Critical Thinking and Client Centered Nursing Care

Bernadette Q. LaVoie
University of Massachusetts Boston

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CRITICAL THINKING

AND

CLIENT CENTERED NURSING CARE

A Thesis Presented

by

BERNADETTE Q. LAVOIE

Submitted to the Office of Graduate Studies and Research of
the University of Massachusetts at Boston in partial
fulfillment of the requirements for the degree of

MASTER OF ARTS

September 1992

Critical and Creative Thinking Program
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Approved as to style and content by:

John R. Murray, Ed.D., Chairperson of Committee

Vincent A. Cristiani, Ed.D., Member

Susan Haussler, Ed.D., R.N., Member

Patricia S. Davidson, Ed.D., Director

Critical and Creative Thinking Program
ACKNOWLEDGEMENTS

I would like to take this opportunity to thank my thesis advisor, John Murray, for his invaluable assistance, discerning feedback and timely encouragement. I also wish to thank Dolores Gallo, for her enthusiastic and inspiring contribution. Special thanks to Patricia Davidson, for her superb editorial assistance. I am very grateful to my committee members, Susan Haussler and Vincent Cristiani, for their time and valuable comments. I am indebted to Francisco Isaza for his computer assistance in the preparation of this manuscript.

I dedicate this thesis to my husband, Jean, for his constant support and unwavering faith in me.
Critical and creative thinking skills are necessary for the new graduate and experienced nurses alike, if they are to respond to the rapidly changing health care system and deliver professional nursing care. Knowledge, generally speaking, is a resource not a constraint, but it becomes a constraint if it is not in the acceptable form. Consequently, knowledge alone is insufficient if the nurse clinician is unable to select the relevant information and defend its integration into client care. Skillful and perceptive nursing practice includes the ability to set and revise priorities for client care, manage actual and potential risks to individuals, and develop, evaluate and revise individualized plans of care.

The focus in this thesis is on the application of critical and creative thinking (CCT) skills in nursing practice. There is a particular focus on activities and
processes related to nursing care. Emphasis is placed on the use of knowledge in the acquisition and development of skills, and on problem solving. There is discussion of the ways in which nursing practice may be captured in writing. The relationship of CCT to nursing management is discussed and examples are offered.

The CCT skills and strategies which are helpful in introducing the theory of modeling and role modeling to a nursing unit are presented. This theory focuses on the clients' needs and a model of their world as a base for nursing intervention. Nurses exercise CCT skills when being conscious of the need to imaginatively put themselves in the place of the other in order to genuinely understand the client. This technique relates to stage six of Kohlberg's moral stages of reasoning "...that of any rational individual recognizing the nature of morality or the fact that persons are ends in themselves and must be treated as such..." (1976, 35). Critical thinking then, should not only help to make those in the nursing profession better thinkers, but also better human beings.
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MODELING AND ROLE MODELING: A CLIENT CENTERED APPROACH TO NURSING

Introduction: Nursing - A Philosophy of Care

Nothing is more trying to one’s toleration than to see men, most of whom never did and never can comprehend what a woman’s work really is, what its details are, and how it ought to be done, undertaking to instruct and train women in something so unquestionably her own special field as nursing. I do not limit this statement to men only, but will say that physicians, be they men or women, cannot teach nursing, any more than nurses can teach medicine. Medicine and nursing are not the same; and however much we may learn from the physician about the disease and its treatment, the whole field of nursing, as nursing is realized by the patient is unknown to the physician. (Dock in Donahue 1985, 459)

Nursing care differs from the care given by other health providers, particularly its historical partner, medicine. Common stereotypes exist and nurses themselves reinforce these. This happens when nurses practice quality nursing care intuitively and do not identify, describe, or record explicitly what it is they do that health consumers value so much. Because of its emphasis on nurturing, such nursing is taken for granted or equated with common sense. As a result, nurses do not justly credit themselves or their chosen profession with the enormous benefits they generate. Isabel M. Stewart frequently wrote about nursing as an art. She stressed that the nurse as a "true artist" was essential
to the progression of nursing into something other than a highly skilled trade:

The real essence of nursing as a fine art lies not in the mechanical details of execution, nor yet in the dexterity of the performer, but in the creative imagination, the sensitive spirit, and the intelligent understanding lying back of these techniques and skills. Without these, nursing may become a highly skilled trade, but it cannot be a profession or a fine art. All the rituals and ceremonies which our modern worship of efficiency may devise, and all our elaborate scientific equipment will not save us if the intellectual and spiritual elements in our art are subordinated to the mechanical, and if the means come to be regarded as more important than ends. (Stewart in Donahue 1985, 459)

Technical skills are extremely important, and the safe practice of nursing depends on the nature and amount of scientific nursing knowledge the individual brings to practice and on the imaginative and intellectual judgement with which such knowledge is made explicit in our service to humankind. A crucial factor is why nurses do what they do. If they give medications, insert catheters, suction, start intravenous fluids, or listen to fetal hearts solely because the doctor orders these, to do so, then they are working towards medical goals and not nursing goals.

Erickson (1988) defines nursing as helping people in any way that nurses perceive they can, to meet a need or want that will enable them to take better care of themselves. Attention is paid not only to physical needs,
but to simultaneous mental, emotional, and spiritual needs too. Humans are whole persons and what happens at one subsystem affects the other subsystems as well. These subsystems are the biophysical, psychological, cognitive, and social aspects of the whole person.

The nurse with special expertise can meet the whole person's needs in an integrated way. It is essential to start with what concerns that person most. For example, when working with a client who has undergone recent surgery, the doctor will be interested in the physiological status of the wound: Is it healing? Is it infected? Nurses, too, are interested in the wound because it is part of the person they are working with. They are interested in all the "right" things about the wound. How healthy and strong does the tissue seem to be? How well is it healing? Even more though, nurses are concerned about how their client feels and thinks about that wound. What does it represent to the client? What does the client think will happen as a result of the surgery? Nursing observations are made in terms of the holistic person, and are based on knowledge of the normal human being's biophysical systems, basic needs, and developmental stages. The doctor's observations and diagnoses in contrast, are made in terms of illness, disease, and abnormality (Erickson 1988).

Whole persons need access to a care-giver who holistically nurtures self-care, enhancing knowledge about
what will restore health. The person’s strengths are sought out, and everything is done to nurture even the smallest one (Erickson 1988).

What is aimed at is not duty, not accountability, but the renewed possibility of taking pleasure in caring and in each other (Noddings 1984, 122).

Nursing fulfills an absolutely essential function in our society. The real essence of nursing is a fine art.

Nursing is an art; and if it is to be made an art, it requires as exclusive a devotion, as hard a preparation, as any painter’s or sculptor’s work; for what is having to do with dead canvas or dead marble, compared with having to do with the living body - the temple of God’s spirit? It is one of the Fine Arts; I had almost said, the finest of the Fine Arts. (Florence Nightingale in Donahue 1985, 469)

Modeling and Role Modeling: Introduction to a Nursing Staff

Modeling and role modeling: (MRM) these words did not appear to have much to do with nursing practice when first introduced at a large urban teaching hospital three years ago. A new Vice President for Nursing had been appointed. Staff nurses listened attentively as she talked about MRM then promptly put the theory aside and proceeded with their daily routine. Shortly afterwards, however, the nurse managers were to meet the individual responsible for the
formulation of MRM, Helen C. Erickson, Ph.D., RN. After attending her lectures and receiving copies of her book, the nurse managers were assigned the task of conveying her concept of nursing care to the staff, who in turn would deliver care based on this view. The majority of nursing staff did not have the opportunity to attend Erickson's lectures. Merely reading the book was not sufficient to help them apply the concepts inherent in MRM. The concepts would have to be defined still further.

**Definition of MRM.** What does MRM mean? The term *modeling* can be defined as the imitation of a standard or the copying of a representation of something. The word *model* often refers to the standard to be copied. Erickson (1988) stated that each individual has a unique model of his or her world based on experience, past learning, state of life, and so on. The way an individual perceives life, events, people, and situations; the way an individual communicates, thinks, feels, acts, and reacts, all of these factors comprise the individual model of the world. The act of modeling then, for the nurse is, the use of critical and creative thinking skills, techniques and strategies in developing an image and an understanding of the client's world, within the client's framework, and from the client's perspective. The art of modeling, Erickson stated is the development of a mirror image of the situation from the client's perspective. The
formulation of this image requires communication skills basic to nursing. It also requires the nurse to think critically about her own frame of reference and to explicate, understand, and critique her own prejudices, biases, and misconceptions. These skills can help the nurse put one foot into a world foreign to herself. The science of modeling is the scientific collection and analysis of the data about the client's model. This process requires keeping the other foot planted firmly in the theoretical bases of nursing care (Erickson 1988).

That covers modeling, but what is role modeling? Role modeling cannot occur until the nurse has modeled her client's world and has collected and analyzed the constructs of that world. Role modeling is not easy. However, critical thinkers recognize the need to struggle with confusion and uncertainty for a time in order to achieve deeper understanding and insight. They recognize that considering a new view takes time, that it is important not to get impatient, that what they most need to do is slow down and think carefully (Paul 1990).

Role modeling is the facilitation of the client in attaining, maintaining, or promoting health through purposeful interventions. These interventions can be planned on the basis of data analyses. Role modeling is also seen as an art and a science. The artistic aspect comes to the fore when the nurse plans and implements
interventions and client-enabling strategies unique to the needs of that client. The science is paramount when the nurse plans interventions according to her/his theoretical bases for the practice of nursing. The client, for example, may have basic unmet security needs and may be working on the stage of autonomy. Scientifically, the interventions planned by the nurse would promote trust and control. These interventions would have to be designed in light of the individual’s personal perceptions and beliefs, model of the world, and frame of reference; that is, if the client were a street person, the basis would have to be a street person’s model of the world. The difference between medical care and nursing care of a client with pneumonia, for instance, is that the doctor treats the pneumonia and the nurse takes care of the client with pneumonia.

Within these two concepts of modeling and role modeling is the essence of nurturance. Erickson states that nurturance implies that the "...nurses seek to know and understand the client’s personal model of his or her world and to appreciate its value and significance for that client from the client’s perspective..." (Erickson 1988, 48). This task requires unconditional acceptance of the person as is, in combination with gentle encouragement and facilitation of health-directed goals at the person’s own pace and within the person’s own model. Being accepted unconditionally as a unique, worthwhile, important individual is crucial to the
client's development of his or her own potential for return to health. The nurse's use of empathy (the power of projecting one's own personality into the object of contemplation and so fully comprehending the situation) helps the individual recognize the nurse's acceptance. Noddings (1984) rejects the use of the term empathy in her discussion of "caring". She states that for her "feeling with" does not involve projection, but reception of the other into herself (40). The author prefers the use of the term "empathy" as it indicates a necessary understanding of the client's situation. She will however use Nodding's interpretation of "understanding" as she believes it underscores the significance of the interactive process inherent in these situations:

In understanding we may have ceased manipulative activity and fallen quiet; we are listening. We are not trying so much to produce a particular product or answer as we are trying to understand, to see. It is not something we do that produces the light, although things we have done undoubtedly contribute to the event, but it is something that happens, something that is revealed to us. (Noddings 1984, 145)

Maslow formulated the Growth Principle and Theory of Human Needs. He stated that all people want to be the best that they can possibly be, i.e., to achieve self actualization; however, unmet basic needs interfere with holistic growth. Maslow describes these needs as existing in a hierarchy. Needs on the lower level of the hierarchy must be met to some degree before higher level needs emerge (See Appendix I). Central to this concept is the idea that basic needs are only met when the individual perceives that they are met.

Erickson (1963) names eight stages of development through which all people progress. Each stage represents a developmental task, or turning point (See Appendix II). People who pass through each critical turning point of each stage in sequence have at their disposal the strengths and resources essential for effective age-appropriate functioning.

Piaget, (Phillips 1969 and Silverman 1975) in his cognitive stages of development, expounded his belief that cognitive learning develops in a sequential manner and identified four periods in this process (See Appendix III). Each stage incorporates and integrates processes from the previous level. Accordingly, if each stage is negotiated successfully, the person is able to think logically and
manipulate abstract concepts in the final stage, formal operations.

Engle, (1962) in Psychological Development in Health and Disease, states that all loss no matter what subsystem, produces a grief response, and that if the loss, (real, threatened or perceived) is unresolved, a state of morbid grieving results: the individual continues to grieve for the lost object for a long time, although the awareness of the loss may be suppressed (See Appendix IV).

Selye, (1975) known as the father of stress theory, has pointed out that people have different abilities to respond to life stressors, depending on what resources they have. He called these resources adaptation energy (See Appendix V). The stimulus may be a stressor initiating a response that is potentially healthy and growth producing. However, it may also be a distressor that depletes the individual of energy or exceeds the individual’s ability to mobilize adaptation energy; in this case, illness may result.

A functional relationship among the concepts can be related to client care and observed behavior. For instance, "difficult" or "demanding" clients often seem impossible to satisfy. The more the client is ignored, the more difficult he/she gets. If, however, it is kept in mind that human beings have basic needs that can be satisfied only from within the framework of the individual, care can be directed
more purposefully. For instance, one fundamental need related to clients is whether there is a need to know or a fear of knowing. Maslow believed that a person has a need to know, but he also talks about the fear of knowing. Individuals sometimes avoid knowledge in order to feel safe and avoid anxiety.

**Reason for MRM.** Throughout nursing's history as a profession, certain common concepts have been operative with slight differences in priorities and wording indicating the focus of nursing at a given time. Florence Nightingale (1893) in (Marriner 1986) viewed the environment as the main factor acting upon the client to produce an illness state. Hildegard Peplau (1952) emphasized the significance of nursing as a therapeutic, interpersonal process functioning cooperatively with other human processes that make health possible for individuals and communities.

Virginia Henderson (1955) in (Marriner 1986) stressed continued assessment and continued revision of clients’ needs as their condition and goals changed.

Ida Jean Orlando (1961) viewed nursing as offering whatever help clients may require to have their needs met, i.e. for assured physical or mental comfort during any form of medical treatment. Sister Callista Roy (1976) stressed the need for nursing activity promoting people’s adaptations in physiological needs, self-concept, role function, and interdependence relations during health and illness.
Patricia Benner (1984) stressed caring as central to nursing practice. The power of caring is underestimated with its attendant emotions, vague feelings, hunches, the sense that something is not quite right, or the cue sensitivity that occur as a result of caring. A caring relationship can mobilize clients' internal and external resources, and empowers them by "...brining hope, confidence, and trust..." (Benner 1984, 213).

These concepts taken together, constitute a fairly complete definition of nursing. Collectively, they present a picture of nursing as a process of "... action, reaction, interaction and transaction..." (Erickson 1988) to assist people:

1. with their response to health and illness states;
2. with their self care practices in relation to their health, i.e., with their coping and adapting;
3. to achieve a state of wellness by way of an interpersonal process.

How does MRM differ from this encompassing view of nursing expressed by leaders in nursing across time? The answer is "...simply that we are working more aggressively towards validating the simple, intuitive, humanistic interventions valued by our predecessors..." (Erickson 1988, 31). Until recently, there was no statistical support for intuitive practices; however, during the last fifteen years, workers in the health sciences have continued to develop
research methods suitable to naturalistic settings. Nursing interventions as simple as handholding, (Lynch 1978) use of a mellow tone of voice, (Smart 1978) permission to cry, (Frey 1981) and the perception that one is being helped can often be as powerful as a prescribed medication (Garfield 1979).

It is important for nurses to understand the nursing concepts that have evolved over time. It is also important for nurses to develop their own personal philosophy consistent with these concepts and with their own ideas. In addition, it is important that nurses keep their goals in view for fellow professionals and the public, goals "...implicitly or explicitly held in common by all nurses, regardless of the age, sex, condition or location of their clients..." (Erickson 1988, 31).

MRM has been accepted by one large urban teaching hospital as its basis for nursing practice. This approach is referred to in the hospital’s mission statement, which reads:

OUR MISSION.
The relationship between the client and the nurse is the central focus of nursing practice. We are committed to excellence in nursing practice. We are responsive to client needs in an environment that is conducive to professional growth and innovation.

OUR VALUES.
Caring: The Art and Science of Nursing.
We care for clients holistically with compassion, respect, and empathy in accordance with their
individual needs. We believe in the unconditional acceptance of each individual. We base the care we provide on scientific principles. (Because of the need for confidentiality, the name of the hospital is not given here. However, it is on file at the CCT program, University of Massachusetts, Boston)

Unit structure and client population. The nursing unit on which MRM is to be implemented is a twenty-seven bed high risk antenatal unit (HRAU). Each floor in the hospital is divided into four "pods". The HRAU is comprised of two pods, one with fifteen, and one with twelve beds. Clients are hospitalized due to obstetrical or medical/surgical conditions that may interfere with their pregnancy, requiring maternal-fetal monitoring and surveillance. The provision of care to young teens and substance abusers is especially challenging. Age range is from twelve to forty-nine years. Average length of stay is approximately six days, range is from two hours to four months.

Staffing pattern. The nursing staff consists of thirty part-time and full-time registered nurses, and two licensed practical nurses. Staff experience ranges from recently graduated, to greater than twenty years experience. Staff members vary in their philosophical approach to nursing and in their assumptions about the role of the nurse.

Role of CCT in the implementation of MRM. Critical thinking is a complex of many considerations (Norris 1985). For example, it requires individuals to assess their own views
and the views of others, seek alternatives, make inferences, and to have the disposition to think critically. It also requires one to be productive in the sense of thinking of alternatives courses of action, before critically appraising which alternative to choose. The author needs to think critically about her own philosophy of client/nursing care, and her conceptual framework consistent with that. She needs to think critically about her own clinical reasoning and thinking ability. The following are questions that the author asks herself:

Does she view her way of thinking about everyday functioning of the unit and client care as being simply the correct way and the only way? How does she relate to staff and clients? Is the environment one which is conducive to new ideas and independent thinking? Are individual ideas, no matter how "far out" they might first appear, considered? Are staff encouraged to elaborate on their ideas? Are staff encouraged to think for themselves, and aided in identifying their approach to problem solving? Does she believe that coming up with the correct answer is more important than the reasoning process behind the individual's conclusions? Are staff assisted to recognize and evaluate their own biases and assumptions, and to be aware of their own frame of reference when making inferences? Does she feel threatened by more knowledgeable individuals, or use this to her advantage? Is she comfortable with ambiguity? Is
flexibility or rigidity more highly prized? Is playfulness and humor tolerated and/or encouraged?

What knowledge or experience does the author already have which would help in implementing this new theory? Can these be transferred, or are there already "...activated ideas and beliefs in place..." (Paul 1987, 132) to use for this?

To think critically, one must have sufficient knowledge about the subject or situation. It will be necessary for the author to assess her knowledge base about theory based practice and to acquire the necessary and sufficient information. Only then will it be possible to apply the critical spirit component of critical thinking.
CHAPTER II

RELATIONSHIP OF CCT TO THE NURSING PROFESSION

There are two ways to slide easily through life: to believe everything or to doubt everything. Both ways save us from thinking. (Korzybsla in Ennis 1985, 28)

Definition of Critical Thinking

The phrase "critical thinking" has many different meanings. In the Oxford Dictionary (1979) "critical" is narrowly defined as "fault finding, skillful at or engaged in criticism" (242). "Thinking" is defined as "to meditate on a problem" (1204). There is no single definition of critical thinking on which all of the experts agree. Their interpretation of this concept may in fact be more important to our understanding than these definitions. Hawes (1990) interprets one meaning of "critic" as someone who "...renders evaluation or judgement along with some explanation..." (47). The evaluation does not have to be negative, it can be an effort of helping oneself and others to see the strengths or inner logic, in a work or an action. Criticism would be understood to be reasoned or reasonable evaluation of something, an event or a curriculum (Hawes 1990). Thus "critical discussion" (47) would be discussion consisting of or exhibiting the qualities of reasoned or reasonable evaluation.

Paul (1984) defines critical thinking in terms of its purpose and its place in the nature of the person. He
explains that teaching critical thinking is teaching it so that students/nurses "...explicate, understand, and critique their own deepest prejudices, biases, and misconceptions..." (Paul 1987, 140) thus allowing the students to discover and question their own "...egocentric and sociocentric tendencies..." (Paul 1987, 140).

McPeck (1985) states that critical thinking includes a "knowledge component" (303) or knowledge based skills. Use of these skills is dependent on the kind of knowledge being called upon. The second component McPeck describes is the "critical component", (303) which consists of the ability to reflect upon, to question effectively and to suspend judgement or belief about the required knowledge composing the situation at hand. The critical component is dependent on the knowledge component. "Critical thinking ability, therefore, varies directly with the amount of knowledge required by the problem" (McPeck 1985, 303).

Definition of Creative Thinking

In the Oxford Dictionary (1979) "creative" is defined as "inventive, imaginative, showing imagination as well as routine skill" (240). The Webster New World Dictionary (1988) defines "creative" as "having or showing imagination and artistic or intellectual inventiveness" (325).

Davis (1986) says that creativity is more than using your imagination to create new ideas, but instead is a
lifestyle, a way of perceiving the world. Being creative is exploring new ideas, new places and new activities. Being creative is developing a sensitivity to problems of others and humankind.

Many studies discussed by Amabile (1983) argue the importance of intrinsic motivation for creativity, proposing that any of a wide variety of extrinsic constraints will, by interfering with intrinsic motivation, have detrimental effects on creative performance. In other words, creativity will be enhanced if the motivation is primarily intrinsic, but a primarily extrinsic motivation will undermine creativity.

Terms such as "imagination", "ingenuity", "innovation", "intuition", "inventiveness", "discovery", and "originality" are all used interchangeably with creativity. There are numerous ideas of creativity set forth, but because of its multifaceted and complex nature, there is not one which describes it completely. There are, however, two traits which seem to characterize creative people: their attraction to complexity and their tolerance for ambiguity (Davis 1986).

Connection between literacy and cognition. The word "literate" always comes to mind when thinking about CCT. The Oxford Dictionary (1979) describes literate as "An ability to read and write" (634). The Webster New World Dictionary (1988) defines literate as "Well educated, having
or showing extensive knowledge, learning or culture" (789).

Allen et al (1989) states that literacy in its fullest sense is the "... creating and organizing of thoughts, the sorting of assertions and relevant evidence, and the development of and support for reasoned decision making..." (6).

Illiteracy may be defined as a demonstrated inability to reason at a minimal level, and not as it is often misunderstood to be, just an editorial deficit, an inability to spell, punctuate and use standard grammar; in other words it is a cognitive deficit. Recent illiteracy studies, (Kinneavy 1980; Allen et al, 1989) illustrate how many students (including nursing students) are unable to understand perspectives different from their own. Cognitive deficits identified by these illiteracy studies have clear implications for the nursing profession.

Reasoned thinking and logic. In Piaget's research on the development of thinking processes as the child grows intellectually, he suggests that young people first entering school are mostly "preoperational" and tend to be dominated by their perceptions, to center on a single attribute of a display and to reason "transductively". In other words, instead of proceeding from the particular to the general, (inductive) or from the general to the particular (deductive), the preoperational child proceeds from the particular to the particular (Phillips 1969). Gradually they develop concrete rules for resolving conflicting
situations, and for solving concrete problems, (concrete operations). By their mid teens, most youngsters develop the ability to perform higher forms of cognitive operations (Presseisen 1985).

In Piaget's view, the ability to take the opinion of the other (without losing one's own) and the corresponding formation of logical consistency and reasoned thinking are acquired gradually, through repeated social interactions in which the person is compelled again and again to take account of the viewpoints of others (Phillips 1969). This social feedback is extremely important in developing the capacity to think about his/her own thinking. Without this capacity, logic is not possible. In Piaget's view, logic is the mirror of thought, and not vice versa. In other words, the function of logic is to make explicit those mental processes that occur naturally at the highest level of human development.

**Dialogical versus egocentric thinking.** People need to experience "dialogical thinking" (Paul 1992) "...thinking that involves a dialogue or extended exchange between different points of view or frames of reference ..." (645) because "...such thinking is essential for dealing rationally with the most significant and everyday human problems..." (Paul 1987, 137). Without it we will not develop the intellectual tools necessary for confronting our own instinctual egocentric thought. Unless we discover our
own egocentric thinking, we will not be able to monitor or work through it. As Piaget (1976) puts it:

Many adults are still egocentric in their ways of thinking. Such people interpose between themselves and reality an imaginary or mystical world, and they reduce everything to this individual point of view. Unadapted to ordinary conditions, they seem to be immersed in an inner life that is all the more intense. Does this make them conscious of themselves? Does egocentrism point the way to a truer introspection? On the contrary, it can easily be seen that there is a way of living in oneself that develops a great wealth of inexpressible feelings, of personal images and schemes, while at the same time it impoverishes analysis and consciousness of self. (In Paul 1987, 139)

Why Cognitive Skills are Essential in Nursing Practice

Cognitive skills are necessary for new graduates and "seasoned" nurses alike if they are to respond to the rapidly changing Health Care System and deliver professional care. Generally speaking, knowledge is a resource, not a constraint, but it becomes a constraint if it is not in the acceptable form. Consequently, knowledge alone is not sufficient if the nurse clinician is unable to select the appropriate information and defend its integration into client care in a way which demonstrates sound clinical reasoning. This level of cognitive development which is "...characterized by the ability to analyze a diversity of opinions, values, and judgements, and to contextualize information..." (Allen et al 1989, 8) is described as
relativism. At this stage there is an understanding of the relevance of context for the development of knowledge and meaning, and an ability to comprehend and argue conflicting perspectives.

Perceptual alertness is evident at this stage too and is the core of good nursing judgement. Often this presents itself as a subtle feeling that something is different or not quite right. It may be so subtle as to be missed or ignored. But through experience, the expert nurse knows how important it is to follow up on these vague feelings of uneasiness with a search to confirm or rule out, aided by appropriate health care workers (Benner 1984).

A case in point is the client with premature rupture of membranes (the fetal sac consisting of a double membrane: the outer chorion, the inner amnion) who is then always at risk for developing an infection. The expert nurse who works closely with her client can often identify subtle changes in her behavior or appearance, before the onset of overt clinical signs. Persistence in getting early treatment is imperative in optimizing client outcome. When these situations are examined afterwards, it is clear that the nurse is not using blind intuition. The clinician is experiencing a "...felt meaning which is at the center of expertise in every domain..." (Caine et al 1991, 92). This is what we have when we perceive a pattern or make connections that matter to us or have meaning for us. It is
further explained that this sense of interconnectedness, which occurs when emotions and cognition come together, is a key to the appreciation of life and learning and to overcoming the inertia that so often precludes us from functioning compassionately and effectively.

Competent nursing practice includes the ability to set and revise priorities for client care, manage actual and potential risks to individuals, troubleshoot equipment problems, and develop, evaluate and revise an individualized plan of care. Given a client’s usual limited length of stay in the hospital, the timely and accurate determination of the client’s nursing needs has taken on critical importance. The final determination, conclusions, and prioritization of these needs and/or diagnosis require critical and creative thinking. Since nurses often find themselves at the center of confusion and dilemmas, i.e. "...Working at the edge more than at the center of one’s competence..." (Perkins 1984, 32), CCT skills are necessary in order to identify strategies and skills which reflect the high standards inherent in quality nursing care. Inquisitiveness is also important, as is an awareness that actions/tasks which are and have been successful in the past can preclude the experimentation that is needed for learning new ideas.

Validation of CCT skills. Validation of technical skill ability is not particularly new or difficult. It is relatively easy to determine the critical behaviors for
safe, acceptable technical performance. Objective assessment of CCT or judgement, however, is much less frequently done. Little is known about how to measure a person's ability to recognize or look for problems that ought to be solved or the ability to implement choices or strategies for problem resolution. More is known about measuring problem solving, judgement capabilities when problem solving is reduced to defining the problem and deciding on alternatives (Benner 1984). This kind of thinking is conceptualized in terms of outcomes. People (nurses in this case) cannot develop better thinking, measurable in terms of outcomes, unless they engage in activities associated with problem identification as well as procedures for already defined problems (Swartz and Perkins 1989). Decision making activities cannot be honed unless there is significant engagement in decision making activities. These activities should provide opportunities to engage in the kind of processes that make up better thinking.

Knowledge and its meaning to the learner. One of the most important elements of learning is meaning, and meaning is related to the depth of active information processing. (Cermack and Craik in Caine et al., 1991) There are two types of knowledge that students can acquire: surface knowledge and meaningful knowledge. Surface knowledge, which involves memorization of facts and procedures, refers
to programming and to the memorization of the mechanics of any subject. Meaningful knowledge, on the other hand, is anything that makes sense to the learner (Caine et al., 1991).

When nursing students enter a new clinical area as novices, they have little understanding of the contextual meanings of recently learned textbook terms. Benner (1984) outlines the Dreyfus model of skill acquisition based upon the study of chess players and airline pilots. This model states that in the acquisition and development of a skill, a student passes through five levels of proficiency: novice, advanced beginner, competent, proficient and expert. There are changes reflected in three general aspects of skilled performance. The first is a movement from reliance on abstract principles to the use of past concrete experience as paradigms. The second is a change in the learner's perception of the demand situation, in which the situation is seen less and less as a compilation of equally relevant bits, and more and more as a complete whole in which only certain parts are relevant. Learning here occurs at the level of concept acquisition and conceptual change. The third is a passage from detached observer to involved performer. The performer is no longer outside the situation but is engaged in the situation.

Phillips (1969) describes the following principle of learning derived from Piaget's theory about intellectual
development. The brain is not a passive receptacle but is an active, organizing and dynamic system. Each pattern of input must be run through the filter of existing structures, and at the same time each encounter changes those structures, (cognitive action). A cognitive structure Phillips likens to a highly organized system of mental actions. If the new input is congruent with the existing structure, it is assimilated to it. Phillips describes the "optimal discrepancy" at which learning occurs:

If the input is precisely congruent with established cognitive structure, new learning does not occur; and if the input does not fit into the structure at all, it is simply not assimilated. The optimal difficulty of a task is therefore one in which the complexity of the (persons) cognitive structure almost, but not quite, matches that of the input pattern. Given those conditions the structure will change. (Phillips 1969, 110)

Learning by doing. Many cognitive researchers (Bransford and Vye 1989) argue that effective learning requires that we spend more time having nurses/novices actively use knowledge to solve problems. This helps to conditionalize their knowledge and decreases the time needed to read about introductory facts and concepts. Thus learning by doing is very important for nurses and novices. It is different from spending much of our time hearing or reading about strategies and concepts, with little chance to use them to increase meaningfulness (Bransford and Vye, 1989). Most of what nurses/novices learn in didactically taught courses is
either forgotten or rendered "inert". The most significant transfer is made by indepth learning which focuses on experiences meaningful to the nurse/novice (Paul 1990).

The initial state of learners plays a major part in any learning situation. Is their knowledge relevant to the task? Does the individual believe that he/she is capable of learning, and are they motivated to continue? Another way to look at the initial state of learners is to understand that they come to tasks with their own knowledge and expectations, or "preconceptions", which if inaccurate represent misconceptions. An important point about misconceptions is that, often, approaches to instruction fail to correct them. It is not sufficient to present students with the "correct facts". It is necessary to change the concepts or schemes that generate the novice’s inaccurate beliefs (Bransford and Vye 1989). For example, in our culture it is expected that mothers wish to hold their babies as soon as possible after birth. In certain other cultures, this is not the case; the baby is cared for by another family member, usually the baby’s grandmother. This could be misunderstood to be a mother who was uncaring and who did not wish to bond with her baby. Many cognitive scientists (Bransford and Vye 1989) share the major assumption that new knowledge must be actively constructed by learners, the secrets of expertise cannot simply be transmitted; they must learn by doing. Nurses/novices must
have the opportunity to actively use the information provided by teachers and text themselves, and to experience its effects on their own performance. If students do not have the opportunity to use the new information, it remains "inert" and is referred to only in specific contexts, even though it is potentially useful.

Research on cognition (Bransford and Vye 1989) shows that learning involves the active construction of knowledge. Memorization of information provided is useful for constructing new knowledge, but the mere memorization of this information does not constitute effective learning. Information that is merely memorized will remain inert even though it is relevant in new situations. For example, nurses frequently review the procedures to follow in specific emergency situations on the HRAU. It is not until they have actually been involved in the emergency situation and experienced the activity that they fully understand the procedure.

Theorists such as Anderson (1990) argue that learning involves a transition from factual or declarative knowledge, i.e. knowledge supplied by a text or an instructor, to procedural or use oriented knowledge. It is a transition from memory to action, or from knowing "what" to knowing "how". Benner (1984) and others observe that "knowing that" and "knowing how" are two different kinds of knowledge. They point out too that some practical knowledge
(know how) may elude scientific formulations of (knowing that).

The nurse/novice must be able to activate his or her memory of declarative knowledge at the right time, interpret it, and turn it into action. The importance of learning when to use information is a component of "conditionalized" knowledge (Bransford and Vye 1989). This is emphasized by learning theorists who focus on the transition from declarative to procedural knowledge. When people transform declarative into procedural knowledge, they learn not only what is important but when to do the right thing. If they are unable to apply principles, concepts and strategies, their knowledge remains inert (Anderson 1990, Bransford and Vye 1989). Therefore knowledge development in an applied discipline such as nursing, consists of extending practical knowledge (know how) through theory based scientific investigations and the documentation of this know how develops through experience in that discipline (Benner 1984).

**Client teaching: cognitive and affective learning.** Just recently while perusing through a collection of nursing documents, the author found a 5x7 card written by her approximately fifteen years prior to this time. There was helpful information listed for client teaching under two main headings: cognitive learning and affective learning. The cognitive domain listed six levels.
1. Knowledge: Ability to define and recall.

2. Comprehension: This should be geared at level of client so that they can restate in their own words.

3. Application: Client should be able to apply material/knowledge to new situation, i.e. diabetic teaching to home situation.

4. Analysis: Break information into parts; take one component of knowledge and use it in another situation.

5. Synthesis: Ability to assemble information into new whole.

6. Evaluation: This should be the goal, when client can judge the adequacy of the solution.

Affective learning listed four levels.

1. Willingness to learn: Have to get the client interested enough to listen. There must be a willingness and a need to change.

2. The client should be an active participant and ask questions. The client perception must be assessed, the way they understand their situation. Their participation will affect the amount of learning.

3. The goal is that the client will attach value to the new information and change behavior, (aspects of lifestyle). The information must have relevance for the client and realistic goals.

4. The client will internalize new idea and consistently practice it. This will be the critical test. It is difficult to measure until this last step is reached.

There were no references listed, however Bloom's Taxonomy is obviously embedded in this. Ennis (1987) lists at least two objections to using Bloom's Taxonomy, one of these being that it provides too little guidance if these levels are taken as the set of higher order thinking goals for the schools. He states that the concepts are too vague
as they stand and that the taxonomy is not accompanied by criteria for judging whether the activity is being conducted correctly. However, used in the context of client teaching, there were specific measurable outcomes to be met, and it was possible to judge whether the teaching activity was effective. The context to which Ennis is referring is its use as a detailed approach to higher order critical thinking skills. Bloom's Taxonomy is offered as a set of types of objectives, not as educational objectives.

A Working Definition of Critical Thinking

Ennis's approach to thinking has five key ideas; practical, reflective, reasonable, belief, and action. They make up Ennis's working definition of critical thinking. "Critical thinking is reasonable reflective thinking that is focused on deciding what to believe or do" (Ennis 1987, 10). Lipman (1988) argues that the defining characteristics, reasonable and reflective are too vague. He believes that good judgements are more likely if they are the products of skillfully performed acts, and would argue that critical thinking is skillful, responsible thinking that facilitates good judgement that relies upon criteria, is self correcting, and is sensitive to context. As mentioned earlier, there is not one definition of critical thinking with which all the experts would agree. However, the author believes that Ennis's taxonomy of critical thinking
dispositions and abilities fits nicely into nursing practice with its emphasis on skill acquisition, integration and sorting out of knowledge, and the refocus of (nursing) decision making on a different basis than the process oriented model many have been taught. This definition also includes creative thinking, i.e. alternative ways of viewing a problem, formulating hypotheses, and viewing situations from the client's perspective are creative acts that fall under this definition (Ennis 1987).

Nurses use discretionary judgement and critical and creative thinking in actual clinical situations daily in their practice. Often when immediate physician attention to a matter is not available, the nurse fills the gap by doing what is needed for the client. When the situation is described, the actions taken can be understood as "...orderly, reasonable behavior that responds to the demands of a given situation rather than rigid principles and rules..." (Benner 1984, 42). This corresponds with "reasonable reflective thinking that is focused on what to believe or do" (Ennis 1987, 10).

**Occasions for critical thinking: some examples.**

A nurse needs to respond to a client who says: "What do you do when you get a client who has AIDS? Do you give them a private room? I hope so, I would not want to come in contact with that person." It is important for the nurse to
recognize that fear is the underlying motive for this question. The critical thinking nurse will listen so as to enter sympathetically into the perspective of this client. The nurse may ask such questions as, "What do you think might happen if you did come in contact with a person with AIDS?." "Tell me what you know about AIDS?" "Would you like to know what we (health care personnel) do to protect our clients and ourselves?" The client will know what is causing and what will diminish her fear. The following are familiar situations in our everyday practice. Each is also an occasion for critical thinking.

A client asks her nurse "Do all nurses wash their hands when they leave patients' rooms?" A simple "Yes" is not sufficient. What prompted this question? A client is admitted with premature rupture of membranes and a presenting cord, (the umbilical cord is in danger of prolapsing which could diminish oxygen supply to the fetus). She states she must be discharged in order to take care of "pressing issues" with her husband and children at home. If she is not discharged she will leave against medical advice. Is it possible to make other arrangements? Could she stay in bed if she went home? Does she have a family/support system who can help? Does she fully understand the situation?

A client states, "I do not want to hear all the bad things that my nurse is telling me can happen to my baby."
Was she given information without first assessing readiness to accept it? A night nurse states, "I hate giving the report in the morning to the day staff." "They pull everything I say apart." What was happening here? Perhaps it would help if this person could be identified, quietly, and asked if she/he would oversee the morning report to ensure that feedback be constructive and not destructive.

A nurse on the HRAU with many years of experience and an intuitive grasp of situations/problems, has difficulty convincing a new obstetrical resident that her client with ruptured membranes may be infected. Who should she talk to, where should she take this next? A nurse with an already heavy load is approached by a colleague who says, "I just cannot deal with Mrs ... any more." "Her requests are so unreasonable and I don’t have the time." What was Mrs ... asking for? Was it unreasonable?

A client who was admitted last evening and will be discharged in the early morning needs information which is necessary in order that she may care for herself at home. However, this individual has made it clear to the nurse that she is not interested in learning. Is there too much information for her to understand? Would it help to write it down? Would a phone call to her at home help? All of these situations require the individual(s) to use certain distinct skills in assessing their own and others’ views to formulate decisions in accordance with certain principles of
thinking. The following are some of the critical thinking skills used in "reasonable reflective thinking that is focused on deciding what to believe or do" (Ennis 1987).

Critical thinking abilities. Ennis (1987) describes the basic areas of critical thinking ability as clarity, basis, inference, and interaction.

Ennis believes that these basic areas make intuitive sense. We need to be clear about what is going on. We need to have a reasonable basis for a judgement. We want the resulting inferring to be reasonable. We want the interaction with other people and clients to be productive.

Clarity. The first principle of clarification is focusing on a question in order to know what is relevant. It includes identifying a proposition or hypothesis. When we think critically about a proposition or hypothesis, criteria for judging the hypothesis are formulated. This implies the question: is the hypothesis (or proposition) acceptable? Focusing is crucial in order to get anywhere or know what is relevant.

A second part of clarifying ability is related to any arguments offered in support of a proposition or an answer to a question. It is important to identify reasons that are not explicitly stated. When the nurse is engaged in clinical reasoning, it is important that he/she clarify and analyze the meaning of words or phrases; to reflect, summarize, and request examples and details; i.e. "What
would be an example of...?" Use of "What if...." "What prevents you from...." "What would happen if...." is helpful.

**Basis.** In client assessment the main source of data is the client. Secondary sources are statements made by others, i.e. family, friends, the health care team and one's observation. Since much of what we have come to believe has other people as its source, the ability to judge the credibility of a source is crucial. Is there agreement among the sources? There should be minimal inferring. Corroboration with interdisciplinary sources is crucial as is dialogical reasoning, a comparison and evaluation of perspectives and interpretations. Reports and documentation of observation should be by the observer and not hearsay. Because memory is so unreliable, the use of records is very significant (Ennis 1987).

**Inference.** Ennis (1987) refers to three somewhat interdependent kinds of inferences: deductive inference, inductive inference, and inference to value judgements. Basically, deduction is concerned with whether something follows necessarily from something else. The context of the actual situation must be included in order to limit the number of possible interpretations. Inductive inference includes generalizing and inferring to hypotheses that are supposed to explain the facts. The proposed conclusion must be consistent with the known facts. It is important to
think critically in arriving at and assessing these conclusions. In making value judgements it is important to judge reasons without judging the person advancing them. For instance, when assessing a client who is a known drug abuser, it is important to accept the person as is, and to suspend judgement.

Interaction. Interaction with others in discussions, presentations, and written pieces, before deciding on an action plan is crucial for critical thinkers, in order to seek each other’s reasons and be open minded. The basic areas of critical thinking mentioned previously are focused on acquiring reasonable beliefs. These areas can be assumed to be relevant to deciding on an action, to tentatively decide what to do (Ennis 1987). For example, a plan of care is created and must be mutually agreed upon with the client. The plan must be evaluated and the client response to the plan of care monitored. While engaged in this, it is important for the nurse to exercise intellectual humility, being aware of the limits of one’s knowledge (Paul 1990), and to interact with others in order to reevaluate and generate a new plan when necessary.

The degree of ability to use these skills varies with the individual. According to Paul (1990) no one is without any critical thinking skills, but no one has them so completely that there are no areas of his or her thought in which critical thinking is not dominant. According to
Norris (1985) it is not sufficient that a person possesses an ability to use some or all of (these) critical thinking skills when the situation calls for it; what is also required is a disposition to use these skills when they are appropriate, the "critical spirit". This according to Norris is as important to critical thinking as having certain skills. Norris identifies three aspects of the "critical spirit": 1. critical thinking skills are used in reasoning about situations encountered daily, to reflect on a perceptual or perplexing problem of any sort, to solve the problem or reduce the perplexity. 2. Critical thinking has to be turned upon itself; that is, to think critically one must think about one's own thinking in order to evaluate how productive one's thinking is. This inner dialogue with oneself is called metacognition (Costa 1985), and enables us to know what we know and what we don't know. 3. There must be a disposition to act according to the reasonings of critical thinking. Knowledge and belief about a situation is insufficient.

Critical thinking dispositions. Critical thinking dispositions are essential for critical thinking (Ennis 1987). Those frequently cited include the following.

1. Seek a clear statement of the question. Refine generalizations and avoid oversimplification.
2. Seek reasons, not just your own.
3. Obtain background knowledge; try to be well informed.

This knowledge McPeck (1985) claims can never be assumed to be complete. The person's critical assessment of things will be influenced by his/her experience, understanding, cognitive perspective, and values. The knowledge component of critical thinking is constantly being added to, reinterpreted, and assessed from different perspectives. This "complex processing of knowledge" (303) McPeck states is always implicated in everyday problems where critical thinking is required. The critical component or the skills aspect consists of the ability to reflect upon, to question effectively, and to suspend judgement or belief about the required knowledge composing the problem at hand. Thus the skills aspect is dependent on the knowledge component and must:

4. Take into account the total situation.
5. Try to remain relevant to the main point.
6. Keep in mind the original or basic concern.
7. Look for alternatives.
8. Be open minded. Consider seriously points of view other than one's own (dialogical thinking). Reason from premises with which one disagrees without letting the disagreement interfere with one's thinking (suppositional thinking). Withhold judgement when the evidence and reasons are insufficient.
9. Take a position and change a position when the evidence and reasons are sufficient to do so.
10. Use one's critical thinking abilities. Exercise intellectual perseverance.

11. Be sensitive to the feelings, level of knowledge, and degree of sophistication of others (Ennis 1987, Paul 1990).

The last disposition, to be sensitive to others, although it does not exactly constitute critical thinking, is very important for anyone exercising critical thinking skills. "Without it, critical thinking often comes to nought" (Ennis 1987, 16).

Swartz and Perkins (1989) interpret critical thinking to concern the critical examination and evaluation, actual and potential, of beliefs and courses of action. The process of better thinking in their opinion constitutes the following:

- considers more possibilities,
- explores further and wider,
- exercises keener judgement,
- marshals more data,
- challenges assumptions,
- checks for errors,
- maintains objectivity and balance. (4)

**Difference in Performances between the Novice and Expert.**

Understandably there are major differences in clinical performance and situation appraisal between beginning and expert nurses. Beginners have had no experience with the situation in which they are expected to perform. They are taught about the situation in terms of objectifiable measurable parameters of a client's condition, task oriented
features which can be recognized without experiencing the situation. Because they have no experience of the situation they face, they follow context free rules to guide their performance. The difficulty lies in the fact that rules alone cannot provide meaning and reveal to them the most relevant way to perform in an actual situation. Context dependent judgements and skills can be acquired only in actual situations (Benner 1984). One of the most important elements in learning is meaning.

Research (Caine et al. 1991) confirms that the search for meaning is at the heart of intrinsic motivation and that much of the energy and drive to pursue goals and engage in essential tasks comes from the search for meaning. Meaningfulness, and the process of making sense of things, is a very important part of skills development. When the advanced beginners have coped with enough real situations, they begin to notice/recognize global characteristics; for example, how different clients respond when being assessed for readiness to learn. This ability/skill is experience dependent. Skill learning occurs in three stages:

1. A cognitive stage, in which a description of the procedure is learned.
2. An associative stage, in which a method for performing the skill is worked out.
3. An autonomous stage, in which the skill becomes more and more rapid and automatic. (Anderson 1990, 256)
The beginner can be instructed in CCT skills, i.e. in recognizing client's readiness to learn about his/her condition: By listening intently and empathically, being sensitive to the feelings and level of knowledge of the client, noticing whether or not the client asks questions, and what these questions relate to. The beginner can gain cues from the way each client responds, but no one cue is definitive in all situations. Experience is needed before the nurse can apply the guidelines to individual clients. Since the novice is trying to communicate in an unfamiliar language, this can be a difficult problem. The knowledge acquired in the cognitive stage is quite inadequate for skilled performance (Anderson 1990).

Beginners need support in the clinical setting, especially at this stage. This support should come from a preceptor who can point out aspects of the clinical situation during the stage of learning and practice. According to Anderson there are a number of factors which modulate the effects of practice:

- Spacing of practice increases learning;
- Skills can be learned better if independent skills are taught separately.
- Subjects learn more rapidly if they are given immediate feedback. (Anderson 1990, 256)

In the associative stage, two main things happen. First, errors in the initial understanding are gradually
detected and eliminated. Second, the connections among the various elements required for successful performance is strengthened (Anderson, 1990). Mere memorization or the acquisition of "surface knowledge" (Caine et al. 1991, 93) (content devoid of significance to the learner) is insufficient if nurses are to be genuinely competent in their fields in complex and unpredictable situations. What they need is an expansion of their "natural knowledge" (Caine et al. 1991, 102) (knowledge which is personally meaningful). This frames the way in which we observe and perceive the world. People may organize their perceptions in bigoted, prejudiced and limited ways. Hence it is important for educators to push for expansion of nurses/novices' frames of references (Caine et al. 1991).

Some of the critical thinking skills in terms of process which can be used here are: consideration of more possibilities, exercise of keen judgement, collection of more data, challenging assumptions, maintaining objectivity. Nurses need to be able to interpret events in many different ways. Often they become competent at a basic level. It is very important that nurses be capable of thinking in more demanding ways, both conceptually and contextually. In other words, nurses need to be able to think and to care (Caine et al. 1991). For example, a client's plan of care would indicate which aspects are to be considered most important and immediate and those which can wait. Hence for the
competent nurse a plan of care establishes a perspective, and the plan is based on considerable conscious, abstract, analytic contemplation of the problem (Benner 1984).

Basically, the outcome of the associative stage is a successful procedure for performing the skill. In this stage the declarative information is transferred into a procedural form, in other words the "know that" into the "know how" (Benner 1984). This "creative insight" (Caine et al. 1991, 94) begins as an unarticulated general sense of relationship and culminates in the "illumination" experience that accompanies insight (Caine et al. 1991). The procedural representation of the knowledge does not always replace the declarative; the two forms can exist side by side. However, it is the procedural, not the declarative knowledge that governs the skilled performance.

From beginning to autonomous stage. The proficient nurse perceives situations as wholes rather than in terms of aspects. Based upon experience and recent events, the perspective "presents itself" (Benner 1984, 27) rather than being thought out. The proficient nurse understands a situation, i.e. reason for admission, because he/she perceives its meaning in terms of long term goals. For instance, during the time a client is hospitalized, he/she must move from point A to point B. Certain tasks must be performed along the way to make that happen, but performing the task is not nursing. The proficient nurse can recognize
when the expected client’s response to a plan of care does not materialize. She/he can evaluate the situation in terms of which aspects are most important, take the client’s perspective into consideration, consider fewer options and "...zero in on the accurate region of the problem without wasteful consideration of a large range of unfruitful alternative diagnosis and solutions..." (Benner 1984, 32).

This third stage in the analysis of skill acquisition is the autonomous stage. At this point the procedure becomes more and more automated and rapid. Because facility in the skill increases, verbal mediation in the performance of the task often disappears at this point. In fact, the ability to verbalize knowledge of the task often disappears altogether (Anderson 1990). Speed and accuracy are two of the dimensions which improve with practice. Benner (1984) estimates that proficient performance can usually be found in nurses who have experience with similar client populations for approximately five years. Experience as the word is used here does not refer to the mere passage of time, or longevity. Rather it is the "...refinement of preconceived notions and theory through encounters with many actual clinical practice situations that add nuances or shades of differences to theory..." (Benner 1984, 36).

We do not however, automatically learn enough from our experience (Caine et al. 1991). What matters is how experience is used. Nurses need to have appropriate
experiences, and to help them capitalize on their experiences Caine et al. (1991) lists three interactive elements that are essential to the process. First, the learner needs to be immersed in complex interactive experiences that are both rich and real. The second element is working with clients who are challenging, but who offer a rewarding personal experience. This is an intrinsic motivation. Lastly, there must be intensive analysis so that the learner gains insight about the problem, about the ways in which it could be approached using critical and creative thinking skills, and about learning generally. This is called the active processing of experience (Caine et al. 1991).

The expert nurse. In contrast to the beginner, the expert nurse learns to recognize signs of impending changes in bodily systems before documentable changes in vital signs become apparent, and can determine the need for imminent resuscitation efforts before circulatory collapse or dramatic vital sign changes (Benner 1984). Often the perceptual grasp of a situation is context dependent, that is, the subtle changes take on significance only in light of the client's past history and current situation. Much of this takes place naturally as nurses compare their judgements of qualitative distinctions such as the "behavior" of a diabetic who is about to have an insulin reaction or the "feel" of a contracted uterus in contrast to
one that is firm because of bleeding. Benner (1984) calls this perceptual recognitional ability of the expert clinician "connoisseurship" (5).

It is not possible to capture all the stages in nursing practice. This would assume that nursing is not holistic, but procedural. Expert performers can grasp the most important aspects of a problem. Even when they attempt to make explicit all the elements that go into a nursing decision, essential elements are left out, because experts do not make decisions in this elemental procedural way (Benner 1984). Qualitative distinctions made by experts on the basis of their experience cannot be transmitted by precise written description. For instance, difference in "touch" or "feel" are hard to teach, because not only do beginners lack experience with touch and feel, but also need procedural protocols and analytic procedures. The expert always knows and understands more than he/she can tell (Benner 1984).

**Importance of dialogical thinking.** Students need to do all critical thinking in dialogical settings (Paul 1987). Paul contends that the skill of empathy and reciprocity is essential to the development of the rational mind. Only such activity forces us outside our own frame of reference. Because our primary nature is spontaneous, egocentric and strongly prone to irrational beliefs, people need no special training to believe what they want to believe, what serves
their immediate interests and what preserves their sense of personal comfort and righteousness. On the other hand, Paul continues, people do need extensive practice to develop their secondary nature, their implicit capacity to function as rational persons. They need extensive practice to recognize the tendencies they have to form irrational beliefs. Extensive practice is necessary too, to develop a dislike of inconsistency, a love of clarity, a passion to seek reasons and evidence and to be fair to points of view other than their own. The capacity to suspend judgement pending evidence is a higher order secondary nature skill. The practice of dialogical thinking is necessary for people to come to discover, reconstruct and ultimately transcend the ideas and beliefs that he or she is uncritically and unconsciously internalizing (Paul 1987).

Capturing the Stages of Nursing Practice in Writing

The nursing responsibility in client assessment has increased greatly over the years. The nurse is expected to recognize and document measurable changes and observable data. This is a problem when it is found to be nonexistent or when it does not communicate the needed and necessary information. As well as the importance of maintaining records that reflect the client’s progress and planned nursing care, today there is clearly greater emphasis placed on documentation from our regulatory board, the Joint
Commission for Accreditation of Hospitals Organization, (JCAHO). One of JCAHO’s standards (JCAHO 1990) state that nursing care data related to client assessments, nursing care planned, nursing interventions, and client outcomes must be permanently integrated into the clinical information system; i.e. the medical record. It is important that as nurses, we can articulate what we are doing which meets the standard, and not "what is it that they (JCAHO) are looking for".

Connection between writing and thinking. The connection between writing and thinking has undergone radical rethinking in recent years (Allen et al. 1989). The previous view (learning to write) saw writing as recording thought. Writing was viewed as necessary only to communicate what had been learned through charting, care plans or process recording. This type of writing is often described as technical or reportorial. The author reports what he or she already knows. The new perspective sees writing as developing thinking, (writing to learn). Central assumptions of this perspective include:

1. Writing skills are primarily thinking skills, competence in one is inseparable from competence in the other.

2. Higher order conceptual skills can only evolve through a writing process in which the author engages in an active ongoing dialogue with him or herself and others. Learning and discovery are purposes as
important for writing as communication. (Allen et al. 1989, 7)

The practicing nurse must be provided with the information he/she needs concerning contemporary nursing practice. Writing competency is not one of the skills included in the pre-nursing requirements or in the nursing curriculum. Donald Stuart in (Cooper and Odell 1978) indicates that the fault of present day teaching methods is that they teach students how to judge their finished work but not how to produce it. This implies a fundamental shift in writing from the product of writing to the process by which the product eventually gets on paper (Cooper and Odell, 1978). Not all of the knowledge embedded in expertise can be captured in theoretical propositions. "However, the intentions, expectations, meanings and aspects of clinical know-how can be captured by the interpretive descriptions of actual practice" (Benner 1984, 35). Recording or documentation of this information is central in defending or justifying the need for a longer than projected hospital stay or the need for ongoing professional nursing care. The underlying assumption by nursing educators and administration is that nurses, and especially experienced nurses possess an inherent ability to write.

Elbow (1981) indicates that the basic problem in writing is discovering what one wishes to say, not simply deciding how best to present ideas that already exist, fully
formulated in one’s mind. The ability to comprehend nursing content can be strengthened through writing. Elbow states that only at the end will you know what you want to say or the words you want to say it with.

The composing process. It was the eighteenth century British rhetoricians, influenced by the empiricist philosophers, who suggested that rhetoric should be based on a psychological analysis of the mind of the listener (Cooper and Odell 1978). This psychological orientation still pervades much of the communication research, but its influence is waning. The alternative tradition in psychology is the cognitive-developmental position.

The psychology is cognitive in that it focuses on the way a person knows the world, on "mind" rather than behavior. The position is developmental in that it emphasizes the sequential stages through which mature intelligence emerges (Cooper and Odell 1978). This compares with Anderson’s (1990) "declarative" (220) and "procedural" (220) knowledge. "Declarative" (220) knowledge is knowledge of the world and how it gets into the system, how this knowledge is represented, so it is knowledge about facts and things. "Procedural" (220) knowledge he explains as knowledge about how to perform various cognitive activities.

Relating this to the nursing clinician’s writing process, there may be a lack of verbalization of the procedural knowledge. Therefore one needs to reflect on
what one knows procedurally and then transform the knowledge into a declarative form.

Often when we think a problem through, we are bombarded by many "...confusing, half formed ideas, feelings, doubts, associations and objections..." (Howard and Barton 1986, 29). The speed with which they come and the number of them become a burden on the memory. If they are not written down quickly, many valuable thoughts will be lost. Writing them down is not only one of the best ways to preserve but to discover and identify one's thoughts (Howard and Barton 1986).

Watson (1980) offers some specific thoughts on the writing process. One of these is that some highly articulate individuals are conspicuously incapable of writing at all. He keeps a file of confusing sentences that crop up in thesis papers. When he asks students to read sentences such as these aloud, the students invariably say "What I was trying to say was such and such." The words they utter turn out to be more direct and unaffected than the words they write.

Watson (1980) does not believe that the difference lies between writing and speaking. He thinks the students' interpretation of their own writing, spoken in response to his objection were not apparent to them when the original sentences had been written. It was not that they had a clear thought, but failed to find the right words. Rather,
the thought at the time had not been discovered. Watson hypothesizes about the reason some people have difficulty writing is that they try to do two incompatible things at the same time: say something and say it in the most acceptable way. The aim should be to exteriorize thought without regard to its expression in accordance with the cliche that you don’t know what you are trying to say until you have said it.

Freud once said "write it, write it, put it down in black and white...get it out, produce it, make something of it...outside you, give it an existence independent of you" (Freud in Watson, 1980, 132).

Before an author can produce any given utterance, a great number of these utterance must be integrated. A number of skills must be exercised and a number of demands met more or less all at once. As a dynamic process, writing is the act of dealing with an excessive number of simultaneous demands or constraints. Viewed this way, "a author in the act is a thinker on a full time cognitive overload" (Flower and Hayes, 1980, 33).

Turning thoughts into text. Turning verbal thought into text is a demanding task. Hirst and Olson in (Flower and Hayes, 1980) describe the difference between an utterance and a text. We expect that the meaning in written speech will be fully contained and explicitly present in the text itself, as it never is in oral speech. By contrast, the
meaning of an utterance often depends in large part on a context shared by speaker and listener, on the immediate situation, shared intentions, prior knowledge and on many forms of paralanguage, tone, emphasis and body language. To compensate for all that lost meaning, the author of a text must draw on the specialized conventions of written discourse in order to contextualize the meaning.

Howard and Barton (1986) state that articulation comes before communication, writing serves understanding first and communication later. They also remind us that our thoughts are not so much in pursuit of words as we use words to pursue our thoughts. If there is a need to be persuasive, the author will have to generate good arguments or subtle prods, organize sentences for effect and constantly monitor the tone of voice projected. The most useful and accessible form of thought is when it is transferred onto paper as in writing. This will activate further thought and will enable one to take control of the writing process instead of waiting for the "right" words to "arrive" later.

**Influence of Interactive Nursing Process on Documentation**

Just as in the writing process, nursing process does not follow a rigid sequence wherein data are first collected, then analyzed, plans made to intervene and then evaluated. The nursing process is dynamic, interactive, and interpersonal in nature. The nurse "intervenes from the
start by listening while analyzing and evaluating, analyzing while listening, evaluating while intervening, analyzing and listening" (Erickson 1988, 105). When nurses identify problems that have no current relation to the client’s expressed concerns, efforts to develop plans and intervene with these persons are often ineffective. However, when nurses experience the nursing process as the lively, significant, and productive interaction between nurse and client, they will gather and record data that are truly relevant to achieving mutual goals.

By always starting where the client is, (modeling) and inviting free expression of worries, concerns and questions (CCT) this can lead to satisfying, effective care that incorporates subsequent documentation of nursing (not medical) observations, nursing (not medical) goals, means and progress (Erickson 1988).

The nursing population the author is involved with are not students, they vary in experience from new graduates to greater than twenty years of nursing experience. Writing ability varies greatly within this group. The author decided to ask some questions of the nurses who she thought exhibited the greatest difficulty with writing, and what they thought some of the reasons might be. This was achieved in a relaxed and non-threatening atmosphere. The nineteen responses indicated the following reasons:

. Insufficient information about the situation/concern. (7)
- Difficulty evaluating client response. (3)
- Difficulty finding the right words. (3)
- Just don’t know what to say sometimes. (3)
- Don’t like writing “my” opinion. (1)
- Difficulty forming ideas, concepts, opinions. (1)
- Difficulty assessing client needs. (1)

When nurses who exhibit the ability to analyze a diversity of opinions, values and judgements, and to contextualize information were asked what they attributed their skills to, the following are some of the responses the author received:

Oh! I don’t know. Well, I usually talk with the client a lot. I make sure I know the whole situation before I write the final summation in the chart. I also make sure that we both understand and agree to the same thing.

If I’m not sure about any aspect I will talk it over with someone in order to clarify my own thinking. I feel it is important to include others’ viewpoints. Jotting down ideas helps too.

Based on the responses from the nursing staff and frequent monitoring of documentation, it is clear that what some staff need is help to steer them away from their present approach of reducing the nursing process to an outline on which to display information gathered elsewhere, rather than a process by which to make discoveries and learn to manage that previously obtained information. Engaging in
Using CCT to Stimulate Performance

Can CCT play a part in management? A resounding yes! Not only can CCT enhance management style, but it enables the manager to transfer these skills to his/her staff. Decisions are frequently made without thinking about other possibilities. In other words, the first idea that enters one’s head, often within a very narrow framework, is accepted. Staff sometimes perform tasks without evaluating the efficiency of their own performance. Use of metacognition (Costa 1985), taking the time to think about what we do, and to evaluate our decision making or problem solving, enable one to be aware of and have control over one’s mind and thinking. Paying attention to our thinking process before, during, and after an episode of thinking is metacognitive activity (Swartz and Perkins 1989). Over time, it is possible to encourage this higher order thinking skill in daily interactions with staff.

Inhibitors to creative thinking. As in any large institution, rules (regulations and policies), habits and traditions can be some of the inhibiting factors which can interfere with people’s creative ability. There are also perceptual blocks, which are related to habit and learning (Davis 1986). Because we are accustomed to perceiving
things in a particular way, it is difficult to view them in new ways, or with new applications and uses. Psychologists call this perceptual set, mental set or functional fixity (Davis 1986). This view inhibits our thinking rather than helps us to flexibly see alternatives. Too often people feel obliged in every situation to respond according to what they believe others want or expect. Two good creative attitudes are to (1), assume that anything and everything can be improved, not just accepted as status quo, and (2), creative contributions often are valued and appreciated (Davis 1986).

**Turning sighs into song.** Two years ago, the Vice President for Nursing of a large urban teaching hospital, decided that for the first anniversary of the implementation of primary nursing, all units would celebrate. This celebration would be in the form of a presentation of some sort, by each unit which would depict nursing and especially primary nursing. Often, this was in the form of posters of many and varied kinds. The staff on the HRAU were not enthusiastic about the project, and some felt that it was burdensome.

Since the author was enrolled in the CCT program at the University of Massachusetts, she believed it was necessary to involve and excite staff in order for the outcome to be fruitful. Brainstorming sessions were held with staff, and while these did not produce "the" ideas, staff enjoyed the playfulness. The decision was made to produce a video, with
the understanding that it must not be boring. But what? In an incident quite unrelated to the task at hand, one of the nursing staff, using some very familiar primary nursing language, "sang" them to a "rapping" rhythm. Eureka! This was it! The author suggested using this for part of the video. The reaction from the staff was one of surprise and shock. "We can't do that." "It's not professional." "Our Vice President wouldn't like it." Soon however, staff started to think positively and became very enthused about the idea. The author wrote her own lines for the "rap", however the originator completed the "song" (See Appendix VII).

The unit became the center of activity, excitement and fun. Even staff who could not participate supported it in other ways. We needed assistance from other departments in the hospital to produce the video, and all responded with enthusiasm. All the "professional" statements about Primary Nursing were made, with the "Rappin' RN's" singing its praises at the end. It was an immediate hit, and the Vice President loved it!

This did involve risk taking; what if it had not been accepted? However, the attitude suggested by Davis (1986) that certain contributions are often valued and appreciated, did pay off this time. This activity resulted in another unplanned positive outcome, and it improved the staff cohesiveness on the unit.
Using CCT to introduce humor. This incident involved some members of the staff on the HRAU and one "other" unit. These staffs accused one another of not understanding each other's position with regard to the situation on their respective units at the time clients are transferred in. This other unit is accused by the staff on the HRAU of undermining the complexity involved with some of the clients they transfer to the HRAU. The HRAU is accused of prolonging the transfer time for clients being admitted to their unit. These were two of the main issues involved.

The author and the nurse manager on the second unit decided that both staffs should meet to discuss the issues, and the staff agreed. However, staff members were anxious. We decided on a strategy which (we hoped) would create an environment conducive to rational dialogue. However, the author felt that "something else" was needed. There was very great potential for displayed hostility. What would help to defuse this? Perhaps the introduction of some form of playfulness or humor? But judging by the feelings expressed, would this be a "wise" thing to do? The idea of a cartoon came to the author's mind. It could be a cartoon poking fun at the HRAU unit, and staff, depicting the unit's alleged failing in its extreme (See Appendix VIII).

An artist was sought and found. Only two members of the HRAU staff were informed about this. On the morning of the scheduled meeting, when staff from both units assembled
unsmiling, for their interaction, the author had second thoughts about trying to introduce humor. However, the urge to "break the ice" superseded all other feelings about the wish to retreat. The meeting began with appropriate introductions. While the reasons for our meeting were being reiterated, copies of the "cartoon" were passed around. Watching people's expressions, wondering how they would react proved to be somewhat anxiety provoking. Smiles appeared on people's faces; however, one person from the "other" unit pointed to the cartoon saying "This is not what we think!" Immediately, another voice from the same unit joined in saying "It's a joke!" There was laughter all around.

There was certainly risk involved in this endeavor. It could have had a negative outcome. However, it did help to defuse the potential for a hostile exchange. The issues still exist with both units, but now staff discuss the incidents as they occur, a decision made at the meeting. They also suggested that further meetings of this kind would be helpful.

Using CCT to influence change. The HRAU has thirty two beds, divided into three separate "pods", (increased from two to three pods). Two of the pods have twelve beds each; the third has eight beds. Staff sometimes switch from pod to pod, the only staff who do not are the nurses in charge, (NIC), of which there is one on each of the three pods for
day shift only. Staff remain on one pod or another as much as possible, but the amount of switching back and forth is still disruptive as identified by staff and clients. In the interest of primary nursing and to further facilitate continuity of client care, the decision was made to have staff "assigned" to permanent pods, with the understanding that only when absolutely necessary would staff be expected to move from their "permanent" pod. Most staff members agreed that permanent assignment would provide more satisfaction for clients and staff.

Staff were asked to select the pod of their choice and submit this to the author. The results did not reflect an even distribution of pod preference across shifts. Given that there is a philosophical shift in the nursing department, toward a Professional Practice Model, to include participative management and self governance, assigning staff to a pod without a choice would not be in congruence with this model. So the plan remained that staff would be given a choice.

It did not seem to make sense to have staff identify why they chose the pod they did. The client population is homogeneous across all pods. Was this preference due to personality preference, (NIC on particular pod), staff they assumed would be working with them, the number of beds, the structure of the pod or any other number of reasons? To do this would be very time consuming, and the author felt that
it would not lead to a solution. So instead of asking forty five staff members to identify all problems on the unit, the author asked them for their view of the ideal unit. The plan involved all staff in this activity in groups of seven to nine. They were asked to forget that our three pods exist; the plan was to construct a new pod, and staff were invited to list all the ideal properties of this pod. The question was presented to each person in written form. Each individual was given a single sheet of paper with the following:

If we could construct an "ideal" pod, what properties would you choose to be included?
Use these questions to help you think about this.

1. What is it we can do better?
2. What would you like to happen differently?
3. What ideas would you like to get going?
4. What relationships would you like to improve?
5. What takes too long?
6. What is wasted?
7. What barriers or bottlenecks exist?
8. What do you wish you had more time for?
9. What makes you angry, tense or anxious?
10. What do you complain about?

Write your answers below in short phrases.
These questions were reviewed by the three NIC's and a Ph.D., Clinical Nurse Specialist who is a member of the Nursing Research Committee and Ph.D. prepared. The question (ideal properties of a pod) was read out loud, the members were asked to take five to ten minutes to list their ideas in response to the question, in brief phrases on one piece of paper. The members were requested to work silently and independently. The silent generation of ideas in writing:

1. Provided time to think.
2. Provided a creative setting.
3. Provided focus and uninterrupted thought.
4. Encouraged each member to search for ideas.
5. Avoided competition and status difference.
6. Avoided conformity pressures.
7. Avoided evaluation and closure.
8. Avoided polarization of ideas.

This process allowed staff to look at ways and means to do something which was different from the "usual" or the status quo, and away from rigidity. It allowed them to think new ideas, try them out, put their creative thought processes into plans and develop them. Ideas alone are not sufficient, they have to be made workable. Some of the CCT skills members were asked to use are defined below.

**Synthesis.** Combining ideas. The ability to see relationships. A new idea may be a combination of the old and the new to create the ideal.
Change of perception. Changing the "frame" in which a person perceives events can change the meaning the person associates with the events.

Flexibility. Get outside the "walls". Look at things from different perspectives. Take a different approach. Look at a different pod.

Substitute. Look at some of the things we are doing now, can we do them differently -- better.

Elaborate. What are some basic ideas or plans which could be built upon and further developed.

Eliminate. Look at some of the tasks we do now, and think about why we do them. Could some of them be eliminated?

Stretching. Think of original ideas, novel ideas. Take risks, be bold. Search for possibilities, an alternative route or option to a solution. Extend the boundaries. Go beyond what is "usual" or "expected".

Reflection. Of self in relation to environment.

Focusing. Keep the situation in mind.

Review. Take into consideration the total situation.

Visualization. Project into the future. Mentally manipulate ideas.

Fluency. Production of many ideas.

The purpose of this group technique is to eliminate social and psychological dynamics of group behavior which tend to inhibit individual creativity and participation in
group decisions. For the time that the group uses the technique it avoids the usual problem of having a few individuals doing all the talking, the rest listening, and very few people taking the time to actually think about the issue at hand. Individuals can be more creative, and everyone is given a structured opportunity to participate.

Each member in turn was asked by the facilitator to read one of her ideas. Each idea was written on a flip chart as it was read. This procedure continued around the table enough times for each member to exhaust her list. This recorded listing of ideas on a chart:

1. Structures equal sharing and participation.
2. Encourages problem-mindedness.
3. Encourages each member to build on other member's ideas.
4. Depersonalizes ideas.
5. Reinforces concentration to hear and see ideas.
6. Provides written permanence.

Each idea listed on the chart was discussed in order. The facilitator pointed to each idea beginning with the first, read it out loud and asked the group if there are any questions or statements of clarification which members would like to make about it. This discussion and clarification of each idea on the chart:
1. Initially makes each idea as important as another.
2. Provides equal time to each idea.
3. Clarifies ideas.

Since all staff would participate, this activity was repeated until all or most staff contributed. Following a brief discussion of each idea on the chart, charts listing ideas from prior groups were presented. Since some ideas may be similar in nature this helped them to see relationships and to combine ideas.

When all staff had contributed their ideas, the next step was to vote on priorities. The vote was silent and independent. The facilitator asked the group to select a specific number, five or seven, of the most important items from the entire list of ideas. Each member was asked to place each priority item on a separate 3x5 card. When members had their set of priority cards complete, they were asked to rank order the cards.

The cards were collected and the vote was recorded on a flip chart in front of the group. It is useful to consider this a "preliminary" vote. This will enable additional thought and elicit judgements about the ideas without "locking in" anyone at this time.

The final step was to list and agree on prioritized items. The results of the process were listed on a flip chart to provide a permanent record of the group's
agreement. During the first of these activities with a
group of twelve staff, the first "idea" to be read was as
follows:

* "Eliminate the filling out of charge slips
each shift."

Explanation: When the Nurse in Charge is not on duty, there
is a charge nurse for each pod who is responsible for
various activities. The charge slip lists activities which
should be checked off by the charge nurse on each shift.
Some of these are time consuming. The discussion and
clarification of this problem went as follows:

Staff- Filling out that charge slip on each shift
is a pain.

Facilitator- Do you remember why this list
was initiated?

S. Well, I know things were often not completed
as they should be, and just left for the
next shift to pick up, and coming on duty to
a mess drives me nuts too!

S. That's right, some of us did complain about
that.

S. There are so many items and things to do for
the charge person though....

F. Are any of the tasks listed unimportant, any
that could be deleted?

Quiet......................

S. Well, not really, they are important and
need to be done. But I do these things
anyway for all my clients. I suppose what I
resent more than anything is having to check
up on others who should be doing the same
things I do.
S. Then when something is not completed as it should be, I have to recheck later....it's a pain.

F. So everyone should be responsible and accountable for her own client care and the accompanying tasks?

S. Absolutely! Chorus.

F. What do you think about the differential payment for taking charge?

S. Well, it's fine, but there are times when it is just not worth it. Often I would just rather forego the extra few dollars.

S. It would be so much easier if everyone would just do what they are supposed to do.

S. Could we share it ... the charge pay I mean? That way we could share the responsibility too.

F. I don't see why not. How would you do this?

S. Lots of ideas burst forth, many acceptable.

F. We are still left with the problem of the charge slip.

S. I'd like to get rid of that!

F. Is there another way of communicating what is on that list?

S. I have an idea. Each of us could tape a one minute "blurb" before starting client report about what tasks if any still need to be addressed by the oncoming shift. This way when we listen to report we know what has to be done and will not be surprised. For instance, if a client does not have a primary nurse, or if the assessment has not been completed, that should be passed on, otherwise it could be missed on the next shift too.

S. That sounds great! Then everyone will have to do it.

S. Of course.
F. Would it help to have some of the important items listed on the bottom of your assignment sheet just as a reminder?

S. Yes, that would help.

S. So we'll share charge pay and responsibilities. That makes more sense.

S. Do you think this will be acceptable to everyone?

S. Well, we are all RN’s except A....... and M....... (they are LPN’s, and do not “take charge”). We all know we can’t share when we work with them, but they can still take care of their own responsibilities. No! this has got to work if we want to get rid of that piece of paper! (Laughter.)

This was an "everyday" kind of problem situation, but nevertheless one which staff identified as a source of irritation. The CCT challenge was to find good solution ideas. When this problem was first identified, there were no reasonable options available; they had to be found. CCT involved the examination and evaluation of the responsibility in question:

A. The standards of client care, which themselves are the result of critical reflection.

B. Staff accountability and "ownership" of the responsibility.

Critical thinking was not solely a discussion of the fairness of the situation, but also was an undertaking of inquiry and understanding. The needs were self evident. It was well understood that "one sided" thinking was
insufficient in this case. In order to eliminate the charge slip, it was necessary to come up with a well reasoned alternative. The number of options which could be generated for this particular situation were self limiting to a degree, since "accountability" rested with all. It was necessary to maintain a sense of responsibility for self and others.

There was a general feeling that this decision mattered a lot, because it would affect everyone. Although the decision was reached within a reasonably short time period, this was not a matter of settling for the first idea that presented itself. It was a straightforward and well reasoned suggestion. Since this "brainchild" was conceived and developed by the staff collectively, it is more likely that this change will be implemented without difficulty.

Permanent pod assignment? Following these sessions, many staff who had expressed a preference in pod assignment, made it clear that it really didn’t matter so much. What mattered was remaining on the same pod as much as possible. The planning and implementation of this were uneventful.
CHAPTER IV
INTRODUCTION OF A THEORY BASED PRACTICE TO A NURSING STAFF

Review of Literature

Currently, very little published data related to the theory of MRM exist. The author found none related to implementation of the model on a nursing unit. There are however, several studies under way at the University of Michigan, and when published these will serve to support the theory and enhance its clinical applicability. Erickson (1989) states that every part of this theory needs to be developed further. Erickson also states that each statement made has a research question attached to it.

One such study is under way at the University of Michigan Medical Center, by three nurses who have hypothesized that length of stay correlates with stages of development. They are using an updated version of the theorist's data collection tool and newly developed scales based on Erickson's and Piaget's Theories and are assessing the states of coping which are predictors of length of stay. (Erickson 1991)

In her literature search, the author found three articles on MRM. In the first article: "MRM: Integrating Nursing Theory into Practice", (Kelly et al. 1989) contrasts two clinical cases using MRM. The concepts and linkages from MRM are presented and are the basis for analyzing the outcomes of two clients.
The second article: "Psychophysiological Process of Stress in Chronic Physical Illness: A Theoretical Perspective", (Kline et al. 1990) proposes a theoretical framework and conceptual model for clinicians and investigators working with people who have a chronic physical illness. The major premise (based upon nursing theory and classical propositions from psychology and physiology) is that individuals with limited psychosocial attributes and a preponderance of unmet basic needs are more likely to perceive events as threatening and experience a maladaptive stress response. Conversely, those with strong attributes and a perception of need satisfaction are more likely to view events as challenging, thus avoiding symptomatic discomfort and enhancing personal growth.

The third article: "Modeling the Client’s World: A Way to Holistic Care" (Kinney and Erickson 1990), examines the difference between Wholistic nursing and Holistic nursing and proposes that the latter conceptualization is more effective for contemporary nursing care. A brief historical overview and critique of the two concepts are given. The Nursing Theory, MRM, is presented as an example of a theoretical perspective that encompasses the holistic orientation. Case examples of how this theory has been used in clinical practice are offered.

There is a National Conference on MRM in a large urban Teaching Hospital planned for October 1992. Current
research will be presented on concepts of the theory. Issues relating to clinical practice utilizing the theory as a basis for current development in nursing education will be offered.

Publication of the book, *Modeling and Role Modeling: A Theory and Paradigm for Nursing*, (Erickson 1988) as well as publication of research studies based on the theory, have exposed practicing nurses to the theory. The author believes that the added exposure that the MRAU staff experienced when they dialoged with Helen Erickson, enhanced the likelihood that this theory will be integrated into their practice. Erickson (1991) has noted that what seemed to be a revolutionary idea as recent as eight or ten years ago, that the client be head of the health care team, is fast gaining acceptance, as well as the idea that nurses can practice nursing independently. According to Erickson, negative responses to the theory are more likely to come from individuals who cannot accept the idea that they should listen to the client first, or who do not take the concept of holism seriously.

**MRM: Introduction to a Nursing Unit**

Initial discussions with staff elicited many and varied responses which included:
But I feel that I already model the client’s world, except that I don’t call it that.

I do not understand the theories that MRM is based upon.

It is so abstract. How can I document this?

Staff felt free to verbalize their frustrations at having to include one more process into their practice. The author was sensitive to their feelings and was careful not to undermine them. It was necessary to model their world for a time. At this time the topic of individual philosophies was introduced. Staff were invited to discuss their own philosophy of nursing, and their conceptual framework consistent with that; to think about why they entered the nursing profession: what was it they enjoyed most about their work and, what kinds of joys and disappointments did they experience? The definition of MRM was discussed at length.

What is nursing’s relationship to MRM? Nursing is holistically helping people with their self care activities as they relate to their health. This interactive interpersonal process enables persons to identify and develop the resources needed to cope with their circumstances.

Terms relating to MRM. It was necessary to discuss many of the terms relating to MRM. Nurturance implies that the nurse seeks to know and understand the client’s personal model of
his or her world, and to appreciate its significance and value for the client from the client's perspective. The clinician's role in unconditional acceptance is to accept the client as a unique important individual as the client is, in a relationship which is health directed and growth directed. The relationship should facilitate the individual in developing his or her own potential; it should not control or regulate. Very often clients will link up to us because we have accepted them unconditionally.

All people have an inherent need for affiliated-individuation (Erickson 1988), an inherent drive as basic as Maslow's (1982) basic needs to be linked to people at the same time that they are separated from people, a need to be oneself and have some control over one's life, and at the same time a need to be affiliated. Everyone has that need, and our needs differ at different times.

People are faced with and have to deal with stressors throughout their lifetime. Descriptions of stressors encountered during antenatal hospitalization have been limited (White and Richie, 1984). People's ability to cope with stressors will determine the outcome to stress response. Adaptive potential is the ability to mobilize resources to contend with stressors. This ability is linked to many reasons, but one of them is the developmental residual which is linked to how basic needs have been met or
not met. The more they have been met, the more residual one will have.

What people know about themselves that no one else knows in the same way is termed self care knowledge.

At some level a person knows what has made him or her sick, lessened his or her effectiveness, or interfered with his or her growth. The person also knows what will make him or her well, optimize his or her effectiveness or fulfillment (given circumstances) or promote his or her growth. (Erickson 1988, 48)

It is important to remember that all behavior is motivated by a need. We should try to understand the behavior without putting a value judgement on it. By focusing on getting the need met and not on the behavior, it is more likely that the behavior will change (Erickson 1988).

How people are alike. A certain curiosity started to develop among and between staff. They needed to know what foundation for the theory and paradigm was offered. During these discussions they realized too, that while some of them may have modeled their client's world, their practice of nursing was not consciously based on role modeling. Basic to this practice is an understanding of the many theories which underlie these assumptions about clients. Nurses often talk about the uniqueness of their clients, but we have also to think about how people are alike if we are to
utilize the theories on which this nursing practice is based.

Erickson (1988) explains that as humans we are alike in our biophysical makeup, and as nurses we study anatomy, physiology, biochemistry, and microbiology in order to know what is normal and how people compare in the biophysical subsystem. Without this knowledge, nurses are unable to detect deviations from normal which may signal the need for care. As people are alike in their biophysical subsystem responses, they are also alike in that they are holistic. They are not just a head and body; humans are biophysical, psychosocial, and spiritual beings. When needs are not met within one subsystem, a potential exists for the individual to draw energy from another subsystem in order to maintain him/her self. This may result in the individual becoming physically sick when experiencing psychosocial stressors, or emotionally distressed when experiencing biophysical stressors (Erickson 1988). So humans are also alike in that they have a mind body relationship.

Review of theoretical bases. So that we might more fully understand this relationship and how people are alike in this respect, the theoretical bases associated with this needed to be reviewed. For some staff members, these theories were within recent memory. However, for many it took longer for them to refresh their understanding of these concepts. The following theories were reviewed:
1. Maslow's formulation of the growth principle and theory of human needs (See appendix I).

2. Erickson's eight stages of development through which we all progress (See Appendix II).

3. Piaget's cognitive stages of development (See Appendix III).

4. Engle's theory on loss and grief (See Appendix IV).

5. Selye's theory of stress and human response to stress (See Appendix V).

These theories were discussed in relation to observed client behaviors. Now that there was a basic understanding of the theories which underlie this practice of nursing, how are these going to help us? Where do we go from here? These theories cannot be used in isolation. The functional relationships among the concepts needed to be discussed and understood. For instance, nurses often find that they are unable to satisfy the "difficult" or "demanding" client. As in a mother-baby relationship, or any nurse client relationship for that matter, the more the client is ignored the worse the situation gets. It is important to keep in mind that all human beings have basic needs that can be satisfied, but only from the framework of the individual, so that care might be directed more purposefully.

Integration of MRM into nursing practice. Since this theory based practice had been recently accepted by the hospital,
guidance was needed by the units which were at varying levels of implementation, from not at all, to struggling with the basic concepts. Workshops were planned and offered to staff at large. The faculty for these one day workshops were a select group of staff, including clinical nurse specialists and staff educators who had conducted telephone conferences with Erickson each week for one hour. These conferences lasted for several weeks to help them understand the theory. The workshops were designed to expand the participants' understanding of MRM concepts in order to enhance their skills in case analysis and develop strategies for clinical application. The author found that integrating the concept of MRM into actual case presentations was very useful in helping her to understand the basic concepts.

Attendance was voluntary. However, staff who exhibited interest in and curiosity about the model were among the first encouraged to attend. There would be opportunities for many, if not all staff to attend over time. Five staff attended the first workshop. In the meantime, MRM was discussed at every opportunity; it was added to the agenda for staff meetings; special meetings were devoted to it to ensure exposure of all staff to the concept. Client presentations were planned each week, with one of the MRM resource group always in attendance. It took time for staff to feel comfortable presenting issues without feeling that they had to provide the solution to the issues. Every
attempt was made to provide as non-threatening an
environment as possible. Eventually, every staff member
understood that these were learning situations as much as
they were client care issues.

The following is an excerpt from the first of these
presentations:

I am Mrs A's primary nurse. She was
admitted with bleeding and contractions five
day's ago. She is thirty two weeks
pregnant. The issue I would like to talk
about and need help with, is, well there is
just something about her that I can't quite
understand. She always has something
negative to say about the other staff,
indicating that she does not like them. She
spends most of her time in Mrs B's room on
the other pod. They stop talking when you
go into their room and it feels
uncomfortable. She is not easy to talk to.
I almost feel she doesn't trust me. If
these theories are supposed to help me, well
they're not. I just don't know where to
start.

Another staff member discussed her observation of Mrs
B, and indicated that she felt that Mrs B didn't seem to
trust the nursing staff. Both of these nurses expressed
their exasperation. They appeared uncomfortable when asked
if they had "modeled their clients world." They both said
"no." It was necessary at this time to model these staff
nurses' world. What would help them to deal with this
issue? What were their needs? They stated that it would
help if this issue was discussed further and suggestions
offered by other members present. It was obvious by the
many unanswered questions that more data were needed in order to understand their basic needs. Ways to assess client needs were offered (See section on data collection).

The available data were reviewed and analyzed within the context of the relevant concepts and theoretical bases. We discussed the following:

1. How nurses might consider individual uniqueness.

2. That people are different based on their genetic and inherited characteristics.

3. Their current ability to mobilize resources needed to respond to stressors and distressors.

4. The way in which they model their world.

5. How humans differ in some ways, while simultaneously are alike in other ways.

6. A prerequisite for providing holistic care is an appreciation for each person’s model of his or her world.

7. The greater the basic need deficits at any point in time, the less potential a person has for mobilizing the resources needed to contend with new or ongoing stressors.

8. The importance of entering for a time into our client’s world, to share as empathetically as we can the client’s model of it. The need for CCT skills in interacting with these clients.

9. The need to understand that because each one has a personal model of the world, people with nursing needs are not helped in standardized ways. We do not have it within ourselves to know how a unique individual may best be helped; only the individual knows the kinds of help he or she needs to mobilize strengths and resources. (Erickson 1988)
We need to be aware of the limits of one’s knowledge including sensitivity to circumstances, bias and limitation of one’s viewpoint. (Paul 1990)


One of the things Erickson had said was that initially it may be helpful for staff to forget about the theories, and to focus on the client’s needs using the Five Aims of Nursing Intervention (Erickson 1988).

The five aims of nursing intervention. These are as follows:

1. Build trust.
2. Promote client’s positive orientation.
3. Promote client’s control.
4. Affirm and promote client’s strengths.
5. Set mutual goals that are health directed.

The two staff members would assess their clients for the kinds of data they would need in order to understand their needs and then plan an intervention. This dialogue would be continued in one week.

At the client presentation the following week, both staff were excited about presenting their findings. The interactions they had with their respective clients had been positive. Based on the discussion the previous week, they
had changed their approach. Instead of judging the client's behavior, they approached it from a needs perspective.

Mrs A. responded to this changed approach and confided in her nurse who was now showing concern for her. She told her she was worried about her relationship with her husband. This was her second marriage; her first husband had "left her." Her husband now was several years younger than her and she was concerned that her being in the hospital might "strain" their relationship. She was afraid that he might leave her too. Relating this to the theories underlying MRM, the nurse could identify this client's lack of trust, and that this was projected to the nursing staff. She understood that one of the basic aims of intervention was to develop a trusting and functional relationship between herself and her client.

Mrs B's social history resembled Mrs A's in that trust was an issue in her marital relationship. Here too, the nursing process requires that a trusting relationship exist between the nurse and client. This was just the beginning, and both nurses were hopeful that their respective clients would benefit from these and further therapeutic interactions.

Building trust. One of the most effective ways of building trust is to listen well enough to understand a person's representation or model of their world. Creativity
is essential to this form of thinking. This dialogical thinking is a series of reciprocal creative acts wherein the nurse moves up and back in mind from different imagined roles. If we then demonstrate open, honest, direct and kind behaviors in response, we are building the foundation for a "secure" attachment necessary to the well-being of clients. Most clients do not expect that nurses be perfect; however they do expect that their nurses value and accept them for themselves. They always want some form of caring, even though some of them may not know how to ask directly for what will best represent that caring for them. "Some want to be cared for; some want to be taken care of; others want both" (Erickson 1988, 171).

The next client to be "presented" was described as a "disruptive, non-complying individual who just would not settle down" when admitted at 3 A.M. one morning. "No matter how much I tried to do for her, it didn’t help. She kept putting her call light on". Discussion of this client centered around "What her greatest concern was", which the nurse had not identified.

It is important to remember that all behavior is motivated by a need. The nurse had not focused on the reasons for the behavior. In order to think critically about this situation it was necessary to consider the client’s point of view. This means to imaginatively put yourself in the place of the other to genuinely understand her and overcome your
egocentric tendency to identify truth with your immediate perceptions (Paul 1990).

Here, too, more relevant data were necessary. The nurse would follow up with her client and present her findings next week. Utilizing the MRM and CCT concepts, the client was assessed and her needs were identified. The nurse discovered that the client had many fears about losing her baby, (she had several losses) and what she needed most, (her basic need) was to be informed about everything, no matter how trivial, that was going to happen to her. The nurse’s description of her client changed from “disruptive” to “needy”.

Human development is dependent on the individual’s perceiving that he or she has some control over life (while concurrently sensing a state of affiliation). (Erickson 1988, 171)

Promoting client control. It was necessary to promote the client’s control. The nurse was encouraged to find ways particularized to her client by which she might creatively meet this general aim. Asking such simple questions as "What do you think you can do to help yourself?" "How can I help you?" Ask the client what she needs to feel safe, and do and provide what you are capable of. Reinforce the idea that no decision is final: "You can change things if you choose. You have important data inside yourself that is available to no one else. You are the best person to make
final decisions after we tell you what we know, including health principles and lab data that are external to you and less accessible to you. Ultimately, you're in charge" (Erickson 1988).

During these discussions Ennis's (1987) critical thinking skills used in "Reasonable and reflective thinking that is focused on what to believe or do" are employed:
1. Focusing on the question.
3. Asking questions of clarification.

The critical thinking dispositions are absolutely essential in these situations. It is also helpful to think about interpretation of critical thinking as "...critical examination and evaluation, actual and potential, of beliefs and courses of action, and critical judgement about what to accept as measurable and or to do" (Swartz and Perkins 1989, 17).

These presentations utilizing the five aims of nursing intervention were very useful in helping staff to understand these different aspects of care. These would be continued, and staff nurses who had attended the MRM conference would present the issues.

Promoting client's positive orientation. The next client issues to be presented were focused on self worth.
This client was thirty-five years old, thirty-two weeks pregnant and admitted for pregnancy induced hypertension. While hospitalized she was diagnosed with a sexually transmitted disease (STD), for which she blamed her husband. She weighed three hundred and forty pounds. Her responses to staff were always "gruff", and her nurse said she had a very difficult time approaching her as "I never knew how she was going to respond to me." She slept late into the mornings with her room in semi-darkness. She was described as a very unpleasant person. She kept the sheet pulled tight around her neck. Her husband was not very supportive to her and she questioned his fidelity.

When discussing this patient, the nurse was asked gently: "Did you try to model this client’s world?" "Did you try to imagine what it must feel like to weigh as much as she does, have a husband whom she does not trust, and be the victim of a STD?" The nurse had not, and needed help with this. First she needed to develop a trusting relationship with the client. Obviously this client did not feel good about herself and probably did not think she was valued as a person. It was important that her nurse understand and model her world if she wanted to role model a healthier, happier world for the client’s future.

Each human is uniquely different in how he or she has interacted with his or her world, met needs, resolved developmental tasks, and so forth. But each is like the others in that he or she wants his or her world to be
good. As we strive for this better world for our clients we need to role model the possibilities of new ideas, excitement, and hope within their reality. (Erickson 1988, 186)

In interacting with this client, it was important to avoid any negative comments about her condition (weight), while teaching the value of learning how to stay healthy and get even healthier. Ask for the client’s opinion on ideas and goals for the future. Affirm your’s or others’ dependence on the client for continued contributions that only the client can make. Tell the client that you enjoy working with her.

This changed approach to interacting with her client did result in the development of a more positive relationship. Her nurse as well, felt more comfortable and was more enthusiastic about caring for this person. Her nurse did express the feeling that she wished she had understood her better a little sooner, so that she could have planned her care more purposefully.

**Promoting client strengths.** A twenty-four year old client who was thirty-one weeks pregnant, was admitted to the HRAU because of sensory deficits in her lower extremities. Her condition deteriorated to the point where she was unable to walk without assistance. This was very frightening for her, and more so because the etiology was unknown at this point. She was presented by her nurse who
felt "very helpless as far as offering her any hope for her recovery." "I can model her world, but I am having difficulty role modeling it." Discussion revolved around how the client felt about her condition. What were her support systems? What kind of work did she do?

While nurses aim to detect and promote strengths on which a person may build and improve the state of health, it is the doctor's aim to solve the medical problems. Both work together very well. Suggestions were given for the many subtle ways to identify and promote strengths. For example, when doing a physical examination, the client's health status can be described to her. Her heartbeat is strong and steady; her blood pressures are within a desirable range; her lungs are clear. The baby's heart beat is strong and regular; she can be asked if she would like to listen to it. Her ability to maintain her weight, and to eat the right kinds of food for her baby should be recognized. She can be complimented on how well she adheres to her physiotherapy routine.

Frequently "mirror" strengths and normal observations with: "Are you aware that...?" "I note that...."
Focus on the client's existing sensory abilities.

When stressors mount, persons often lose sight of the strengths and capabilities they have in terms of who they are and their life experiences. They invariably benefit when an alert nurse raises their awareness of their positive qualities and abilities. Many people deny they have strengths.
Frequently, they will give no answer at all when asked "What are your strengths?" On the other hand, they are usually able to cite a long list of weaknesses without prompting. (Erickson 1988, 208)

Setting health directed goals. This client is a sixteen year old high school student, twenty weeks pregnant, admitted because her diabetes is "out of control". While doing her initial assessment, the nurse with her client identified many reasons why this was the case. She did not adhere to her diet, and found that since getting pregnant she was much more hungry. She had not been to see an obstetrician, and came to the emergency room because she was "not feeling well."

Erickson (1988) believes that whatever the client’s "presenting problem" is, it is the unmet needs that are the nurse’s focus. We should focus not so much on the behavior, as on how to help and support the person and have their needs met. This client’s basic needs were that she felt hungry, and she wanted to eat more. Whether goals are long or short term, they cannot be set without the maximum participation on the part of the person to be helped. In helping the client to maintain control of her diabetes, information is given about calories, insulin, blood sugar level and exercise. The client decides she can cut down on certain foods but not cut them out altogether. To stay with the issue of maintaining her blood sugar, the nurse discusses relationships between the number of calories her
body needs, the amount of insulin necessary for that number of calories combined with her daily exercise and the amount of calories burned.

To better assure that she models the clients world she asks, "What are you able to do to achieve this goal?" and "What can I do to be of help?" It is important to remember that to be "healthier" is not the same as optimal health. The outcome in this nurse-client relationship is a healthier state for the client, through improved eating habits. It is important that the nurse promote and nurture coping mechanisms that satisfy basic needs and permit growth-need satisfaction (Erickson 1988).

There are many times during these presentations when a nurse describing a situation, understands as she is verbalizing what she has not done to model her client’s world, and what it is she can do. At other times, she describes a perplexing situation only to realize that she sees it only from her own perspective. For example, on many occasions a nurse will describe in detail what she has done to "be nice" to her client, or what she has done to help her. However, it is important to think "from whose perspective?" These may be very nice and kind things to do, but it may not be what the client needs.

A nurse was describing her concern for a client who had a photo of her dead baby, born eighteen months earlier, on her bedside locker. She felt that this was "unhealthy", 
that the client should "be over" this loss by now and focusing on the upcoming birth. She realized as she was talking that it was she, the nurse, who felt uncomfortable talking about this loss with her client. Her client spoke quite naturally and was at ease when talking about her loss. Her grieving was not morbid. The nurse was referred to Engel's theory on object loss (See Appendix IV).

Another situation which reinforces the significance of dialoging about client issues was when a nurse was describing her frustration with a client. "She just keeps talking." "I couldn't get her to listen to what I had to say; I needed to do some teaching with her but she keeps going back to her own topic." As the nurse spoke the words "She keeps going back to her own topic," she realized that she had not listened to the client first. She said:

Oh!, I just realized what I said, and what I should have done, but didn't! I didn't ask her what concerned her most. I should have listened to what she had to say about her topic.

Maslow (1982) states that all people want to be the best that they can possibly be; unmet basic needs interfere with holistic growth whereas satisfied needs promote growth.

Imperative in this concept is the notion that basic needs are only met when the individual perceives that they are met. A care giver may try very hard to satisfy these needs but, no matter what, until the individual perceives that they are satisfied, they are not. (Erickson 1988, 57)
Collecting The Data

There are several sources of information, but the primary and most important source is the client. Health provider's opinions about what is normal or what "should be" is no substitute for client's perception and observed data. The nurse and client need to create together what it is they are seeing (Erickson 1988). So it is most important to give utmost attention to the person's perspective in the data collection phase of the nursing process. This means staying with the person's stated concerns until the person changes the focus of the interaction. Active listening skills must be engaged, taking seriously verbal and nonverbal messages without being judgmental. Nothing a person says should be discounted especially in favor of any personal interpretation of the meaning of nonverbal messages.

Critical thinkers realize that their feeling would be different if they had a different understanding or interpretation of that situation. The client should validate any possible interpretations we make of those meanings. It is important to identify the client's full perception of the topic under discussion. A problem well identified is a problem half solved. Problems can be defined through communication and critical thinking skills: reflecting, clarifying, focusing, summarizing, requesting examples and details. Use of "What if...?" "what prevents
you from...?" "What would happen if...?" "What control do you have over that worst thing...?"

This may help clients to realize that thoughts, feelings and situations they may have considered unyielding may be changeable (Erickson 1988). Statements such as "You are concerned with...." or "You just said that...." should be avoided, as they may be seen as too confronting and nonaccepting.

Although special emphasis is placed on the person’s perspective, it is important that any unattended medical need be identified and brought to the client’s, doctor’s or someone else’s immediate attention. The nurse should feel free to express this as her/his concern. It is important for nurses to share with the client their knowledge of the sciences and clinical judgement as it currently is (Erickson 1988).

Data organization. The kinds of data that need to be collected in order to make an assessment can be organized under four major categories.

1. Description of the situation.
2. Expectations.
3. Resources.

Data collected within each of these major categories will help to predict and explain the response to presenting health situations and adjustments that will be required.
Description of the situation. These data are collected in order to develop an overview of the client’s situation from their own perspective.

1. Overview of the situation.
   What is the client’s perception of the situation? Is it congruent with the perception of the other sources of information? What subsystems are involved? Are there basic-need deficits?

2. Etiology.
   Stressors, distressors. What etiological factors are involved? Are they stressors or distressors? Are they threatening or challenging? Are there losses associated? Are they real, threatened or perceived?

3. Therapeutic needs.
   What will help this person get well or healthier?

   It is important to ascertain the client’s description of the situation in order to determine what factors the client perceives as stressors precipitating or amplifying the current situation. Critical thinkers recognize the need for "intellectual empathy", the need to imagine oneself in the place of the client in order to genuinely understand them (Paul 1990).
Some stressors that the client does not name may be identified by the nurse, but these perceptions should be clarified with the client before being further considered. Human beings have connections with people, animals, objects and activities that generate expectations and obligations. The person's behavior and choices are affected by these expectations and obligations. These demands made on the person (self expectations as well as expectations that others bring to bear) create emotional responses. Some of these expectations routinely made include:

a. Acceptance of new diagnostic labels and sudden changes in body image.
b. Acceptance of recommended major treatments.
c. Acceptance, with good grace, of loss of privacy and control over space, information, self and lifestyle.
d. Engaging in the "good patient" role.
e. Acceptance of unexpected, sometimes unsupportable financial burdens.

The nursing perspective requires a valid data base on the specific demands in daily living that the client is experiencing, the extensiveness of composite demands and the "expense" to the person of meeting these. Thoughts about these should be written down when they occur. By reading back over what was written, the important points which emerged should be noted. What does it add to? What was the most important or central thing in it? The earliest hypotheses activated in the clinical reasoning sequence tend
to be general in nature, as might be expected, and appropriate when the cues are still sparse and often ambiguous. Critical thinkers distinguish what they know from what they don’t know. They will say “I don’t know” with ease when they are not in a position to be sure. They know how important it is to rethink conclusions in the light of new knowledge (Paul 1990).

We also need to listen carefully and to clarify what is being said to determine whether these precipitating factors are stressors or distressors. This is an important dimension to consider when sorting out a client’s modeled world. There are many exciting and stimulating things that happen every day that are stressors. If the person sees them as exciting and positive, that is, perceives them as a challenge, it is less likely that they will identify them as the cause of a health problem. Both take energy and both can aggravate and culminate the problem; however, distressors are more likely to take more energy and cause problems faster than are stressors (Erickson 1988).

Expectations. To develop an understanding of the client’s personal orientation in terms of the client’s expectations for the present and future.

1. Immediate.

What does the client think will happen to her today? What does she see as the outcome of today’s interventions? Can the client
project herself into the future? Is the image (projection) growth directed?

2. Long-term.

What is the long term expected outcome? Can the client project growth and development?

It is useful to consider what the client thinks will happen immediately and what he/she thinks will happen in the future. Nurses are often heard to say that their clients simply won’t accept what has happened or what lies ahead. Frequently people fear what may lie ahead. They seem to deny it because it seems to them too terrible to think about what is in their immediate future. For example, the woman who ruptured her membranes at twenty-three weeks gestation. It was her first pregnancy, at thirty-eight years old. The outlook for a healthy full term baby was not good, although the possibility of prolonging her pregnancy to viability was not ruled out. This woman was "denying" the present (if we dare call it denial) only because the present leads to the future. How we handle our ongoing stressors is determined partially by what we think will happen as a result of our action and partly by what we think will happen if we do nothing (Erickson 1988). "Think" is used very loosely here; in most cases people feel or perceive that something will or won’t happen but often the information is not cognitively processed.
Resource potential. It is important to determine the nature of the external support system and the client’s currently available resources.

1. External.
   - Social networks.
   - Support system.
   - Health care system.

What relationship does the client have with the family?
Is the relationship "draining" or "invigorating"?
Is the family near-by?
Does the client have supportive friends? Are they available?
What is the client’s perception of the health care system?
How does the client usually use the health care system?
What does the client think you can do to help?

2. Internal.
   - Physiological states.

What are the client’s perceived strengths?
What strengths are identified by others?
What level of basic needs are unmet?
What level of growth needs are unmet?
Is the client expressing feelings of tenseness-anxiousness? of sadness-depression? of fatigue? of hope for the future?
Does the client relate any feelings to object loss?
What physiological need deficits exist?

What potential exists for current mobilizing of resources?

Is one subsystem in jeopardy in order to support another?

When collecting data for this category it is useful to ask clients where they get support. Is there anyone who provides reinforcement, helps them to problem solve and so forth? It is important to elicit how clients perceive their support system. These may be energy draining instead of supportive; that is, clients may perceive that they have all the supporting to do, and have not had their own dependency needs met very well.

It is also important to find out the client’s perspective on his or her health care providers, including oneself. The question “How can we help you help yourself?” is one way to determine what the client needs are. Taking the response seriously and acting upon it will enhance the probability that we will increase our clients’ resources and available energy rather than deplete energy stores (Erickson 1988).

Self strengths refer to all the internal resources that a person can use to promote health and can be defined in terms of attitudes, endurance, patterns, or whatever the client or assessor wishes to define them. What is important is whether or not the client can identify his or her own strengths. An understanding of the client’s current ability
Goals and life tasks. To determine the current developmental status in order to understand the client’s personal model and to utilize maximum communication skills.

1. Current goals.
   - What seems important to this client at this time in life?
   - Are goals related to basic needs deficits?
   - Are they related to developmental tasks?
   - Is the client enjoying the task as opposed to being threatened?

2. Planned and future goals.
   - What are the client’s planned goals?
   - How do they relate to basic need satisfaction?

3. Cognitive methods used.
   - What is the client’s major or favorite way of conceptualizing?
   - What developmental stage of cognitive growth does this typically represent?
   - Is the identified developmental stage congruent with that expected with chronology?

One of the reasons nurses need data on clients’ goals is to identify need deficits. When a client states that she/he cannot think past the present, this will help in planning nursing interventions aimed at these deficits.
Another reason it is important to identify current and future goals is to determine where the client is in the developmental process.

For example, a twenty-one year old woman, twenty-eight weeks pregnant and a diabetic, stated that she could not afford to buy insulin she needed to control her blood sugar level, but that same day purchased an airline ticket to New York to visit her boyfriend. Obviously for this client the more basic physiological need did not present itself as her most basic need to be satisfied. She could not envision the potential danger to her own body and the wellbeing of her fetus. Thus to provide sound nursing interventions, it is important to know what task the client might now need some assistance working through.

Although it might often seem that "just as you get one problem taken care of another emerges", doesn't mean that the client is having one problem after another. This statement reflects a lack of understanding that resolution of one developmental task automatically means that new tasks will emerge. "Instead, the client is working through one task after another" (Erickson 1988, 88).

How to Analyze and Synthesize Data for the Purpose of Making a Nursing Diagnosis

Tradition and client wellbeing require the nurse to be competent enough to engage in clinical reasoning and to make treatment decisions in at least two disciplines; nursing and
medicine. In the biomedical domain nurses have a delegated responsibility to make accurate and appropriate clinical judgements on the client's pathophysiologic health status. In the nursing field, nurses have primary accountability for making judgements regarding the status of the client and family's daily living as it affects or is affected by their health (Carnevali 1984). First we have to remember we are nurses, not doctors. We do not make medical diagnosis. We collect and analyze data for the sole purpose of making a nursing diagnosis.

It can be seen that the stage of development in diagnostic expertise will have a marked effect on the data-gathering behavior, the clinical reasoning patterns and the diagnoses that are produced. Carnevali (1984) states that in addition to discipline and experience/expertise factors, there are also individual variables that influence the diagnostic process. One of these variables has to do with the diagnostician's storage of knowledge in long term memory. What is stored in memory and how it is stored, is a personal variable. Recency, intensity and frequency of client events will influence both what one is prepared to notice and how one interprets it. The number of diagnostic concepts, their quality and sharpness, and the system used to store this knowledge in long term memory for diagnostic retrieval, will have an effect on what the nurse is able to diagnose. So the analytic, organizational, and language
skill, as well as the energy individual clinicians devote to this aspect of their professional competency, are very personal qualities.

The diagnostic task. The diagnostic task itself is to infer and classify the status of the client on the basis of whatever data are present and available to the nurse. Under most circumstances the nurse is required to enter into an encounter with a presenting situation, a disconcertingly open field with so many cues never before totally experienced in all its dimensions (Carnevali 1984). It is always a question as to whether the most urgent and important problems to be diagnosed will present themselves with sufficient cues, or cues of sufficient amplitude to be noticed and recognized. There will be cues that could be indicators of more than one diagnosis. There will also be ambiguous and missing cues. The nurse’s challenge then is to use CCT skills to find a known starting point and to move into and make order out of, this uncertain ambiguous world of cues, to collect, sort out, and organize them, and gradually move to the end point of assigning a diagnosis and deciding on treatment options.

There is no question that this complex and uncertain task of moving from the wide open beginnings and responsibility of producing valid diagnosis within the time constraints (repeated many times a day) generates high cognitive strains on the nurse. It is helpful to use
available client data before the actual one-on-one encounter. For instance, the client population on the HRAU is limited to females within childbearing age, the pathophysiology is limited to females, and certain conditions are more common than others. This helps to reduce the cognitive strain, and reduce some of the total open-mindedness of the presenting situation.

The presenting situation contains cues of several levels of interest and uses to the clinician. These can include cues indicating: 1) risks of health problems, 2) strengths, resources and health or “normality”, 3) the presence of problems and 4) many that seem to be irrelevant; however, it is important to remember from whose perspective this is.

Risk indicators. Cues associated with risk factors signal that a problem is more likely to occur than if these were not present. For example, prospective parents who were abused as children are more likely to be child abusers in their parenting. Cues identifying risk factors may be present in the person themselves, in their activities of daily living, in the demands of daily living in their environment, and/or in the status of their external resources.

Indicators of strength. Another type of cue that is available is that indicating a high level of strength and
available usable resources. From any disciplines point of view it is "...as important to determine health and effectiveness in living as it is to discover disease and deficits in functional capacity or resources..." (Carnevali 1984, 38). Many of these cues are indicators of normalcy and adequacy of resources. These become useful in ruling out problems, in predicting prognosis, and in selecting treatment options.

Symptoms are subjectively reported data. They are indicators of the person’s perception of health experiences they have had or are having. Subjective data is a synonym for symptom. Symptoms usually come from the primary source, the client. However, they may also come from secondary sources, people who have been or are sharing the health problems or situations with the client.

Signs are the observable cues that indicate the existence of a problem; "objective data" is the synonym for signs. Cues that are categorized as objective data can be received through any sense organ directly from the person. They may also be received directly through data via monitors or reports of client functioning.

The art of making accurate clinical judgements has its foundation in the early stage of noticing and lending significance to appropriate cues. (Carnevali 1984, 39)
Process of Aggregating, Analyzing and Synthesizing Data

Before the data can be analyzed, it will be necessary to pull together the information gained from primary and secondary sources. Use of Ennis’s (1987) critical thinking abilities is essential here in order to decide what to believe or do. Once the data are compiled, it will be necessary to search for relationships within the data that will lead to interpretations and diagnosis. The activation of hypotheses early in the assessment encounter when cues taken in are often sparse and ambiguous, is not without diagnostic dangers. Francis Bacon (in Carnevali 1984) observed that once an opinion had been made, the mind tended to draw all things to support that judgement, ignoring the presence of contrary or ill-fitting data. This suggests that while early hypothesis activating is a necessary part of clinical reasoning, the tentative nature of the hypothesis must be maintained.

One of the functions of early hypotheses has to do with reducing cognitive stress by increasing structure in the activity. This limits the scope of the search field and brings it into more manageable dimensions (Carnevali 1984). Cues can be arranged into a series of provisional problem areas which can be examined sequentially or simultaneously. This gives a sense of structure and reduces cognitive
strain. The function then of early hypothesizing is in selecting and managing information.

**Short and Long Term Memory in Hypotheses Activation**

Both short and long term memory are critical elements in the diagnostic sequence.

**Short term memory.** Short term memory (STM) is like a small busy control room during the initial client encounter. Here the current transactions carried out include:

1. holding limited quantities of data,
2. sending a retrieval shuttle to LTM stores for associated knowledge,
3. combining the knowledge with the associated data for short term storage,
4. directing succeeding observations that are derived from the knowledge-data combinations. (Carnevali 1984, 42-43)

The amount of information that can be held for working use in STM is five to nine "chunks" (Simon 1974, Carnevali 1984). A chunk of information is any stimulus that has become familiar through previous encounters so that it is recognizable as a single unit. (Larkin et al. 1980, Carnevali 1984) In the health care field such chunks could be a single cue, clusters or pattern of signs, symptoms and risk factors.

The difference between novices' and experts' abilities to deal with chunks of information involves several
features. Novices' chunks tend to contain fewer elements, and recognition is slower and more tentative. Experts' chunking encompasses more items within the recognized unit, and recognition tends to be more rapid and secure (Larkin et al. 1980, Carnevali 1984).

Developing relationships between hypotheses can assist in holding them available in STM during the assessment and diagnostic process. One critical thinking strategy for retaining hypotheses and data in a manageable number of chunks is to develop competing hypotheses and alternate explanations for the same phenomena. The use of competing hypotheses linked to each other enlarges the chunk size (Carnevali 1984).

Enlarging the chunk size also helps to keep the nurse from becoming attached to a possible incorrect hypothesis. A common situation in nursing is that a client does not participate in a prescribed health behavior. Two competing diagnostic hypotheses are that she/he: is unable to do it, physically or emotionally (can't); or does not wish to engage in the behavior (won't). The dynamics and treatment of "can't" (inability secondary to inadequate strength/endurance/knowledge/skill) versus "won't" (lack of desire) are different.

A good strategy for holding cues available is of course the recording of them in writing as the assessment is in progress. This is particularly critical for cues that don't
seem to fit or cluster with the hypotheses that are being activated. Experienced nurses often find that a recorded word or two will later reactivate remembrance of a large chunk of data they encountered with the client during the assessment.

**Long term memory.** Storage of information in long term memory (LTM) is thought to take seconds, while retrieval of accessible knowledge from LTM is achieved in milliseconds (Anderson 1990). A major element in professional skill is gaining efficiency in using the access routes between the **presenting situation** and the packets of information in the LTM library. Expertise is achieved by repeated and critiqued experiences of encountering cues in varying circumstances and combinations and then retrieving the knowledge to classify and explain them (Carnevali 1984).

How does one make what’s going on in one’s head implicitly, explicit, especially for novices? The development of expertise in retrieving the most precise and relevant knowledge can become an element in the nurse’s critical self analysis after any client encounter, from either a pathophysiological or management of daily living perspective.

**Hypothesis Evaluation**

The first stage of generating a number of possible nursing diagnoses involves divergent thinking; this next
stage involves convergent thinking, the "rule out" stage.

It is helpful to think about the profile of features within each classification.

1. Antecedent events,
2. Risk factors that increase the likelihood of the problem occurring,
3. Prevalence of problem,
4. Patterns of events or manifestations associated with the development of the problem,
5. Signs and symptoms indicating the problem's presence and stage of development,
6. Underlying mechanisms involved in the problem and relationships to other systems,
7. Complications,
8. Variables affecting outcome (prognosis),
9. Responsiveness to treatment,
10. Activities associated with effective management of the problem, and

The knowledge and experience associated with the first five components are the ones that offer the most direction in the data search for diagnosis for the nursing process (Carnevali 1984). As more data are collected, it will be necessary to go back and reaggregate, reanalyze, and conclude whether or not the new data warrant a change in plans. This is inherent in the term "nursing process". It is necessary to keep in mind the holistic framework of nursing.
The final stage of the hypothesis evaluation process is to select a diagnostic classification as precise as the available data will permit. The nursing diagnosis plus the data become the foundation for decisions about prognosis, goals, and treatment plans.

Since health problems and client response are rarely static and often unpredictable, ongoing clinical judgements regarding the person's status and response to treatment is another important step in the judgement-decision pattern. These include continuing review of the status of previously diagnosed problems and risk areas, as well as the monitoring of the person's current situation afresh for changes, in each subsequent encounter.

**Strategies for Self Monitoring of Clinical Reasoning (Metacognition)**

Reasoning, and clinical reasoning in this instance are very personal qualities. While other members of the health care team can observe and/or benefit from the results (verbal or written statements of the data base, problems ruled out, impressions and diagnosis), only the nurse, can engage self observations of the critical thinking that produces these behaviors and products. Self monitoring is limited by one's knowledge base and experience certainly, but self analysis is a useful tool in gaining greater awareness and skill in clinical reasoning.
A series of questions or observational guidelines can help attain a greater awareness of current practices being used. There are two possible strategies. One involves concurrent observation as the clinical reasoning is occurring. The other involves working backwards from actions to diagnosis, to the data from which the diagnosis derived (Carnevali 1984).

Metacogitating One's Clinical Reasoning Process

What aspects of the client data field do I notice first?

How do I structure my initial behavior in relationship to the client in order to shape the direction of data he/she provides?

Do I invite expression of any questions, worries or concerns? Do I actively listen to elicit specific detail?

Do I dare to "bend the rules" when it is important to the client's peace of mind?

If a value conflict arises do I identify the conflict and not withdraw from or reject the client?

Do I honestly admit discrepancies and inconsistencies in my thoughts and actions?

Is there a pattern to my early data collection? What is it?

How soon in the data collecting process do I find myself generating possible diagnosis?

Do I tend to generate competing diagnosis?

Do I simplify problems in order to make them easier to deal with?

How do the diagnostic hypotheses I bring to mind affect any subsequent data collection?
How do I go about evaluating goodness of fit between the client's presenting data, the profile of risk factors, events and manifestations linked with the diagnostic hypotheses I am testing (Carnevali 1984).

Am I predicting the risks of future problems based on client data and my professional knowledge of new demands in daily living, or further weakening of client resources?

Retrospective Analysis of One's Clinical Reasoning

A second way of evaluating one's clinical reasoning skills is that of working backwards. One first looks at the nursing plan being engaged in, and thinks back to the diagnosis/need that served as the motive for that plan, and then back to the data used to arrive at the diagnosis. One also needs to evaluate the client response to this plan of care.

What nursing activities am I undertaking with this client/family? Am I carrying them out in a particular manner?

Am I doing these activities differently with this client or family than with others having a similar problem? Does client behavior inhibit my approach to care?

Why were the actions or skills of a nurse required in this situation, i.e. why can't the client/family deal with this situation for themselves?

What cues of inadequacy in managing health related daily living or risk factors did I notice as being presented by this client, family or their environment, that could have lead me to discern the problem area in which my action is being taken?

What other health care resources or specialty could be helpful in this situation? How has my past
experience, and specialty helped me with this client?

The retrospective approach is somewhat less refined than the concurrent self-analysis approach. As skills and confidence develop, it can be replaced by the self-analysis. One may concentrate on different areas at different times. The goal is to become "...more conscious of the process used in one's diagnostic reasoning in order to critique it and hone it into greater sharpness..." (Carnevali 1984, 228).
Clients' Perception of Their Basic Needs

Basic needs: underlying assumptions. All people want to be the best that they can possibly be, Maslow (1982) states. Unmet basic needs interfere with holistic growth; whereas satisfied needs promote growth. All human beings seem to have basic needs which "...if not attended to, can very often lead to the initiation or aggravation of physical or mental distress and illness..." (Erickson 1988, 56). These needs are physiological or psychological in nature and often precede the need to learn.

As nurses we talk considerably about the role of the nurse as a "client educator" and we do these things because we care about our consumers. However we need to model (seek to know and understand the client's model of his or her world) before we force knowledge on them. We need to remember that only when the client is incorporated as a key player, can basic needs be met from within their framework and care directed more purposefully. It is within the realm of nursing to decrease unnecessary client distress, confusion and misunderstanding, and help to improve their medical condition as well as cooperation and satisfaction.

Reason for selecting basic needs. The researcher has worked closely with clients and experienced their reactions to the many different theories of nursing care. Approximately two
years ago the theory of MRM was introduced to a large urban teaching hospital. Since client education is a very important aspect of client care on the HRAU, the importance of establishing each client's readiness to learn cannot be overemphasized. According to Maslow's (1982) theory, providing information without first assessing whether or not the client's basic needs have been met may be distressing for the individual. Basic needs deficits were chosen because of its implications for the nursing process.

At this time the author as researcher is pursuing the establishment of MRM on the HRAU. The nursing staff are now, on a more consistent basis, beginning to ask the client on initial assessment, "What is your greatest concern/worry at this time?" However, for many, the notion that "nurses know best" still prevails. The author believed that it was necessary to intellectually assess and validate Maslow's assumption, in a way which would challenge the thinking of some staff members. By thinking this assumption through for the first time, the author is hopeful that to some extent, we will create the logic we are using. It is hoped that the study will also articulate anew the purposes and reasons for identifying basic needs deficits, that new concepts will be formed, new questions asked and new inferences made.

In order to establish whether hospitalized clients' basic needs is to learn more about their condition, a group of these clients has been studied. The clients' perception
of their most important need will be measured by a questionnaire developed by the author (See Appendix IX).

The study did support the theory that:

1. The client’s perception of their most basic needs will not always be to learn more about their condition.

2. This knowledge should not be provided without first assessing the client’s readiness to learn.

The author’s conclusion about MRM based on available literature review and experience is that all humans seem to have basic needs which if not attended to can very often lead to the initiation or aggravation of physical or mental distress or illness. Maslow (1982) has described these needs as existing in a hierarchy. Needs on the lower level of the hierarchy must be satisfied to some degree before the higher level needs emerge. Because each individual has a personal model of the world, people with nursing needs are not helped in the same standardized ways. Nurses do not possess the knowledge to know how a unique individual may best be helped; only that person knows the kind of help he or she needs to muster strengths or resources. This next situation will be helpful in illustrating some of the points the researcher has made.

A sixty four year old man, three days post cardiac surgery, was transferred from the intensive care unit to the unit where the author worked at that time. The plan was to
implement all rehabilitative services as soon as possible.
This man stated emphatically that his most pressing need was for a few hours of unbroken rest, free from any interruptions, including all physical assessing by the rehabilitation team. After a thoughtful exchange of data and health information, this client asked if all possible disturbances could be intercepted during the next several hours. This would mean that the rehabilitation services would be delayed until the following day, and possibly add one day to his hospital stay. Based on the holistic analysis of factors by the researcher, his request was carried out.

When the physicians arrived and wanted to see the client, a clear description of the data and the principles underlying the decision was given to them. As a result of this intervention the client awakened spontaneously, refreshed and much improved, rejoicing in his "first real rest" since admission. He swore this "saved his life".

Often we health care providers assume we know what will help, but do not take into account that we are talking and thinking from our own perspective. This approach implies that nurses objectively know what clients need and that they can decide based on their expertise what is best for clients. How can we try to solve other people's problems when we don't know what their problem is?. Persons whose real, immediate concerns are unattended do not progress as
the nurse expects. It is very important to start with what concerns that person most.

Preview of Methodology

Definition of terms. Basic needs in this study are defined as what the client perceives their immediate needs to be.

Assessment of client readiness to receive knowledge. This is a fundamental issue related to education of clients and deals with whether there is a need to know or a fear of knowing. The need to know is described by Maslow (1982) as the search for information or knowledge as a method of coping with fear and anxiety. In this case the acquisition of knowledge meets safety and security needs. This need to know is associated with survival instead of growth. There are clients who want to know everything there is to know, even all the "bad things" about their condition. Often as nurses, we feel that this will make our clients more anxious. However, if they request this information, we need to give it to them; otherwise it looks like their care givers are holding back.

The fear of knowing is described by Maslow (1982) as avoiding knowledge in order to feel safe and avoid anxiety. Individuals with this condition have unmet safety and security needs and perceive additional information as a further threat to their safety.
When we educate prematurely (without assessment of true readiness and the effect of current stressors) clients may continue to signal their crucial unmet basic needs by acting out related feelings, usually those of helplessness, inadequacy or hopelessness, but often those of fear or frustration.

Limitations of survey. The survey did not involve a truly random selection in that some clients had to be excluded. The sample population consisted of thirty-one clients, however, six of these questionnaires were incomplete and had to be disregarded. The questionnaire was a simple one, even so it is possible that some of the questions were misunderstood. If the method used had been a client interview, it is possible that more reliable information may have been captured.

All clients were female and pregnant. Knowledge deficits and needs may differ in this population from the general hospital population, thereby limiting its generalizability. It is possible that had each client been given a more indepth explanation for the survey, this may have provided the researcher with better data.

Assumptions. That all clients understood each question as the researcher understood it. That the questionnaire elicited the knowledge needed.
Methodology. Data required to answer the questions posed are the results of the questionnaires from the client group.

Sources of data. Available literature of MRM was reviewed extensively. This included studies of clinical situations.

Where Survey was conducted. The survey was conducted at a large urban teaching hospital. There are three “pods” within this unit, two pods have twelve beds each and one has fifteen beds. Each pod has its own nursing station. There is one nurse manager responsible for this unit.

Development of Instrument

A search of the literature revealed no acceptable instrument which would provide data to identify clients’ basic needs. In view of this it was necessary to develop an instrument to survey clients’ views of what their most immediate basic needs were, a need for knowledge about their condition versus “other” basic needs. The instrument was developed also to capture clients’ perception of their readiness to receive knowledge about their condition.

In order to elicit the necessary information from clients, a long list of questions was generated. Experience with client needs, client satisfaction, and client complaints provided a major source of information for this questionnaire. The number of questions was reduced to
three, with questions one and two requesting two choices, most important and next most important. An attempt was made to use terminology which clients themselves might use. Language was kept as simple and clear as possible to convey a single idea in each statement. The items were not negative or positive, to avoid response set bias.

While the instrument was being constructed, criticism was invited from experts in the nursing field, including one clinical nurse specialist in psychology, one clinical nurse specialist in obstetrics, a nurse manager from a non-obstetrical area, and two charge nurses from the HRAU. This helped to determine whether the statements reflected the information being sought.

Pretesting the instrument. The questionnaire was not tested for reliability or validity by a pilot group from the population being surveyed. However, the researcher did ask one long stay client to review the questionnaire for clarity and understanding of statements. No revision was necessary following this.

Data collection method. Data were collected through the administration of one questionnaire comprised of three questions. The questionnaires were distributed and retrieved by the researcher. An explanatory letter to each client accompanied the questionnaire.
Collected data results. The assumptions were:
That all clients have basic needs. Often these basic needs precede the need to learn about their condition, treatment etc. Readiness to learn varies with the individual.

The clients’ questionnaire will indicate what the individual perceives as her most important need. It will also indicate what they perceive as their "best time" or readiness to learn.

For the hypothesis to be supported the results will have to indicate that "other" basic needs often supersede the need to learn about their condition. The results will also have to indicate that readiness to learn will vary with each individual.

Procurement of Data

In order to gather the data, guidelines for screening the clients taking part in the study were established as follows:

1. Age did not have to be a factor.
2. Clients would have been hospitalized for a minimum of twenty four hours.
3. Excluded would be:
   Clients experiencing psychological disturbances at that time.
   Clients experiencing severe physiological discomfort.

All other clients would be included in the study.
All clients considered suitable for the study were approached by the researcher. An explanation of the questionnaire and a brief reason for the study was given. Each client was asked if she would be willing to read and respond to the questions. It was decided that the researcher would collect the questionnaires the following day.

Due to an insufficient number of suitable or "well" clients at a given time on the HRAU, the study was conducted over a five day period. Of the thirty-one clients approached, all agreed to participate in the study. Collection was completed within one week.

Presentation of Findings

All of the thirty-one questionnaires were returned.

Sample Size. 31. There were 31 returned, = 100% return. Six (19%) of the questionnaires were incomplete and were not used in this study.

Client satisfaction questionnaire (See Appendix IX). There were a total of three questions broken into three categories. Questions number one and two offered six responses and one "other" which invited the client to add their own comments. Each client was asked to check two and indicate (1) most important and (2) next important. Question three offered four responses and one "other". Each client was asked to check one response.
The results of the study did reflect a diversity of needs. However, only the main points will be discussed here. The three categories of responses were as follows:

**Question one.** Eighteen clients (72%) chose "risk to my baby" as their greatest concern on admission. On this question, even though clients were asked what their greatest concern was apart from their medical condition, these eighteen clients chose "risk to my baby" which was directly related to their medical condition. "Apart from your medical condition" was included because the researcher felt it would be difficult for clients to choose any other category if in fact risk to their baby was their greatest concern. It was included also to convey the researcher's understanding that their medical condition would be (most likely) their greatest concern.

Three clients (12%) chose each of the questions "Who would care for my family at home" and "Not enough information about my condition" (Appendix IX).

**Question two.** Seventeen clients (68%) chose "Information about my condition" as their most important need on their first day as a client. "A period of undisturbed rest," "Spending some quiet time with family," and "Other" received equal scores of 8% (two clients).

**Question three.** Twelve clients (48%) chose "On admission to the unit" as their time for being best ready to learn. Of
these twelve clients, three (25%) did not choose "Information about my condition" as their number one need on their first day on the unit. Six clients (24%) chose "after I had a chance to talk about some other questions I may have had." Five (20%) chose "when you 'felt' you were ready to listen and learn." Of the seventeen clients (68%) whose most important need on their first day of admission was to receive information about their condition, eight (47%) indicated they were best ready to learn on admission to the unit. Four clients (23%) chose "After I had a chance to discuss some questions I might have," three (18%) "When you "felt" you were ready to listen and learn," and two clients (12%) "One day after you were admitted."

Summary and Evaluation. The findings serve to heighten awareness of the importance of identification and satisfaction of basic needs. Basic needs can often be met in a very few actual minutes of care. Erickson (1988) believes that if a substantive block of time is taken, it may in the long run preserve the nursing staff from even greater investments of time and energy extended over numerous future interactions. More strenuous efforts become necessary when complications occur that might otherwise have been avoided. One client noted that although she had not particularly given thought to when she was ready to learn up to that point, she felt that it was very important.
What the researcher has established from this study is that since basic needs vary, the most important point of emphasis is to identify what clients' basic needs are, and to help them to meet their needs. Consequently, this will enable them to take better care of themselves. Readiness to learn also varies between individuals. It is important to assess clients' readiness in order to avoid educating prematurely.

This study could be repeated with a larger sample. Investigation of the elements of basic needs identification, which result in meeting the whole person's needs in an integrated way, will aid the understanding that what happens at one level affects the other parts as well.
CHAPTER VI
SUMMARY AND EVALUATION

Critical and Creative Thinking and MRM: A Review

On reflecting over the work of the last two years the author wonders, "Has CCT and MRM helped the nursing staff and clients?" "Has nursing practice improved?" Is there a change in the way nurses interact with clients?" In order to evaluate the first part of the question, "Has CCT and MRM helped?", it is necessary to think about what these strategies have provided.

They have provided principles and theories to help improve thinking and guide the practice of nursing. MRM has provided more opportunity for professional autonomy. The nurse is invited to rethink through his/her beliefs and philosophy and to decide if his/her philosophy is compatible with the CCT skills and strategies inherent in the MRM paradigm.

MRM reinforces the notion that nursing fulfills an absolutely essential function in our society, and that nurses are vitally important to the wellbeing of their fellow human beings. It promotes the nurses' role to nurture the development in others. To promote development means to accept persons including oneself, for what we are now, and to assist us to become what we want to be. It promotes belief in ourselves, our potential and inherent value, and encourages the acceptance of value and potential
in others. It requires the development of a philosophy of nursing that supports this valued function. MRM has provided nursing with a common philosophy, i.e. a collective understanding of statements such as "modeling your clients world," "identifying basic needs." It has provided the means to "soften" the sometimes curt approach of the overly efficient nurse. It reminds us that the client is a vital member of the health care team. It has helped us to better understand the dynamics of behavior and to remember that all behavior is motivated by a need.

It has provided a sense of direction for nurses to refocus on the nursing process. Sometimes the focus is more on the process than on the end goal. It has reminded us that no other health professional has the unique opportunity that nurses have to interact with their clients. The study and practice of MRM theory and the utilization of CCT strategies have helped to develop analytical skills, challenge thinking, clarify values and assumptions, and to determine a purpose for specific interventions.

Paul (1990) discusses several interdependent traits of mind he feels should be cultivated in order to become critical thinkers. Three of these are listed below because of their importance to nursing, and because some staff recognize a need to develop these in themselves. They are:

1. Intellectual humility: Awareness of the limits of one's knowledge, including sensitivity to circumstances in which one's native egocentrism is likely to function
self deceptively; sensitivity to bias and prejudice in and limitations of one’s viewpoint.

2. Intellectual Courage: The willingness to face and assess fairly ideas, beliefs, or viewpoints to which we have not given a serious hearing, regardless of our strong negative reaction to them.

3. Intellectual Empathy: Recognizing the need to imaginatively put oneself in the place of others to genuinely understand them. (Paul 1990, 54)

The CCT strategies exercised at the bi-weekly client presentations take into account the knowledge, philosophies and interests of a diverse group of nursing staff. These strategies have facilitated their ability to formulate, analyze and assess:

1. The problem or situation at issue.
2. The purpose or outcome of the brainstorming or thinking activity.
3. The different frames of reference or points of view involved.
4. Their own frame of reference.
5. Assumptions and inferences made versus facts.
6. Central ideas and concepts involved.
7. The linking of theory to practice.
9. Interpretations and claims made.
10. Reasons, inferences and formulation of thought.
11. Implementation and client responses which follow.
How MRM has impacted on nursing practice. MRM theory has helped especially with the "difficult" or "demanding" client, whom nurses are not anxious to accept as their primary client. Periodically a client's situation appears so hopeless the nurse can be heard to say "How can I possibly model her world," and "How can I role model her world?" MRM and CCT highlight the need for "dialogical thinking."

Nurses now are more likely to admit that they cannot provide all the answers and to collaborate with others members of the health care team. Since the introduction of the theory, there is less emphasis on placing a value on the behavior and more self directed thinking with the goal of identification of needs. At times a client may appear to have a "bottomless base," and insatiable needs. Nurses need to realize that there is a limit as to what they can do from a nursing perspective to meet a need. When a client's basic need has been identified as "a place to live," the nurse can initiate the process with the appropriate resources to provide this need; however, they cannot satisfy this need.

When the client is a sixteen year old pregnant woman, who supports herself by drug dealing and prostitution, is incarcerated for her part in car theft and drug dealing, has a guard from her correctional institution twenty four hours a day, and whose sister died from an overdose while she was
hospitalized, this is sufficient to daunt even the stoutest of hearts. The amount of energy expended on this client was monumental. On a day to day basis it was difficult to measure progress in any linear sense. However, on retrospective review of her chart and progress notes, it became clear that there was satisfaction of some basic needs, so that she could receive calls and make calls to her attorney only. It was necessary to include her correctional institution when collaborating about this client.

Continuity and consistency of structured nursing care was necessary to help build a trusting relationship. Internal strengths, adaptive potential and future goals were all identified and addressed. She was adaptive in her own maladaptive way.

How CCT and MRM has changed the way nurses think. The author believes that some staff have always "modeled their client's world," except that it was not identified as this. These are nurses who listen to their clients and can readily identify their greatest concern, and are at ease with the critical thinking dispositions (Ennis 1987). However, for these people MRM and CCT have lent credence to their unspoken philosophy. It helps them to recognize the point of view or frame of reference in which they are thinking and to clearly express their purpose or goal. They identify very well with the model.
Do nurses sometimes not model their client's world? Absolutely! Nurses will state "It just doesn't work with this person." What are some of the reasons the model doesn't work? Sometimes our model of the client's world may not truly identify their needs. We do not meet the client where they are at that time developmentally. Sometimes identification of basic needs may be overwhelming for the nurse. "I just do not have the time to spend with this client right now." The most frequent reason for not modeling the client's world, on the HRAU is the difficulty linking theory to practice. More time needs to be spent with nursing staff on this task.

Some staff members do not think they have the "permission" to link theory to client care. Others are not motivated. For the "specialized" or very experienced nurse there can be confusion between following the rules and the need for judgement.

For still others, their frame of reference cannot "expand" to accommodate the client perspective or take into account diverse opinions. There is not a:

...willingness to entertain all viewpoints sympathetically and to assess them with the same intellectual standards, without reference to one's own feelings or vested interests. (Paul 1990, 54)

Sometimes nurses will state that their repeated reactions or responses to specific situations are just not
useful. They have tried them again and again without success. One definition of insanity is "repeating the same behavior over and over again hoping it will work, hoping the outcome will change." (Pesut 1992) So what does one do when a plan of care doesn’t work? Try something different.

How nurses’ interactions with clients have changed. When client presentations were first initiated, staff were very timid and unsure of themselves. They were, after all expected to discuss something they knew very little about. They believed that as well as presenting the issues, that they had to provide the answers. The data presented were often vague, sometimes inadequate, unclear and incomplete, and at times biased. When they were asked to clarify and state the purpose more clearly, they would appear uncomfortable and at times act defensively. It was important at these times to introduce some form of playfulness in order to dilute the seriousness with which they approached this task. It took some time and the infusion of CCT skills and strategies to refocus their focus. These presentations were evaluated frequently in order to increase their effectiveness for staff, and to promote an interest in and curiosity about the model.

Over time staff developed their self assurance, and could freely admit and identify where they needed help. Presentation of issues became more focused and precise. Assessments became more indepth. They became more
comfortable stating their positions and could freely express frustration and anger. However, it was important to recognize and accept their perspective, and to reason sympathetically within their frame of reference. Frequently following discussion and acceptance of this position, they could identify the degree that their identity and sense of self are related to the issue of linking theory to client care, and often overcome the challenge.

Documentation. When certain aspects of client assessment are not documented, the author asks staff nurses to respond in writing to one or two client assessment questions. The question is framed in such a way that they have to think about how they formulate these particular questions for clients. Writing their thoughts down and clarifying them through concrete examples, is a very real and practical way to think things out and act upon that thought. At this point staff are identifying and voicing their needs such as: "I’m really not sure how to do a psycho-social assessment so that my client and I both benefit." "I have difficulty articulating the question asking whether my client uses illicit drugs." "Even if I suspect it, how can I ask the client if she’s been abused by her husband, and then how do I document it?" These are very real and important issues.

The author believes that it is possible to ask any question provided that it is prefaced in the appropriate way. For instance, when checking to see if a client uses
drugs, one way to frame the question would be: "We want to provide the very best care we can for you and your baby. In order to do that there are some questions that we need to ask all our clients." If anxiety needs to be identified the question could be prefaced with: "In my ... years of working with pregnant clients I have known many who have difficulty with ....." "What has your experience been?" This gives the client permission to discuss their feelings without feeling that their behavior is being focused upon.

A certain number of client presentations are being devoted to this. Staff are asked to write down their psychosocial questions in relation to the five aims of nursing interventions as these relate to their clients. These sessions engage the staff in fruitful, exploratory dialogue, proposing ideas, testing ideas and moving between various points of view. CCT skills are integrated into the dialogue so that it is as productive as possible. By raising root questions and ideas, multiple points of view get expressed and thinking proceeds "...not in a predictable or straightforward direction, but in a criss-crossing, back and forth movement..." (Paul 1990, 340). The goal is to eventually capture in writing as much of nursing process and descriptions of actual practice as possible.

Ideals of Theory and Realities of Practice
There is a great difference between the ideals of theory and the realities of practice. Staff often question whether
their behaviors and reactions to specific situations are useful, and question why they don't work. Linking theory to client care is a function of Nursing IQ which Pesut (1992) states is a blending of academic and practical intelligence modified by dreams, reality, criticism and the mental self management of one's professional thoughts and actions in a constructive and purposeful way.

A high degree of Nursing IQ is needed to enhance client care. It is a function of knowing that, knowing how and knowing why. It is a function of a clinician's ability to maintain curiosity and a sense of surprise in their work, and actively engage themselves, peers, and colleagues in a dialogue with each clinical situation. Such reflection defends against overlearning and invites surprise helping clinicians to act on not only what is but what should be. Linking theory to client care works when you begin to question why it doesn't". (Pesut 1992, Conference Notes)
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Maslow: Growth Principle and Theory of Human Needs

Maslow categorized needs in two ways, basic survival needs and growth needs. When basic survival needs are unmet, a deficit occurs, the deficit creates a tension. The tension creates a motion or drive to meet the need. When the need is met the need no longer exists.

The individual is an integrated, organized whole. It is not usual that an act or a conscious wish have just one motivation, i.e. the whole person is motivated, not just a part. When you are hungry, all of you is hungry, not just your stomach. When basic needs are unmet, a tension results, if needs continue to be unmet, a deficiency, then deprivation occurs. Deprivation is a result of continuous deficiency.

The human being is motivated by a number of basic needs which are species wide, apparently unchanging, and genetic or instinctual in origin. They are psychological as well as physiological. They are the true inner nature of the human species, but they are weak, delicate and easily overcome by cultural practice, habits and wrong attitude toward them. They are intrinsic aspects of human nature which culture cannot kill, but only repress (Maslow 1982).

Types of needs:

Physiological needs. - those necessary to maintain life (food, oxygen, rest, fluid).
Safety needs. - avoidance by an individual of various forms of perceived danger situations; one’s withdrawal from strange and unfamiliar situations that elicit danger and terror reactions; our defensive tendencies as in war, disease, injury, catastrophes, etc. Consistency, fairness and freedom within limits.

Love and belonging needs. - desire for affectionate relations with others and for a place in the group; need for affiliation. Love is being deeply understood and deeply accepted.

Esteem needs. - need to receive recognition as a worthwhile person; includes possessing feelings of confidence, worth, strength, and usefulness (the thwarting of these needs produces feelings of inferiority, weakness, or helplessness) (Klausmeier and Goodwin 1966).

Self actualization needs. - refers to man’s desire for self fulfillment, namely, the tendency for him/her to become actualized in what he/she is or can be potentially, the desire to become more and more what one is, to become everything that one is capable of becoming, "...What man can be, he must be...." (Maslow in Davis 1986, 4)

A self actualized person is a person who has had his/her needs met repeatedly, has a very good sense of self, regarding who he/she is, can see his/her limitations, but does not see this as a problem for him/herself. These
people can also see their attributes, not what attributes they want to see, but what is actually there. These people are usually more objective, less emotional, are more decisive, and have a clear notion of what is right and wrong. These people have a sense of humility, and the ability to listen to others. They can admit that they don’t know everything and that others can teach them something (Erickson 1989).

Maslow talks about the need to know and the fear of knowing. Maslow believed that a person has a need to know for two reasons. First there is a need to gain information for it’s own sake, for the sheer satisfaction of knowledge and understanding. These are generally considered cognitive needs, thinking, curiosity, exploration, the desire to be "enlightened". Second, there is the need to know, which Maslow describes as the search for information as a method of coping with fear and anxiety. In this case, the acquisition of knowledge meets safety and security needs. Maslow also talks about the fear of knowing. People sometimes avoid knowledge in order to feel safe and avoid anxiety (Maslow 1982). These individuals have unmet safety and security needs and see additional information as a further threat to their safety (Erickson 1988).
APPENDIX II

Erickson: Psychosocial Stages of Development

Erickson (1963) describes eight stages of psychosocial development through which we all progress. Each stage represents a developmental task or decisive encounter resulting in a turning point, a moment of decision between alternative basic attitudes, i.e. trust versus mistrust.

1. Trust versus mistrust. During his/her first year of life the infant depends on others for care. The baby is fed, carried around, dressed and constantly exposed to new stimuli. His/her mother and father cuddle, talk, and play with him/her. These social interactions determine his/her later attitudes. If the infant is cared for affectionately, and if his/her physical needs are adequately met, the infant learns to trust the environment. If, on the other hand, the infant is not cared for properly, or if the parents are not consistent in their treatment, the infant will become fearful and will mistrust him/herself as well as others (Silverman 1975). The infant’s first social achievement, is his/her willingness to let the mother out of sight without undue anxiety or rage, because she has become an inner certainty as well as an outer predictability (Erickson 1963).

2. Autonomy versus shame and doubt. During the child’s second and third years, he/she learns to walk, talk, and act
independently; is capable of learning at his/her own rate of speed and exploring the world on his/her own. If the child’s parents are inconsistent in their disciplinary techniques, tend to be overprotective, or show disapproval when the child acts on his/her own initiative, the child will become uncertain and ashamed of his/her behavior. If, on the other hand, parents encourage initiative, act consistently, and allow the child a certain amount of independence, he/she will be better able to deal with later situations requiring choice, control and autonomy (Silverman 1975).

This stage, then, becomes decisive for the ratio of love and hate cooperation and willingness, freedom of self expression, and its suppression. From a sense of self-control without loss of self esteem comes a lasting sense of good will and pride; from a sense of loss of self-control and of outside overcontrol, comes a lasting propensity for shame and doubt. (Erickson 1963)

3. Initiative versus guilt. Between the ages of four and five, the child’s motor skills begin to develop, and he/she is thrown into a number of experiences, including relationships with school friends, neighbors, and relatives. If activities, questions and general creative play are encouraged by parents, children will find it easier to go out on their own. The more experiences they are allowed to have, the more they will try to have on their own. If
children’s activity and inquisitiveness are restricted by parents, they will develop feelings of guilt whenever they try to move out on their own.

4. **Industry versus inferiority.** From six to eleven years, the child becomes fairly competent at manipulating objects and creating his/her own activities. Boys, as a rule, are taught to use this newfound ability to make or build things, and girls to cook or sew. The sexes are equally free to study, read, and learn about anything that interests them. If encouraged by parents and teachers, the child will develop a sense of industry and curiosity and will seek intellectual stimulation. If the parents or teachers become impatient with the child’s first attempts at industriousness, the child will develop a sense of inferiority and possibly a disinclination to complete future tasks.

5. **Identity versus role confusion.** Adolescence, between the ages of twelve and eighteen, has traditionally been identified as a time of emerging sexuality and related crisis. Erickson is less concerned with this aspect of behavior than with the adolescent’s crisis in finding his place in society. The adolescent must integrate all he previously experienced in order to develop a sense of ego identity, determining what he/she wants out of life, what he/she believes in and who he/she is. If adolescents cannot
integrate these earlier experiences, they cannot gain a sense of their own identity and they become confused over what their role should be. Erickson (1963) believes that this is the single most significant conflict that the individual must face.

6. Intimacy versus isolation. Dating, marriage and early family development are all part of young adulthood. If the individual has achieved a sense of identity, he/she is able to form close relationships; he/she is able to share him/herself as well as possessions with others (Silverman 1975). At this stage adolescents are ready for intimacy, that is, the capacity to commit themselves to concrete affiliations and partnerships and to develop the ethical strength to abide by such commitments, even though they may call for significant sacrifices and compromises (Erickson 1963). If the individual is unable to relate intimately to others, or if he/she has never achieved a full sense of identity, a sense of isolation may develop and a feeling that he/she has no one else in the world (Silverman 1975).

7. Generativity versus stagnation. Middle age is the time when the individual must resolve any conflict with the external world, the future, and the willingness to contribute to its betterment. By "generativity" Erickson (1963) means the individual's ability to look outside him/herself and to be concerned for others. Generativity
thus is an essential stage on the psychosexual as well as on the psychosocial schedule (Erickson 1963). If the person cannot do this, perhaps because of the inability to resolve earlier conflicts, he/she tends to be self-centered, often with a pervading sense of stagnation and personal impoverishment, rather than productive and happy.

8. **Ego integrity versus despair.** Older persons enter a period of reflection; they realize that most of their life’s work is complete and that they must bring their active pursuits to a close (Silverman 1975). Each individual, to become a mature adult, must to a significant degree develop all the ego qualities, so that they share and recognize in one another the final stage of integrity (Erickson 1963). If older adults remember their lives with pleasure, they establish a sense of unity in themselves and with others. If they feel that their life was a series of disappointments and failures, realizing that they cannot relive a new life at this age they develop a sense of despair (Silverman 1975).
APPENDIX III
Piaget: Theory of Cognitive Development

Piaget focused his attention on cognitive development, studying how thinking develops rather than what happens in psychosocial or affective development. Piaget worked with children of all ages, creating experiments to observe and measure the child's awareness of the natural world around them. From these studies he concluded that cognitive development is best described by its stages, rather than as a continuous, unbroken progression. Piaget theorized that cognition develops as the individual masters certain mental operations characteristic of each stage, operations that are nonverbal, unlearned, and universal. The following summarizes the stages of cognitive development, as seen by Piaget (Silverman 1975).

Sensorimotor operations. (birth to age two) From birth to eighteen months, infants function almost exclusively by means of reflective responses; few of the behavior patterns that exist at birth are cognitive in nature. For example, a baby can neither perceive objects as different from him/herself, nor him/herself as different from an object. When babies see their arm bobbing about the crib, they cannot differentiate between their arm and a toy, because they do not have in their repertoire the concept of self that allows them to make the differentiation.
Because movement is almost all the infant is capable of doing at this age, the first cognitive stage is called "sensorimotor operations" (the exercise of sensory and motor awareness).

At approximately eighteen months, infants demonstrate some ability to solve problems. They can figure out how to get at a distant toy or how to pull a covering over their face. They are aware of objects and can consistently identify some of them. They can use the same solution for different situations, or adapt a learned solution to a new problem.

Preconceptual thought. (age two to four years) Speech is often developed through the association of word and object. At the stage of "preconceptual thought," the power of association is further developed by the use of mental representations. Thus, something a child sees can be imagined as something else. A doll becomes a real child, a fence post is a person, a tree is a large animal. The child's imagination creates a world of objects for his own mental exercise. But the child does not yet think in terms of concepts or generalities.

Intuitive thought. (age four to seven years) The child develops keen perceptual sensitivity. Especially, he/she gains the ability to see several objects as a group characterized by some obvious similarity. At this stage,
given a box of pegs the child might perceive round pegs as one group and square pegs as another. The child may know nothing about circles or squares but acts on intuition.

One concept generally tested at the intuitive stage is known as "conservation" (or what Piaget calls the principle of invariance). In essence, according to the conservation concept, we perceive that the same amount, mass, weight, or volume is being conserved even when it is placed in a different position, poured into a different sized container, or molded into a different shape. The conservation concept does not seem to operate in children at the intuitive stage. If the child is given two identical balls of clay and asked to roll one into a sausage, he/she will say that the sausage contains more clay than the ball simply because the sausage is longer. The same is true if you have different-sized or shaped bottles containing the same amount of water.

If children observe gradual alterations in the shape of the mass, they are likely to think that they have seen more than one object. They cannot see the moon as an object that changes from a whole circle to a sliver of a circle and back again; they see the moon in its stage as three different objects. The child is in the intuitive stage; he/she is unable to understand cognitive processes, even as they exist in others. For example, if asked what his/her mother might think if he/she were to cry, he/she is simply not mature enough to imagine the thoughts of another person.
Concrete operations. (age seven to eleven years) During the stage of concrete operations, the child acquires many concepts that escaped him/her at earlier stages. They can now comprehend the concept of conservation and can even work conservation experiments. For example, given a ball of clay and instructed to roll it into a long sausage, they are able to reason that the quantity of clay has remained unchanged.

At this stage, learned behavior responses are part of the child's repertoire. As long as a problem is concrete and involves physical objects or processes, the child is able to apply previous learning to its solution. Children are able to think through transformation problems, that is, problems that involve sequential developments, such as successive increases in size. And they can perceive points of view different from their own.

Despite these developments, the child is still unable to deal effectively with abstract problems. Although they may see and understand elements of an abstract problem, and can even relate it to someone else, they are unable to formulate a solution.

Formal operations. (age eleven to fifteen years) The peak of cognitive development is approached during the stage of "formal operations", the stage at which the child begins to think abstractly. In older children, the early sign of formal operations is the ability to think scientifically, to approach problems with several solutions and weigh them by
reasoning, discussion, or putting them to practical tests, until the correct solution is found.

Once logical thought begins, a great deal of subsequent learning is needed for the young adult to attain the cognitive maturity required for complex intellectual tasks. Not all individuals make the effort to develop the faculty of dealing with formal operations. Ideally, cognitive development continues until late in life. There are no limits to creative use of the cognitive function in humans.
Engel (1962) states that all loss produces a grief response, whether the loss is real, threatened or perceived. Engel's five stages of grief process are:

1. Shock/disbelief
2. Development of awareness - (anger)
3. Restitution
4. Loss resolution
5. Idealization

When the loss is unresolved, a state of morbid grieving results. The person continues to grieve for the lost object for a long time (although the person may suppress awareness of the loss) (Engel 1962). People in morbid grieving fluctuate between angry-hostile feelings and sad depressed feelings. They tend to spend time in purposeless activity (Erickson 1988).

Normal versus morbid grieving.

1. Normal grief process lasts up to one year, with a gradual diminution of the feelings and gradual transference of attachment.

2. Morbid grief occurs when there is an unresolved loss. This is usually associated with conflict, ambivalence or guilt associated with the loss of the object.
Implications. Resolution of loss requires normal grieving with transference to a new object. Morbid grief is related to need deficits, therefore morbid grief interferes with resolution of developmental tasks.

It is important to note that an event may not be categorized as a loss unless the person has regarded it as an actual or anticipated threat or loss of needed gratification. For example, a person may state little concern over the loss of a step father, but may react strongly to the suggested termination of contact with a caregiver. At other times an apparent gain may be experienced as a loss. For instance, a man who is given responsibility at work with a promise of a raise, may feel demoted instead of promoted because the additional work he was asked to do was previously done by a woman. At times the anticipation of an event may serve as the threat of loss of needed gratification; a woman overwhelmed by the anticipated fulfillment of a promise to quit her job on the anniversary of her marriage in order to have a baby her husband desired (Adamson and Schmale, 1965).

Definitions.

1. Object. Anything that is significant to the person.
2. Object attachment. Occurs when the object acquires a status of significance for the individual.
3. **Object loss.** Can be real, threatened or perceived, occurs when the person *feels* it has occurred; it cannot occur until attachment has been established.

4. **Transitional object.** Non human object, i.e. thumb, a toy, a blanket or a photograph (Erickson 1988).
APPENDIX V

Selye: The Stress Response

Stress is a response that has specific identifying characteristics. When stress occurs secondary to a stimulus, that stimulus can be labeled a stressor. Selye described the stress response from a biophysical perspective. (Engel described it from a psychosocial point of view). Hans Selye (1975) known as the father of stress theory, has pointed out that people have different abilities to respond to life stressors, depending on what resources they have. These resources he called "adaptation energy". Selye was interested in the nonspecific syndrome of being sick. His major question was what is disease in general as opposed to what is this disease. Stress has its own characteristic form but not its own cause.

In his experiments with animals he has demonstrated that a group of general physiological changes occurred in response to various specific stressors. He discovered that this was a triphasic response. This he called the "general adaptation syndrome" (G.A.S.) General: produced by agents that have a general effect upon large portions of the body. Adaptive: stimulated defense. Syndrome: individual manifestations are coordinated and partly dependent on one another (Erickson 1988). Selye named the stages in the biological stress syndrome the alarm reaction, the stage of resistance, and the stage of exhaustion. Alarm: stores in
the adrenals are depleted; there is concentration of blood, loss of body weight, an increase or decrease in temperature, and chemical changes in the blood. Resistance: the adrenal stores of hormones are high; blood is diluted and there is an increase in body weight. Stages were broken down further to include shock and countershock phenomena in the alarm reaction and exhaustive stages. Resistance and adaptation to stress depend on a balance of the following three factors:

1. the direct effect of the stressor upon the body.
2. Internal responses which stimulate tissue defence, or help to destroy damaging substances.
3. Intrinsic responses which cause tissue surrender by inhibiting unnecessary or excessive defense (Selye 1975).

Selye provided evidence that the body’s adaptability to stressors is finite, by identifying the triphasic nature of the body’s response to stress. He compared adaptation energy to an inherited fortune from which we can make withdrawals, and pointed out that there is no evidence to suggest that we can make deposits. There may be a resurgence of energy at times, immediately following a very draining experience, as if borrowing from one or other account to cover a deficit. But when the deep reserves of adaptive energy (long term investments) have been completely exhausted, the body succumbs to the ultimate effect of
constant wear and tear; this is the exhaustive stage. Illness, disease and even death can result (Erickson 1988).

Selye also points out the positive effects of stress and stressors too. For example, immunization will put children into an alarm state purposefully so that they will be in a stage of resistance the next time they encounter the same stressor.

It is important to question when the stimulus is a stressor that mounts a stress response that is potentially healthy and growth producing, and when it becomes a distressor that depletes the person of energy, possibly resulting in maladaptation and illness. Selye stated that a stressor becomes distressful when it is prolonged or exceeds the person's ability to mobilize adaptation energy.

Lazarus (1966) states this in another way. He points out that the way a person responds to an event or occurrence depends on whether the individual sees it as challenging or threatening. A "stressor" is a stimulus that is experienced as challenging or one that mounts an adaptive response; a distressor is a stimulus that is experienced as threatening or one that mounts a maladaptive response.
APPENDIX VI

MRM: Selected Definitions
Adapted from Erickson 1988

Affiliated Individuation. The need to be able to be dependent on support systems while at the same time maintaining independence from these support systems.

Client. One who is considered to be a primary member of the decision making team, and who is incorporated in his or her own care as much as possible.

Cognitive processes. Mental processes that reflect thinking, reasoning, and problem solving.

Coping. The process of contending with stressors. Coping can be adaptive (health and growth directed) or maladaptive (sickness directed).

Growth. The changes in body, mind, and spirit that occur over time.

Health. A state of physical, mental, and social wellbeing, not merely the absence of disease or infirmity. In addition it implies a state of equilibrium within each of the various subsystems of a holistic person.

Holism. The concept that a multisystem person is more than the mere sum of subsystem parts.

Modeling. A process used by the nurse to develop an image of the client's world, to imaginatively put oneself in the place of others to genuinely understand them.

Role Modeling. The facilitation and nurturance of the client in attaining, maintaining and promoting health through purposeful interventions.

Self Care Knowledge. The knowledge that a person has at some level, about what has made him or her sick, lessened his or her effectiveness, or interfered with his or her growth. The person also has self-knowledge that no else has in the same way. The person knows what will help to make him or her well and promote his or her own growth.

Self Care Resources. The internal and external resources, convened through self care actions, which will help a person gain, maintain and promote an optimal level of health.
Self Care Actions. The development and utilization of self care knowledge and self care resources to promote optimum holistic health.

Stress. The non-specific response of the holistic person to any demand.

Stressor. A stimulus that precedes and elicits stress.

Object. Anything that is of significance to the individual; essential to need satisfaction, i.e. people, possessions, a job, status, home, ideals, parts and processes of the body, etc.

Object Attachment. When an object repeatedly meets basic needs, attachment results.

Object Loss. A loss of a significant object (one where attachment has occurred); creates consequences that result in need deficits and deprivation responses.

Patient. Is one who is given instruction, and treatment with the expectation that such services are appropriate and that the recipient will accept them and comply with the plan. (Erickson 1988)
APPENDIX VII

Rappin' RN's

We're the rappin RN's and we're here to say, we like primary nursing in a major way.

Documentation and education, upgrades our antenatal reputation.

We give you care from morn to dusk, twenty four hour responsibility is a must.

A primary nurse and an associate too, will bring nursing care direct to you.

No problem too big, no question too small, our inventory of care plans answers all.

We use generic care plans but have no fear, they're individualized for our clients here.

Ms Peavey enlisted our expertise with weekly meetings and charts policed.

PROM, diabetes and premature labor, are diagnoses we all favor.

We can't forget PIH or previas, are covered in our rappin' media.

So don't be glum, and don't be blue, our rappin' RN's are here for you. (Dorsheimer, 1990)
APPENDIX VIII

Cartoon

Housekeeping want to lunch. The room should be ready in 3.4 hours.

Toy like to give report

Betsy Bisson '72
APPENDIX IX

Client Questionnaire

Dear

I would like to ask for your participation in a client care study. We want to learn more about how we can be most effective as nurses and provide the kind of care you need. Agreeing to participate is completely voluntary and consists of completing the enclosed questionnaire. Your participation will be very helpful and much appreciated. Deciding not to participate will not affect your care in any way.

Sincerely,

Bernadette Q. Lavoie.

Nurse Manager, 5ABC.
When you were admitted to this unit, what was your greatest worry or concern apart from your medical condition? Please check two items from the list below, and indicate (1) greatest worry and (2) next greatest worry.

A. Who would care for my family at home.
B. Not enough information about my condition.
C. Risk to my baby.
D. Financial issues.
E. My job.
F. The kind of care I would receive at this hospital.
G. Other. _____________________________

On your first day as a client on the unit, which of the following was most important to you? Please check two and indicate (1) most important and (2) next important.

A. A period of undisturbed sleep.
B. Time for personal care/shower.
C. Spending some quiet time with family.
D. Information about my condition.
E. Knowing who my nurse was going to be.
F. Food.
G. Other. _____________________________
Assuming that there is a certain amount of information you need about your condition, when do you think you are best ready to learn? Please check one item.

A. On admission.
B. One day after you were admitted.
C. When you "felt" you were ready to listen and learn.
D. After I had a chance to talk about some other questions I may have had.
E. Other.