we're the first off the diving board, we're in the water, heads barely above.

The participants also described movement along the continuum of the unconvinced or uncertain faculty towards either the position of acceptance or the position of rejection of the new paradigm. In one participant's experience, the majority of this group, two years after the initiation of the curriculum, had shifted so that they had personally adopted the

curriculum. Another participant described the positive shift of largely behaviouralist instructors by saying that "they were still trying to shove everything in from the old into the new" but after the third term teaching in this manner, "now they can see that they can throw their check-lists away and trust that if you teach this way the students will still be okay, safe, able to do it".

The participants agreed that some faculty will shift along the continuum towards rejection of the new paradigm. According to the participants, these faculty look for and emphasize the negative aspects of the new paradigm. They also introduce their negative criticisms of the new paradigm at faculty meetings.

A significant factor identified as influencing movement along the acceptance continuum was the amount of change recently experienced by faculty, both personal and professional. One participant stated that, at the time the key group was active in initiating a paradigm shift, nursing department faculty had recently adopted a new nursing model as a conceptual framework. This adoption caused major disruption among faculty and students. As well, the

faculty were feeling threatened by the establishment of a new educational institution in the geographic region. The faculty viewed this institution as competitive and were concerned about the resulting viability of their program. Additional changes that influenced acceptance included returning to graduate education. The participants stated that this may have a positive influence by exposing the individual to new ideas, but it might also result in enough additional stress to cause the individual to reject any further change.

Developing a New Awareness

Several participants mentioned that, in nursing education, a paradigm shift largely involves moving from one world view to another entirely different world view, based on very different philosophical outlooks.

> It is the interactions between the teacher and the learner, learning occurs through the interactions ....You can't change your interactions with the students until your world view is in the new paradigm.
> As long as somebody does not philosophically teach that way, or believe or understand that way, you will never be teaching in the new paradigm, you will not be teaching THE curriculum, you'll be teaching something else.

One participant stated that the philosophical differences between the traditional and new paradigms became readily apparent during the process of

developing a new curriculum:

> We REALLY saw the difference between what we were trying to do in the new curriculum and what we'd been doing before....You would do all this work and prep but really what you were doing was putting content together in your head from various sources and you were giving it to the students and you thought this great learning thing was happening.
> The trouble with the old world-view (behaviourist) is it didn't have a piece that was about self-awareness. It didn't have a piece that was emancipatory or empowering.

In this participant's experience, the development of the new curriculum resulted in personal as well as professional change: "Really we were learning all the time because once you start teaching this way you start being this way. This whole thing about valuing reflection and dialogue and being self-aware and looking at what you're doing was really catching on".

The participants recognized that, in order to make a paradigm shift, the new paradigm must be congruent with both the instructor's teaching and personal philosophy. "Your view of the world influences your view as a teacher cause it influences who you are and you can't be other than who you are".

The difficulty in adopting some of the complex philosophical perspectives inherent in the new paradigm was acknowledged.

> It is really tough to adopt a phenomenologic perspective. It is so antithetical to nursing and health care....to really know what it looks like for you as a person and for your practice takes time and reflection and interaction amongst people.

Facilitating the Paradigm Shift

Three ways were suggested by participants to ease the struggle associated with "owning the philosophy" of the new paradigm and changing one's world view. One of the participants suggested that instructors can learn about the new paradigm in the same manner as the students learn within the new paradigm; that is, by praxis. "It's like a praxis kind of thing, you really have to do it, reflect on it, go this is what that meant...and there's that idea about over-evaluating and having your check-list and make sure all the stuff is covered". The participants concurred that much of the new paradigm "has to be experienced to make sense of it" and to incorporate it into one's value system. Learning about the new paradigm by the instructor and learning within the new paradigm by the student happens in the same way, namely through praxis. One participant illustrated this concept by comparing the preliminary program approvals report submitted to the Registered Nurses Association of British Columbia

(R.N.A.B.C.) which was a "skimpy little conceptual thing", and one recently submitted, a "very thick document".

> They could never have written that back then because we weren't there yet. This is what praxis is all about. This is phenomenology. You can't know it, you've got to do it, then reflect on it, then say these are the concepts, the theory. You don't know what it looks like until you do it.

The participants stated that, once faculty have been through the process themselves, they can then help students go through the process of accepting the philosophies of the new paradigm and the resulting changed world view.

A concept somewhat related to learning through praxis is attaining a level of comfort through learning the language. Two participants mentioned the influence that feeling comfortable with the language of the paradigm had in accepting the new paradigm. Both participants discussed this in relation to co-workers who were having some trouble making the paradigm switch. "People need to get to the point where they feel confident and competent and have the language - then they can ask for help and play a formal role". "We got them to gradually get into the language of the curriculum and be getting into the language, you can

come around to your world view being that way". One participant expressed the opinion that the "initial reaction is to object to the language but, in fact, it's just the fear of the unknown".

Another highly recommended method of easing the transition is through the use of a facilitator. Two participants had both direct and indirect experience with facilitation of a paradigm shift. Both agree that an important piece of the process is dialogue and interaction among people. The participants agreed that reflection is also important but this is usually conducted in a solitary fashion.

> If we had just done it ourselves, I don't know where we'd be, but we kept having experts come. You need to have someone who is a facilitator, who can work with you. Can students learn nursing just by reading and reflecting or do they need an outside person like a teacher?

> A facilitator from outside came in and made a significant difference - somebody from outside was necessary because of uncomfortable dynamics between people moving forward and those who weren't. The facilitator provided the expertise to move the group through the curriculum, and through the philosophical issues.....everybody has been engaged and everybody feels committed and everybody's read the stuff. Not everybody is up to the same speed, but they are going in the same direction.

Effect on the Working Environment

While faculty were struggling to complete their

personal paradigm transition, the working climate at the various institutions was affected to varying degrees. One participant acknowledged that "to change the whole curriculum is just an incredibly unsettling thing"; therefore, "reverberations among faculty are almost to be expected". This participant went on to describe the working climate experienced at the institution during the time of the paradigm shift: "There was a rift in faculty between the people that hadn't bought in and the people who had...there is a group of people who are very technically oriented. They were really into supervision and surveillance ....they're coming in with that world view". In response to the question of how faculty who have changed their world view can assist those who have not, this participant stated that it is very difficult:

> We're caring with patients and with students but NOBODY is caring with their colleagues...cause you're sort of the bottom of the list, because you're so tired with your workload.

Two suggestions were made to overcome this: (1) try to empower each other when interacting as a group; (2) affirm each other. These suggestions were based on her assumption that, while unity of the group is highly desirable, diversity is valued. Another participant

had hoped for more caring, sharing, and openness among faculty. The participant stated she realized she had been naive in thinking this potential might be actualized. What she observed was a few individuals who did the "bulk of the work", some of whom "burned out" later.

Another participant described a situation where divisions already existed along organizational lines and, when one group started to develop in a different way because of changes they made in accordance with the new paradigm, the divisiveness of the faculty was increased. Things improved, however, when everyone made a decision to work together.

One participant described a different experience during the transition from one paradigm to another:

> The faculty is a very sort of a supportive, close-knit group to begin with, and so it was a good group within which to take on this sort of a change, because we're a group that is used to looking after each other.

The participants stated that the process of paradigm shift tended to isolate some groups of faculty. This happened both to individuals who were teaching in the existing curriculum, while colleagues were moving ahead and teaching in the "new" curriculum,

and to individuals who moved ahead in the "new" curriculum while colleagues remained teaching the familiar. The participants described these faculty (and sometimes students) as feeling abandoned and unrecognized.

> "it was hard for teachers...in that last preceptorship because at one point...we needed to access the budget for some reasons, to plan a graduation party or something, and we realized, we were told that oops, we forgot to give preceptorship a budget, in other words we just sort of forgot that preceptorship was still running and they were so busy with development of the new program and running the first program and that to me sort of captures what this was like to teach in the last part of that existing program".

On-Going Development

Rewards of Teaching in a Non-Traditional Curriculum

Most participants described that seeing a different student develop as both teachers and students lived the new curriculum was one of the greatest rewards resulting from the often difficult process of making a paradigm shift. Nurses who emerge after experiencing the new curriculum are described by one participant as having "a better grasp of what's required of holistic type of care. They approach the individual and WILL incorporate the family, spiritual needs, socialization. It is a more global picture".

Another change this participant had noticed is that students interaction with the culture of nursing is changing. "They will question the traditions and things we do unquestioningly". As well, she described students as being more creative, more willing to look at problems in different ways.

Another participant, when comparing second year students within the former paradigm with second year students from the new paradigm, described present students as "being at a different stage than our second year students ever were before, and really seeing them much more clear about their role as a nurse, much more assertive and advocating for their clients". She provided the following example:

> One of my favourite stories is a student just standing right up to one of the gynecologists who no nurse would ever have questioned, and she did it in such a lovely way where she just asked, "Well, that's not how I would have seen it. Can you explain to me how you got to that conclusion?" And she did it in a most non-threatening way, and the gynecologist looked at her, and the other nurses were standing around, and were coming over to me "Oh, I don't think she should be talking to him". And I'm going, "She'll deal with it, let's see what happens", and so I think to see...a vision of how nursing could be and how it should be, so I think those are the moments of glory.

Teachers also experience rewards teaching within the new paradigm in other ways. One instructor

included among the benefits she has experienced the exposure to different ways of teaching and a broader perspective on teaching in general. Having exposure to other educators outside nursing has broadened what is in her perception the traditionally narrow focus of nursing. She has also felt the freedom to broaden her own teaching abilities, to have the "luxury of trying new things without being penalized if mistakes are made" because "it's the new curriculum and we're all learning". Another instructor described the freedom it gave her in allowing her to exercise her strong beliefs in critical thinking: "before we were trying to fit critical thinking around heavy content, now critical thinking was in the centre".

Participants identified that experiencing these rewards is an important part of experiencing the paradigm shift. One participant described that a belief in the effectiveness of the new paradigm to educate nurses who are at least as capable as the nurses educated in the traditional paradigm is necessary in fostering the change.

> And so, my first worry is "Will they still be able to do the job with this new approach?" I've got to have confidence in this. And then the second thing is "Do the job. Hum". Then I begin, under

> these new ways of thinking to say, "Hum, maybe the job should be different".

The draw-backs of teaching in a new paradigm were also expressed by the participants. These are largely centred around workload and student evaluation issues, particularly clinical evaluation. They also included discussions concerning the lack of knowledge about how students learn clinically, what clinical reasoning "looks like", and the very different role that the instructor plays in clinical teaching. Some nursing staff in certain clinical areas are having difficulty adjusting to the new role of the teacher, as one of the participants describes:

> Students are very understanding and forgiving, but the practice setting is not as forgiving. They still see faculty in the traditional role....you're supposed to know (everything) ....there's some loss in credibility with some of the R.N.'s.....As long as you're open and honest with them they seem quite willing to help you out, BUT there is that core that think, "No, you're getting paid to do this".

The participants stated that, if the rewards are strong enough, faculty experiencing a paradigm shift are motivated to "keep pressing forward" despite the frustrations.

<u>The Process Never Ends</u>

The participants described a continuing process

of evolution within the paradigm shift. No end point had yet been reached that satisfied the participants that they had completed the transition. One participant described her experience, four years after beginning teaching in a new paradigm. "Even now I'm getting new insights...even though I have been teaching in the new paradigm four years I still fall back, a little piece drags me back there". In describing some of her co-workers she says, "They're still not there yet, but I'm just getting there myself". Another participant warns about the dangers of "thinking you've arrived somewhere" and expressed concern about "people that think they are there when they are not".

Part of the ongoing evolution in a paradigm shift is the effect that changes have on the nursing profession at large. The conclusion of some of the participants is that the paradigm shift they are engaged in will cause reverberations within and without the profession. Two participants expressed the concern that nursing educators are making strong changes with the intent of helping future nurses cope with the rapidly changing environment; however, the participants are seeing that the graduates from new paradigm

programs are really engaging in a different type of nursing, based on the differing philosophies of the programs. The graduates are having a great impact on the clinical settings and how they deal with patients, but the clinical settings are not changing to accommodate their new ways of being. One participant described their clinical facility as being a "dinosaur". She stated that change in the facility was "happening the least of anywhere in the entire world".

One participant discussed the repercussions of the paradigm shift in socio-political terms.

> As we are encouraging ourselves not to accept the educational status quo, I think that we can't accept the health care status quo....it's at the larger socio-political level I think nurses have a responsibility, I think we have a responsibility to teach health problems, not just as individual responses but as the product of a whole way of thinking and being in society.

Another participant expressed similar ideas in this manner: "We realized that here we were, that this is where the future is, a lot of this is generative stuff - we are not teaching for the local community but for the world". Yet another participant expressed the following hope when discussing the curriculum that evolved at her institution as a result of the paradigm shift:

> I think the pace of change in our society is so fast, I think it's just going to be a constant evolution, but maybe we're on a better track than we have been in the past.

Summary

In summary, the participants described various aspects of their journey through the paradigm shift. They identified how their initial teaching experiences influenced the development of beliefs and values that helped facilitate a later paradigm shift. They described how they were initially exposed to the new paradigm, various experiences that were significant in their willingness to pursue these new ideas, and their reactions to the philosophies inherent in the new paradigm. "Buying into the new paradigm" for both themselves and their colleagues was not a smooth process. They described a "continuum of acceptance", ranging from total acceptance to total rejection, along which faculty could be located at varying times during the adopting process. Those who totally rejected the new paradigm were of some concern and are seen by their co-workers in differing ways. Making a successful shift is largely dependant upon the establishment of beliefs and values that are congruent with the philosophy of the new paradigm. This takes varying

lengths of time for various individual and can be facilitated. While faculty are working through the process of accepting the new paradigm, an effect is felt on the working environment. An already unified faculty will feel the least effect. All participants described the rewards of being with students in a new way, and of seeing program graduates being in their world in a new way. This helps to solidify faculty commitment to the new paradigm. The process is seen as being on-going by most participants, with resulting effects that will reach into the heart of society.

CHAPTER FIVE

Discussion of Research Findings

This chapter will include a discussion of the significant research findings, as elaborated in Chapter Four. These findings will be examined in relation to the literature presented in Chapter Two, and in relation to the work of other theorists who can contribute to the understanding and interpretation of the data. In particular, Thomas Kuhn's (1970) work on paradigm shifts will be re-visited in light of research findings from this study.

Discussion will be organized according to the process of paradigm shift occurring within the culture of a school of nursing. Analysis of the research results have shown that the process of paradigm shift occurs as follows. Key players pursue knowledge in response to various stimuli and put together their knowledge in such a way that an understanding of the possibilities of a new world view emerges. These key players undergo their own paradigm shift which primarily involves a major examination and possible change in their personal beliefs and values. Key players then transmit their understanding of the new

conception and their new way of being to colleagues. Other members of the culture must then undergo their own paradigm shift, through gaining knowledge and incorporating the knowledge into their beliefs and values system. As identified by the research participants, the process of paradigm shift is a dynamic one. The individual moves back and forth through the stages and gaining full insight into the totality of the new paradigm goes on for a long time after the teaching of the new paradigm is implemented.

The Personal Process of Paradigm Shift

The findings of this research study have demonstrated that the process of paradigm shift begins as a highly individual endeavour. It is apparent in this study that, as colleagues within the culture become aware of the possibility and potential of a revolutionary change, each individual must examine the meaning the paradigm shift has for their own person. Deeply inherent in this examination are individual beliefs and values. Through reflection on this process, two questions emerge to be answered: What are the qualities that enable an individual to first recognize the significance that the integration of

certain ideas can result in a different way to view the educational world?; and how do beliefs and values change when an individual is presented with a new way to view the world?

Gaining Revolutionary Insights

An answer can be found to the first question by comparing the process described by Kuhn (1970) of paradigm shift and resulting scientific revolution, as previously presented (see Chapter II), with the process of paradigm shift as described by the research participants.

When the process of paradigm shift occurs in nursing education, it is evident that events similar to those found in the scientific world take place. According to the participants, nurse educators attend to anomalous data that are received as feelings of unrest and uneasiness, largely arising from their own sense of frustration regarding the system in which they work. The participants describe their frustrations with the system by saying that it is not working for either themselves or the students, they do not fit into it, they are not teaching the way they want to teach, and the world is changing rapidly while the system

remains stagnant. This initiates a personal seeking process where the question is asked, "how can I make it better?"

One of the key components in reacting to frustration associated with the system is seeking knowledge (Kuhn, 1970). According to the participants, in nursing education this occurs either through exploring material that presents a new way of looking at the world, revisiting older ideas that now seem to have more utility, exposure to related movements, and/or return to graduate school. When the individual has gathered sufficient information, a new way of thinking and experiencing teaching and learning is incorporated into their beliefs and values system. The individual begins to entertain the hope that a revolutionary way of teaching nursing is possible that may solve the individual frustrations with the current system. This is analogous to the process described by Kuhn in which the scientist has rigorously tracked down the source of the anomalies and, in the process, discovered a new way to view the world.

Beliefs and Values

The participants in the study identified another

significant process that must occur to effect a true paradigm shift. This is an examination of and possible change in personal beliefs and values. Unlike the scientific community, where a paradigm shift is precipitated by "hard data", a paradigm shift among educators must be made ultimately based on ideas that make sense to the individual. In the participants perspective, at the outset there is no definitive data that suggests these changes are going to work. The individual in the "key group" who leads the way in proposing a paradigm shift does so based on the "fit" of a multitude of ideas inherent within the paradigm shift and within their own belief system. According to the participants, for those who do not realize this "fit", another process must take place before the paradigm shift can be incorporated into their way of being. This process is one of transformation. According to Lifton (1976, p. 458) transformations

> must connect with the past while going beyond mere survival of that past in the creations of new forms and modes. The process is both psychological and historical, and at the same time prominently aesthetic, very much a matter of sensibility.

The same author puts forward the idea of "Protean man", referring to the mythological character of

Proteus who was able to change his shape with relative ease. Lifton (1976) suggests that this self-process "is characterized by an interminable series of experiments and explorations---some shallow, some profound---each of which maybe readily abandoned in favor of still new psychological quests" (p. 459).

In a manner similar to Protean man, the "Protean" educator must undergo a transformation in order to "be" different in the world, as is required of an individual who is undergoing a paradigm shift. This self-exploration is an essential part of continued growth and, because of the rapidity of change in our society, is likely to be an on-going process. According to Lipton (1976 p. 465), this self-exploration can occur in three different styles:

> There is first a shallow plasticity, repeated change of "color" or appearance without serious depth of immersion anywhere--a style more accurately termed plastic than Protean. A second pattern is that of intense immersion followed by equally intense rejection, so that one ends up almost where one began, with virtually nothing--or what might be called the "shedding style". Finally there is what I would view as the more genuinely Protean style, the one most consistent with patterns of transformation, in which there is immersion, resurfacing, and reimmersion, with retention of certain aspects of each of the.... experiences in which one has been immersed, so that there is an accruing of inner forms and a constant recombining of psychic elements.

In this research study, the first and third styles were clearly described by the participants, while the second pattern was not seen in exactly the fashion that Lipton describes it. What was seen is movement from a strong position of acceptance to a more neutral position, and from rejection to a neutral position. These individuals did not end up where they began. Nursing instructors who conform to the first pattern are described by the research participants as those who "talk the talk but do not walk the walk". They are unwilling to engage in a process of self-reflection. Why this is so is a matter of conjecture, but could be related to past experiences or fear of delving deep into the psyche. Individuals engaged in the third pattern are those who have undertaken the process of self-examination and who have emerged with some degree of self-awareness. These individuals possess the characteristics described by the research participants as authentic, or genuine.

According to the research participants, in order to achieve a true paradigm shift, the transformative process must occur, or have occurred. It is likely that those for whom the ideas contained within the

paradigm shift make immediate sense are able to discover immediate congruency between the new ideas and their own values. This means that a personal transformation has already occurred, or that their beliefs and values system were progressive enough to incorporate profoundly new ideas. For others, the transformation must occur by a process of matching personal values with the values inherent in the new paradigm philosophies.

Munhall (1988) speaks of transformation in an analogous way with regard to both revolutions and paradigm shifts. She says:

> this transformation has to do with shifts in paradigm and with an expansion of consciousness. A curriculum revolution would entail both, of course: there would be a new way of thinking and a new scheme for understanding and explaining certain aspects of reality (p. 219).

Grundy (1987) supports this by saying "What is required ....to inform one's practise, is a transformation of consciousness, that is, a transformation in the way in which one perceives and acts in 'the world'" (p. 99).

Bevis (1990) presents a similar idea when discussing the nursing education revolution in comparison to Kuhn's (1970) work. She calls her conceptualization a "conversion" when explaining that

it is not grounded in research. Bevis likens the response she receives to the ideas she puts forward to Saul's conversion by revelation on the road to Damascus. She warns of the dangers of dogmatization, saying that a new paradigm to replace Tyler's outmoded one must be selected carefully to ensure that it is in fact better than the one it is replacing.

According to the participants, the process of transformation for the faculty member is akin to the process that a student will experience during submersion in the new paradigm. To some degree the faculty member can read about new philosophies and start a process of shifting but, ultimately, beliefs and values are best expressed in the doing, the being (Bevis, 1989, Diekelmann, 1988). This is the notion of praxis that the participants discussed. Praxis, according to the participants, is the only way to know that beliefs and values have really changed. It may be for many that this process of inner examination will not occur until faculty actually are required to teach in the new paradigm (Diekelmann, 1988, Grundy, 1987). At this time, faculty will probably shift their world view at the same time the students are engaged in

shifting theirs, and become true co-learners with the students (Diekelmann, 1988, Grundy, 1987).

Transmission of the Vision

The preceding discussion was primarily centred around key individuals and the transformational process that must occur on the personal level for a paradigm shift to occur. The individuals referred to are those members of "key groups" who are central to making a paradigm shift a reality within their institution. Once those individuals have experienced their paradigm shift, another process must occur. This process is one of spreading the vision to the other members in the culture. It is important that as many members of the culture as possible are making congruent changes and working within the same paradigm. Failure to do this will cause a great deal of confusion for the students in the program and may ultimately threaten the success of the paradigm shift. After this stage, repatterning or restructuring of the culture can occur, followed by some measure of stability, evidenced by preservation and maintenance of the new system.

In order to examine the spread of the paradigm shift among members of the culture, other concepts must

be pursued. Kuhn's (1970) contribution to the understanding of this phenomenon is quite limited and he admits his own weakness in this area. Kuhn does postulate several reasons why individuals adherent to the old world view will come into conflict with those who adhere to the new world view. Kuhn says that, because their standards or definitions are not the same, they will disagree on what the new paradigm is to accomplish. Often, as is the case in the educational paradigm shift, the vocabulary and other surrounding ideas are incorporated into the new paradigm, resulting in miscommunication between adherents of the two paradigms. Kuhn (1970) states that "the proponents of competing paradigms practice their trades in different worlds" (p. 150).

The Diffusion of Innovations

The acceptance of a vision inherent in a new paradigm can be compared to the diffusion of innovations. Research regarding the diffusion of innovations evolved from a need for companies to understand how their technological advancements were received by the targeted community (Rogers, 1962). This later expanded from diffusion of technology to

include the diffusion of ideas, particularly in the field of education (Rogers, 1962). Many findings in this field are useful to understanding the adoption process of paradigm shift in nursing education.

Rogers (1962) can be credited with analyzing and synthesizing a wide variety of research concerning innovations. The outcome of his pioneer work was the development of a theory on the diffusion of innovations. Rogers (1962) defines an innovation as "an idea perceived as new by the individual" (p. 13). This definition allows that the idea may not be new to society, only to the individual. Rogers (1962) defines diffusion as "the process by which an innovation spreads" (p. 13). At the heart of the diffusion process is interpersonal communication. One person must know about the idea and communicate it in some form to another. A final term necessary for understanding of this concept is adoption which is "a decision to continue full use of an innovation" (Rogers, 1962, p. 17). Rogers allows that culture will play an important part in the adoption and diffusion of innovations. Normal cultural beliefs and practices and group interactions will influence the individual

decision to bring the innovation into personal practice.

Rogers (1962) identifies many significant characteristics of the concept in his innovation theory. He describes an adoption process that consists of five stages: awareness, during which time the individual is introduced to the idea; interest, when the individual actively seeks additional information; evaluation, where the idea is submitted to an intellectual review; trial, a process of implementing the idea into limited practice; and adoption or full acceptance of the idea for future use. Rejection, or "discontinuance" can occur in either the trial or adoption phases, or at any time after adoption.

In applying the stages of the adoption process to the current research, insight can be gained into the process that other members of the culture, other than the "key group" go through in accepting a paradigm shift. Individuals in the culture who are more likely to pass through the stages identified by Rogers (1962) are those not directly involved at the outset of defining the new paradigm, but are the receivers of a paradigm that is at least partially formalized. These

stages can be viewed as preliminary steps occurring prior to full adoption. These stages do not exclude the individual from the necessity of undergoing personal development in order to realize the paradigm shift. As previously discussed, the deep self-examination inherent in the concept of transformation must still take place before ideas of the paradigm shift are fully accepted into one's personal values system. It is of interest to note that in congruence with Rogers' innovation theory, most research participants described a period of trialing before adoption of the paradigm shift concepts were integrated into their teaching.

Rogers (1962) identifies five characteristics of the innovation that will influence its rate of diffusion throughout a particular cultural group. The first is relative advantage, meaning the individual's perception of the degree of improvement over the idea that it is replacing. Like Kuhn (1970), Rogers identifies the role that a crisis plays in innovation. Kuhn views a crisis as a precipitating event but Rogers perceives a crisis situation as being a useful event that will assist the individual in determining the

relative advantage of the innovation. For example, research has shown that depressions and wars will retard the adoption of education innovations, whereas speed of adoption is accelerated when the crises pass (Adler, cited in Rogers, 1962). The research participants did not identify crises as described by Rogers as being a factor in their decision to accept the paradigm shift.

Other concepts identified by Rogers that influence the rate of diffusion are compatibility of the innovation with the individual's beliefs and values and past experiences as well as the complexity, divisibility, and communicability of the innovation. Transposing these concepts of diffusion onto information obtained from the research participants reveals some interesting similarities.

The importance of compatibility of the new paradigm with beliefs and values has already been discussed. Those respondents for whom the philosophies of the new paradigm fit with their own beliefs and values system accepted the new paradigm much more quickly as compared to those for whom the new philosophies were alien.

Rogers (1962) and Kuhn (1970) both are in agreement regarding the importance of the perception of the new paradigm or idea as an improvement over the old. For a nursing education program that is adopting a new paradigm, it will take between two and one half to four years before program graduates are produced. This means that educators are functioning within the new paradigm with minimal evidence that nursing clinicians are being developed that meet the standards of practice. The research participants identified that the relative advantage of the new paradigm is unknown for a considerable period of time, making it appear as a very risky venture to some faculty.

Perhaps one of the reasons that ideas contained within the new paradigm in nursing education are not enthusiastically received by all who meet them is a result of the complex philosophical ideas that must be understood. Even though various concepts in the new paradigm are somewhat divisible, their complexity makes these ideas more difficult to communicate.

Another contribution that Rogers (1962) makes to the understanding of the process of dealing with innovations is the identification of adopter

categories. He identifies five adopter categories and links them to personality traits as follows: "innovators", who are described as venturesome; "early adopters", individuals who usually command respect by others and often serve as role models; the "early majority", deliberate thinkers who take longer to adopt the innovations than the innovators or early adopters; the "late majority", characterized as being sceptical and who may not adopt the innovation without some social pressure; and the "laggards", the traditionalists who subscribe to the past.

These categories are analogous to those identified by the research participants. The "innovators" and "early adopters" seem to have characteristics similar to the "small key group" that played an instrumental role at each institution by initiating the process of paradigm shift. These individuals were innovators who were quickly able to recognize the significance of the new ideas for their field. It was through these innovators and early adopters that the concepts that structure the paradigm shift were introduced to the rest of the faculty. The majority of faculty receiving and eventually accepting the new ideas would encompass

both the early majority and the late majority, according to Rogers' (1962) definition. The "laggards" as described by Rogers correspond to the third group identified by the respondents; i.e. those who reject the new paradigm.

The idea of adopter categories or an adoption continuum provides a useful conceptual understanding of the cultural disruption that occurs when a revolutionary new idea is introduced. It is important for the early acceptors to recognize that their understanding and adoption of the complex concepts occurred at an accelerated pace as compared to the majority. The early acceptors will need to be prepared to allow their colleagues time to assimilate the material. This highly individual process of making the paradigm shift will likely take varying amounts of time, largely depending on the congruency of the personal beliefs and values system with the beliefs and values inherent in the new paradigm. The research participants have identified that there is very little that can be done to move this process along if the individual has determined that the incongruence of values is irresolvable. The research participants also

identified that for some individuals, the process can be facilitated through compassion and empathy for the difficult struggle that is occurring, and through discussion with others, possibly using an outside facilitator.

Bevis (1989) speaks about the importance of creating a cultural climate that is conducive to fostering the development of faculty attitudes towards the new paradigm. She describes this climate as being one of

> permission giving, practice, and group approval for the normal warmth, concern, caring, and moral rectitude that characterize most nursing teachers. A climate of validation of self-worth; of wholeness; of perfect person; of good intent;. respect for the needs, integrity, life choices, and styles; and personal and professional values is created in agreement and effort together (p. 176).

Keddy (1995) discusses her experience with a group of older nurses involved in a learning experience (journalling) that was initially not a part of their values system. She records their progress in moving from a highly resistant stage, to anger, and then to hope.

For the last group, the traditionalists or laggards who are likely to reject the new paradigm, it

is important to be aware of the possibility of their sabotaging the new paradigm way of learning. When it is important to have all individuals within the culture moving in the same direction, as it is in education, this group may prove dangerous to the process.

Future Directions

This research is a beginning investigation into an area where little is known. Although preliminary, some general statements can be made that will affect nursing education, research, and practice.

Implications for Nursing Education

The biggest impact of this research will be on nurse educators. Nurse educators form a cultural group that must be as cohesive as possible (Bevis, 1989). When a major disruption such as a paradigm shift occurs, the work environment will be shaken and will take some time to recover. If nurse educators know that an expected part of the process is that faculty will not be together initially, ways can be found to support each other through this process (Bevis, 1989). With compassion, understanding, and respect for the individual, patience can be exercised during the time it will take for those who will come on board to join

in. Education administrators should be alerted to the possibility of faculty who will not join in the paradigm shift. Rather than wait for the opportunity for sabotage to occur, perhaps these individuals can be given the opportunity to make a valuable contribution to the program in a way that will not put the program at risk. An understanding of the scope of the event taking place, and a realization that this is not just another curriculum change, will all contribute to a successful paradigm shift occurring. In the event that faculty are clearly not able to shift together as a group, benefits might be obtained through the use of an outside facilitator.

Implications for Nursing Research

Many opportunities can be identified for further research arising out of this study. Three groups of faculty emerge as significant to a paradigm shift in nursing education: the key group or innovators, the middle group that takes longer to change, and the resistant group. Understanding of the process of paradigm shift could be enhanced by further research concerning the nature and experience of each group. The concepts of transcendence and transformation could

be explored with faculty nominated as key group members. Research surrounding the middle group of faculty could focus on identifying factors that facilitate and inhibit their experience with paradigm shift. An in-depth understanding of the experience of those who resist a paradigm shift could provide insight regarding what factors cause their resistance and any movement towards acceptance of the new paradigm. If acceptance does not occur, it would be useful to know what supports could be put into place for resistors so that their work has meaning for them and they do not feel isolated from the culture.

This study has been retrospective in nature, relying on the accounts of participants about past experiences. It would also be highly useful to conduct a longitudinal study to examine a culture of faculty as they are experiencing a paradigm shift.

Implications for Nursing Practice

The participants reported a concern that the new paradigm in nursing education focuses on the critical reflective abilities of nursing students and yet those nurses in the practice arena of the profession appear to most often uphold the traditional values of

submission and dependence (Spence, 1994). If the participants are portraying accurately the situation in the practice arena, graduates of curricula in the new paradigm will face dissonance and perhaps hostility when they attempt to be independent thinkers within the profession (Spence, 1994). Nurse educators need to dialogue with colleagues in the practice arena in order to identify ways of minimizing this dissonance. Failure to do so may result in new graduate attrition from the profession. As well, researchers should investigate the experience of graduates of new paradigm curricula as they attempt to grapple with the "reality shocks" (Kramer, 1984) of traditional nursing practice.

Watson (1990) broadens this scope by saying that we must transform "the values that form the basis of the health care system" (p.16). She calls for transforming "the consciousness in health care, policy, politics" (p. 16). She advocates that nurses must become more politically active in order to accomplish this massive change.

Summary and Conclusions

This research has examined the phenomenon of paradigm shift in nursing education. Five nursing educators were interviewed to determine their experience during the process of paradigm shift. While their experience varied, certain commonalities can be identified.

Their search for a new way of being in the world took them through a process of struggle and self-transformation that gave way to a change in their beliefs and values system, allowing acceptance of the philosophies inherent in the new paradigm. The process of seeking and finding meaningful knowledge, often through returning to upgrade their education, was a significant part of experiencing the paradigm shift. The end result of the experience is placement within a new world view.

The paradigm shift is initiated by a small key group of individuals who then transpose their conceptions to their colleagues. Colleagues react to the new paradigm in various ways, but ultimately most will adapt their beliefs and values system so that they also can be within the new world view. Varying lengths

of time must be allowed for this process to take place. While it is a highly individual endeavour, discussion facilitates movement. A supportive and caring environment creates a climate that allows others to feel safe in exploring new concepts. For faculty that experience divisions because of widely differing philosophical perspectives, an outside facilitator might be useful in encouraging cohesiveness.

Part of the process of engaging in a paradigm shift is living it as a new curriculum is developed and taught. The meaning inherent in the philosophical concepts must be experienced to be made real to the individual. Until this occurs, a paradigm shift cannot be considered to have been effected. All participants agreed that the process of paradigm shift is dynamic, and there has not as yet been an end-point reached.

Those individuals who share a congruent world view and find meaning through congruent conceptual language are able to communicate within the framework of the new paradigm. For those individuals for whom this is not the case, miscommunication with both students and faculty is most likely. The possibility exists that some faculty will choose to remain within the

traditional paradigm. These individuals should be acknowledged and respected, and ways found for them to exist within the new framework. Faculty members who are able to use the language without undergoing the transformative experience can potentially sabotage the efficacy of the paradigm shift.

The goal of involvement in a paradigm shift is achieving a new way of being in the world. As individual possibilities are explored and individual boundaries expanded, the potential for a transformation within society is created.

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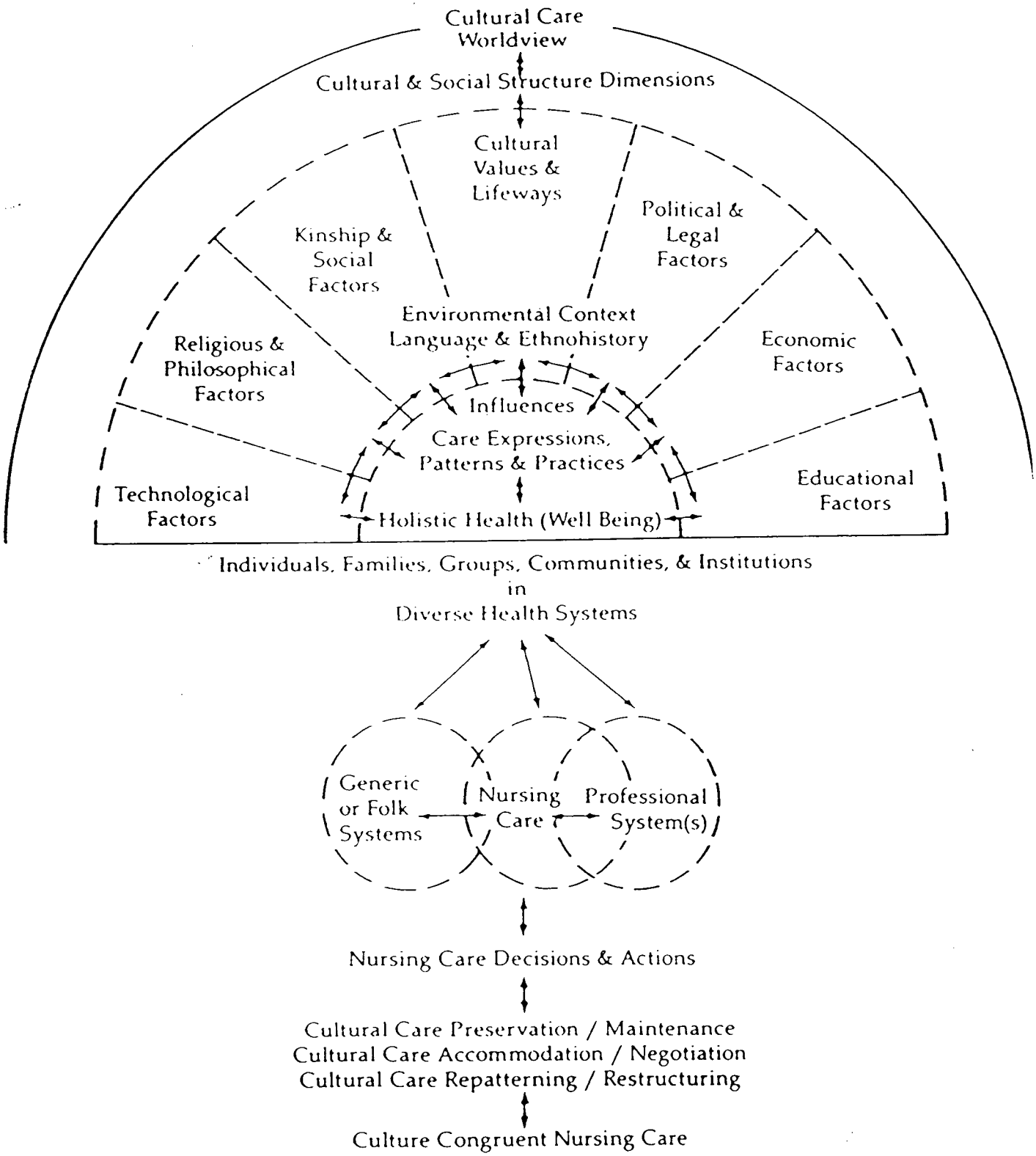
APPENDICES

Appendix A: Leininger's Sunrise Model

Leininger's Sunrise Model to Depict Theory of Cultural Care Diversity and Universality



Appendix B: Letter of Recruitment

School of Nursing
The University of British Columbia

Dear Graduate Student:

My name is Mary Tynski and I am a registered nurse presently enroled in the Masters of Science in Nursing program at U.B.C. To fulfil my thesis requirement, I have chosen to study the experience of nursing instructors who are undergoing a major paradigm shift in the way that nursing education is being taught. My interest in this stems from my own involvement with teaching under the "old" objectives-driven curriculum and the emancipation I anticipate experiencing as I shift to the "curriculum revolution" paradigm.

Nursing instructors with at least two years experience in teaching in an objectives-driven curriculum, and who have participated in curriculum development and have taught one semester in a curriculum that is radically different to the former curriculum, are invited to participate in this study.

Participation in this research will involve an initial interview of one to one and a half hours in length, with a follow-up interview of approximately one hour. You will be free to decline to answer any of the questions I ask during the interview, and you will be invited to add your own perspectives to the interview. These interviews will be conducted face-to-face in a mutually convenient location, either at your residence or at the university. The interviews will be audiotaped, and the audiotapes will then be transcribed by the researcher. The audiotapes will be stored in a secure place in my home, and the audiotapes will be erased and the transcriptions destroyed at the conclusion of the study.

Confidentiality is assured. Any names or other identifying information will be omitted from the transcripts and from the body of the report. You are under no obligation to participate in the study. If you do decide to participate, you are free to withdraw from the study at any time. Withdrawal from the study will not result in any personal or professional repercussions. There are no risks to participants in this study, however you might gain insight into your values regarding teaching, and professionally you might ease the transition for other nursing educators who

will make this major paradigm shift.

If you are interested in learning more about this study or in participating, please feel free to call me at 980-4207. I will answer your questions, and if you are still interested in participating in the study, we will arrange a mutually convenient time to meet. When we meet to initiate the first interview, I will obtain a written consent from you prior to the interview and taping. I thank you for your interest in my study and I look forward to your participation.

Sincerely,

Mary Tynski

Appendix C: Letter of Consent

School of Nursing
T206-2211 Wesbrook Mall
Vancouver, B.C. Canada V6T 2B5
Tel: (604) 822-7417
Fax: (604) 822-7466

CONSENT TO PARTICIPATE IN THE RESEARCH STUDY
"THE EXPERIENCE OF FACULTY UNDERGOING A MAJOR CURRICULAR PARADIGM SHIFT IN NURSING EDUCATION"

I hereby give my consent to participate in the research study entitled "The Experience of Nursing Instructors Undergoing a Paradigm Shift". I understand that the student investigator, Mary Tynski, is conducting the research in fulfilment of the requirements for a Masters of Science in Nursing degree at U.B.C.

The purpose of the research is to identify commonalities in the experience of nursing faculty who are making the transition from objective-driven curricula to a curricula which is humanistic and empowering to the student. Identification of common themes will assist in easing the transition of other faculty members who will be involved in making a similar paradigm shift.

I understand that the research will involve an initial interview of one to one and a half hours in length, and a Focus Group interview at the end of the research study of no more than one hour in length. Approximately one half hour will be required to review a copy of the transcript of the initial interview. The total time commitment for participation in this research project is a maximum of three hours. Each interview will be audiotaped. During the interviews, I will be asked questions about my experience as a nursing instructor involved in developing and teaching a curriculum that is shifting from one teaching paradigm to another.

I understand that confidentiality of my identity and the information I provide is assured. Each participant will be given a code name, know only to the researcher. The audiotapes will only be listened to by Mary Tynski and her thesis advisors. The audiotapes will be transcribed by Mary Tynski and the transcripts will only be available to her thesis advisors. The tapes will be stored in a locked filing cabinet to which only the researcher will hold the key. At the end of a ten year time period, the audiotapes will be erased and the transcriptions will be destroyed. No identifying information will be included in the discussion of data collection or analysis.

I understand that I have the right to refuse to participate in or withdraw from the study at any time, without any personal or professional repercussions.

I acknowledge that the study has been adequately explained to me by Mary Tynski, and that I may contact her at 980-4207 if I have further questions regarding this study. I may also contact Mary's thesis advisor, Barbara Paterson, at 822-7490 if I have questions about the study. I have received a copy of this consent form, and the letter of initial contact.

My signature indicates my willingness to participate in this study.

Signature_____

Date_____

Witness_____

Date_____